Final Environmental Impact Report

It's Your Future, So Get Involved

Chula Vista Vision 2020

General Plan Update

December 2005

CITY OF CHULA VISTA

ERRATA

FINAL GENERAL PLAN UPDATE EIR

The Final EIR for the Chula Vista General Plan Update is comprised of the following:

- Comments and Responses to Draft EIR
- Revisions to the Draft EIR

In response to public comments, the text of the EIR has been modified which is indicated in underline and strikeout format as follows:

~~Old Text~~ Revised Text

The Final EIR is organized in the same manner as the Draft EIR, as each section of the document has retained the same section number. Immediately following the title page of the EIR are the comments and responses to the Draft EIR. Following the comments and responses is the revised Draft EIR. Where changes in the text have been made in response to comments on the Draft EIR, such changes are noted in the responses. Specifically, these changes to the EIR are limited to the following sections:

Executive Summary

Project Description

Land Use

Landform Alteration/Aesthetics

Biological Resources

Cultural Resources

Water Resources and Water Quality

Transportation

Air Quality

Public Services

Public Utilities

Hazards/Risk of Upset

After completion of the Draft EIR, revisions to the document text have been identified by City staff in order to correct inaccurate information. All of the corrections have been

reviewed, and none of them affect the impact analysis conclusions. The corrections are summarized below.

- Executive Summary, Section 1.1, page S-1, third paragraph, the text has been revised as follows:

  Chula Vista encompasses approximately 52 square miles of land from the San Diego Bay to the Otay ~~Lakes~~Reservoir, generally between Sweetwater River and Otay River.

- Executive Summary, Section 1.1, page S-1, fourth paragraph, the text has been revised as follows:

  County land to the east of Chula Vista is generally ~~vacant and~~ undeveloped.

- Executive Summary, Table 1-3, page 21, revised text as follows:

  This includes the joint planning efforts of the City of Chula Vista, the City of San Diego, and the County of San Diego for the Otay Valley Regional Park and Otay River Watershed and SANDAG's RCP, and RTP which promote smart growth principles; Regional Housing Program; Employment Lands Inventory; MTDB trolley extension, including the Otay Ranch Transitway Alignment and alternatives; and MTDB's Transit First studies.

- Executive Summary, Table 1-3, page 25, revised text as follows:

  Implementation of mitigation measure 5.2-1 reduces the significant landform alteration and aesthetics impacts however, the open, rolling hills and surrounding watershed would be permanently altered by development and the impact due to the change from open areas to developed areas remains significant and unmitigated.

- Project Description, Table 3-2, page 23, revised text as follows:

  This category is applied to bodies of water within the General Plan area, including San Diego Bay area and the Otay Reservoir~~Lakes~~.

- Land Use, Section 5.1.1.1, page 92, Modify to reflect text changes identified below:

  The easterly lands are largely under public control; specifically, the City of San Diego, who owns and manages the Otay Reservoir (upper and lower), is required by state and federal laws to protect water quality for potable drinking purposes.

As such the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used.

- Land Use, Section 5.1.3.1, page 140, the text was revised as follows:

  Currently, the land within both of these subareas is undeveloped~~vacant~~; therefore, any proposed changes would cause an increase over the existing condition.

- Land Use, Section 5.1.3.1, page 147, revised policy number as follows:

  LUT 82~~1~~.4: Prior to approval of any discretionary permit in the Otay Valley District ensure that the proposed project is consistent with the Otay Valley Regional Park Concept Plan, and assist implementation of the Concept Plan through project features and design that support or provide access, staging areas, trails, and appropriate buffering.

- Land Use, Section 5.1.4.3, page 183, revised text as follows:

  Currently, the land within both of these subareas is undeveloped~~vacant~~; therefore, any proposed changes would cause an increase over the existing condition."

- Landform Alteration/Aesthetics, Photograph 5.2-3, revised as follows:

  F Street Looking East~~West~~-Effect of Overhead Power Lines on Tpical Older Residential Neighborhood

- Biological Resources, Section 5.3.1.2, page 225, third paragraph, the text was revised as follows:

  This USFWS also manages ~~has designated~~ approximately 2,620 ~~3,940~~ acres of land and water in South San Diego Bay as the ~~South~~ San Diego Bay ~~Unit of the San Diego~~ NWR, which is partly located within the jurisdictional boundaries of Chula Vista. Within the refuge boundaries, USFWS ~~will~~ protects and manages native fish and ~~the remaining~~ wildlife habitat in and around the southern end of San Diego Bay. ~~using a variety of habitat protection methods.~~ Coordinating with landowners, ~~local~~ local, state, and federal agencies, and the ~~U.S. Navy,~~public, USFWS is currently ~~will be~~ developing a management plan that will describe the desired future conditions of the San Diego Bay MWR and provide long-range guidance and management direction for ~~to~~ conserving ~~e~~ wildlife and habitat resources within the Refuge. ~~through land acquisition, protection through interagency agreements with the Navy, and cooperative agreements, coordinated planning and shared resources with local, federal, and state agencies.~~

- Biological Resources, Section 5.1.3.4, page 226, second paragraph, the text was revised as follows:

  The Otay/Sweetwater Unit of the San Diego NWR and the South San Diego Bay Unit of the San Diego Bay NWR are adjacent to the Southwest Planning Area. Wildlife species known to occur in these ~~is~~ areas include ~~gull billed tern, egrets, elegant terns, l~~least Bell's vireo, California gnatcatcher, the quino checkerspot butterfly, San Diego horned lizard, ~~and~~ arroyo toads, California lest tern, western snowy plover, gull billed tern, and elegant tern, among many others.

- Cultural Resources, Section 5.4.1.1, page 243, the EIR was revised to include the Ad Hoc Committee report Evaluation of Historic Preservation in Chula Vista as an attachment to the EIR. The text was revised as follows:

  The report of the Ad Hoc Committee titled An Evaluation of Historic Preservation in Chula Vista was adopted by the City Council on September 30, 2003 [Resolution #2003-416] and is attached in Appendix J.

- Cultural Resources, Section 5.4.1.2, page 243, fourth paragraph, revised text as follows:

  They began developing the area by subdividing a 5,000-acre portion into five-acre lots. The lots were separated with avenues and streets 80 feet in width and a steam motor passing through the center of the streets.

- Cultural Resources, Section 5.4.1.2, page 244, fourth paragraph, revised text as follows:

  There are currently 69~~1~~ sites on the List of Historic Structures in the city (Table 5.4.1). These 69~~1~~ structures have been determined by the City Council to meet the City's historic criteria." In addition, Table 5.4-1 has been corrected to reflect the updated number of sites on the List of Historic Structures in the city.

- Cultural Resources, Table 5.4-1, added text as follows:

Site No.	Address	Historic Name
64	254 Fifth Avenue	Martin Sette House
65	181 Madrona Street	Almond Pickering House
66	238Second Avenue	John M. Davidson House
67	186 Cypress Street	James Williams House
68	3487 Main Street	Lorenzo Anderson House
69	470 E Street	The Horace Sloan House

- Cultural Resources, Section 5.4.3, page 249, third paragraph, revised text as follows:

  These 69~~1~~ structures have been determined by the City Council to meet the City's historic criteria.

- Water Resources and Water Quality, Section 5.9.1.2, page 306, fourth paragraph, the text has been revised as follows:

  The Otay hydrologic unit encompasses approximately 160 square miles in southwest San Diego County. The major waterbodies include the Upper and Lower Otay Reservoirs, Otay River, and the San Diego Bay. The Otay Reservoir is a drinking water source. The watershed consists largely of unincorporated area, but also includes portions of the city of Chula Vista, as well as other cities. The predominant land uses in the watershed are open space (67 percent) and urban/residential (20 percent). Serious water quality problems are limited to the presence of elevated coliform bacteria in the Pacific Ocean receiving waters near Coronado.

- Water Resources and Water Quality, Section 5.9.1.2, Page 310, third paragraph, revised text as follows:

  At the eastern end of the Otay River valley are two reservoirs used for flood control and municipal water storage by the City of San Diego, the Upper and Lower Otay Reservoirs. The reservoirs are fed by Proctor Valley Creek, Jamul (Dulzura) Creek, and a number of smaller drainages in the San Miguel and Jamul Mountains, as well as imported water. The use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring would be required if herbicides or pesticides are used.

- Water Resources and Water Quality, Table 5.9-2, Sweetwater Hydrological Unit Beneficial Uses, has been revised to include a column for Reservoirs and Lakes.

- Water Resources and Water Quality, Figure 5.9-2 has been revised to update the 100-year flood boundary and inundation area for the lower Sweetwater River to reflect the channel improvements constructed by the U.S. Army Corps of Engineers west of I-805.

- Water Resources and Water Quality, Section 5.9.1.2, Page 313, first paragraph, revised text as follows:

  The location of surface waters within the General Plan area is provided in the San Diego Bay, Otay, and Sweetwater watershed discussions above. The major inland water bodies, Upper and Lower Otay Reservoirs~~Lakes~~, are two reservoirs that supply drinking water to more than 200,000 people. The Otay Reservoir is part of the City of San Diego municipal drinking water supply system and is kept approximately 75 to 85 percent full in order to meet emergency water storage requirements. These reservoirs also provide important habitat and recreational opportunities.

- Transportation, Section 5.10, Page 349, modified to include Table1.4-1 of the traffic study as follows.

  The project's circulation impacts were determined based on a comparison of long-term future conditions to existing conditions (i.e., "plan-to-ground"). The traffic implications of proposed land use/transportation network alternatives were evaluated using the SANDAG TRANPLAN regional traffic model, which is based on Series 10 employment and population projections for the San Diego region. This computerized model takes land use and transportation network information as inputs and estimates the volumes of traffic on existing and future roadways under long-term future conditions using the four-step Urban Transportation Planning Process. Table 5.10-3 summarizes the land use and network assumptions for each alternative evaluated in the study. The planning "horizon year" for this study is the Year 2030. Regional transportation infrastructure was modeled using SANDAG's "reasonably expected" Mobility 2030 assumptions. The impact analysis assumed that the city was built out in 2030, but that the surrounding area was consistent with the SANDAG land use assumptions for the year 2030.

  Tables 5.10-3, 5.10-4, and 5.10-5 have been renumbered to 5.10-4, 5.10-5, and 5.10-6, respectively.

- Transportation, Section 5.10.3.2, Page 355, modified text as follows:

  As discussed above, existing and future levels of service were calculated for each roadway segment evaluated. The future condition was determined for the Preferred Plan and each of the scenarios was evaluated by comparing the existing level of service to the future levels of service by scenario (see Table 5.10-4). In addition, all Year 2030 scenarios assume that SR-125 will operate as a tollway. The following results are organized by each component of Threshold 2.

- Air Quality, Section 5.11.5, Page 419, modified to reflect text changes identified below.

  Threshold 4: Expose sensitive receptors to substantial pollutant concentrations.

  The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because of Policy EE 6.4 of the proposed General Plan Update avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of a highway. In addition, pollutant concentrations resulting from CO hotspots is self-mitigated and not significant because the adoption of Policy LUT 14.2 requires the optimization and maintenance the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels. No additional mitigation is required.

  ~~The potential for development under the Preferred Plan or any of the Scenarios to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating through adoption and compliance with Policy EE 6.4. No additional mitigation is required.~~

- Public Services, Section 5.13.3, Schools, Page 478, has been revised to indicate that 5.6 new elementary schools will be needed in western Chula Vista in order to meet increased demand upon buildout of the Preferred Plan.

- Public Services, Figure 5.13-4, has been revised to be consistent with the General Plan Update Figure 8.8 of the Public Facilities Element.

- Public Services, Table 5.13-12, has been revised to include the following footnote:

  NOTE: Future parks and recreation facilities include proposed parks that are not yet planned or programmed.

- Public Utilities, Section 5.14.1.3, Water, page 514, third paragraph, revised text as follows:

  Buildout of the General Plan under the Preferred Plan or any of the Scenarios would place demands on the water supply system, both in the need to improve and develop infrastructure and in the provision of an adequate supply. All four scenarios propose to increase development potential in each update area of the city. This increased demand for water would require corresponding

improvements to treatment and distribution facilities. Both the Sweetwater Authority and OWD have capital improvement programs for completion of required infrastructure. Since these capital improvement programs are based on the current Master Plans, which are based on the adopted General Plan, the adoption of any of the four scenarios proposed would require the capital improvement programs to be reevaluated. They would serve as the lead CEQA agency for their respective infrastructure improvements, and are responsible for assessing specific potential environmental impacts. Significant impacts could occur as a result of the completion of these projects. At this level of planning, the extent of those effects is speculative because the nature and location of those improvements has not been determined."

- Public Utilities, Section 5.14.1.3, Water, page 515, sixth paragraph, revised text as follows:

  In general, the net result of the land use revisions create the need for additional water supply caused by the increase in projected water demand resulting in direct impacts to the previously planned water system infrastructure. The Authority's ~~T~~transmission system pipelines in various locations will need to be increased in size to provide an adequate level of service. Also, the water storage reservoir volume needs and alternative water supply requirements must be increased.

- Hazards/Risk of Upset, Section 5.15.1.2, Page 538, revised text as outlined below:

  The transformers within the study area were not individually inspected at the time of the site reconnaissance. However, all known PCB transformers were removed from the SDG&E system years ago. Additionally SDG&E has a mandated Corrective Maintenance Program which includes regular inspection of electric transformers located within the City of Chula Vista as well as its entire service territory. Based on the results of these inspections, each transformer is subject to maintenance, repair, replacement or removal as appropriate to avoid or minimize the release and/or exposure of workers or the public to potentially PCB-containing substances. In the event these substances are found or, in the rare event, released, they are properly handled and disposed of in accordance with all applicable federal, state and local regulations.

- Water Technical Report, page 11, fourth paragraph, revised text as follows:

  Established in 1869, the Sweetwater Authority's overall infrastructure is older than OWD's infrastructure. However, as a result of an intensive Capital Improvement Program approximately 90% of their 390 miles of water mains are less than 50 years old. There are 11 emergency interconnections to the City of

San Diego, OWD and the Cal American Water Company. The flow rate by each interconnection varies from 0.72 to 2.08 mgd depending on size of the interconnecting pipeline and hydraulic gradient. It is not planned that all interconnections would be used simultaneously in the event of an emergency. ~~to provide a total flow of approximately 17 mgd.~~

- Water Technical Report, page 15, paragraph, revised text as follows:

  The Sweetwater Authority also provides for the storage of emergency water supply, providing up to four months of emergency supply in Sweetwater and Loveland Reservoirs. In addition, storage tanks in the water system are designed to hold three days of average day demands plus needed fire flows and pump stations with emergency power generators (permanent and portable) to allow continuous pumping. The Sweetwater Authority has taken steps to improve their reliability in an emergency situation. There are 11 emergency interconnections to the City of San Diego, the Otay Water District and Cal American Water Company. The flow rate by each interconnection varies from 0.72 to 2.08 mgd depending on size of the interconnecting pipeline and hydraulic gradient. It is not planned that all interconnections would be used simultaneously in the event of an emergency ~~to provide a total flow of approximately 17 mgd if needed.~~.

City of Chula Vista General Plan Update
RECIRCULATED EIR #05-01
Letters of Comment and Responses

Letters of comment to the Recirculated Draft EIR (dEIR) were received from the following agencies and organizations. Comment letters received during the Recirculated dEIR public review period contained accepted revisions that resulted in changes to the Final EIR text. Revisions to the Final EIR are intended to correct minor discrepancies and provide additional clarification. The revisions do not constitute significant changes to the project or environmental setting, no new significant environmental effects have been identified for the project, and the severity of environmental impacts would not be increased.

State and Federal Agencies

Letter A	California Integrated Waste Management Board	PR-2
Letter B	California Department of Transportation (Caltrans District 11)	PR-4
Letter C	United States Department of the Interior, Fish and Wildlife Service	PR-5

Local Agencies

Letter D	County of San Diego	PR-8
Letter E	City of San Diego	PR-27
Letter F	SANDAG	PR-39
Letter G	Sweetwater Authority	PR-40
Letter H	SDG&E, A Sempra Energy Utility	PR-45

Local Organizations

Letter I	San Diego County Archaeological Society, Inc.	PR-52
Letter J	Scripps Mercy Hospital	PR-57
Letter K	Environmental Health Coalition	PR-58
Letter L	John Hoegemeeir, San Diego & Imperial Valley Roadway	PR-88
Letter M	Foley & Lardner LLP, Attorneys at Law	PR-90
Letter N	Nicholas Aguilar, San Diego County Board of Education District 2	PR-113
Letter O	Chula Vista Elementary School District	PR-116
Letter P	Jackie McQuade, Grandparents of America, Chula Vista Chapter	PR-121
Letter Q	Sweetwater Community Planning Group	PR-124
Letter R	Friend of Bonita/Sunnyside, Friends of Bonita Meadows	PR-126
Letter S	California Transportation Ventures	PR-127
Letter T	Berkowitz, Lichtstein, Kuritsky, Guisullo & Gross, LLC	PR-133
Letter U	The Corky McMillin Companies	PR-139
Letter V	Orrick	PR-141
Letter W	Crossroads	PR-150
Letter X	Sierra Club	PR-161

Other Individuals

Letter Y	David A. Wood	PR-171
Letter Z	Terry Thomas	PR-181
Letter AA	Theresa Acerro (November 6, 2005)	PR-193
Letter AB	Planning Commission Close of Public Review Comments	PR-194
Letter AC	Theresa Acerro (November 2, 2005)	PR-261

California Integrated Waste Management Board

Rosario Marin, Chair
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www.ciwmb.ca.gov

Alan C. Lloyd, Ph.D.
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

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September 22, 2005

Mr. Steve Power, AICP
City of Chula Vista
Planning and Building Department
276 Fourth Avenue
Chula Vista, CA 91910

Subject: SCH No. 2004081066: Recirculated Draft Environmental Impact Report for the City of Chula Vista General Plan Update – EIR #05-01, San Diego County

Dear Mr. Power:

The California Integrated Waste Management Board's (Board) staff received, on September 19, 2005, the Recirculated Draft Environmental Impact Report in CD-ROM format and the textual document for the above referenced proposed project.

The Board's staff has reviewed the environmental document. Since Board staff found no discussion of new transfer stations or landfills or new entitlements to any existing transfer station and landfill the general plan update does not fall under the jurisdiction of the Board.

A-1 Table 1-3 SUMMARY OF ENVIRONMENTAL ANALYSIS RESULT, Page S-59 directs the reader to Utilities and Mitigation regarding the project's solid waste disposal needs. Board staff is of the opinion, based on information in our files, the Joint Technical Document for the operation of Otay Landfill and the current Solid Waste Facilities Permit that the analysis presented in your document and the operating specifics of Otay Landfill is factually incorrect.

You state that Otay Landfill has sufficient capacity for approximately 25 years, which in your analysis is sufficient capacity to accommodate projected population growth at build out of any of the alternatives. Otay Landfill's current Solid Waste Facilities Permit issued on May 17, 2005, indicates closure in 2021 – 16 years from now – not 25 years. On a daily basis Otay Landfill is operating at or near their maximum permitted daily tonnage. Any increase in daily tonnage at the landfill would shorten the closure date, resulting some what less than the 16 years.

A-2 Board staff is aware of a contractual agreement with Otay Landfill that they will accept waste from the City of Chula Vista. The concern is that while there may be an agreement to accept the waste or dispose of it in another locale, the landfill does not have the capacity indicated in the

RESPONSE

A-1 The comment makes the calculation of available capacity based on permitted acceptance rates (recently revised to be 5,830 tons per day or 35,000 tons per week) and not on the actual amount of waste received. The analysis in the dEIR was based on the published average daily rate of disposal of 2,260 tons. As presented on Page 532 of the dEIR using the actual daily disposal rate of 2,260 and assuming the additional population at buildout of the proposed General Plan and no additional recycling programs are implemented, the Otay Landfill has sufficient long-term capacity.

As referenced in the dEIR (page 532), revisions to the permit will increase the maximum allowable daily disposal rate to 5,830 tons. However, the permit maintains a weekly maximum disposal rate of 35,000 tons per week (average of 5,000 tons per day). Increasing the permitted daily disposal capacity does not affect the average amount of solid waste disposed of at the landfill upon which the analysis in the dEIR was based because the Otay Landfill currently accepts an average daily rate of disposal of 2,260 tons which is much lower than the permitted maximum rate allowed per day. The Otay Landfill has a permitted remaining capacity of 31,336,166 tons. The Preferred Plan would generate an estimated population at buildout of approximately 326,900 people. Using the per person average rate of daily disposal of trash into the Otay Landfill, and assuming the additional development at buildout of Preferred Plan and no additional recycling programs are implemented, the Otay Landfill has sufficient capacity to accommodate the increased waste disposal.

A-2 This comment addresses the remaining capacity at the Otay Landfill and the contractual agreement for Pacific to dispose of solid waste generated in the City. The Otay Landfill Permit Modification Agreement (see Response 1, above), approved on May 17, 2005, indicates that:

> In the event that the Otay Landfill is not successful in achieving the expansion of the Sycamore Canyon Landfill, the Otay Landfill agrees to revisit the disposal capacity issue and negotiate terms for additional remedies which will protect the landfill capacity available to Chula Vista rate payers, in accordance with the terms of the Amended and Restated Solid Waste Disposal and Recycling Franchise Agreement [Franchise Agreement], effective July 1, 1999, to which the City and the Otay Landfill are parties.

Section 6.2.15 of the Franchise Collection Agreement states that:

> Pacific shall dispose of Solid Waste, at its expense, at the Otay Landfill or the Sycamore Canyon Landfill, both being City authorized landfills, in accordance with all applicable law, or such other landfill mutually agreed upon by Pacific, City, Otay Landfill, Inc., and Sycamore Canyon, Inc.

This Franchise Collection Agreement is in effect until after June 30, 2028 with extension clauses for both the City and Pacific.

environmental document. In Board staff's opinion by indicating no mitigation required is an error on the part of the Lead Agency and should be reanalyzed or clarified in either another environmental document or in the Final Environmental Impact Report.

If you have any questions regarding these comments, please contact me at 916.341.6728 or email me at rseamans@ciwmb.ca.gov.

Sincerely,

Raymond M. Seamans
Permitting and Inspection Branch, Region 4
Environmental Review
Permitting and Enforcement Division
California Integrated Waste Management Board

cc: Tadese Gebrehawariat
Permitting and Inspection Branch, Region 4
Permitting and Enforcement Division
California Integrated Waste Management Board

Suzanne Hambleton, Supervisor
Permitting and Inspection Branch, Region 4
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Kerry McNeill, Supervisor
County of San Diego
Department of Environmental Health
9325 Hazard Way
San Diego, CA 92123-1217

Lynn France
City of Chula Vista
1800 Maxwell Road
Chula Vista, CA 91911

PR-3

STATE OF CALIFORNIA---BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
District 11
2829 Juan Street
P. O. BOX 85406, M.S. 46
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November 2, 2005

Mr. Ed Batchelder
Deputy Planning Director
City of Chula Vista
276 Fourth Avenue
San Diego, CA 91910

Dear Mr. Batchelder:

B-1 This correspondence is regarding the potential extension of La Media Road south across the Otay Valley, as addressed in your proposed General Plan Update. It is reasonable to assume, depending on timing, that this proposed construction could adversely affect the amount of traffic trips on the South Bay Expressway (SR 125 South Toll Road) that will run substantially parallel to La Media Road. We have all worked hard as a region to be able to develop the South Bay Expressway through an innovative public-private partnership that has resulted in over $600 million in private investment in the facility. We are therefore gratified to see that this latest General Plan Update has been sensitive to the potential adverse ridership impact a premature extension of La Media Road may have on the South Bay Expressway. Although we generally believe that the City revised policies LUT 14.8 and 14.9 adequately address this issue, we concur with the comments submitted separately by California Transportation Ventures, Inc. (CTV), dated October 31, 2005, related to clarifications in the General Plan Update, the Recirculated Draft Environmental Impact Report and the Traffic Technical Report.

B-2 We also observe that the capital cost of extending La Media Road across the Otay River Valley is likely to be relatively high and that reliance on the South Bay Expressway for regional trips in this vicinity is likely to be a fiscally prudent strategy through its franchise period. We would urge the City to only consider the possible extension of La Media Road when and if traffic capacity cannot be accommodated on the South Bay Expressway.

Sincerely,

Ramm Martinez FOR

LAURIE BERMAN
Deputy District Director
SR 125 Corridor Project Director

c: Greg Hulsizer, California Transportation Ventures, Inc.

"Caltrans improves mobility across California"

RESPONSE

B-1 Comment noted.

B-2 The exact timing of the La Media Road improvements is not known at this time, and its schedule is likely to be impacted by the availability of funding sources, environmental analysis, and other considerations. For the purposes of the general Plan update, La Media Road is anticipated to be in place by the Year 2030.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Diego National Wildlife Refuge Complex
6010 Hidden Valley Road
Carlsbad, California 92011

November 8, 2005

Mr. Steve Power
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments for the Chula Vista General Plan Update Revised Draft Environmental Impact Report (DEIR)

Dear Mr. Power:

C-1 The U.S. Fish and Wildlife Service, San Diego National Wildlife Refuge Complex (Complex) was recently informed that the City of Chula Vista had issued a revised draft Environmental Impact Report (EIR) for the City of Chula Vista General Plan Update and that unfortunately, the comment period had already closed. Although the Complex provided comments regarding the previous draft General Plan Update EIR in February 2005, it does not appear that we were notified of the availability of the revised draft EIR. As such, we respectfully request that the comments to follow be considered by the City of Chula Vista when preparing the Final EIR. We would also request that all future notices of planning actions involving projects proposed in proximity to lands managed by the San Diego National Wildlife Refuge Complex be sent to Victoria Touchstone, Refuge Planner, USFWS, San Diego National Wildlife Refuge Complex, 6010 Hidden Valley Road, Carlsbad, CA 92011. This will avoid any miscommunication in the future.

Based on a quick review of the land use, biological resources, and hydrology discussions presented in Chapter 5 of the revised draft EIR, it appears that most of our previous concerns have been addressed through revisions to various General Plan objectives and policies. We also assume that any site specific concerns related to potential adverse effects to refuge resources will be more fully evaluated during subsequent CEQA review for proposed annexations, specific plans, local coastal plan amendments, and/or development permits proposed in proximity to refuge lands.

C-2 In preparing the Final EIR, we would recommend that corrections be made to reflect recent changes to the refuges within the Complex. Specifically, the refuges in the San Diego Bay have been reorganized and are now referred to as the Sweetwater Marsh and South San Diego Bay Units of the San Diego Bay National Wildlife Refuge. The San Diego National Wildlife Refuge now consists of the Otay/Sweetwater Unit and the Vernal Pool Stewardship Project.

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RESPONSE

C-1 Comment noted. The City of Chula Vista sent the revised dEIR and the notice of availability of the recirculated dEIR to the U.S. Fish and Wildlife. Notices of future planning actions proposed in proximity to lands managed by the San Diego National Wildlife Refuge Complex will be sent directly to the San Diego National Wildlife Refuge Complex as well.

C-2 The EIR has been revised to reflect the recent changes to the refuges within the Complex as follows:

> This USFWS also manages ~~has designated~~ approximately 2,620 ~~3,940~~ acres of land and water in South San Diego Bay as the ~~South~~ San Diego Bay ~~Unit of the San Diego~~ NWR, which is partly located within the jurisdictional boundaries of Chula Vista. Within the refuge boundaries, USFWS ~~will~~ protects and manages native fish and ~~the remaining~~ wildlife habitat in and around the southern end of San Diego Bay. ~~using a variety of habitat protection methods.~~ Coordinating with landowners, ~~local~~ local, state, and federal agencies, and the ~~U.S. Navy,~~public, USFWS is currently ~~will be~~ developing a management plan that will describe the desired future conditions of the San Diego Bay MWR and provide long-range guidance and management direction for ~~to~~ conserving ~~e~~ wildlife and habitat resources within the Refuge. ~~through land acquisition, protection through interagency agreements with the Navy, and cooperative agreements, coordinated planning and shared resources with local, federal, and state agencies.~~
>
> The Otay/Sweetwater Unit of the San Diego NWR and the South San Diego Bay Unit of the San Diego Bay NWR are adjacent to the Southwest Planning Area. Wildlife species known to occur in these ~~is~~ areas include ~~gull-billed tern, egrets, elegant terns,~~ least Bell's vireo, California gnatcatcher, the quino checkerspot butterfly, San Diego horned lizard, ~~and~~ arroyo toads, California lest tern, western snowy plover, gull billed tern, and elegant tern, among many others.

We would also suggest the following changes (shown in strike out/underline format) be made to the text on pages 225 and 226 of the Draft EIR.

Page 225, Beginning at Paragraph 3

This USFWS ~~has~~ also manages ~~designated~~ approximately 2,620 ~~3,700~~ acres of land and water in South San Diego Bay as the ~~South~~ San Diego Bay ~~Unit of the San Diego~~ NWR, which is partly located within the jurisdictional boundaries of Chula Vista. Within the refuge boundaries, USFWS ~~will~~ protects and manages ~~the remaining~~ native fish and wildlife habitat in and around the southern end of San Diego Bay ~~using a variety of habitat protection methods~~. Coordinating with landowners, local, state, and federal agencies, and the ~~U.S. Navy~~ public, USFWS is currently ~~will be~~ developing a management plan ~~to~~that will describe the desired future conditions of the San Diego Bay NWR and provide long-range guidance and management direction for conserving ~~a~~ wildlife and habitat resources within the Refuge. ~~through land acquisition, protection through interagency agreements with the Navy, and cooperative agreements, coordinated planning and shared resources with local, federal, and state agencies.~~

~~Designated by the USFWS.~~ tThe San Diego Bay NWR consists of the Sweetwater Marsh and the South San Diego Bay Units. The Sweetwater Marsh Unit~~NWR~~, which includes 316 acres of salt marsh and coastal uplands located on the east side of South San Diego Bay. ~~The Sweetwater Marsh NWR~~ supports ~~populations of~~ the federally listed light-footed clapper rail, California least tern~~s~~, western snowy plover, California brown pelican, California gnatcatcher, and ~~Belding's savannah sparrows, and two federally listed plants.~~ salt marsh bird's beak, an endangered plant. ~~and Palmer's frankenia.~~ The South San Diego Bay Unit, located at the southern most end of the bay, supports several listed species, an array of nesting seabirds, and tens of thousands of migratory birds that travel along the Pacific Flyway.

Page 226

Biological Resources

The majority of the land area within the Northwest and Southwest Planning Areas has been previously developed with residential, commercial, and industrial uses. The potential for significant biological resources to be present in the Northwest Planning Area and the northern portion of the Southwest Planning Area is low.

The Otay/Sweetwater Unit of the San Diego NWR and the South San Diego Bay Unit of the San Diego Bay NWR are adjacent to the Southwest Planning Area. Wildlife species known to occur in these ~~is~~ areas include ~~gull billed tern, egrets, elegant terns,~~ least Bell's vireo, California gnatcatcher, the quino checkerspot butterfly, San Diego horned lizard, ~~and~~ arroyo toads, California least tern, western snowy plover, gull billed tern, and elegant tern, among many others. In addition, the Otay River ~~V~~valley extends roughly east-west along the southern boundary of the Southwest Planning Area. There are very small patches of coastal sage scrub and riparian scrub along this segment. Additionally, portions of this segment within the Southwest Planning Area are within both the Greenbelt and

MSCP Preserve area (see Figure 5.1-4 in the Land Use section of this EIR). It should be noted that while the General Plan Update does not propose any changes in land use designation for the Bayfront Planning Area, the southernmost portion of this planning area, south of Palomar Street, is proposed to become part of the Southwest Planning Area. This area contains important wetland resources and will not be impacted by adoption of the proposed General Plan.

We appreciate your consideration of these comments and once again request that notices of future planning actions be sent directly to the San Diego National Wildlife Refuge Complex in order to ensure our timely review and comment of future projects.

Sincerely,

Slader Buck
Acting Project Leader
San Diego National Wildlife Refuge Complex

GARY L. PRYOR
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

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November 2, 2005

Steve Power, AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments on the City of Chula Vista Revised Draft General Plan Update; Re-Circulated Draft Environmental Impact Report (EIR-05-01) including Technical Appendices and the Otay Ranch General Development Plan Amendments

The County of San Diego has received and reviewed the City of Chula Vista Revised Draft General Plan Update, Re-Circulated Draft Environmental Impact Report and technical appendices, and Draft Otay Ranch General Development Plan amendments dated September 2005 and appreciates this opportunity to comment. In response to the document the County, as a responsible agency under CEQA Section 15381, has comments that identify the potentially significant environmental issues that may have an affect on the unincorporated lands of San Diego County, reasonable alternatives and mitigation measures that the County will need to have explored in the environmental document.

County Department of Planning and Land Use (DPLU), Department of Public Works (DPW) and County Solid Waste Local Enforcement Agency (LEA) staff have completed their review and have the following comments regarding the content of the above documents:

RE-CIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

D-1 1. Page S-10. City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan/Otay Ranch General Development Plan/Otay Ranch Resource Management Plan (RMP) section states that the following

RESPONSE

D-1 The Otay Ranch Resource Management Plan (RMP) does not specify that all proposed changes to the RMP require the approval of the County of San Diego. As stated in Policy 9.6 of the RMP, "Following notice of a public hearing, the RMP may be amended by the legislative body having jurisdiction over the use of land affected by the amendment, provided that all such amendments shall be subject to review and comment by the Preserve/Owner Manager, by the City of Chula Vista and by the County of San Diego."

The City of Chula Vista has provided the County of San Diego with the appropriate opportunity to review and comment on the proposed amendment. No other actions are needed from the County at this time for the proposed changes to become effective. Although not required by the RMP, the City recommends that the County amend their RMP Preserve map in the future to be consistent with the City's boundary changes.

amendments to the Otay Ranch General Development Plan (GDP) and Resource Management Plan (RMP) are proposed:

"(1) Amend the Otay Ranch General Development Plan (GDP) and Resource Management Plan (RMP) to redefine the eastern and southern boundaries of Villages 9, 10, and 11 consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(2) Amend the Otay Ranch GDP and RMP to include approximately 52 acres of developable University land in the southeastern portion of Salt Creek consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(3) Amend the General Plan and Otay Ranch GDP land use maps to add a note of clarification denoting the development areas that have been acquired for open space purposes within **Villages 14, 15,** and Bella Lago."

Part of the approval of a General Plan Amendment for Otay Ranch by the Board of Supervisors in 1993 included approval of the Phase I RMP. This is a comprehensive planning document that addresses the preservation, enhancement, and management of sensitive natural and cultural resources on the 22,899-acre Otay Ranch property. The goal of the RMP is establishment of an open space system that will become a permanent Management Preserve dedicated to the protection and enhancement of the multiple resources present on Otay Ranch. The RMP is to be implemented as part of the overall integrated planning approach for Otay Ranch. A series of goals, objectives, policies and standards in the RMP address the resource protection issues.

Whereas the Phase 1 RMP established the framework for the RMP, the Phase 2 RMP 2 translates the Phase 1 RMP policies into specific action programs. The Phase 2 RMP defines specifically how the adopted Phase 1 policies and guidelines will be implemented.

The RMP is part of the Otay Subregional Plan, which is part of the County of San Diego General Plan. Any proposed changes to the RMP require a General Plan Amendment approved by the Board of Supervisors in order for the changes to the RMP to become effective. No applications for an amendment to the County of San Diego Otay Subregional Plan RMP have been submitted to the County of San Diego Department of Planning and Land Use at this time. The DEIR needs to discuss the approval process for the proposed revisions to the RMP and should discuss the potential impacts associated with the County Board of Supervisors not adopting these amendments.

LAND USE

D-2 2. The project description is inadequate. Section 1.3 of the Recirculated Draft EIR states that three scenarios were developed for each of the three planning areas to which changes are proposed, and from that a Preferred Plan was developed. Furthermore, it is stated that the Preferred Plan and each of the three scenarios were reviewed in detail to provide decision makers with the flexibility to approve land use and circulation amendments throughout the range of the scenarios, not just those that are part of the Preferred Plan. This approach is inadequate for the purposes of a project description. Without a clear project description, it is impossible to adequately analyze potential impacts and develop mitigation measures. Furthermore, it is impossible to evaluate how the project alternatives would reduce impacts versus the proposed project, when there are three possible proposed projects.

D-3 3. There is a lack of internal consistency in the DEIR and General Plan documents. Draft EIR states that scenarios 2 and 3 propose residential uses within the 1000-foot buffer of Otay Landfill, and that this would be in conflict with proposed Objective LUT79. The City has essentially created a project description through its use of 'scenarios' that conflicts with policies proposed in the General Plan update. This is a fundamental planning error and furthermore Government Code Section 65300.5 requires internal consistency in preparing General Plans and elements thereof. The County requests that the scenarios which propose residential uses around the landfill buffer be removed to address these inconsistencies.

4. The City continues to propose residential uses in the landfill buffer. The Draft EIR states that scenarios 2 and 3 propose residential uses within the 1000-foot buffer of Otay Landfill, and that this would be in conflict with proposed Objective LUT79. Therefore, from the County's perspective, this aspect of scenarios 2 and 3 cannot, and should not be approved, as it would not be in conformance with the proposed General Plan Update. Furthermore, the County has already advised the City of Chula Vista that adoption of any general plan designation which permits residential land uses within the landfill buffer would be incompatible with the operation of Otay Landfill (See attached correspondence dated March 2, 2005). The County continues to urge the City of Chula Vista to retain in its General Plan, only those land use designations deemed compatible with the landfill in the landfill buffer area, and deny any proposal to establish residential land use designations.

The land use policy LUT 79.5 states that the City will "limit land uses adjacent to the Otay landfill to open space and limited industrial uses or business parks." However, this policy should clearly state that uses within the 1,000 foot buffer of the Otay landfill are limited to open space and limited industrial uses or business parks. The current policy, which states "adjacent to the Otay landfill", is too vague to adequately protect public health and the

RESPONSE

D-2 The EIR analyzed four land use and circulation scenarios. Three preliminary scenarios were developed as part of the outreach program for the General Plan Update. Each scenario identified possible land use and circulation changes within portions of the Northwest, Southwest, and East Planning Areas. After intensive analysis and extensive community input, a Preferred Plan was developed with input from the General Plan Update Steering Committee. Section 3.5.2.1 in the Project Description of the EIR contains a description of the Preferred Plan. The proposed land use plan for the Preferred Plan is shown in Figure 3-6 of the EIR. Table 3-3 of the EIR lists the Preferred Plan's land use distribution for the entire General Plan area. Sections 3.5.2.2, 3.5.2.3, and 3.5.2.4 in the Project Description of the EIR contain a description of Scenarios 1, 2, and 3 respectively. The land use maps for each district for all three Scenarios can be found in Appendix B to the EIR. Tables 3-5, 3-6, and 3-7 provide the breakdown of land uses that would result from the adoption of Scenarios 1, 2, and 3 within the Northwest, Southwest, and East Planning Areas. The Preferred Plan and all three scenarios are analyzed throughout the EIR. Mitigation measures for the Preferred Plan and the scenarios were included where appropriate. Section 11 in the EIR analyses four alternatives. Each alternative was evaluated against the Preferred Plan as well as all three scenarios provided to demonstrate how the alternatives reduce impacts compared to the Preferred Plan as well as the scenarios.

D-3 This comment requests that Scenarios 2 and 3 be revised in order to address inconsistencies between the Policy LUT 79.5 and the proposed residential uses around the landfill buffer, land uses proposed under Scenarios 2 and 3. Policies LUT 79.1 through 79.5 address land uses adjacent to the Otay Landfill. Objective LUT 79 states:

Establish appropriate land uses adjacent to the Otay Landfill and Wolf Canyon that reflect the unique land use and landform characteristics of these areas.

Specifically, the Preferred Plan is consistent with Policy 79.5 which states:

> Limit land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks.

The EIR concludes that significant impacts under Scenarios 2 and 3 would occur because both scenarios place residential uses adjacent to the landfill and would be in conflict with this proposed policy. The Preferred Plan is recommended by City staff. If the City Council decides to adopt Scenarios 2 or 3, the adoption of a Statement of Overriding Considerations for these impacts will be required for implementation of Scenarios 2 or 3.

LAND USE

2. The project description is inadequate. Section 1.3 of the Recirculated Draft EIR states that three scenarios were developed for each of the three planning areas to which changes are proposed, and from that a Preferred Plan was developed. Furthermore, it is stated that the Preferred Plan and each of the three scenarios were reviewed in detail to provide decision makers with the flexibility to approve land use and circulation amendments throughout the range of the scenarios, not just those that are part of the Preferred Plan. This approach is inadequate for the purposes of a project description. Without a clear project description, it is impossible to adequately analyze potential impacts and develop mitigation measures. Furthermore, it is impossible to evaluate how the project alternatives would reduce impacts versus the proposed project, when there are three possible proposed projects.

3. There is a lack of internal consistency in the DEIR and General Plan documents. Draft EIR states that scenarios 2 and 3 propose residential uses within the 1000-foot buffer of Otay Landfill, and that this would be in conflict with proposed Objective LUT79. The City has essentially created a project description through its use of 'scenarios' that conflicts with policies proposed in the General Plan update. This is a fundamental planning error and furthermore Government Code Section 65300.5 requires internal consistency in preparing General Plans and elements thereof. The County requests that the scenarios which propose residential uses around the landfill buffer be removed to address these inconsistencies.

D-4 4. The City continues to propose residential uses in the landfill buffer. The Draft EIR states that scenarios 2 and 3 propose residential uses within the 1000-foot buffer of Otay Landfill, and that this would be in conflict with proposed Objective LUT79. Therefore, from the County's perspective, this aspect of scenarios 2 and 3 cannot, and should not be approved, as it would not be in conformance with the proposed General Plan Update. Furthermore, the County has already advised the City of Chula Vista that adoption of any general plan designation which permits residential land uses within the landfill buffer would be incompatible with the operation of Otay Landfill (See attached correspondence dated March 2, 2005). The County continues to urge the City of Chula Vista to retain in its General Plan, only those land use designations deemed compatible with the landfill in the landfill buffer area, and deny any proposal to establish residential land use designations.

The land use policy LUT 79.5 states that the City will "limit land uses adjacent to the Otay landfill to open space and limited industrial uses or business parks." However, this policy should clearly state that uses within the 1,000 foot buffer of the Otay landfill are limited to open space and limited industrial uses or business parks. The current policy, which states "adjacent to the Otay landfill", is too vague to adequately protect public health and the

PR-11

RESPONSE

D-4 The recirculated dEIR concluded that significant impacts would occur with the approval of Scenario 2 or 3 as a result of the placement of residential uses within the 1,000-foot buffer of the Otay Landfill (Page 184 of the dEIR). As stated above, Policy LUT 79.5 of the General Plan Update limits land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks. Policy LUT 79.5 addresses the Preferred Plan land uses.

Scenarios 2 and 3 place residential uses adjacent to the landfill and are, therefore, in conflict with this policy. This is a significant land use impact. The Preferred Plan is recommended by City staff and places no residential units within the buffer area. If the City Council decides to adopt Scenarios 2 or 3, the adoption of a Statement of Overriding Considerations for these impacts will be required for implementation of Scenarios 2 or 3.

In addition to land use impacts, the Air Quality section of the dEIR concluded that significant odor impacts would occur with the approval of Scenario 2 or 3 as a result of the placement of residential uses within the 1,000-foot buffer of the Otay Landfill. Mitigation Measure 5.11-2 listed on page 419 of the dEIR was established to reduce these significant odor impacts to below a level of significance.

environment from the effects of the landfill. The minimum 1,000 foot buffer established by the County and the City of Chula Vista must be set out expressly in the General Plan and actually maintained for use only as open space or industrial / business park uses.

Land adjacent to the Otay Landfill is not suitable for development during the time when the landfill is in active operation. The buffer zone around the landfill should remain intact. This buffer was used in the Final EIR –Otay Landfill Development and Expansion Plan February 2000, "to reduce baseline carcinogenic risk isopleths for a residential receptor" and odors (page 2-44&46). The LEA suggests a cancer risk study be provided for this EIR for any development within the buffer zone, industrial or residential. Cancer risk is identified as a significant impact within this EIR in these identified pages.

Active landfills represent potential increases in risk to public health, safety and environmental issues. Dust, noise, odors, fugitive landfill gas emissions and the use of sewage biosolids are a common theme of nuisance complaints from landfill neighbors. When the wind shifts during events known as "Santa Anas" the LEA receives odor complaints from the developed western side of the landfill in the area known as Robinhood Homes (*East Main Street Sub Area*). Birds, flies and other vectors are attracted to active landfills and often migrate off site causing public health and environmental impacts to the neighborhood.

The wind normally flows from west to east across the landfill to the buffer zone where residential and industrial uses are being. The LEA requests further study to determine impacts of the landfill on workers and residents in this area. The nuisance complaints and perceived risk from landfill neighbors will affect the operation of the landfill and the resources of the County for response, enforcement and abatement.

The LEA also wishes to point out that a closed landfill is still biologically active and generates landfill gas and leachate for 30+ years. A closed landfill requires monitoring, repair, and construction activities such as drilling of water monitoring wells, gas extraction and monitoring wells, gas collection systems and surface grading. These actions can be a nuisance to both residents and workers and possibly a health risk. Post closure impacts should be mitigated or discussed as significant impacts to the adjacent community for at least 30 years post closure

Although it is stated that the preferred scenario and scenarios one through three have been analyzed in enough detail to allow adoption of any of the four scenarios, the County is opposed to adoption of any scenario which allows residential uses in the 1,000 ft. buffer. This opposition is based on the significant impacts that will result to the health and quality of life of the surrounding residents and the impacts to County resources related to landfill

response, enforcement and abatement. These impacts (documented in the Final EIR –Otay Landfill Development and Expansion Plan February 2000) would be significant if any scenario is adopted that allows residential uses in the landfill buffer.

D-5 5. The LEA reiterates the comments of the California Integrated Waste Management Board (CIWMB) dated September 22, 2005 regarding the inaccuracies in the City's documents pertaining to the remaining capacity, permitted capacity and expected closure date of the Otay landfill.

D-6 6. Table 1-3 states, "Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. The scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. Therefore, impacts resulting from development associated with Scenario 2 would be significant."

Biological features were an important consideration in the preparation of the Phase 1 RMP and were examined in great detail. Figure 10 in the Phase 1 RMP illustrates the location of key resource areas. Wolf Canyon represents a topographically well-defined resource area in the western portion of the Otay Valley parcel. It includes California gnatcatchers, cactus wrens and Otay tarweed. It is also utilized by raptors for foraging and perching. Each preserve area must be designed to meet the specific needs of the species of concern in the region. Design size and configuration of the preserve areas must focus precisely on the species and habitat of concern. The proposed substitution of other land ("not identified as a key resource area") for the currently designed Wolf Canyon preserve (identified as a "key resource area") is ineffective and inappropriate. A detailed conservation analysis should be conducted prior to adoption of the DEIR to determine what the impacts on the value of the resources on the "give" sites as compared to the "take" sites to ensure compliance with the Phase 1 and Phase 2 RMPs. A detailed analysis should be included in the DEIR that addresses how the proposed amendment conforms to the objectives, guidelines, policies and action plans set forth in the Phase 1 and Phase 2 RMPs.

D-7 7. Page S-21. Table 3-1. "The proposed discretionary actions include modifications to the General Plan, the Otay Ranch GDP, and the Otay Ranch RMP to ensure consistency with the adopted subarea plan of the MSCP. The action covered by this EIR addresses the modification of the plan boundary as it reflects the approved and adopted Subarea Plan. This action will bring the adopted General Plan map into consistency with the Subarea Plan, thereby eliminating conflict between these components of the General Plan."

The RMP is part of the Otay Subregional Plan, which is part of the County of San Diego General Plan. Any proposed changes to the RMP require a General Plan Amendment approved by the Board of Supervisors in order for

RESPONSE

D-5 Comment noted. Please see Response to Comment A-1.

D-6 This comment requests that an analysis should be included in the EIR regarding the development under Scenario 2 which would require a Boundary Adjustment to the City of Chula Vista MSCP Preserve. Page 180 of the dEIR states that implementation of Scenario 2 would require a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a Boundary Adjustment to the City of Chula Vista Subarea Plan. The scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. Absent a demonstration of functional equivalency, this is considered a significant, unmitigated impact.

The Preferred Plan is recommended by City staff. If the City Council decides to adopt Scenario 2, the adoption of a Statement of Overriding Considerations for these impacts will be required.

D-7 See Response to Comment D-1.

the changes to the RMP to become effective. The DEIR should include an analysis of potential impacts should the County Board of Supervisors not adopt these amendments.

D-8 8. Page 161. 2. Town Center Designation. This amendment would establish a new Town Center designation that allows for higher density housing, office, retail and other commercial developments than allowed in traditional village cores, utilizing a more extensive grid street system, which promotes direct access for pedestrians, cyclists and motorists from the surrounding village developments.

The new Town Center Designation may not be appropriate for lands that are adjacent to lands within the County of San Diego MSCP Preserve or adjacent to lands within the County that are designated as low-density. Potential impacts to the MSCP preserve from higher density development in the Town Center Designation area should be evaluated.

BIOLOGICAL RESOURCES

D-9 9. Figure 5.3-1 "Natural Systems Open Space" This Figure fails to depict the Otay Ranch hardline preserve located within the County of San Diego Multiple Species Conservation Program (MSCP) (a Natural Community Conservation Program). The County's MSCP applies to all unincorporated lands within its boundaries – including the unincorporated areas of Otay Ranch. Any projects or amendments proposed by the City of Chula Vista within the boundaries of the County of San Diego MSCP will need to comply with its provisions. Any amendments to this hard-lined preserve area will require a Major Amendment as provided in the County of San Diego MSCP Subarea Plan.

PUBLIC SERVICES

D-10 10. Table 5-13.12 "Summary Of Existing And Future Park And Recreation Facilities". This table includes acreage for two future 9-acre neighborhood parks in Otay Ranch Village 13, which is outside of the City of Chula Vista municipal boundaries, and current Sphere of Influence. The developers of Village 13 have submitted a project proposal to the County of San Diego. The City of Chula Vista should not include lands within the County of San Diego unincorporated area within its General Plan Area. These areas are included in the County of San Diego General Plan and are currently being analyzed by the County. Therefore, the City of Chula Vista should not rely on the use of lands outside its land use jurisdiction/authority to meet its goals or to mitigate impacts.

RESPONSE

D-8 The Town Designation would not allow high density development adjacent to the MSCP Preserve. The Town Center concept maintains a quarter-mile pedestrian-shed radius that contains the number of households needed to support viable public transit stations. New Town Center policies will require a gradual reduction in multi-family and single-family densities farther away from the Town Center. The new Town Center Designation is proposed in Villages Eight and Nine within Otay Ranch. The Town Center designation in these villages is not located in areas adjacent to lands within the County of San Diego MSCP Preserve or adjacent to lands within the County that are designated as low-density. Therefore, impacts to the MSCP Preserve from higher density development in the Town Center Designation were not evaluated.

D-9 There are no amendments proposed to the County of San Diego MSCP hard-line preserve.

D-10 This comment states that the City of Chula Vista should not rely on lands outside of its jurisdiction to meet its neighborhood park requirements for Otay Ranch. The City of Chula Vista is not relying on the use of lands outside of its jurisdiction to meet its neighborhood park acreage requirement for Otay Ranch. Pursuant to the Otay Ranch General Development Plan, each village in Otay Ranch is required to meet its neighborhood park requirement within its own boundaries. Chula Vista does not deviate from this requirement. Park acreage in Village 13 was referenced in Footnote 5 to Table 5.13-2 in order to provide clarification of park acreage outside of Chula Vista but within its General Plan area.

TRAFFIC AND TRANSPORTATION

DPW staff has reviewed the revised Transportation Study (TS) prepared by Kimley-Horn and Associates dated September 6, 2005 regarding the City of Chula Vista General Plan Update. It appears that Transportation Study has not addressed the County's previous comments dated February 2005. The County is concerned that the proposed plan will have significant direct and/or cumulative traffic impacts to roads and intersections located in the Bonita/Sweetwater community and the Otay Subregion of the unincorporated area. Our previous comments requested the inclusion of a more County-specific discussion in the DEIR/ Transportation Study. The following are our comments that should be addressed in a revised DEIR and Transportation Study:

D-11 11. The DEIR/TS should identify the Circulation Element roads that are currently located within the County's jurisdiction that are part of the City's sphere of influence area. Preferably, the DEIR/TS should include a separate discussion that specifically addresses the impacts to County roads.

D-12 12. The separate County roads discussion should identify Levels-of-service, forecasted traffic volumes, and increase in traffic volumes due to the proposed General Plan for roads located within the County's jurisdiction that are adjacent to the City of Chula Vista. These roads include Proctor Valley Road, Otay Lakes Road, and several roads in the Bonita/Sweetwater community and Otay Subregion.

D-13 13. The DEIR/TS should identify any inconsistencies between the City and the County's Circulation Element Plans as proposed for the County's General Plan 2020 update. The DEIR/TS should identify any differences in either the planned roadway classifications and/or road alignments. For further information regarding the County's Circulation Element Plan, please call Nick Ortiz at 858-874-4204.

D-14 14. The County's Public Road Standards LOS criteria should be used in the assessment of roads located within the County's jurisdiction.

D-15 15. The DEIR/TS should clarify the land use and road network assumptions used for the sphere of influence areas in traffic modeling analysis (Pg.28). The DEIR/TS should state whether the assumptions are based on buildout (post-2030) of the City's proposed General Plan or the SANDAG Series 10 Year 2030 projections.

16. The DEIR/TS should clearly identify any significant impacts to County roads and provide recommended mitigation measures.

17. It appears that the proposed General Plan will significantly impact segments of Bonita Road currently located within the County's jurisdiction. The TS

RESPONSE

D-11 The traffic study for the General Plan Update calculated existing and future levels of service for each roadway segment evaluated within the General Plan Area, which included several roadways within the County's jurisdiction. County of San Diego roadway segments were evaluated using Chula Vista criteria and were not separated from other facilities currently within the City. The traffic implications of proposed land use/transportation network alternatives were evaluated using the SANDAG TRANPLAN regional traffic model, which is based on Series 10 employment and population projections for the San Diego region. This computerized model takes land use and transportation network information as inputs and estimates the volumes of traffic on existing and future roadways under long-term future conditions using the four-step Urban Transportation Planning Process. This process includes trip generation, mode split, trip distribution and traffic assignments. The planning "horizon year" for this study is the Year 2030. Regional transportation infrastructure was modeled using SANDAG's "reasonably expected" Mobility 2030 assumptions. The impact analysis assumed that the city was built out in 2030, but that the surrounding area was consistent with the SANDAG land use assumptions for the year 2030.

D-12 The tables contained in the dEIR and the Transportation Study do provide a summary of LOS, traffic volumes, volume-to-capacity ratios, and other information for the roads listed in this comment. As discussed in Response to Comment D-11, County of San Diego roadway segments were evaluated using Chula Vista criteria and were not separated from other facilities currently within the city.

D-13 The cumulative traffic analysis conducted for the General Plan Update employed the regional traffic database and modeling employed by SANDAG. As such, it included the projected growth for the region, including both growth in regional trips and anticipated expansion of the circulation system. The extent to which SANDAG's regional projections reflect the County's adopted circulation system is the extent to which the EIR considered the County's roadway standards. Traffic effects identified in Chapter 5.10 of the dEIR were significant.

D-14 The Chula Vista standard for LOS C is more conservative than the County's LOS D standard as described on Page 347 of the dEIR. LOS C is a widely accepted and conservative standard for roadway capacities. It is appropriate to use the City of Chula Vista's criteria to evaluate these roadways.

D-15 As described on page 28 of the Transportation Study and page 349 of the dEIR (and in Table 1.4-1 of the Transportation Study) the analysis horizon year was 2030. In the traffic model, it was assumed that City of Chula Vista land uses would be build out, while uses in the region and adjacent areas would be developed through the year 2030. All plan alternatives assume that SR-125 would be a tollway south of SR-54. SANDAG's assumptions were for the area outside the City of Chula Vista. Table 1.4-1 of the Transportation Study has been incorporated into the EIR in Table 5.10-3.

TRAFFIC AND TRANSPORTATION

DPW staff has reviewed the revised Transportation Study (TS) prepared by Kimley-Horn and Associates dated September 6, 2005 regarding the City of Chula Vista General Plan Update. It appears that Transportation Study has not addressed the County's previous comments dated February 2005. The County is concerned that the proposed plan will have significant direct and/or cumulative traffic impacts to roads and intersections located in the Bonita/Sweetwater community and the Otay Subregion of the unincorporated area. Our previous comments requested the inclusion of a more County-specific discussion in the DEIR/ Transportation Study. The following are our comments that should be addressed in a revised DEIR and Transportation Study:

11. The DEIR/TS should identify the Circulation Element roads that are currently located within the County's jurisdiction that are part of the City's sphere of influence area. Preferably, the DEIR/TS should include a separate discussion that specifically addresses the impacts to County roads.

12. The separate County roads discussion should identify Levels-of-service, forecasted traffic volumes, and increase in traffic volumes due to the proposed General Plan for roads located within the County's jurisdiction that are adjacent to the City of Chula Vista. These roads include Proctor Valley Road, Otay Lakes Road, and several roads in the Bonita/Sweetwater community and Otay Subregion.

13. The DEIR/TS should identify any inconsistencies between the City and the County's Circulation Element Plans as proposed for the County's General Plan 2020 update. The DEIR/TS should identify any differences in either the planned roadway classifications and/or road alignments. For further information regarding the County's Circulation Element Plan, please call Nick Ortiz at 858-874-4204.

14. The County's Public Road Standards LOS criteria should be used in the assessment of roads located within the County's jurisdiction.

15. The DEIR/TS should clarify the land use and road network assumptions used for the sphere of influence areas in traffic modeling analysis (Pg.28). The DEIR/TS should state whether the assumptions are based on buildout (post-2030) of the City's proposed General Plan or the SANDAG Series 10 Year 2030 projections.

D-16 16. The DEIR/TS should clearly identify any significant impacts to County roads and provide recommended mitigation measures.

D-17 17. It appears that the proposed General Plan will significantly impact segments of Bonita Road currently located within the County's jurisdiction. The TS

RESPONSE

D-16 The Transportation Study and the dEIR have called out all significant impacts to all facilities on Tables 1.5-1 and 1.5-2 of the Transportation Study and Tables 5.10-3 and 5.10-4 of the dEIR. Section 5.10.5 of the dEIR lists mitigation measures required for the General Plan Update which includes roadways within the County's jurisdiction. Of the facilities located in County jurisdiction (Bonita Road, Sweetwater Road, and Central Avenue), only Bonita Road has significant impacts under the Preferred Plan (i.e., from I-805 to Plaza Bonita Road and from Willow Street to Central Avenue). Mitigation was not recommended for the first segment because traffic signal coordination is not expected to provide much benefit for such a short segment (about 750 feet). However, mitigation (in the form of traffic signal coordination) was proposed for the segment between Willow Street and Central Avenue. As discussed on Page 41 of the Transportation Study, signal coordination, while improving peak hour flow, will not necessarily mitigate project impacts to a less-than-significant level.

D-17 Operational improvements, which will improve traffic flow, but not necessarily mitigate impacts, will be coordinated with appropriate agencies.

proposes (Pg.43) operational improvements (i.e traffic signal coordination) to mitigate the impacts. The City should coordinate with the DPW Traffic section prior to any implementation of proposed operational improvements along County roads. It should be noted that operational improvements may not fully mitigate the impacts of the proposed General Plan.

D-18 18. The DEIR should not rely on future planned roads to mitigate for traffic impacts. The DEIR notes that traffic volumes on Otay Lakes Road will be reduced once the SR-125 tollway becomes a freeway. It should be noted that SR-125 will not convert from a tollway to a freeway until the completion of the 35-year franchise agreement. Senate Bill 463 also proposes to extend the franchise agreement to 45 years.

D-19 19. The TS states (Pg.25) that the City and County of San Diego uses LOS D as their performance standard. The DEIR/TS should also discuss conformance with the County's Public Facility Element Transportation Policy 1.2.

D-20 20. The City should be aware that an application to close and vacate portions of Proctor Valley Road and San Miguel Road has been submitted to the County. The DEIR/TIS should evaluate/discuss the cumulative impacts of the proposed General Plan Amendment with the road closure/vacation request proposal.

D-21 21. The County's draft Transportation Guidelines for the Determination of Significance should be used as a guide in the preparation of the traffic analysis. If an alternate method is used, it must be in conformance with the requirements of CEQA (see Section 15130 of the State CEQA Guidelines).

22. In April 2005 the County adopted the Transportation Impact Fee (TIF) program. The program may provide a mechanism to mitigate cumulative impacts to County roads that was not previously available to neighboring jurisdictions. The DEIR/TS should provide a discussion of the feasibility of projects in the City of Chula Vista participating in the TIF program in order to mitigate their cumulative impacts. The TIF fee could be based on the amount of project trips distributed on County roads.

23. City of Chula Vista staff should coordinate with the DPW Capital Improvement Program (CIP) section in order to ensure consistency with the County's Bicycle Transportation Plan. Please contact Tom Hart, Civil Engineer, at 858-495-5288 regarding the Bicycle Transportation Plan.

CHULA VISTA GENERAL PLAN UPDATE AND OTAY RANCH AMENDMENTS

24. Government Code Section 65300 states that "Each planning agency shall prepare and the legislative body of each county and city shall adopt a comprehensive, long-term general plan for the physical development of the

RESPONSE

D-18 The dEIR does not rely on future planned roads to mitigate for traffic impacts. Table 5.10-5 in the dEIR provides a list of measures or operational improvements that would lessen the Circulation Element impacts identified, but because the circulation impacts are defined based on roadway capacity, only measures that increase capacity are available to avoid those effects. Many of the mitigation measures listed in Section 5.10.5 are operational in nature, and will improve arterial progression during the peak commuting hours. This is likely to translate into higher vehicles speeds and possibly an improvement in LOS on certain segments. While operational improvements will not increase the 24-hour capacity of a segment, which is based on the number of lanes, they will improve traffic flow and reduce peak hour congestion. Operational improvements would reduce impacts but not to a level less than significant. All roadway segments identified in Tables 5.10-3 and 5.10-4 of the dEIR as having a significant impact before mitigation will have a significant impact after mitigation, although the intensity of this impact will in most cases be reduced.

The reduced volume on Otay Lakes Road was mentioned for informational purposes. The rationale for not building this facility out to its Adopted General Plan classification is based on several considerations, including absence of "side friction", and the improvements that may be provided through signal coordination.

D-19 This comment states that the dEIR and Transportation Study should use LOS D as their performance standard and discuss conformance with the County's Public Facility Element Transportation Policy. The traffic analysis for the General Plan Update is not subject to the policies and regulations of adjacent jurisdictions. See Response to Comment D14.

D-20 The City of Chula Vista has received no official notification regarding the application to close and vacate portions of Proctor Valley Road and San Miguel Road. The cumulative traffic analysis conducted for the General Plan Update employed the regional traffic database and modeling employed by SANDAG. As such, it included the projected growth for the region, including both growth in regional trips and anticipated expansion of the circulation system. Traffic effects identified in Chapter 5.10 of the dEIR were significant. The traffic analyses included mitigation measures to reduce significant traffic impacts. These mitigation measures included operational improvements which would improve traffic flow and alleviate peak hour congestion; however, they would not increase the 24-hour capacity of a segment, which is based on the number of lanes, and would, therefore, not result in avoidance of impacts. As such, operational improvements would reduce impacts but not to a level less than significant. Therefore, significant and unmitigated cumulative traffic impacts are noted for the street network.

D-21 It is appropriate to use City of Chula Vista criteria in order to be consistent with the other analysis and mitigation. The traffic analysis for the General Plan Update is not subject to the policies and regulations of adjacent jurisdictions. See Response to Comment D-11.

proposes (Pg.43) operational improvements (i.e traffic signal coordination) to mitigate the impacts. The City should coordinate with the DPW Traffic section prior to any implementation of proposed operational improvements along County roads. It should be noted that operational improvements may not fully mitigate the impacts of the proposed General Plan.

18. The DEIR should not rely on future planned roads to mitigate for traffic impacts. The DEIR notes that traffic volumes on Otay Lakes Road will be reduced once the SR-125 tollway becomes a freeway. It should be noted that SR-125 will not convert from a tollway to a freeway until the completion of the 35-year franchise agreement. Senate Bill 463 also proposes to extend the franchise agreement to 45 years.

19. The TS states (Pg.25) that the City and County of San Diego uses LOS D as their performance standard. The DEIR/TS should also discuss conformance with the County's Public Facility Element Transportation Policy 1.2.

20. The City should be aware that an application to close and vacate portions of Proctor Valley Road and San Miguel Road has been submitted to the County. The DEIR/TIS should evaluate/discuss the cumulative impacts of the proposed General Plan Amendment with the road closure/vacation request proposal.

21. The County's draft Transportation Guidelines for the Determination of Significance should be used as a guide in the preparation of the traffic analysis. If an alternate method is used, it must be in conformance with the requirements of CEQA (see Section 15130 of the State CEQA Guidelines).

D-22 22. In April 2005 the County adopted the Transportation Impact Fee (TIF) program. The program may provide a mechanism to mitigate cumulative impacts to County roads that was not previously available to neighboring jurisdictions. The DEIR/TS should provide a discussion of the feasibility of projects in the City of Chula Vista participating in the TIF program in order to mitigate their cumulative impacts. The TIF fee could be based on the amount of project trips distributed on County roads.

D-23 23. City of Chula Vista staff should coordinate with the DPW Capital Improvement Program (CIP) section in order to ensure consistency with the County's Bicycle Transportation Plan. Please contact Tom Hart, Civil Engineer, at 858-495-5288 regarding the Bicycle Transportation Plan.

CHULA VISTA GENERAL PLAN UPDATE AND OTAY RANCH AMENDMENTS

D-24 24. Government Code Section 65300 states that "Each planning agency shall prepare and the legislative body of each county and city shall adopt a comprehensive, long-term general plan for the physical development of the

RESPONSE

D-22 Developer Impact Fees, such as Chula Vista's TDIF, may be assessed only against developments within the agency's jurisdiction. Voluntary participation in neighboring DIF programs is not a policy of the General Plan Update.

D-23 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

D-24 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

county or city, and any land outside its boundaries **which in the planning agency's judgment bears relation to its planning**."

As a planning agency, it is the County of San Diego's judgment that the unincorporated lands outside the City of Chula Vista's boundaries and current sphere of influence bear no relation to the City of Chula Vista's planning and should not be included in the Chula Vista "General Plan Area" based on the following:

a. These lands are within the land use jurisdiction and authority of the County of San Diego.

b. The County already is analyzing these lands as part of its General Plan 2020 Update.

c. On December 14, 1994 (9) the County Board of Supervisors stated its position on the Chula Vista Sphere of Influence Study (Sphere), and directed the Chief Administrative Officer to transmit the following recommendations to the City of Chula Vista and to the Local Agency Formation Commission:

"Easterly Sphere Boundary: Reaffirm February 9, 1994 (4), tentative Board decision to align the easterly Sphere boundary with the San Bernardino Meridian, which roughly passes through the center of the lower Otay Reservoir. It is further recommended that the San Bernardino alignment bend slightly to follow the center of the Lakes between the upper and lower reservoirs. The recommended alignment will result in Otay Ranch Village 13 (Resort), Village 14 (Proctor Valley), Village 15 (San Ysidro West), Village 16 (Jamul Rural Estate) and Village 17 (San Ysidro East Rural Estate) **remaining within the unincorporated County, with the Otay Lakes forming the natural boundary between the City and the unincorporated area."**

d. Several lands within the unincorporated areas previously scheduled for development have been purchased by the State or Federal Government as well as by private conservancies for open space purposes (including Villages 14, 15 and 16) and any impacts to the City of Chula Vista related to land use, transportation, public safety or other infrastructure and services created by development in the unincorporated area is greatly reduced.

D-25 25. The following policies, objectives, and statements in the City of Chula Vista General Plan and Otay Ranch Amendments make it clear to the County that the City is positioning itself to annex unincorporated lands in their sphere of influence **and** plans to pursue expansions of their current sphere of influence boundary to allow further annexations. The County is of the opinion that the

RESPONSE

D-25 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

existing unincorporated lands east of the City of Chula Vista are not logical extensions of the City of Chula Vista and should not be pursued for annexation.

a. The Chula Vista General Plan includes objective GPI 6, which is, "Promote logical revisions to the Chula Vista sphere of influence and jurisdictional boundaries". The specific policies related to this objective include GPI 6.1 which states, "Permit, and in some instances promote, requests for reorganization of jurisdictional or sphere of influence boundaries that further the vision established by the Chula Vista General Plan".
b. Page LUT-231: Objective - LUT 65 Annex to the City development areas in the Proctor Valley or San Ysidro Mountain parcels of the Otay Ranch that require urban-level services from the City or that otherwise relate strongly to the City.
c. LUT 65.1 Ensure that services and infrastructure are adequate to accommodate development in Villages 13, 14, and 15 of the Otay Ranch GDP.
d. LUT 65.2 Evaluate for annexation into the City all development areas within those portions of Villages 13, 14, and 15 that require urban-level services.
e. Page GPI-21: Objective - GPI 6 Promote logical revisions to the Chula Vista sphere of influence and jurisdictional boundaries.
f. GPI 6.1 Permit, and in some instances promote, requests for reorganization of jurisdictional or sphere of influence boundaries that further the vision established by the Chula Vista General Plan.
g. GPI 6.2 Require analyses to consider and review impacts to services, infrastructure and fiscal health anticipated by proposed changes to sphere of influence or jurisdictional boundaries.

D-26 26. Page LUT-229: LUT 10.4.2 Unincorporated East Otay Ranch Subarea. The Unincorporated East Otay Ranch Subarea is located entirely within the unincorporated County of San Diego. As such, it is included within the San Diego County General Plan, specifically addressed by that document's Otay Subregional Plan. According to the Chula Vista General Plan update, the vision for the area is described as follows:

"Development within this Subarea is carefully planned...The area located north of Lower Otay Reservoir and along Otay Lakes Road, identified as the Resort Focus Area, has more intense resort and residential uses, as shown on the County's Otay Subregional Plan. **Development of the Resort Focus Area may require City services to be extended to the site."**

The County notes that the Resort Focus Area, known as Otay Ranch Village 13 currently has a General Plan Amendment, Specific Plan Amendment,

RESPONSE

D-26 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

Rezone and Tentative Map application being processed by the County for development of the site. The Notice of Preparation (NOP) of an Environmental Impact Report for this project recognized potentially significant impacts related to utilities and public services. As described in the NOP, the project is investigating several options for obtaining sewer service, only some of which would involve agreements or contracts with the City. Water service may be provided by Otay Water District, fire protection services by San Diego Rural Fire Protection District, and police services by San Diego County Sheriff's Department. Thus it is very possible City services may not be required for the project.

D-27 27. General Plan 2020 Consistency: The General Plan Land Use Diagram (Figure 5-12) of the City of Chula Vista General Plan includes plans for areas located outside the City's sphere of influence. Those areas include a substantial portion of two unincorporated communities: Otay and Jamul/Dulzura. The General Plan Land Use Diagram creates large, irregular patterns within the unincorporated County where land use changes would impact environmental resources, planned development patterns, road network planning, and the character of distinct communities.

The County of San Diego requests that Chula Vista modify its General Plan Land Use Diagram by removing plans for land located outside its sphere of influence. The County would like to note its particular disagreement with plans that conflict with the County's draft General Plan 2020 (GP2020). The County's draft plan is a product based on an extensive analysis of existing conditions and a high level of public input from communities, landowners and interest groups. Chula Vista's plans for land located within the unincorporated County do not appear to reflect the planning criteria, the level of analysis, or the level of public input incorporated into GP2020.

One such area is the Proctor Valley district of the East Otay Ranch subarea that includes residential densities as high as 3 dwelling units per acre on land adjacent to Proctor Valley Road in the Jamul/Dulzura community (unincorporated County). As part of GP2020, the County planned these areas at very low densities (1 du/10, 20 or 40 acres) because they are remote from infrastructure and public services, contain environmental resources, and are surrounded by public land. The City of Chula Vista plan calls for leapfrog development that allows for substantially more growth and mixed-use development on these same lands.

We would also like to note that proposed parks and low-density residential areas located by Chula Vista within the eastern portion of the San Ysidro Mountain District in Village 15 of the unincorporated East Otay Ranch subarea were assigned to land that is currently owned by the State of California and the federal government (Fish and Wildlife Agency). The exception is a single parcel owned by the Otay Ranch project. The impacts on

RESPONSE

D-27 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

the RMP and feasibility of proposing land uses in these areas needs to be evaluated.

In some cases, densities planned within the City of Chula Vista are in stark contrast to densities planned for adjacent land within the unincorporated County. One such area is the eastern portion of the Sweetwater planning area where the community character is based on low-density residential development and equestrian activities located near the Sweetwater reservoir. This area will be adversely affected by increased traffic from developments such as the San Miguel Ranch that are planned at substantially higher densities than adjacent densities proposed by the County of San Diego.

The County of San Diego is currently working on the road network planning portion of its general plan update, and updated road classifications have not yet been determined. We request that the City of Chula Vista coordinate its road network plans with the unincorporated County to ensure that plans are consistent and based on mutually acceptable traffic forecast data.

D-28 28. There are several figures that were not included in the pubic review documents. This makes it impossible to complete a thorough review of the documents.

a. Page 76: Exhibit 18b "Otay Ranch GDP/SRP Land Use Plan" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.
b. Page 80: Exhibit 20 "Otay Valley Parcel Land Use Map" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.
c. Page 82: Exhibit 22 "Proctor Valley Parcel Land Use Map" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.
d. Page 84: Exhibit 24 "San Ysidro Mountains Parcel Land Use Map" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.
e. Page 87: Exhibit 25 "Otay Ranch Village Types & Rural Estate Areas Map" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.
f. Page 91: Exhibit 26 "Commercial, Industrial & Business Sites" is not available for the public review. There is a note on the Exhibit indicating "To Be Revised", but the pages are blank.

The County of San Diego appreciates the opportunity to continue to participate in the environmental review process for this project. We look forward to receiving future environmental documents related to this project or providing additional assistance at

RESPONSE

D-28 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

your request. If you have any questions regarding these comments, please contact Jennifer Campos at (858) 495-5204.

Sincerely,

GARY L. PRYOR, Director
For Department of Planning and Land Use

GLP:JEG:JC

Attachments: Letter dated March 2, 2005 from Walter F. Ekard (County) to Mr. George Krempl (City of Chula Vista)

cc: Ron Kelley, Board of Supervisors, District 1 Policy Advisor, M.S. A500
Adam Wilson; Board of Supervisors, District 2 Policy Advisor, M.S. A500
Megan Jones, DCAO, Staff Officer, M.S. A6
Eric Gibson, Deputy Director, Department of Planning and Land Use, M.S. O650
Barry Beech, Department of Public Works, M.S. O336
Robert Goralka, Department of Public Works, M.S. O385
Mellissa Porter, Department of Environmental Health, M.S. D561
Jennifer Campos, Department of Planning and Land Use, M.S. O650
Chantelle Swaby, Department of Planning and Land Use, M.S. O650
Rosemary Rowan, Department of Planning and Land Use, M.S. O650
Trish Boaz, Environmental Resource Manager, Department of Planning and Land Use, M.S. O650
Sweetwater Community Planning Group
Jamul/Dulzura Community Planning Group
Priscilla Jaszkowiak, Administrative Secretary, Department of Planning and Land Use

Reference County Project IJN 05-064

County of San Diego

WALTER F. EKARD
CHIEF ADMINISTRATIVE OFFICER
(619) 531-6226
FAX: (619) 557-4060

CHIEF ADMINISTRATIVE OFFICE
1600 PACIFIC HIGHWAY, STE. 209, SAN DIEGO, CA 92101-2472

March 2, 2005

Mr. George Krempl
Assistant City Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

CITY OF CHULA VISTA GENERAL PLAN UPDATE

Dear Mr. Krempl:

Thank you for your letter dated January 20, 2005, in which you advised the County of San Diego that the Chula Vista General Plan Update includes a land use alternative (Scenario 2) that includes single and multiple family land use designations within the Otay Landfill Buffer Area (OLBA). As you indicate, the "Agreement Between the County of San Diego and the City of Chula Vista Regarding Jurisdiction Over and Operation of Otay Landfill" dated May 15, 1996 (the Agreement) requires the City to consult with the County prior to holding any hearings on such a general plan amendment applicable to any of the OLBA, and the Board of Supervisors will respond within 60 days, advising the City whether the proposed general plan amendment is compatible with the Landfill.

As you are aware, a fundamental purpose for which the County and the City entered into the Agreement, was to protect and facilitate the continued operation of the Otay Landfill. Components of the strategy for providing this protection are stated in Section 6 of the Agreement. These include:

> The requirement that the City amend its general plan, zoning and other applicable land use regulations so that no residential land uses are permitted within the OLBA, and all uses permitted are compatible with the Landfill (paragraph (a));

> The requirement for consultation with the County on any proposed general plan amendments within the OLBA, as is presently being pursued (paragraph (b));

> Penalties which become applicable if the City amends its general plan to permit land uses within the OLBA which the County has advised the City are incompatible with the Landfill (paragraphs (c) and (d);

> The requirement that the County notify the City as to which of the City's non-residential general plan land use designations are compatible with the Landfill (paragraph (e)); and

> Provisions for "Landfill Nuisance Easements" covering land within the OLBA.

On June 11, 1996 (42), the Board of Supervisors implemented paragraph (e) of Section 6, by providing the City with a list of OLBA land use designations deemed compatible with the Otay Landfill. Those uses were Research and Limited Manufacturing Industrial, General Industrial and Open Space, Agriculture, Reserve Floodplain, and Parks and Recreational Facilities. The County reiterated that public, quasi-public, and residential land uses were found incompatible and not permitted within the OLBA.

At its meeting of March 2, 2005, the Board of Supervisors considered the current general plan update proposal, which includes residential land uses within the OLBA. The Land Use Agenda Item planning report submitted to the Board for that meeting evaluates the numerous, extremely important reasons that residential land uses within the OLBA were not deemed compatible with the Otay Landfill when the Agreement was entered into, demonstrates that those same reasons continue to exist today, and identifies additional reasons why residential uses would be incompatible. The Board of Supervisors concurred with the findings of this Land Use Agenda Item, and therefore directed that the City of Chula Vista be advised, pursuant to Section 6(b) of the Agreement, that adoption of any general plan designation which permits residential land uses within the OLBA would be incompatible with the Otay Landfill.

The Board of Supervisors therefore urges the City of Chula Vista to retain the light industrial land use designations within the Otay Landfill Buffer Area in its general plan and deny any proposal to establish any residential land use designation.

Thank you again for keeping the County informed of this important issue. If you have any questions, feel free to contact Gary Pryor, Director of the Department of Planning and Land Use, at 858.694.2962.

Respectfully,

Robert R. Copper
Deputy Chief
Administrative Officer

WALTER F. EKARD
Chief Administrative Officer

cc: Gary Pryor, Director, Department of Planning and Land Use, M.S.O650
Eric Gibson, Deputy Director, Department of Planning and Land Use, M.S. O650
√David Hulse, Chief Major Projects, Department of Planning and Land Use, M.S. O650
Gary Erbeck, Director, Department of Environmental Health, M.S. D561
John Snyder, Director, Department of Public Works, M.S. O332
Megan Jones, CAO Staff Officer, M.S.A-6

THE CITY OF SAN DIEGO

November 2, 2005

Steve Power
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: **City of San Diego Comments on the Revised Draft Chula Vista General Plan Update and Re-Circulated Draft Environmental Impact Report (EIR #05-01; GPA-01-03; SCH #2004081066)**

Dear Steve Power:

The City of San Diego is a Responsible Agency for this project and we will need to use the subject document for our permitting purposes. We offer the following comments as a mitigation strategy:

Traffic Engineering – Fernando Lasaga (619-446-5298)

E-1 1. The City of Chula Vista's southern border is at the Otay River Valley with the City of San Diego communities of Otay Mesa-Nestor, which is mostly built-out residential, and Otay Mesa, which is developing with residential and industrial, on the other side.

E-2 2. The Circulation Plan shown in Figure 1.2-2 on Page 11 of the Traffic Technical Report depicts the intersection of Rock Mountain Road and La Media Road as that of two "Town Center Arterials" which is supposed to imply a one-way street system. It would appear that an intersection of two streets with newly coined classifications would be analyzed. As a matter of fact, no intersection analysis is performed in this DEIR, the only traffic analysis presented is Level of Service (LOS) for specific roadway segments based on Average Daily Traffic (ADT).

Development Services
1222 First Avenue, MS 501 • San Diego, CA 92101-4155
Tel (619) 446-5460

RESPONSE

E-1 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

E-2 The threshold used in the dEIR for the General Plan is a 24-hour segment capacity threshold identifying a significant impact as a roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout. In addition, a significant impact was identified as a roadway segment operating at LOS D or E would operate at LOS E or F or which would operate at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout. Based on these thresholds significant circulation impacts were identified. The use of a project-specific intersection analysis for the buildout of the General Plan is speculative and, lacking project-specific detail, inappropriate. Intersection analysis shall be performed as part of the environmental review for subsequent projects.

E-3 3. The Traffic Technical Report on Page 28 mentions that the regional Series 10 model was used for the analyses of alternatives which included 2030 scenarios as well as build-out scenarios (these are said to be included for informational purposes). The City and County Otay Mesa areas are currently planned as industrial areas with some residential at the west end of the City's Otay Mesa community. A 2030 regional model will make it appear that very little traffic is generated in Otay Mesa because the regional land use model is not balanced between residential and industrial land uses and the model is then biased to favor the development of the more regionally centrally located industrial uses. Any 2030 or beyond model in such a situation must really build out the Otay Mesa area in order to overcome this very pronounced bias.

E-4 4. The City of San Diego has observed that the Series 10 regional model (and prior model series may also exhibit this property) is not putting enough traffic on the north-south facilities in the South Bay in the model base year 2000. It is a very pronounced under-assignment of traffic that carries over to model results for future years, and, by not calibrating the model, the City of Chula Vista could be considered to be taking advantage of a flaw in the model to enjoy less volume on the streets that are analyzed in their DEIR.

E-5 5. The analysis scenarios are listed in Table 1.4-1 on Page 29 of the Traffic Technical Report. It appears that in developing the scenarios certain assumptions were evaluated twice, with La Media and without La Media, which means the connection of La Media Road to the City of San Diego. The intent is not discussed, and it appears that these are working scenarios that were not subsequently discarded so as not to have to run them again correctly. As there are basically multiple scenarios for the same assumptions, please create a reduced list of the essential scenarios, and break them out in a separate table. It should have been apparent from the build-out analyses that it does not make sense to remove La Media Road from the circulation element. Moreover, the town center designation for the first La Media intersection in Chula Vista reveals a planning decision to make that area a strong attractor of trips, from all around, by definition removing a spoke from your town center is bad planning.

E-6 6. The City of San Diego appreciates that the DEIR analyzed the build-out with both the adopted land uses in Otay Mesa, as well as those being proposed in the City's on-going Community Plan Update for Otay Mesa. Please indicate any process that has occurred to integrate the two updates. The Southwestern Community College campus in Otay Mesa seems to be the only attempt at consciously connecting the land uses for these two communities. The Regional Transit Vision transit network assumed in the DEIR has three interweaving transit lines in the southeast section (Otay Ranch) of Chula Vista, with at least one of these lines originating in Otay Mesa. The DEIR should summarize the alternative

RESPONSE

E-3 Model runs 56 and 58, described in Table 1.4-1 on Page 29 of the Transportation Study, assume complete buildout of the study area, including Otay Mesa. The analysis considered the potential Otay Mesa Community Plan under consideration by the City of San Diego. Please see Response to Comments E-6 and E-7 for more discussion of consistency of model results.

E-4 Chula Vista and SANDAG conducted extensive model calibration efforts prior to the completion of the model runs. The City of Chula Vista has worked closely with the City of San Diego and SANDAG to incorporate the most up-to-date land use assumptions for other adjacent jurisdictions and the region as a whole. The modeling effort for this project, which has been developed in a two-year process, provides a reasonable estimate of future patterns. The differences in volume may be attributed to different land use and/or network assumptions, including assumptions about the land uses in Chula Vista. It is not necessary to reconcile the differences between the General Plan Update models and alternative runs based on different assumptions.

E-5 Table 1.4-1 of the traffic study and 5.10-3 of the dEIR lists the assumptions of the General Plan Update Traffic Model. Model Run 56C as shown in the table was analyzed with La Media. The analysis with La Media Road was provided for informational purposes to determine the impact based on the Otay Mesa Community Plan and does not affect the analysis findings summarized in the Transportation Study. The table lists all the assumptions and scenarios analyzed for the General Plan Update.

E-6 The City of Chula Vista has worked closely with the City of San Diego and SANDAG to incorporate the most up-to-date land use assumptions for the Otay Mesa Community, other adjacent jurisdictions, and the region as a whole. The modeling effort for this project, which has been developed in a two-year process, provides a reasonable estimate of future patterns. The analysis did consider the potential Otay Mesa Community Plan under consideration by the City of San Diego. Pages 50 and 51 of the Transportation Study discuss the Otay Mesa Community Plan update being considered by the City of San Diego. That discussion concluded that:

> Given the relatively limited and localized impacts associated with the Otay Mesa community plan update under Buildout conditions, it is concluded that results of the analysis contained in Section 1.4 and 1.5 of this report are valid in the context of the City of San Diego's proposed action. No additional analysis is recommended.

Sections 1.4 and 1.5 as referred to in this conclusion are the basis for the impact analysis and significance conclusions presented in the dEIR.

assumptions or logic that led to this system which takes no advantage of a future east-west freeway (SR-905) or a 6-lane prime arterial to be relieved of congestion (Otay Mesa Road). The Traffic Technical Report transit discussion has grade separation and H Street corridor alternatives analyses, but the bigger picture is lost.

E-7 Transportation Planning – Linda J. Marabian (619-236-6496)

Table 1.8-1 of the Traffic Technical Report, Appendix E, identifies the daily traffic volumes and segment levels of Service for the preferred plan with La Media Road in and adopted land uses in Otay Mesa. The City of San Diego has recently run Sandag's transportation model using similar assumptions and resulted in significantly different daily traffic volumes on many of the roadway links. The following are the major differences between volumes obtained from the transportation model. These differences are significant enough to affect the identified impacts to streets within the City of San Diego. Please verify the model number and recalculate the projects impacts accordingly.

STREET	SEGMENT	CHULA VISTA'S TRANSPORTATION MODEL RESULTS	SAN DIEGO'S TRANSPORTATION MODEL RESULTS
Otay Mesa Road	Ocean View Hills Pk.- Heritage Rd	34,400	52,100
	Heritage Road-Britannia Blvd	30,000	51,400
	La Media-SR-125	24,700	55,700
Heritage Road	Datsun St-Chula Vista City limits	34,700	46,100
	SR-905-Otay Mesa Rd	39,200	59,300
La Media Road	Otay Mesa Road-Lone Star Rd	40,400	49,400
	Lone Star Rd-Chula Vista limits	37,100	48,900

CIP Water Policy, Water Department – Cathy Cibit (619-527-7405)

The City of San Diego Water Department (Water Department) has reviewed the above-referenced document. The Water Department is extremely supportive of the agreement between the City of San Diego and Otay Water District to distribute six million gallons per day (mgd) of recycled water from the South Bay Water Reclamation Plant throughout the City of Chula Vista. This increase in distribution will benefit the regional water

RESPONSE

E-7 As stated in Response to Comment E-6 above, the City of Chula Vista has worked closely with the City of San Diego and SANDAG to incorporate the most up-to-date land use assumptions for the Otay Mesa Community, other adjacent jurisdictions, and the region as a whole. The modeling effort for this project, which has been developed in a two-year process, provides a reasonable estimate of future patterns. The differences in volume may be attributed to different land use and/or network assumptions, including assumptions about the land uses in Chula Vista. It is not necessary to reconcile the differences between the General Plan Update models and alternative runs based on different assumptions because they reflect the most up-to-date land use assumptions provided by SANDAG, the regionally recognized traffic expert.

supply by expanding the current reclaimed water distribution system and customer base within the San Diego region, thereby reducing the region's reliance on potable water for non-potable uses.

The Water Department owns and maintains a number of existing potable water facilities within the City of Chula Vista. Potential conflicts with any of these facilities should be discussed in the Draft EIR. To minimize potential infrastructure conflicts, please coordinate with the Water Department during design and construction of any facilities proposed as part of the update that would encroach into existing Water Department infrastructure or facilities.

The following comments are provided on both the General Plan Update and on the associated EIR. Otay Reservoir has served as drinking water source since the 1890s, and will continue to serve the San Diego Region - including the City of Chula Vista - well into the future. For more than 100 years the watershed lands tributary to Otay Reservoir have been rural and largely undeveloped, and water quality in the reservoir was good. Very recent changes in land uses in the watershed, such as those envisioned the General Plan Update, have the potential to compromise water quality in the reservoir. The San Diego Water Department, as mandated by the federal and state Safe Drinking Water Acts, has compiled a Watershed Sanitary Survey for Otay Reservoir [2000, 2005]. The Watershed Sanitary Survey identified non-point source runoff from residential and commercial development as the most significant source of pollutants to the reservoir. The planning area of the General Plan Update covers 17,000 acres in the watershed of Otay Reservoir, which is 27% of the total land area draining to the reservoir. Because the General Plan Update proposes additional residential and commercial development over these watershed lands, it should place major emphasis on protecting this drinking water source. The General Plan Update and its associated EIR do not appropriately emphasize protection of Otay Reservoir as a drinking water source. This is a major oversight that needs to be corrected, including an assessment of impacts and mitigation measures.

Also, related to this water quality issue are several statements that refer to impacts being mitigated if the project complies with existing state or federal standards. Reliance on regulatory standards should not be a basis for determining a level of significance until specifics of impacts are substantiated. A case in point is the impact of future development on water quality at Otay Reservoir; refer to comment Nos. 3, 12 – 17.

E-8 **<u>I. EIR:</u>**

1. Executive Summary, Section 1.1, Page S-1:

   In the first paragraph and throughout the report, please delete the term "Otay Lakes" and replace this term with Otay Reservoir. In the second paragraph, 8th line, please rephrase this sentence as follows:

RESPONSE

E-8 The EIR has been revised to reflect the changes as follows:

County land to the east of Chula Vista is generally ~~vacant and~~ undeveloped.

"County land to the east of Chula Vista is generally ~~vacant and~~ undeveloped and is comprised mainly of the City of San Diego's Otay Reservoir. This reservoir and associated treatment facility supplies drinking water to 200,000 people. This area is also part of the City of San Diego's Cornerstone Lands associated with their Multiple Species Conservation Plan. It represents one of the core biological resource areas."

E-9 This issue needs to be disclosed in the environmental document (Land Use, Biology, and Water Quality Sections) in relationship to the General Plan Update as well as addressing any applicable land use adjacency guidelines and source water protection.

E-10 2. Table 1-3, first row, Page S-21: Please add the joint planning efforts of the County of San Diego, City of San Diego, and City of Chula Vista for the Otay Valley Regional Park and include Otay River Watershed Management efforts.

E-11 3. Table 1-3, Page S-25: Please include in the last sentence, first column the following:

> "Implementation of mitigation measures 5.2-1 .....however, the open, rolling hills **and surrounding watershed,** would be permanently altered by development and the impact due to the change from open areas to developed areas remains...."

E-12 Pages S-40 & S65, Water Quality: The San Diego Water Department disagrees with these statements. Compliance with federal, state, and regional [board] water quality objectives will not ensure that impacts to drinking source waters will not be significant. This is because federal, state, and regional board water quality objectives are not specific to the pollutants of concern for drinking water sources. Reference the *Source Water Protection Guidelines*, 2004, for a discussion of the pollutants of concern (nitrogen or phosphorus, total organic carbon, and salts) for drinking water and how they differ from the pollutants addressed by the federal and state objectives. Therefore, impacts could be significant.

E-13 4. Page 17, second to last bullet: Add the following: "Assure adequate protection of drinking water sources such as the Otay Reservoir through implementation of the *Source Water Protection Guidelines*, 2004.

E-14 5. Table 3-2 Page 23 (recommend number table pages): Water: Revise Otay Lakes to Otay Reservoir.

E-15 6. Section 5.1.1.1, Land Use, *East Planning Areas,* Page 92: Include the following:

RESPONSE

E-9 The areas of change proposed in the General Plan Update are not located adjacent to the Otay Reservoirs or adjacent to the City of San Diego's MSCP.

E-10 Table 1-3 of the dEIR has been revised to reflect these changes.

This includes the joint planning efforts of the City of Chula Vista, the City of San Diego, and the County of San Diego for the Otay Valley Regional Park and Otay River Watershed and SANDAG's RCP, and RTP which promote smart growth principles; Regional Housing Program; Employment Lands Inventory; MTDB trolley extension, including the Otay Ranch Transitway Alignment and alternatives; and MTDB's Transit First studies.

E-11 Table 1-3 of the dEIR has been revised add "and surrounding watershed."

E-12 Objective EE 2 of the General Plan Update protects and improves water quality within surface water bodies and groundwater resources within and downstream of Chula Vista. Policies EE 2.2 through 2.7 and conformance to all federal, state, and regional water quality objectives will ensure that water quality impacts from specific developments would not be significant. The General Plan Update does not propose any changes in the land uses above the Otay Reservoir or adjacent to the Otay Reservoir. Therefore, no impacts to drinking waters are anticipated.

E-13 This comment requests adding a goal to the primary goals and objectives of the General Plan Update and does not pertain to the adequacy of the dEIR. Comment noted.

E-14 The dEIR has been revised to change Otay Lakes to Otay Reservoir in Table 3-2.

E-15 Page 92 of the dEIR has been revised to incorporate the following paragraph:

The easterly lands are largely under public control; specifically, the City of San Diego, who owns and manages the Otay Reservoir (upper and lower) is required by state and federal laws to protect water quality for potable drinking purposes. As such the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used.

The easterly lands are largely under public control; specifically, the City of San Diego, who owns and manages the Otay Reservoir (upper and lower) is required by state and federal laws to protect water quality for potable drinking purposes. As such the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used."

E-16 7. Section 5.1.2: Thresholds of Significance, Page 105. Please add a fourth bullet as follows:

- Threshold 4: Conflict with City of San Diego's, *Source Water Protection Guidelines for New Development*, 2004.

E-17 8. Section 5.1, Page 140, East Planning Area, first paragraph, second to last line: Replace "vacant" with "undeveloped" because this land most likely has some sort of vegetation on it and is not truly "vacant". Same comment for Section 5.1.4.3, Page 183, first paragraph, 5th line.

E-18 9. Section 5.1, Page 147, LUT 81.4 is most likely LUT 82.4 (?).

E-19 10. Objective LUT 85.6, Page 149: Please include in the second sentence the following: "This strategy should identify and consider important land use, **water quality**, economic, circulation...."

E-20 11. Section 5.1.5: First paragraph, Page 148. Incorporate "source water protection devices" after "sufficient buffering".

E-21 12. Section 5.9.1.2, Existing Conditions, Page 305: This section discusses groundwater resources, but provides no discussion of surface water resources. This section should give at least as much emphasis to surface water sources of drinking water as to groundwater sources.

E-22 13. Last paragraph, Page 306: This paragraph which describes existing conditions in the Otay Hydrological Unit, should include that Otay Reservoir is a drinking water source.

In addition, the sentence that states: "Serious water quality problems are limited to the presence of elevated coliform bacteria in the Pacific Ocean receiving waters near Coronado." This statement is problematic because it depends upon who you ask. The San Diego Water Department believes there are serious water quality problems in the portions of the Hydrologic Unit above Otay Reservoir and in Otay Reservoir itself; specifically, nutrients, total dissolved solids, organic carbon, bromide, and pathogens. These problems express themselves as challenges to treating the water to drinking water standards.

RESPONSE

E-16 This comment requests the addition of another threshold. The dEIR contains the following thresholds which are taken from Appendix G of the CEQA Guidelines:

- Threshold 1: Physically divide or adversely affect the community character of an established community.
- Threshold 2: Conflict with any applicable land use plan, policy, or regulation or an agency with jurisdiction over the project (including but not limited to the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Threshold 3: Conflict with any applicable habitat conservation plan or Natural Communities Conservation Plan.

These are appropriate thresholds to determine land use impacts for the City of Chula Vista General Plan Update.

E-17 The dEIR has been revised on page 141 as follows:

Currently, the land within both of these subareas is undeveloped~~vacant~~; therefore, any proposed changes would cause an increase over the existing condition.

E-18 The dEIR has been revised to change LUT 81.4 to LUT 82.4.

E-19 This comment requests a change to the GPU policy and does not pertain to the adequacy of the dEIR. The comment will be forwarded it to the appropriate City Decision making body.

E-20 This comment requests a change to the GPU policy and does not pertain to the adequacy of the dEIR. The comment will be forwarded it to the appropriate City Decision making body.

E-21 The location of surface waters within the General Plan area is provided in the San Diego Bay, Otay, and Sweetwater watershed discussions in the existing conditions section of the dEIR as well as under the heading Surface Waters on page 313 of the dEIR. The major inland water bodies, Upper and Lower Otay Reservoirs, are two reservoirs that supply drinking water to more than 200,000 people. The Otay Reservoir is part of the City of San Diego municipal drinking water supply system and is kept approximately 75 to 85 percent full in order to meet emergency water storage requirements. These reservoirs also provide important habitat and recreational opportunities.

E-22 The dEIR has been revised on page 306 to state that the Otay Reservoir is a drinking source water.

E-23 14. Table 5.9.3 "Otay Hydrological Unit Beneficial Uses within the Study Area", Page 310: This table lists Municipal and Domestic [water] Supply as "exempted." This implies that drinking water supply is not a beneficial use in the Otay Hydrologic Unit. In fact, the Basin Plan exemption refers only to the stream segments below Lower Otay Reservoir. All of the stream segments above Otay Reservoir, and Otay Reservoir itself have "Municipal and Domestic Supply" listed as an existing beneficial use. Refer to Table 2-2, page 2-40 and Table 2-4 in the Basin Plan.

Also note that the above also applies to Table 5.9.2 for the Sweetwater Hydrological Unit which should be an important issue to the Sweetwater Authority.

E-24 15. Section 5.9, Water Resources and Water Quality Page 310, third paragraph: Please add a statement that the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used."

E-25 16. Section 5.9.3, Page 259: The document makes no mention of impacts to drinking source waters which is a major oversight. Note that an entire section [5.9.3.2] is given over to impacts to groundwater resources. This [and Comment No. 9] may be because of the error in listing of beneficial uses for surface water, which fails to show municipal and domestic water supply as a beneficial use [see Comment No. 11. If the error in the beneficial uses listings were corrected, it would necessitate a reassessment of the impacts to include degradation of drinking source waters.

17. Section 5.9.2, Thresholds of Significance, Page 314: Please add another bullet as follows:

- Degrade water quality by contributing pollutants of concern for drinking water sources as described in the City of San Diego's, *Source Water Protection Guidelines for New Development*, 2004

18. Section 5.9.3.1, Impacts, Page 315: Please discuss the water quality issues associated with any developments adjacent to the Otay Reservoir. In addition, add the following Policy to Objective EE2 as shown on Page 316:

EE 2.6: Ensure compliance with source water protection adjacent to the Otay Reservoir. This includes but is not limited to the use of potable water for irrigation purposes, the design of BMP's to reduce or eliminate nutrients (nitrogen or

RESPONSE

E-23 Table 5.9.2 has incorporated the beneficial uses information from Tables 2-2, 2-3, and 2-4 of the Water Quality Control Plan for the San Diego Basin. This table lists beneficial uses of Municipal and Domestic Supply for inland surface waters to Hydrologic Unit HA Numbers 910.31, and 910.32, for Reservoirs and Lakes to Hydrologic Unit HA Numbers 910.31, 910.31, 910.32, and for ground water to Hydrologic Unit HA Numbers 910.20 and 910.30. Table 5.9.3 has been revised to include the beneficial uses of reservoirs and lakes to the Sweetwater Reservoir Hydrologic Unit HA Number 909.21.

E-24 The EIR has been revised to reflect these changes. The changes to the EIR are made on page 310 and include the following:

The use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring would be required if herbicides or pesticides are used.

E-25 Threshold 1, in Section 5.9.3.1 of the dEIR (page 314), states that the proposed General Plan Update would result in a significant impact to water quality if it would violate any water quality standards or waste discharge requirements. This threshold analyzes the significant impact of development on water quality and the beneficial uses of surface waters. As stated on Page 314 of the dEIR, direct runoff to drainage basins, municipal storm sewer systems, and eventual drainage to surface waters and/or the ocean, would be increased and would contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients, and trash. In addition, grading and construction activities could also generate sediments as well as oil and grease which could enter surface waters. This could incrementally decrease water quality and impair the beneficial uses of surface waters, which would result in a significant impact. The General Plan Update does not propose any changes in the land uses above the Otay Reservoir or adjacent to the Otay Reservoir. Therefore, no impacts are anticipated.

14. Table 5.9.3 "Otay Hydrological Unit Beneficial Uses within the Study Area", Page 310: This table lists Municipal and Domestic [water] Supply as "exempted." This implies that drinking water supply is not a beneficial use in the Otay Hydrologic Unit. In fact, the Basin Plan exemption refers only to the stream segments below Lower Otay Reservoir. All of the stream segments above Otay Reservoir, and Otay Reservoir itself have "Municipal and Domestic Supply" listed as an existing beneficial use. Refer to Table 2-2, page 2-40 and Table 2-4 in the Basin Plan.

    Also note that the above also applies to Table 5.9.2 for the Sweetwater Hydrological Unit which should be an important issue to the Sweetwater Authority.

15. Section 5.9, Water Resources and Water Quality Page 310, third paragraph: Please add a statement that the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used."

16. Section 5.9.3, Page 259: The document makes no mention of impacts to drinking source waters which is a major oversight. Note that an entire section [5.9.3.2] is given over to impacts to groundwater resources. This [and Comment No. 9] may be because of the error in listing of beneficial uses for surface water, which fails to show municipal and domestic water supply as a beneficial use [see Comment No. 11. If the error in the beneficial uses listings were corrected, it would necessitate a reassessment of the impacts to include degradation of drinking source waters.

E-26 17. Section 5.9.2, Thresholds of Significance, Page 314: Please add another bullet as follows:

    - Degrade water quality by contributing pollutants of concern for drinking water sources as described in the City of San Diego's, *Source Water Protection Guidelines for New Development*, 2004

18. Section 5.9.3.1, Impacts, Page 315: Please discuss the water quality issues associated with any developments adjacent to the Otay Reservoir. In addition, add the following Policy to Objective EE2 as shown on Page 316:

    EE 2.6: Ensure compliance with source water protection adjacent to the Otay Reservoir. This includes but is not limited to the use of potable water for irrigation purposes, the design of BMP's to reduce or eliminate nutrients (nitrogen or

RESPONSE

E-26 This comment requests the addition of another threshold to the Section 5.9.2, Water Resources and Water Quality of the dEIR. The dEIR contains the following thresholds which are taken from Appendix G of the CEQA Guidelines:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater resources or aquifer recharge areas or divert existing groundwater flows.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or flooding.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam or place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

These are appropriate thresholds to determine the water quality impacts for the City of Chula Vista General Plan Update.

14. Table 5.9.3 "Otay Hydrological Unit Beneficial Uses within the Study Area", Page 310: This table lists Municipal and Domestic [water] Supply as "exempted." This implies that drinking water supply is not a beneficial use in the Otay Hydrologic Unit. In fact, the Basin Plan exemption refers only to the stream segments below Lower Otay Reservoir. All of the stream segments above Otay Reservoir, and Otay Reservoir itself have "Municipal and Domestic Supply" listed as an existing beneficial use. Refer to Table 2-2, page 2-40 and Table 2-4 in the Basin Plan.

    Also note that the above also applies to Table 5.9.2 for the Sweetwater Hydrological Unit which should be an important issue to the Sweetwater Authority.

15. Section 5.9, Water Resources and Water Quality Page 310, third paragraph: Please add a statement that the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used."

16. Section 5.9.3, Page 259: The document makes no mention of impacts to drinking source waters which is a major oversight. Note that an entire section [5.9.3.2] is given over to impacts to groundwater resources. This [and Comment No. 9] may be because of the error in listing of beneficial uses for surface water, which fails to show municipal and domestic water supply as a beneficial use [see Comment No. 11. If the error in the beneficial uses listings were corrected, it would necessitate a reassessment of the impacts to include degradation of drinking source waters.

17. Section 5.9.2, Thresholds of Significance, Page 314: Please add another bullet as follows:

    - Degrade water quality by contributing pollutants of concern for drinking water sources as described in the City of San Diego's, *Source Water Protection Guidelines for New Development*, 2004

E-27 18. Section 5.9.3.1, Impacts, Page 315: Please discuss the water quality issues associated with any developments adjacent to the Otay Reservoir. In addition, add the following Policy to Objective EE2 as shown on Page 316:

    EE 2.6: Ensure compliance with source water protection adjacent to the Otay Reservoir. This includes but is not limited to the use of potable water for irrigation purposes, the design of BMP's to reduce or eliminate nutrients (nitrogen or

RESPONSE

E-27 The General Plan Update does not propose any changes in the land uses above the Otay Reservoir or adjacent to the Otay Reservoir. Therefore, no impacts are anticipated. However, as discussed on Page 315 of the dEIR, the proposed Environmental Element of the General Plan Update identifies the following objective and associated policies addressing water quality:

Objective EE 2

Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista.

Policies

EE 2.1: Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.

EE 2.2: Pursue safe alternatives to traditional pest management methods whenever feasible in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands).

EE 2.3: Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm drainage system.

EE 2.4: Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.

EE 2.5: Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.

EE 2.6: Maximize the protection of potable water supply resources from pollutants.

EE 2.7: Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans that will provide a balance between watershed protection, regional economic growth, and development of public infrastructure and services consistent with the goals and objectives of the General Plan.

Conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant.

This comment requests a change to the GPU policy and does not pertain to the adequacy of the dEIR. The comment will be forwarded it to the appropriate City Decision making body.

phosphorus), total organic carbon, salts (total dissolved solids) or sediment from entering the Otay Reservoir.

E-28 19. Objective PFS 1, Policies PFS 1.3, Page 319. Add the following to this policy"

PFS 1.3: Plan and design drainage facilities, and upgrade existing facilities as necessary to meet current needs, accommodate growth and to satisfy state and federal requirements. **Include adherence to the City of San Diego's, *Source Water Protection Guidelines for New Development*, 2004.**

20. Objective PFS 2, Page 319: add the following to PFS 2.2:

PFS 2.2 As part of project construction and design, assure that drainage facilities in new development, **especially those adjacent to Otay Reservoir,** incorporate stormwater runoff and .....

E-29 21. Section 5.9.4.1, Level of Significance Prior to Mitigation, Page 327: The sentence that states, "The conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant."

The San Diego Water Department disagrees with this statement. Compliance with federal, state, and regional [board] water quality objectives will not ensure that impacts to drinking source waters will not be significant. This is because federal, state, and regional board water quality objectives are not specific to the pollutants of concern for drinking water sources. Reference the *Source Water Protection Guidelines*, 2004, for a discussion of the pollutants of concern (nitrogen or phosphorus, total organic carbon, and salts) for drinking water and how they differ from the pollutants addressed by the federal and state objectives. Therefore, impacts could be significant.

Please submit 3 copies of the final EIR to the City of San Diego as follows:

1. Bob Manis, Assistant Deputy Director (one copy)
   Development Services Department
   1222 First Avenue
   San Diego, CA 92101-4112

RESPONSE

E-28 This comment requests a change to the GPU policy and does not pertain to the adequacy of the dEIR. The comment will be forwarded it to the appropriate City Decision making body.

E-29 See Response to Comment E-24.

2. Nicole McGinnis, Acting Senior Planner (2 copies)
   CIP Financing and Planning Division
   Water Department
   600 B Street
   San Diego, CA. 92101-4112

E-30 **II. Draft General Plan Update document:**

Water Quality: Section 3.1.2 [Chapter 9, page E-14 through E-18]

This section mentions that Otay Reservoir is a drinking water source [page E-17], and makes some reference to protection of drinking source waters [Objective EE 2-6, page E-20] which is very brief and weak.

It is recommended that in order to strengthen the focus on drinking source water protection are [insert bolded language; delete strike-out] as follows:

1] In Section 3.1.2 [maybe throughout the document] substitute "**drinking water**" for "potable water." For example, Objective EE 2-6, page E-18: "Maximize the protection of ~~potable~~ drinking water supply resources from pollutants." The term "potable water" is nebulous; "drinking water" is a much better descriptive term.

2] Page E-17, first paragraph:

"The major inland water bodies, Upper and Lower Otay Lakes, are two ~~water supply~~ reservoirs **that supply drinking water to more than 200,000 people. These reservoirs** also provide important habitat and recreational opportunities."

3] Page E-17, insert a new paragraph following the third paragraph:

The San Diego Water Department, which operates Otay Reservoirs, has published its Source Water Protection Guidelines for New Development, 2004. These Guidelines are intended to help jurisdictions to plan, design, and implement development projects in ways that maximize protection of drinking source waters.

4] Page E-17, last paragraph:

Chula Vista will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards~~, and~~ watershed planning efforts involving the City, **and the San Diego Water Department's *Source Water Protection Guidelines.***

RESPONSE

E-30 This comment does not pertain to the adequacy of the dEIR. The comment will be forwarded it to the appropriate City decision making body.

Please contact Jeff Pasek, Senior Biologist, at (619) 668-3240 for additional information about the Source Water Protection Guidelines for New Development, 2004.

Please contact the above-named individual if you have any questions on these comments. We ask that you please address these issues in the draft EIR and Draft General Plan Update and use our significance thresholds for mitigation.

Sincerely,

Robert J. Manis
Assistant Deputy Director
Land Development Review Division

SANDAG

401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 699-1900
Fax (619) 699-1905
www.sandag.org

October 5, 2005

5000900

Mr. Steve Power, AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Power:

RE: RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

Thank you for the opportunity to comment on the Recirculated Draft Environmental Impact Report for the City of Chula Vista's General Plan Update. We are pleased by the extensive commitment the City is planning toward transit and smart growth development.

F-1 As you are aware, SANDAG will be partnering with the City of Chula Vista on an analysis of the H Street corridor between the H Street Trolley Station and Interstate 805 (I-805). This analysis will focus on identifying right-of-way requirements for stations and priority measures for future transit routes. We have been told by the City of Chula Vista that there are no opportunities for a dedicated transit-way for Bus Rapid Transit (BRT) along H Street between the H Street Trolley Station and I-805. To achieve "Light Rail Transit" equivalent operating speeds and trip reliability required for BRT service, a dedicated transit-way is essential. If the dedicated transit-way cannot be achieved along H Street, a Rapid Bus service should be designated for the corridor. While offering somewhat lower speeds and trip reliability than BRT, use of signal priority treatments and queue jump lanes could help a Rapid Bus service bypass congested areas. In addition, other BRT attributes such as high frequency service and upgraded stations could be provided that will improve the attractiveness of the service.

We look forward to working with you over the next year on further analysis of this corridor and other routes in the region to determine how best to provide transit services. Congratulations on the pending completion of your General Plan Update

Sincerely,

BOB LEITER
Director of Land Use and Transportation Planning

BL/JW/cd

MEMBER AGENCIES
Cities of
Carlsbad
Chula Vista
Coronado
Del Mar
El Cajon
Encinitas
Escondido
Imperial Beach
La Mesa
Lemon Grove
National City
Oceanside
Poway
San Diego
San Marcos
Santee
Solana Beach
Vista
and
County of San Diego

ADVISORY MEMBERS
Imperial County
California Department of Transportation
Metropolitan Transit System
North San Diego County Transit Development Board
United States Department of Defense
San Diego Unified Port District
San Diego County Water Authority
Mexico

RESPONSE

F-1 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

SWEETWATER AUTHORITY
505 GARRETT AVENUE
POST OFFICE BOX 2328
CHULA VISTA, CALIFORNIA 91912-2328
(619) 420-1413
FAX (619) 425-7469
http://www.sweetwater.org

GOVERNING BOARD
W.D. "BUD" POCKLINGTON, CHAIR
R. MITCHEL BEAUCHAMP, VICE CHAIR
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MARISA FARPÓN
SECRETARY

DENNIS A. BOSTAD
GENERAL MANAGER
MARK N. ROGERS
OPERATIONS MANAGER

October 26, 2005

RECEIVED
NOV - 1 2005

Mr. Ed Batchelder
Department of Planning and Building
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: Re-circulation of Draft General Plan Update
SWA Gen. File: City of Chula Vista General Plan 2020

Dear Mr. Batchelder:

G-1 Sweetwater Authority (Authority) has received your letter dated September 16, 2005, for comments to City of Chula Vista's Re-Circulation of Draft General Plan Update, Otay Ranch GDP Amendments and related Draft EIR. Since the Authority has no additional comments, please continue to use the comments sent to Mr. Paul Hellman, Environmental Projects Manager, on February 14, 2005 (a copy of this letter is attached).

If you have any questions or require additional information, please contact Mr. Hector Martinez at (619) 409-6751.

Sincerely,

SWEETWATER AUTHORITY

James L. Smyth
Director of Engineering

JLS:jg

Enclosure

I:\engr\Gen\City of Chula Vista General Plan 2020\Corresp\Ltr - EB - GP2020 comments 10-26-05.doc

A Public Water Agency
Serving National City, Chula Vista and Surrounding Areas

RESPONSE

G-1 Comment noted. The comments sent on February 14, 2005 are addressed below.

File

SWEETWATER AUTHORITY
505 GARRETT AVENUE
POST OFFICE BOX 2328
CHULA VISTA, CALIFORNIA 91912-2328
(619) 420-1413
FAX (619) 425-7469
http://www.sweetwater.org

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GENERAL MANAGER
MARK N. ROGERS
OPERATIONS MANAGER

February 14, 2005

Mr. Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RECEIVED
NOV - 1 2005

Subject: Chula Vista General Plan Update 2020 - Comments to DEIR
SWA. Gen. File: Chula Vista, City of (General Plan 2020)

Dear Mr. Hellman:

As the water purveyor for western Chula Vista, Sweetwater Authority (Authority) appreciates the opportunity to comment on the Draft Environmental Impact Report, as follows:

G-2 1) 5.9.1.1 Regulatory Plans and Policies, *Clean Water Act* (Page 247). Since the Authority uses extracts and treats groundwater located within the area described by the General Plan, it is recommended that this document include the *Federal Safe Drinking Water Act (SDWA)* as the primary federal law that ensures the quality of drinking water. The law was amended in 1996 recognizing the importance to protect the drinking water supply and its source.

G-3 2) 5.9.1.1 Regulatory Plans and Policies, 5.9.1.2 Existing citywide Conditions, Table 5.9-2.

a. *Hydrologic Area Numbers* 909.12 (Sweetwater River) and 909.21 (Sweetwater Reservoir Hydrologic Unit) are also within the General Plan Update study area, but are not listed. These hydrologic units include the Municipal and Domestic Supply (MUN), and the Non-Contact Water Recreation (REC2), as well as other beneficial uses. Table 5.9-2 should be revised to reflect this information.

b. *Municipal and Domestic Supply*: The designation under the Ground Water column should be changed to "Existing Beneficial Use."

c. *Contact Water Recreation*. What specific water body location is referenced for this activity?

G-4 3) 5.9.1.2 Existing Citywide Conditions, *Drainage and Flood Control* (Pages 251-256), and Figure 5.9.2. Is the 100-year flood boundary and inundation area for the lower Sweetwater River shown on this figure reflective of the channel improvements constructed by the U.S. Army Corps of Engineers circa 1990, west of I-805?

A Public Water Agency
Serving National City, Chula Vista and Surrounding Areas

PR-41

RESPONSE

G-2 The EIR has been revised to include the Federal Safe Drinking Water Act. The revisions to the EIR are as follows.

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.) Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

G-3 a. Table 5.9-2 of the EIR has been revised to include the beneficial uses for Hydrologic Area 909.12, Sweetwater River and Hydrologic, and Area 909.21, Sweetwater Reservoir.

b. Table 5.9-2 of the EIR has been revised to make the appropriate correction to the Municipal and Domestic Supply to indicate that groundwater is an existing beneficial use.

c. The California Regional Water Quality Control Board defines Contact Water Recreation (REC-1) as: Recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs. The California Regional Water Quality Control Board lists existing beneficial use for both inland surface waters and coastal surface waters within the Sweetwater Hydrological Unit.

G-4 Figure 5.9.2 of the dEIR has been revised to update the 100-year flood boundary and inundation area for the lower Sweetwater River to reflect the channel improvements constructed by the U.S. Army Corps of Engineers west of I-805.

G-5 4) 5.9.3.2 Groundwater Resources (Page 262). Corrections needed to this section are as follows:

a. First paragraph, third line, "...Desalination Facility, which ~~was completed in 1999~~ began operations in January 2000, ..."
b. Second paragraph, second line, "...Sweetwater Authority has ~~two~~ four wells in the alluvial aquifer and ~~four~~ six wells in the San Diego...."
c. Second paragraph, tenth line, "...Sweetwater Authority operates ~~two~~ three wells in National City."

G-6 5) 5.14.1 Water, 5.14.1.1 Existing Citywide Conditions, *Sweetwater Authority* (Page 411): Although this plan refers to the Richard A. Reynolds Demineralization Facility, for clarification, the Authority has since changed the name of the facility to the "Richard A. Reynolds Desalination Facility." All references to the Richard A. Reynolds Demineralization facility should be changed to "Richard A. Reynolds Desalination Facility."

G-7 *5.14.1* Water, 5.14.1.1 Existing Citywide Conditions, *Sweetwater Authority Urban Water Management Plan 2000* (Page 411). The second paragraph, fourth line should be changed as follows, "...during periods of wet weather with Sweetwater Reservoir also utilized to store untreated water imported from CWA." Finally, the second paragraph correctly cites that this plan as indicating that the lack of recycled water transmission lines in the service area would make the use of reclaimed water prohibitive. However, in consideration of recent projected recycled water requirement increases in the Authority's service area (e.g., Duke Energy and Bayfront Development), the Authority has initiated a Recycled Water Master Plan. The Authority intends to have it completed by April 2005.

G-8 6) 5.14.1 Water, 5.14.1.3 Impacts, *Water System Infrastructure* (Page 418). This paragraph correctly states that the proposed four scenarios will increase water demand and corresponding treatment and distribution facilities. However, this paragraph infers that the Authority has a capital improvement program that addresses this increase. It should be noted that the capital improvement program that the Authority is implementing is based on its 2002 Master Plan, which, in turn, is based on the current adopted City of Chula Vista General Plan only. The Authority suggests that the sentence in the fifth line be rewritten as follows: "Sweetwater Authority has a capital improvement program that was developed based on current Chula Vista planning. The four scenarios proposed will require the Authority's capital improvement program to be completely reevaluated." What is said regarding Otay Water District would be independent of the Authority's statement.

RESPONSE

G-5 The EIR has been revised to make the appropriate corrections to groundwater resources.

G-6 EIR has been revised to reflect the change from the Demineralization Facility to the Desalination Facility.

G-7 The EIR has been revised to make the appropriate corrections. A statement has been added to the EIR to reflect the addition of the preparation of the Recycled Water Master Plan as follows:

Recently, due to an increase of projected recycled water requirements in the Authority's service area, the Authority has initiated a recycled water master plan. Because the timetable for implementation of recycled water is not yet determined, it is not considered in the current projections for Sweetwater Authority water supplies. This plan is intended to determine whether it is feasible to deliver reecycled water to this area based on future needs.

G-8 The EIR has been revised to note that the capital improvement programs would need to be reevaluated with the adoption of the General Plan Update. The text on page 514 has been revised as follows:

Since these capital improvement programs are based on the current Master Plans, which are based on the adopted General Plan, the adoption of any of the four scenarios proposed would require the capital improvement programs to be reevaluated.

G-9 7) 5.14.1 Water, 5.14.1.3 Impacts, *Water Supply*, Table 5.14-2 (Page 420).

a. The General Plan, Chapter 5, cites existing and proposed population figures under the proposed Plan. The existing estimated population for the southwest and northwest planning areas essentially represent the area served by the Authority. After further review, the Authority believes that the existing population stated (113,700) is high based on the existing water demands from this area (Authority's calculation would have this approximately 81,600). When the Authority applied the land use data provided for the four scenarios into its water system hydraulic model, the corresponding water demands were, in the Authority's opinion, overstated compared to simply calculating a demand based on the increase in population between what the City believes is existing and that proposed by this Plan. Therefore, the demand figures shown in Table 5.14-2 are modified as follows:

Condition	Demand (mgd)	Demand Increase Above Existing 2002 Master Plan (mgd)
Existing	3.22	NA
Scenario 1	7.87 ~~15.04~~	4.65 ~~11.82~~
Scenario 2	7.62 ~~14.76~~	4.40 ~~11.54~~
Scenario 3	7.91 ~~16.76~~	4.69 ~~13.54~~
Preferred Plan	7.83 ~~15.91~~	4.61 ~~12.69~~

Because of the differences in water demands projected, it is crucial that the Authority discuss this with you in more detail as this has a significant impact to the Authority's water system.

G-10 b. It may be appropriate to add a paragraph regarding the Authority's proposed Recycled Water Master Plan currently in progress. This plan is intended to determine whether it is feasible to deliver recycled water to this area based on future needs from Duke Energy's proposed power plant and the Bayfront Development. This, in turn, reduces the dependence on the need for additional potable water. The anticipated completion date of the Authority's Recycled Water Master Plan is April 2005. See item number 5 above.

G-11 8) 5.14.1 Water, 5.14.1.3 Impacts, *Update Areas* (Page 419): The Authority suggests that the first paragraph make specific reference that this is the Authority's system improvements.

G-12 9) Chapter 10.0 Plan to Plan – No Project Alternative, Table 10-5 (Page 508), needs to be changed as follows (refer to Item number 7 above):

RESPONSE

G-9 Table 5.14-2 of the EIR was revised to update the water demand figures.

G-10 See Response to Comment F-7 above.

G-11 This paragraph has been revised as follows:

The Authority's transmission system pipelines in various locations will need to be increased in size to provide an adequate level of service.

G-12 Table 10-5, Projected Water Demand, has been renumbered to Table 10-9 and revised to update the water demand figures.

Condition	Demand (mgd)	Demand Increase Above Existing 2002 Master Plan (mgd)
Adopted General Plan	3.76 ~~10.4~~	NA
Scenario 1	7.87 ~~15.04~~	4.11 ~~4.64~~
Scenario 2	7.62 ~~14.76~~	3.86 ~~4.36~~
Scenario 3	7.91 ~~16.76~~	4.15 ~~6.36~~
Preferred Plan	7.83 ~~15.91~~	4.07 ~~5.51~~

G-13 10) Appendix H, Water Technical Report, 4. Chula Vista Water Service, Sweetwater Authority, Physical Facilities (Page 11). In the first paragraph, modify the last sentence as follows: "There are 11 emergency interconnections with the City of San Diego, OWD and the Cal American Water Company. The flow rate by each interconnection varies from 0.72 to 2.08 mgd depending on size of the interconnecting pipeline and hydraulic gradient. It is not planned that all interconnections would be used simultaneously in the event of an emergency."

G-14 11) Appendix H, Water Technical Report, 5. Emergency Water Supply, Sweetwater Authority (Page 14): In the first paragraph, repeat comment as stated in Item number 10 above.

G-15 12) Appendix H, Water Technical Report, 7. Forecasted Conditions, Table 1 (Page 18): Modify as shown in item number 7a above, and Table 2 needs to be modified as shown on item number 9 above.

Thank you for allowing the Authority to comment on this document. If you have any questions, please contact Mr. Hector Martinez at (619) 409-6751.

Sincerely,

SWEETWATER AUTHORITY

James L. Smyth
Director of Engineering

JLS:HM:jg

Pc: Mr. Don Thomson, Sweetwater Authority
Mr. Hector Martinez, Sweetwater Authority

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RESPONSE

G-13 Appendix H, Water Technical Report, 4, Chula Vista Water Service, Sweetwater Authority, Physical Facilities, has been revised to include the following:

There are 11 emergency interconnections with the City of San Diego, OWD, and the Cal American Water Company. The flow rate by each interconnection varies from 0.72 to 2.08 mgd depending on size of the interconnecting pipeline and hydraulic gradient. It is not planned that all interconnections would be used simultaneously in the event of an emergency.

G-14 Appendix H, Water Technical Report, 5, Emergency Water Supply, Sweetwater Authority, has been revised. See text revision on response 7-12 above.

G-15 Table 1 of Appendix H has been revised.

SDGE

A Sempra Energy utility™

October 24, 2005

Mr. Steve Power, Environmental Projects Manager
City of Chula Vista Planning and Building Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Chula Vista General Plan 2020 Comments on the Draft Revised Plan and Draft EIR SCH No. 2004081066

Dear Mr. Power:

Thank you for the opportunity to review and comment on the above-referenced documents. San Diego Gas & Electric (SDG&E) appreciates that the City of Chula Vista has incorporated most of the information, policy recommendations and maps provided by SDG&E into the Updated Draft General Plan and EIR. We would like to provide additional information with regard to the Draft EIR's identification of energy supply as significant and unmitigated in Section 5.8, Energy.

H-1 As you are aware, SDG&E is a California Public Utilities Commission regulated utility and must provide for the short- and long-term energy needs of customers in its service territory. In the context of the significance conclusion on energy set forth on page 299 in section 5.8, SDG&E has filed a long-term resource plan with the California Public Utilities Commission which proposes a mix of conservation, demand response, generation, including renewable generation, and transmission to provide safe and reliable energy to its customers for the next 20 years. The State of California has also prepared a plan to address the long-term energy needs for the San Diego region. A summary of SDG&E's Long-Term Resource Plan has been attached to this letter for your information along with links to the entire plan testimonial text and the State's plan. We respectfully request that the City revisit its significant impact determination and findings in light of this information and modify it in the Final EIR as appropriate.

H-2 Also, over the past two years, SDG&E has met with various developers and property owners of Village 11, EUC, Freeway Commercial, and Village 9 within Otay Ranch, as well as City Planning and Building Department staff. The purpose of these meetings was to inform all parties that based on anticipated growth in the area, an electric substation will be required as described in the mapping and text of the revised General Plan Update

RESPONSE

H-1 The City acknowledges the long-term resource plans prepared by SDG&E and the State of California. Although these plans and programs would result in more efficient use of energy the projected increase in population resulting from the Preferred Plan or any of the Scenarios would result in an increased demand for energy. None of the plans would ensure that energy supplies will be available when needed. Because there is no assurance of a long-term supply of energy in the future, the increased projected energy demand results in a significant impact.

H-2 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body.

and EIR. SDG&E has expressed its desire to work in a collaborative manner to site the substation in a compatible fashion with proposed land use plans for this portion of Otay Ranch.

H-3 In May 2005, SDG&E was included in the University Framework Strategy Planning effort with the City, University and the other affected developers/property owners within the Eastern University District. One of the goals of the Framework Committee was to determine potential acceptable locations for the substation, which could be incorporated into development plans early in the planning process. While we are disappointed that to date this goal has not specifically been accomplished, SDG&E believes that the proposed substation should be referenced in the Land Use and Transportation Element, LUT 10.5.4 which discusses the Eastern University District. For instance, Policy LUT 82.1 discusses the locating of a high school east of State Route 125. Reference to the proposed substation could be handled in a similar fashion. Additionally, it would be appropriate to include mention of the proposed substation in Policy LUT 82.6.

H-4 With respect to the above efforts, SDG&E believes it is extremely advantageous for the City, project developers and SDG&E ratepayers to incorporate energy infrastructure into development plans as early as possible rather than SDG&E having to obtain land after planning and/or development have already occurred and then having to deal with compatibility, buffering and other issues that could have been integrated up front into the community and neighborhood planning process. Furthermore, ratepayer dollars can be saved by incorporating the substation facility into the City's planning and environmental process rather than the CPUC permit and environmental process which can be a slow, redundant and occurs on a state level with potentially not as much local input.

H-5 Finally, on page 538 of the General Plan EIR, there are the following statements with regards to hazardous materials and specifically polychlorinated biphenyls (PCB's):

"Site reconnaissance activities were performed from public rights-of-way. Exteriors of individual properties were surveyed only to the extent that access was available to the general public. Interiors of individual facilities were not accessed. Pad-mounted and pole mounted electrical transformers, owned and operated by SDG&E, were observed in the study area and are a potential source of PCBs. The transformers within the study area were not individually inspected at the time of the site reconnaissance."

With regards to the above statement, SDG&E has not knowingly purchased electrical equipment containing PCBs. All known PCB transformers were removed from the SDG&E system years ago. Additionally, SDG&E has a mandated Corrective Maintenance Program which includes regular inspection of electric transformers located within the City of Chula Vista as well as its entire service territory. Based on the results of these inspections, each transformer is subject to maintenance, repair, replacement or removal as appropriate to avoid or minimize the release and/or exposure of workers or the public to potentially PCB-containing substances. In the event these substances are found or, in the rare event, released, they are properly handled and disposed of in accordance with all applicable federal, state and local regulations.

RESPONSE

H-3 These comments refer to the General Plan Update's policies and do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

H-4 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

H-5 The EIR has been revised to include the following:

Pad-mounted and pole-mounted electrical transformers, owned and operated by SDG&E, were observed in the study area and are a potential source of PCBs. The transformers within the study area were not individually inspected at the time of the site reconnaissance. However, all known PCB transformers were removed from the SDG&E system years ago. Additionally SDG&E has a mandated Corrective Maintenance Program which includes regular inspection of electric transformers located within the City of Chula Vista as well as its entire service territory. Based on the results of these inspections, each transformer is subject to maintenance, repair, replacement or removal as appropriate to avoid or minimize the release and/or exposure of workers or the public to potentially PCB-containing substances. In the event these substances are found or, in the rare event, released, they are properly handled and disposed of in accordance with all applicable federal, state and local regulations.

Again, SDG&E appreciates this opportunity to comment, and we look forward to continuing to work with the City in the planning and provision of energy and associated facilities within Chula Vista and the SDG&E service territory.

Sincerely,

Christopher P. Terzich, REA, Principal Environmental Specialist, Land Planning

Cc: Laurie Madigan, Special Projects
Rick Rosaler, Principal Planner

SDG&E's Ability and Plan to Provide Service:

The Long –Term Resource Plan

Energy Outlook and Resources

-- Cost-effective energy efficiency programs are estimated to reduce SDG&E's energy requirements by an additional 9% by 2014. This result is in addition to the accomplishments of SDG&E's past energy efficiency programs, which have already reduced energy needs by roughly 10%.
-- Renewable resources are planned to provide 20% of SDG&E's energy needs in 2010, increasing to 24% by 2014.
-- After accounting for the substantial reductions in energy needs resulting from SDG&E's past and future aggressive and highly successful energy efficiency programs, remaining average year annual energy needs are substantially met by existing SDG&E resources, CDWR contract allocations, and renewable purchases through 2010. In a less probable high-demand year (for example, sustained hot weather), the additional energy will come from additional purchases from the market and from local generation added primarily for grid reliability, as explained further below.
-- As allocated CDWR contracts begin to expire in 2008 and beyond, additional energy resources will be needed. By 2011, approximately 25% of average year energy will come from resource additions, including additional renewable purchases, on- and off-system generation, and purchases from the market, facilitated by the additional import capability provided by the added transmission interconnection.

Capacity Outlook

--Cost-effective energy efficiency and response resources are estimated to meet 10% of San Diego's total capacity need in year 2014.

--By provided 20% of SDG&E's retail energy needs in 2010, renewable resources are estimated to meet roughly 10% of San Diego's total capacity need in that year and 11% in 2014.

-- Beginning in 2011, additional renewable and conventional generation will be needed, including additional on-system resources to meet grid reliability criteria, and a portion of the resource need created by load growth and expiration of the CDWR contracts. If Sunrise were to be reallocated, the timing of these additions would likely change as would the resulting Reliability Must Run (RMR) cost reduction since SDG&E would have "headroom" to accelerate additions of on-system resources.

-- Pursuant to SDG&E's Balanced Portfolio Strategy, a portion of these needed resources are expected to come from on-system resources, and a portion from off-system. While these projections represent a reasonable set of assumptions made years in advance of specific project proposals, SDG&E observes that there may be fine tuning of exact year of need, resource types (for example, a based loaded versus an intermediate loaded plant), and plant location (for example, an on-system resource versus an off-system one).

Transmission Implications

-- By 2010, the plan calls for an additional major transmission project to comply with ISO Grid Planning Criteria, displace existing high-cost RMR generation, provide for the potential retirement of aging local units, deliver additional off system generation—renewable and conventional—to lower costs, increase supply diversity, and replace a portion of the expiring CDWR contracts. SDG&E believes that the benefits of added transmission infrastructure, as described in the testimony of Witness Brown make it a required element of any SDG&E resource portfolio. SDG&E therefore seeks specific authorization in this proceeding to pursue the necessary project approvals to fill this 2010 need. As SDG&E pointed out last year, the question is not whether additional transmission is beneficial; it is how much of a resource portfolio is delivered through transmission rather than on-system generation options to meet resource gaps not filled through energy efficiency and demand response alternatives. In addition, whether SDG&E has the ability to successfully complete these projects in the time frames indicated could impact SDG&E's ability to meet the goal of achieving a 20% renewable energy supply by 2010.

Fuel Diversity

-- SDG&E's ability to add fuel diverse resources is constrained by the nature of its service territory, public policy, and possible limited availability of nonfossil resources. There are few hydro resources in San Diego, and there is no policy support for either local coal-based or additional nuclear resources. Thus, the plan depends on renewable resources (both supply-side and customer-side distributed renewable generation) for fuel diversity, although there is a potential that off-system purchases will come from coal and nuclear plants outside the service territory, further contributing to fuel diversity.
-- The addition of Liquefied Natural Gas (LNG) supplies to California's gas resource mix would provide an opportunity to further diversify the geographical location, delivery system, and cost components of the fuel supply for the gas-fired portion of SDG&E's preferred plan.

Source:
Order Instituting Rulemaking To Promote Policy And Program Coordination And Integration In Electric Utility Resource Planning R.04-04-003, Long-Term Resource Plan Of San Diego Gas & Electric Company (U 902 E) Direct Testimony Before The Public Utilities Commission Of The State Of California, July 9, 2004

Full Text Link:
http://www.sdenergy.org/uploads/7-9-04SDG&E_LTRP.pdf

Statewide Program:

http://www.cpuc.ca.gov/PUBLISHED/REPORT/49078.htm

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WEEKLY REPORT

DATE: November 2, 2005

TO: Margot Kyd

FROM: Frank Urtasun

SUBJECT: DBE report for week-ending 11/02/05

MAJOR CONTRACTS SIGNED WITH DBE COMPANIES

Two major contracts were recently signed for the 20SD Project. The 20SD Project is a surcharge project, money collected on the SDG&E utility bills is used to pay for the conversion from overhead utilities to underground utilities. The city of San Diego selects the areas for conversion.

Herman Weissker has been awarded a $4,808,388 project, scheduled to start 05/01/2006 and run through 12/01/2006.

AM Ortega has been awarded a $3,158,480 project, scheduled to start 11/07/2005 and run through 05/17/2006. Because of the invoicing and payment process, none of the dollars are expected to be included in the 2005 totals.

XEROX – SUBCONTRACTING MEETING

DBE met with the representative from Xerox to promote additional subcontracting dollars. Xerox rep. has concerns of not meeting their DBE commitment and requested our assistance. Discussion on additional areas to include DBEs such as paper and temporary services were considered. Two DBE subcontractors were referred to Xerox in this area for possible subcontracting opportunities.

MOORE BUSINESS FORMS – SUBCONTRACTING MEETING

DBE arranged a conference call with Moore Business Forms to discuss and assist them in their Subcontracting Plan. Moore Business Forms was awarded the Billing Forms Contract.

HINES – SUBCONTRACTING

DBE had a conference call with Hines Company, DBA Brandon Taylor Design, to discuss the Subcontracting Program & Plan. Hines Company provides us with graphics productions, hired talent and media placement. Conversations on how to increase their DBE subcontracting dollars was discussed.

AMI BIDDERS CONFERENCE

DBE created talking points for the AMI Bidders conference to assist the Company's spokesperson in explaining our DBE program and subcontracting plan to the bidders.

ENERGY EFFICIENCY QUESTIONS / EVALUATION CRITERIA

DBE continues to work on the Energy Efficiency RFP process, questions and evaluation criteria.

MARKETING
DBE responded to Marketing requests for DBE suppliers in the areas of promotional items and food services.

ASIAN INC – CPUC CLEARINGHOUSE
DBE had a discussion with Asian Inc., regarding expediting suppliers for verification. Asian Inc. has halted the expediting suppliers for the rest of the year. DBE is concerned about getting our DBE suppliers verified for our year-nd results, and ultimately affecting not reaching our goal. This concern will need to be elevated to the CPUC. (Ceci could we put this on our agenda for tomorrow)

NATIONAL CONGRESS OF AMERICAN INDIANS (NCAI)
Jeff Thorsen of DBE, Greg Craig of Cook Inlet and Tracy Stanhoff of the California Indian Chamber participated on a business development and energy and business panels at the NCAI in Tulsa Oklahoma. The NCAI is the oldest Native American civil rights and business organization.

COOK INLET ENERGY SUPPLY
On November 1, one of SEU's prominent DBEs, Cook Inlet, was acquired by a large Australian Commerce and Trading Bank. The DBE group and SEU gas supply teams helped mentor Cook Inlet from a start up in 1990 to a $4 billion dollar energy-trading firm. Their success and rising gas prices ultimately spurred the need to replace Harvard Endowment Fund as their financial backer/ 49% partner. They chose to sell out to provide for further growth instead of shrink to remain DBE. They ended up with 200+ utility and Fortune 500 customers. The DBE group has assisted in the start up of EVI, a sort of minority owned spin-off of Cook Inlet. EVI is owned and operated by Suyen Encarnacion, Cook's former 13 year Cheif Trading Officer VP. EVI could replace Cook Inlet's DBE natural gas dollars, which varied from $20-$40 million per year.

San Diego County Archaeological Society, Inc.

Environmental Review Committee

25 September 2005

To: Mr. Steve Power, AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Recirculated Draft Environmental Impact Report
Chula Vista General Plan Update

Dear Mr. Hellman:

I have reviewed the cultural resources aspects of the subject Recirculated DEIR on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the Recirculated DEIR, we have the following comments:

I-1 1. We urge the City to consider and recognize the industrial historic resources such as the Western Salt Works and the sites of the other operations mentioned in Section 5.4.1.2.a Such facilities are often overlooked, yet they form an important part of the City's development history.

I-2 2. We commend the City for its decision to participate in the Mills Act program. The benefits this program offers are a valuable component of a historic preservation program.

I-3 3. In Section 5.4.1.2, in the paragraph beginning "In 1885," the description of the five-acre lots refers to "streets 80 feet in width and a steam motor passing through the center." The meaning of this sentence is not clear.

I-4 4. In Section 5.4.3 of the DEIR, Policy EE 9.2 calls for supporting and encouraging the accessibility of the City's cultural resources. To accomplish this, for archaeological collections, the City should undertake research to determine where collections from previous CEQA-mandated projects are currently located, and their condition. Efforts should then be made to upgrade those collections, as necessary, and bring them into a qualified curation facility (see 10, below) It should be understood that, if a project relies upon previous work, the collections from that previous work must also be curated along with the new collections.

5. The first paragraph of Section 5.4.4, Threshold 1, states: "In open areas, there is the potential that future development, as permitted by the plan, could impact historic and prehistoric sites." This possibility does not exist solely in open areas. Portions of sites may exist under

P.O. Box 81106 • San Diego, CA 92138-1106 • (858) 538-0935

RESPONSE

I-1 The dEIR evaluated cultural resources including industrial historic resources. Page 241 of the dEIR states that a cultural resource may: be the location of a prehistoric or historic occupation or activity; be a locale which has been, and often continues to be of religious, mythological, cultural, economic, and/or social importance to an identifiable ethnic group; be associated with events that have made a significant contribution to history or cultural heritage; be associated with the lives of important persons; embody the distinctive characteristics of a type, period, region, or method of construction; represent the work of an important creative individual; possess high artistic values; or yield information important in prehistory or history. These resources encompass industrial historic resources. Page 244 of the dEIR discusses the Western Salt Works which has been operating on the Chula Vista bay front since the beginning of the century. Compliance with the policies associated with Objectives LUT 12 and EE 9 and the mitigation measures identified on Page 253 and 254 of the dEIR would reduce the impact to cultural resources resulting from the adoption of the General Plan Update to below a level of significance.

I-2 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body. Comment noted.

I-3 Comment noted. The sentence has been revised to provide the following clarification:

They began developing the area by subdividing a 5,000-acre portion into five-acre lots. The lots were separated with avenues and streets 80 feet in width and a steam motor passing through the center of the streets.

I-4 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

San Diego County Archaeological Society, Inc.

Environmental Review Committee

25 September 2005

To: Mr. Steve Power, AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Recirculated Draft Environmental Impact Report
Chula Vista General Plan Update

Dear Mr. Hellman:

I have reviewed the cultural resources aspects of the subject Recirculated DEIR on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the Recirculated DEIR, we have the following comments:

1. We urge the City to consider and recognize the industrial historic resources such as the Western Salt Works and the sites of the other operations mentioned in Section 5.4.1.2.a Such facilities are often overlooked, yet they form an important part of the City's development history.

2. We commend the City for its decision to participate in the Mills Act program. The benefits this program offers are a valuable component of a historic preservation program.

3. In Section 5.4.1.2, in the paragraph beginning "In 1885," the description of the five-acre lots refers to "streets 80 feet in width and a steam motor passing through the center." The meaning of this sentence is not clear.

4. In Section 5.4.3 of the DEIR, Policy EE 9.2 calls for supporting and encouraging the accessibility of the City's cultural resources. To accomplish this, for archaeological collections, the City should undertake research to determine where collections from previous CEQA-mandated projects are currently located, and their condition. Efforts should then be made to upgrade those collections, as necessary, and bring them into a qualified curation facility (see 10, below) It should be understood that, if a project relies upon previous work, the collections from that previous work must also be curated along with the new collections.

I-5 5. The first paragraph of Section 5.4.4, Threshold 1, states: "In open areas, there is the potential that future development, as permitted by the plan, could impact historic and prehistoric sites." This possibility does not exist solely in open areas. Portions of sites may exist under

P.O. Box 81106 • San Diego, CA 92138-1106 • (858) 538-0935

RESPONSE

I-5 While it is true that Figure 5.4-1 addresses only the potential for prehistoric archaeological resources and not historic archaeological resources, mitigation measure 5.4-1 listed below was established to reduce impacts to historic resources resulting from the adoption of the General Plan Update to below a level of significance.

5.4-1 Implementation of Policies LUT 12.7 and EE 9.1 shall include the following measures:

1. Any future development project that has not been previously examined shall be subject to a cultural resource survey or review, to identify any specific resources that could be potentially affected by the proposed project.

2. In western Chula Vista, an archaeological survey shall be completed for any development project that includes previously undisturbed acreage and has not been previously examined or for which there is reason to expect a potentially significant historic or prehistoric archaeological resources, to identify any specific resources that could be potentially affected by the proposed project.

3. The City will promote maintenance, repair, stabilization, rehabilitation, restoration, and preservation of historical resources. Where these will be undertaken, they will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

4. Prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource, as defined pursuant to applicable state and federal laws, shall complete an historic survey report to determine potential historic significance. The determination of resource significance shall be made in accordance with CEQA Guidelines Section 15064.5 and the program established as a result of Policies LUT 12.3, 12.4, 12.7, and 12.11 and EE 9.1, and shall be completed to the satisfaction of the appropriate decision maker.

5. In the event that significant resources could be adversely affected by the proposed action, as established in Policy LUT 12.12, a conservation program shall be implemented in accordance with applicable state and federal laws, to the satisfaction of the appropriate decision maker. The conservation program shall be designed to reflect the reason that the identified resource is considered important. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation. For archaeological remains, conservation of a resource for which preservation in place is not feasible would include the execution of a research design directed program of scientific data collection and analysis.

current development, such as streets or structures where extensive grading did not take place. This is particularly possible for historic archaeological resources, such as privies, and it especially applies in the western portion of the City. It is worth emphasizing that Figure 5.4-1 addresses only the potential for prehistoric archaeological resources, not historic archaeological resources.

I-6 6. In Section 5.4.5, Mitigation Measures 1 and 2 refer to archaeological surveys being required for previously-unsurveyed projects. Projects where surveys more than five years old are generally considered to require resurvey, whether or not positive results were obtained, and this standard should be reflected in this Section. Also, please note that in addition to a survey, records searches are necessary, and review of maps and aerial photographs can assist in identifying previous land uses and resources.

I-7 7. Mitigation Measure 4 refers to relocation of historic structures. It must be noted that relocation of a historic structure destroys some of the significance of the resource. While certainly preferable to demolition, it does not mitigate impacts to a level of insignificance. Therefore, where relocation is part of the "mitigation" for a project, the City will need to incorporate findings to substantiate why the impacts cannot be mitigated to the point where they are not significant.

I-8 8. In Mitigation Measure 5, for archaeological resources, archaeological monitoring may be an appropriate part of the mitigation measures for a particular project.

I-9 9. And also for Mitigation Measure 5, for archaeological resources, the DEIR must recognize that mitigation is not complete without curation of the resulting collections and associated records in a facility meeting the standards defined in *Guidelines for the Curation of Archaeological Collections*, dated May 7, 1993, and available from the California Office of Historic Preservation. Not curating collections is a violation of Section V of the Code of Conduct of the Register of Professional Archaeologists.

Thank you for providing this recirculated environmental document to SDCAS for our review and comment.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
File

RESPONSE

I-6 Currently, it is not a General Plan policy to require re-surveying every five years. It is a policy to survey every property proposed for development that has not been surveyed. CEQA requires mitigation for any site that has been determined to be significant.

I-7 While it is true that relocation could destroy some of the significance of a historic resource, whether or not relocation is an appropriate mitigation varies from project to project. To determine this, Mitigation Measure 5.4.1 (4) requires a historic survey report to determine potential historic significance would be required prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource, as defined pursuant to applicable state and federal laws.

I-8 Comment noted. Archaeological monitoring may be part of the program established for a particular project, however, it is not in itself sufficient mitigation if the site is going to be destroyed.

I-9 Project level environmental analysis will address curation. This is not a General Plan issue.

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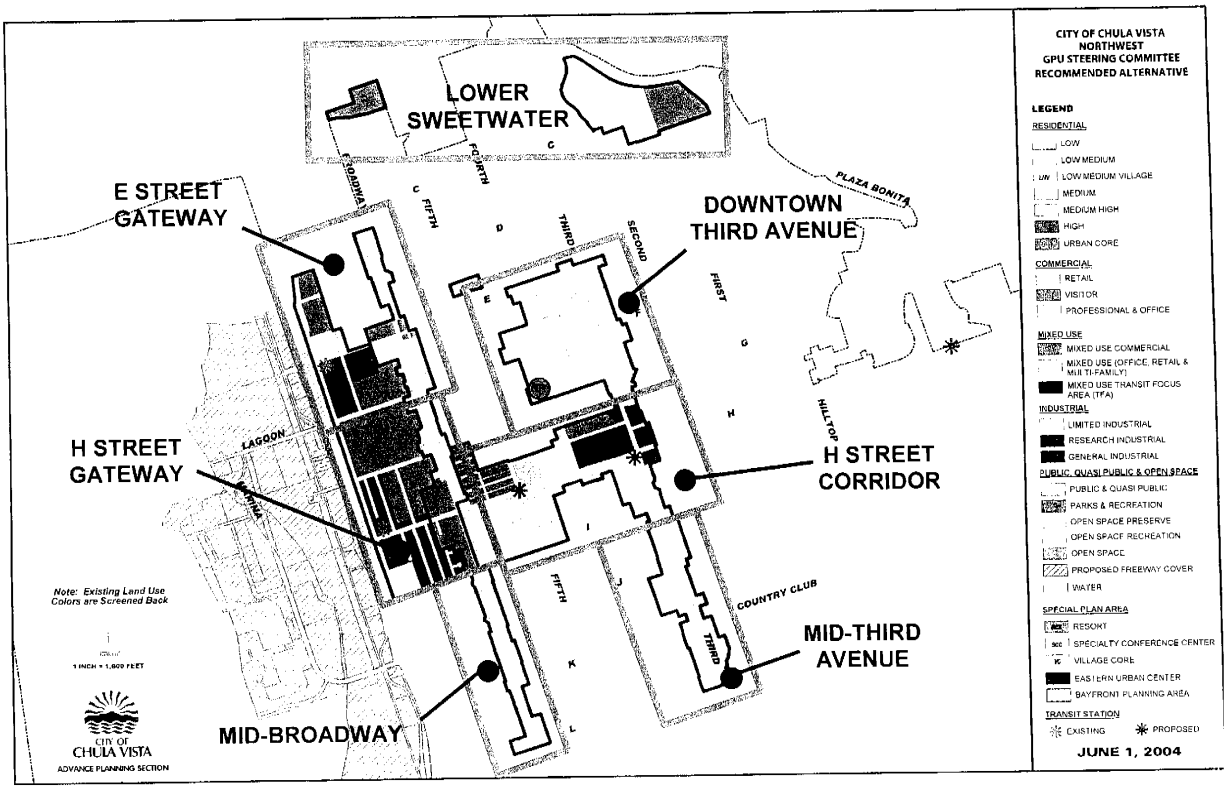
"...existing residential neighborhoods." in the "Promenade Area":

TYPE	NAME	NO. OF UNITS
Condominiums	Holiday Gardens	164
Manufactured Homes	Terry's	196 (55+)
	Carillo's	125 (55+)
	Broadway	73 (55+)
	Bison	79 (55+)
	Mohawk	15 ("older person")
	Rose Arbor	120
	Caravan	42
	Trailer Villas	146
	Flamingo	61
Apartment complexes	Vistan	352
	South Bay Towers	132
	Pine Tree Manor	32
	Woodlawn Gardens	150
	Sunny Side Manor	32
	Vista Village	90
	Cambridge	41
	St. Thomas	77
	Park Regency	125
	Woodlawn	117
	Woodlawn 20	20
	Sunset 8	8
	Woodlawn Colonial	136
TOTAL		2,333


CITY OF CHULA VISTA
NORTHWEST
GPU STEERING COMMITTEE
RECOMMENDED ALTERNATIVE
LEGEND
RESIDENTIAL
LOW
LOW MEDIUM
LOW MEDIUM VILLAGE
MEDIUM
MEDIUM HIGH
HIGH
URBAN CORE
COMMERCIAL
RETAIL
VISITOR
PROFESSIONAL & OFFICE
MIXED USE
MIXED USE COMMERCIAL
MIXED USE (OFFICE, RETAIL & MULTI-FAMILY)
MIXED USE TRANSIT FOCUS AREA (TFA)
INDUSTRIAL
LIMITED INDUSTRIAL
RESEARCH INDUSTRIAL
GENERAL INDUSTRIAL
PUBLIC, QUASI PUBLIC & OPEN SPACE
PUBLIC & QUASI PUBLIC
PARKS & RECREATION
OPEN SPACE PRESERVE
OPEN SPACE RECREATION
OPEN SPACE
PROPOSED FREEWAY COVER
WATER
SPECIAL PLAN AREA
RESORT
SCC
SPECIALTY CONFERENCE CENTER
VC
VILLAGE CORE
EASTERN URBAN CENTER
BAYFRONT PLANNING AREA
TRANSIT STATION
EXISTING
PROPOSED
JUNE 1, 2004
LOWER SWEETWATER
E STREET GATEWAY
DOWNTOWN THIRD AVENUE
H STREET GATEWAY
H STREET CORRIDOR
MID-THIRD AVENUE
MID-BROADWAY
FLORIDA
FOURTH
FIFTH
THIRD
SECOND
FIRST
PLAZA BONITA
HILLTOP
COUNTRY CLUB
LAGOON
Note: Existing Land Use Colors are Screened Back
1 INCH = 1,000 FEET
CITY OF CHULA VISTA
ADVANCE PLANNING SECTION

Scripps Mercy Hospital
Chula Vista
435 H Street
Chula Vista, CA 91910-4307
Tel 619-691-7000

RECEIVED
NOV - 2 2005

Scripps

November 1, 2005

Mark Stephens
Principal Planner
City of Chula Vista
Department of Planning and Building
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Stephens:

J-1 Scripps Mercy Hospital Chula Vista is proud to continue our mission of providing quality and accessible health care to the residents of Chula Vista and the South County community. We also look forward to participating in the future redevelopment plans for Chula Vista's urban core.

We have reviewed the Revised Draft General Plan Update and Re-Circulated Draft Environmental Impact Report and are in support of the inclusion of the recommendation to conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit focus corridor between Interstate 5 and Third Avenue into the General Plan. The results of this study will provide important information that will be necessary for Scripps' long range strategic planning efforts.

Sincerely,

Todd Hoff
Chief Operating Officer

RESPONSE

J-1 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body.

Environmental Health Coalition

401 Mile of Cars Way, Suite 310 ♦ National City, CA 92101 ♦ (619) 474-0220 ♦ FAX: (619) 474-1210
ehc@environmentalhealth.org ♦ www.environmentalhealth.org

November 2, 2005

Mr. Ed Batchelder
Planning Department
HAND DELIEVERED

RE: EHC comments on GPU Draft Environmental Impact Statement (DEIR)

Dear Mr. Batchelder:

Environmental Health Coalition (EHC) has participated in the General Plan Update process for several years. The new GPU is much improved and we thank you for the many revisions that the staff has included in the current edition. Our remaining concerns relate to analysis and mitigation of impacts to human health from known sources of air pollution. These should be addressed in the Air Quality section of the DEIR.

Request stronger language for avoiding human health risks from freeway pollution

K-1 We did not find any analysis or mention in the DEIR of a significant law passed in 2003 SB 352 Escutia which amended Section 17213 of the Education Code, and Section 21151.8 of the Public Resources Code, relating to public schools. This law disallows location of a school within 500 feet of a freeway due to health concerns except under very limited and site specific conditions. Also, the Air Resources Board Land Use Guidance is not referenced as a relevant guidance document that the City will comply with in its planning decisions. Both of these should be included in the EIR. Relative to adjacent location of highways and sensitive receptors we strongly believe that EE 6.10 should be revised to reflect current science and land use guidance related to sensitive uses and freeways in order to mitigate potential health impacts from polluted air. The current language implies that there are federal and state standards in existence to protect people from locating housing and schools from the impacts of highway pollution.

K-2 The Air Resources Board's *Land Use Planning Guidance* adopted this year that recommends a 500 foot buffer between freeways and sensitive receptors due to known health impacts in that zone. In effect, the ARB has already done a generic risk assessment and has decided it is a significant health risk to locate sensitive receptors in the 500 foot zone. Additional studies continue to confirm this and there have been several news articles on this issue of late. We recommend that a policy be revised to prohibit sensitive uses in this zone (at least housing and schools) unless there is some finding of extremely over-riding benefit such as a pressing need for this land use which is not possible to meet in a more healthful location. In this kind of case, then the requirement to do an HRA would be pursued and attempts to mitigate made.

RESPONSE

K-1 This comment states that SB352 and Section 21151.8 of the Public Resources Code should be included in the EIR. Section 21151.8 was amended by SB352. This bill prohibited the approval by a school district of a school site within 500 feet from the edge of a freeway or other busy traffic corridor. For the project area, these are roadways carrying over 100,000 vehicles per day. The proposed General Plan Update does not plan for a school site within 500 feet of a roadway carrying more than 100,000 vehicles per day. The dEIR addresses the siting of new sensitive receivers within 500 feet of highways in Policy EE 6.10 on Page 406. Policy EE 6.10 states:

> The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the HRA shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

K-2 This comment states that stronger language should be included for avoiding human health risks from freeway pollution and that a policy should be revised to prohibit sensitive uses within 500 feet of a freeway. This is a comment about the General Plan Update, rather than the dEIR. The dEIR addresses Policy EE 6.10 on Page 406 which states:

> The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the HRA shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

Furthermore, Policy EE 6.4 (Page 406 of the dEIR) states:

> Avoid siting new or re-powered energy generation facilities, and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.

Based on these policies, the dEIR concluded that the impacts that could result from exposing sensitive receptors to substantial pollutant concentrations were self-mitigated. The policy comment will be forwarded to the appropriate City decision making body. The California Air Resources Board Air Quality and Land Use Handbook is "advisory and does not establish regulatory standards of any kind."

We suggest that EE 6.10 be revised to read:

EHC PROPOSED Revision (EE 6.10)
The siting of sensitive receptors within 500 feet of highways resulting from development or redevelopment projects shall be avoided. In the event that there is an extreme need or mitigating site specific circumstance, overriding considerations can be made to this policy in conjunction with preparation of a health risk assessment as part of the CEQA review of the project and attendant health risks identified in the HRA being mitigated to the maximum extent practicable and in compliance with SB352.

K-3 We request that the studies attached to this letter be included in the FEIR to demonstrate the associated risks and support more stringent prohibitions regarding locating housing and schools in this 500 foot buffer area.

Updated information on BFGoodrich Emissions Inventory should be included in the EIR

K-4 We repeat our concern that the impacts of the BFGoodrich and the South Bay Power Plant are not adequately analyzed or disclosed in this environmental assessment. As we raised in our comments on the first DEIR, just because the facilities are not located directly within the planning area they are directly upwind and directly impact the planning areas. In fact, there are residents currently living within 800 feet of BFGoodrich and a schools nearby and downwind of both emissions sources. The land use patterns in this area create a need for current and precise information about the emissions and health risks from Goodrich's operations which are not disclosed in the DEIR and should be.

Past health risk assessments and lack of current information on operations leave considerable uncertainty about the health hazard from Goodrich emissions at downwind locations. This facility's first HRA, in 1992, showed a 10 per million cancer risk isopleth that extended 20 kilometers offsite. The 1993 HRA showed a much reduced isopleth, but the health risks were still significant off-site. An updated emissions estimate was completed in 1991, but no new isopleth maps have been generated. Currently, Goodrich has the region's highest reported annual emissions of hexavalent chromium, with an annual emission rate estimated at 9.2 lbs. As operations at this facility have changed, accurate information should be provided in all EIRs for projects that can be impacted by these air emissions. This information will be imperative for communities and government to make informed decisions to both protect human health and preserve the economic benefits to the region from this facility.

Thank you for the opportunity to comment on this document.

Sincerely,

Laura Hunter, Director
Clean Bay Campaign

RESPONSE

K-3 This comment requests that the studies attached to the letter should be included in the Final EIR. The letter and attachments are included as part of the Final EIR.

K-4 This comment states that the updated information on BFGoodrich emissions inventory should be included in the EIR. Current emissions inventories from BFGoodrich are unavailable. The most recently available health risk assessment for the Goodrich facility, on file with the San Diego APCD is dated February 7, 1997 and was used as the basis for the analysis provided in the dEIR. The results of that analysis are provided on Table 5.11-11, page 405 of the dEIR. It states that the Maximum Lifetime Cancer Risk per million for the BF Goodrich/Rohr Industry plant is 7.7; lifetime Cancer Burden ‹0.1; Chronic THI‹0.1; and Acute THI‹0.1.

KEY STUDIES ON AIR POLLUTION AND HEALTH EFFECTS NEAR HIGH-TRAFFIC AREAS

Compiled by the Environmental Law and Policy Center and the Sierra Club

Air Pollution from Busy Roads Linked to Shorter Life Spans for Nearby Residents

Dutch researchers looked at the effects of long-term exposure to traffic-related air pollutants on 5,000 adults. They found that people who lived near a main road were almost twice as likely to die from heart or lung disease and 1.4 times as likely to die from any cause compared with those who lived in less-trafficked areas. Researchers say these results are similar to those seen in previous U.S. studies on the effects of long-term exposure to traffic-related air pollution. The authors say traffic emissions contain many pollutants that might be responsible for the health risks, such as ultrafine particles, diesel soot, and nitrogen oxides, which have been linked to cardiovascular and respiratory problems.

Hoek, Brunekreef, Goldbohn, Fischer, van den Brandt. (2002). Association between mortality and indicators of traffic-related air pollution in the Netherlands: a cohort study. Lancet, 360 (9341): 1203-9.

Truck Traffic Linked to Childhood Asthma Hospitalizations

A study in Erie County, New York (excluding the city of Buffalo) found that children living in neighborhoods with heavy truck traffic within 200 meters of their homes had increased risks of asthma hospitalization. The study examined hospital admission for asthma amongst children ages 0-14, and residential proximity to roads with heavy traffic.

Lin, Munsie, Hwang, Fitzgerald, and Cayo. (2002). Childhood Asthma Hospitalization and Residential Exposure to State Route Traffic. Environmental Research, Section A, Vol. 88, pp. 73-81.

Pregnant Women Who Live Near High Traffic Areas More Likely to Have Premature and Low Birth Weight Babies.

Researchers observed an approximately 10-20% increase in the risk of premature birth and low birth weight for infants born to women living near high traffic areas in Los Angeles County. In particular, the researchers found that for each one part per million increase in annual average carbon monoxide concentrations where the women lived, there was a 19% and 11 % increase in risk for low birth weight and premature births, respectively.

Wilhelm, Ritz. (2002). Residential Proximity to Traffic and Adverse Birth Outcomes in Los Angeles County, California, 1994-1996. Environmental Health Perspectives. doi: 10.1289/ehp.5688.

Traffic-Related Air Pollution Associated with Respiratory Symptoms in Two Year Old Children.

This cohort study found that two year old children who are exposed to higher levels of traffic-related air pollution are more likely to have self-reported respiratory illnesses, including wheezing, ear/nose/throat infections, and reporting of physician-diagnosed asthma, flu or serious cold.

Brauer et al. (2002). Air Pollution from Traffic and the Development of Respiratory Infections and Asthmatic and Allergic Symptoms in Children. Am J Respiratory and Critical Care Medicine. Vol. 166 pp 1092-1098.

People Who Live Near Freeways Exposed to 25 Times More Particle Pollution

Studies conducted in the vicinity of Interstates 405 and 710 in southern California found that the number of ultrafine particles in the air was approximately 25 times more concentrated near the freeways and that pollution levels gradually decrease to near normal (background) levels around 300 meters, or 990 feet, downwind from the freeway. The researchers note that motor vehicles are the most significant source of ultrafine particles, which have been linked to increases in mortality and morbidity. Recent research concludes that ultrafine particles are more toxic than larger particles with the same chemical composition. Moreover, the researchers found considerably higher concentrations of carbon monoxide pollution near the freeways.

Zhu, Hinds, Kim, Sioutas. Concentration and size distribution of ultrafine particles near a major highway. Journal of the Air and Waste Management Association.. September 2002.

Zhu, Hinds, Kim, Shen, Sioutas. Study of ultrafine particles near a major highway with heavy-duty diesel traffic. Atmospheric Environment. 36(2002),4323-4335.

Asthma More Common for Children Living Near Freeways.

A study of nearly 10,000 children in England found that wheezing illness, including asthma, was more likely with increasing proximity of a child's home to main roads. The risk was greatest for children living within 90 meters of the road.

Venn et al. (2001). Living Near A Main Road and the Risk of Wheezing Illness in Children. American Journal of Respiratory and Critical Care Medicine. Vol. 164, pp 2177-2180.

A study of 1,068 Dutch children found that asthma, wheeze, cough, and runny nose were significantly more common in children living within 100 meters of freeways. Increasing density of truck traffic was also associated with significantly higher asthma levels - particularly in girls.

van Vliet et al. (1997). Motor exhaust and chronic respiratory symptoms in children living near freeways. Environmental Research. 74:12-132.

Children Living Near Busy Roads More Likely to Develop Cancer

A 2000 Denver study showed that children living within 250 yards of streets or highways with 20,000 vehicles per day are six times more likely to develop all types of cancer and eight times

more likely to get leukemia. The study looked at associations between traffic density, power lines, and all childhood cancers with measurements obtained in 1979 and 1990. It found a weak association from power lines, but a strong association with highways. It suggested that benzene pollution might be the cancer promoter causing the problem.

Pearson et al. (2000). Distance-weighted traffic density in proximity to a home is a risk factor for leukemia and other childhood cancers. Journal of Air and Waste Management Association 50:175-180.

Most Traffic-Related Deaths Due to Air Pollution, Not Traffic Accidents

Another study analyzed the affect of traffic-related air pollution and traffic accidents on life expectancy in the area of Baden-Wurttemberg, Germany. It estimated that 4325 deaths in this region would result from motor vehicle emissions compared to 891 from traffic accidents (over a lifetime).

Szagun and Seidel. (2000). Mortality due to road traffic in Baden-Aurttemberg - air pollution, accidents, noise. Gesundheitswesen. 62(4): 225-33.

Emissions from Motor Vehicles Dominate Cancer Risk

The most comprehensive study of urban toxic air pollution ever undertaken shows that motor vehicles and other mobile sources of air pollution are the predominant source of cancer-causing air pollutants in Southern California. Overall, the study showed that motor vehicles and other mobile sources accounted for about 90% of the cancer risk from toxic air pollution, most of which is from diesel soot (70% of the cancer risk). Industries and other stationary sources accounted for the remaining 10%. The study showed that the highest risk is in urban areas where there is heavy traffic and high concentrations of population and industry.

South Coast Air Quality Management District. Multiple Air Toxics Exposure Study-II. March 2000.

Cancer Risk Higher Near Major Sources of Air Pollution, Including Highways

A 1997 English study found a cancer corridor within three miles of highways, airports, power plants, and other major polluters. The study examined children who died of leukemia or other cancers from the years 1953-1980, where they were born and where they died. It found that the greatest danger lies a few hundred yards from the highway or pollution facility and decreases as you get away from the facility.

Knox and Gilman (1997). Hazard proximities of childhood cancers in Great Britain from 1953-1980. Journal of Epidemiology and Community Health. 51: 151-159.

A School's Proximity to Freeways Associated with Asthma Prevalence

A study of 1498 children in 13 schools in the Province of South Holland found a positive relationship between school proximity to freeways and asthma occurrence. Truck traffic intensity and the concentration of emissions measured in schools were found to be significantly associated with chronic respiratory symptoms.

Speizer, F. E. and B. G. Ferris, Jr. (1973). Exposure to automobile exhaust. I. Prevalence of respiratory symptoms and disease. Archives of Environmental Health. 26(6): 313-8. van Vliet, P., M. Knape, et al. (1997). Motor vehicle exhaust and chronic respiratory symptoms in children living near freeways. Environmental Research.. 74(2): 122-32.

Lung Function Reduction Among Children More Likely if Living Near Truck Traffic

A European study determined that exposure to traffic-related air pollution, `in particular diesel exhaust particles,' may lead to reduced lung function in children living near major motorways.

Brunekreef B; Janssen NA; de Hartog J; Harssema H; Knape M; van Vliet P. (1997). "Air pollution from truck traffic and lung function in children living near motorways." Epidemiology. 8(3):298-303.

Asthma Symptoms Caused by Truck Exhaust

A study was conducted in Munster, Germany to determine the relationship between truck traffic and asthma symptoms. In total, 3,703 German students, between the ages of 12-15 years, completed a written and video questionnaire in 1994-1995. Positive associations between both wheezing and allergic rhinitis and truck traffic were found during a 12-month period. Potentially confounding variables, including indicators of socio-economic status, smoking, etc., did not alter the associations substantially.

Duhme, H., S. K. Weiland, et al. (1996). The association between self-reported symptoms of asthma and allergic rhinitis and self-reported traffic density on street of residence in adolescents. Epidemiology7(6): 578-82.

Proximity of a Child's Residence to Major Roads Linked to Hospital Admissions for Asthma

A study in Birmingham, United Kingdom, determined that living near major roads was associated with the risk of hospital admission for asthma in children younger than 5 yrs of age. The area of residence and traffic flow patterns were compared for children admitted to the hospital for asthma, children admitted for nonrespiratory reasons, and a random sample of children from the community. Children admitted with an asthma diagnosis were significantly more likely to live in an area with high traffic flow (> 24,000 vehicles/ 24 hrs) located along the nearest segment of main road than were children admitted for nonrespiratory reasons or children form the community.

Edwards, J., S. Walters, et al. (1994). Hospital admissions for asthma in preschool children: relationship to major roads in Birmingham, United Kingdom. Archives of Environmental Health. 49(4): 223-7.

Exposure to Carcinogenic Benzene Higher for Children Living Near High Traffic Areas

German researchers compared forty-eight children who lived in a central urban area with high traffic density with seventy-two children who lived in a small city with low traffic density. They found that the blood levels of benzene in children who lived in the high-traffic-density area were

71% higher than those of children who lived in the low-traffic-density area. Blood levels of toluene and carboxyhemoglobin (formed after breathing carbon monoxide) were also significantly elevated (56% and 33% higher, respectively) among children regularly exposed to vehicle emissions. Aplastic anemia and leukemia are associated with excessive exposure to benzene.

Jermann E, Hajimiragha H, Brockhaus A, Freier I, Ewers U, Roscovanu A: Exposure of children to benzene and other motor vehicle emissions. Zentralblatt fur Hygiene and Umweltmedizin 189:50-61, 1989.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 SEPTEMBER 9, 2004 VOL. 351 NO. 11

The Effect of Air Pollution on Lung Development from 10 to 18 Years of Age

W. James Gauderman, Ph.D., Edward Avol, M.S., Frank Gilliland, M.D., Ph.D., Hita Vora, M.S., Duncan Thomas, Ph.D., Kiros Berhane, Ph.D., Rob McConnell, M.D., Nino Kuenzli, M.D., Fred Lurmann, M.S., Edward Rappaport, M.S., Helene Margolis, Ph.D., David Bates, M.D., and John Peters, M.D.

ABSTRACT

BACKGROUND

Whether exposure to air pollution adversely affects the growth of lung function during the period of rapid lung development that occurs between the ages of 10 and 18 years is unknown.

METHODS

In this prospective study, we recruited 1759 children (average age, 10 years) from schools in 12 southern California communities and measured lung function annually for eight years. The rate of attrition was approximately 10 percent per year. The communities represented a wide range of ambient exposures to ozone, acid vapor, nitrogen dioxide, and particulate matter. Linear regression was used to examine the relationship of air pollution to the forced expiratory volume in one second (FEV_1) and other spirometric measures.

RESULTS

Over the eight-year period, deficits in the growth of FEV_1 were associated with exposure to nitrogen dioxide (P=0.005), acid vapor (P=0.004), particulate matter with an aerodynamic diameter of less than 2.5 μm ($PM_{2.5}$) (P=0.04), and elemental carbon (P=0.007), even after adjustment for several potential confounders and effect modifiers. Associations were also observed for other spirometric measures. Exposure to pollutants was associated with clinically and statistically significant deficits in the FEV_1 attained at the age of 18 years. For example, the estimated proportion of 18-year-old subjects with a low FEV_1 (defined as a ratio of observed to expected FEV_1 of less than 80 percent) was 4.9 times as great at the highest level of exposure to $PM_{2.5}$ as at the lowest level of exposure (7.9 percent vs. 1.6 percent, P=0.002).

CONCLUSIONS

The results of this study indicate that current levels of air pollution have chronic, adverse effects on lung development in children from the age of 10 to 18 years, leading to clinically significant deficits in attained FEV_1 as children reach adulthood.

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THERE IS MOUNTING EVIDENCE THAT air pollution has chronic, adverse effects on pulmonary development in children. Longitudinal studies conducted in Europe[1-3] and the United States[4-6] have demonstrated that exposure to air pollution is associated with reductions in the growth of lung function, strengthening earlier evidence[7-12] based on cross-sectional data. However, previous longitudinal studies have followed young children for relatively short periods (two to four years), leaving unresolved the question of whether the effects of air pollution persist from adolescence into adulthood. The Children's Health Study[13] enrolled children from 12 southern California communities representing a wide range of exposures to ambient air pollution. We documented the children's respiratory growth from the ages of 10 to 18 years. Over this eight-year period, children have substantial increases in lung function. By the age of 18 years, girls' lungs have nearly matured, and the growth in lung function in boys has slowed considerably, as compared with the rate in earlier adolescence.[14] We analyzed the association between long-term exposure to ambient air pollution and the growth in lung function over the eight-year period from the ages of 10 to 18 years. We also examined whether any observed effect of air pollution on this eight-year growth period results in clinically significant deficits in attained lung function at the age of 18 years.

METHODS

STUDY SUBJECTS

In 1993, the Children's Health Study recruited 1759 fourth-grade children (average age, 10 years) from elementary schools in 12 southern California communities as part of an investigation of the long-term effects of air pollution on children's respiratory health.[6,12,13] Data on pulmonary function were obtained by trained field technicians, who traveled to study schools annually from the spring of 1993 through the spring of 2001 to perform maximal-effort spirometric testing of the children. Details of the testing protocol have been published previously.[12] We analyzed three measures of pulmonary function: forced vital capacity (FVC), forced expiratory volume in the first second (FEV_1), and maximal midexpiratory flow rate (MMEF). Pulmonary-function tests were not performed on any child who was absent from school on the day of testing, but such children were eligible for testing in subsequent years. Children who moved away from their recruitment community were classified as lost to follow-up and were not tested further. From the initial sample of the 1759 children in 1993, the number of children available for follow-up was 1414 in 1995, 1252 in 1997, 1031 in 1999, and 747 in 2001, reflecting the attrition of approximately 10 percent of subjects per year.

A baseline questionnaire, completed at study entry by each child's parents or legal guardian, was used to obtain information on the children's characteristics, including race, presence or absence of Hispanic ethnic background, level of parental education, presence or absence of a history of asthma diagnosed by a doctor, exposure to maternal smoking in utero, and household exposure to gas stoves, pets, and environmental tobacco smoke. Questions administered at the time of annual pulmonary-function testing were used to update information on asthma status, personal smoking status, and exposure to environmental tobacco smoke. The distribution of baseline characteristics of all study subjects and of two subgroups defined according to the length of follow-up (all eight years or less than eight years) is shown in Supplementary Appendix 1 (available with the full text of this article at www.nejm.org). The length of follow-up was significantly associated with factors related to the mobility of the population, including race, presence or absence of Hispanic ethnic background, presence or absence of exposure to environmental tobacco smoke, and parents' level of education. However, the length of follow-up was not significantly associated with baseline lung function or the level of exposure to air pollution, suggesting that the loss to follow-up did not differ with respect to the primary variables of interest.

The study protocol was approved by the institutional review board for human studies at the University of Southern California, and written informed consent was provided by a parent or legal guardian for all study subjects. We did not obtain assent from minor children, since this was not standard practice when the study was initiated.

AIR-POLLUTION DATA

Air-pollution–monitoring stations were established in each of the 12 study communities and provided continuous data, beginning in 1994. Each station measured average hourly levels of ozone, nitrogen

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dioxide, and particulate matter with an aerodynamic diameter of less than 10 μm (PM_{10}). Stations also collected two-week integrated-filter samples for measuring acid vapor and the mass and chemical makeup of particulate matter with an aerodynamic diameter of less than 2.5 μm ($PM_{2.5}$). Acid vapor included both inorganic acids (nitric and hydrochloric) and organic acids (formic and acetic). For statistical analysis, we used total acid, computed as the sum of nitric, formic, and acetic acid levels. Hydrochloric acid was excluded from this sum, since levels were very low and close to the limit of detection. In addition to measuring $PM_{2.5}$, we determined the levels of elemental carbon and organic carbon, using method 5040 of the National Institute for Occupational Safety and Health.[15] We computed annual averages on the basis of average levels in a 24-hour period in the case of PM_{10} and nitrogen dioxide, and a two-week period in the case of $PM_{2.5}$, elemental carbon, organic carbon, and acid vapor. For ozone, we computed the annual average of the levels obtained from 10 a.m. to 6 p.m. (the eight-hour daytime average) and of the one-hour maximal levels. We also calculated long-term mean pollutant levels (from 1994 through 2000) for use in the statistical analysis of the lung-function outcomes.

STATISTICAL ANALYSIS

The outcome data consisted of the results of 5454 pulmonary-function tests of 876 girls and 5300 tests of 883 boys over the eight-year period. We adopted a two-stage regression approach to relate the longitudinal pulmonary-function data for each child to the average air-pollution levels in each study community.

The first-stage model was a regression of each pulmonary-function measure (values were log-transformed) on age to obtain separate, community-specific average growth curves for girls and boys. To account for the growth pattern during this period, we used a linear spline model[14] that consisted of four straight lines over the age intervals of younger than 12 years, 12 to 14 years, 14 to 16 years, and older than 16 years, constrained to be connected at the three "knot" points. The model included adjustments for log values for height; body-mass index (the weight in kilograms divided by the square of the height in meters); the square of the body-mass index; race; the presence or absence of Hispanic ethnic background, doctor-diagnosed asthma, any tobacco smoking by the child in the preceding year, exposure to environmental tobacco smoke, and exercise or respiratory tract illness on the day of the test; and indicator variables for the field technician and the spirometer. In addition to these covariates, random effects were included to account for the multiple measurements contributed by each subject. An analysis of residual values confirmed that the assumptions of the model had been satisfied. The first-stage model was used to estimate the mean and variance of the growth in lung function over the eight-year period in each of the 12 communities, separately for girls and boys.

The second-stage model was a linear regression of the 24 sex- and community-specific estimates of the growth in lung function over the eight-year period on the corresponding average levels of each air pollutant in each community. Inverses of the first-stage variances were incorporated as weights, and a community-specific random effect was included to account for residual variation between communities. A sex-by-pollutant interaction was included in the model to evaluate whether there was a difference in the effect of a given pollutant between the sexes, and when this value was nonsignificant, the model was refitted to estimate the sex-averaged effect of the pollutant. Pollutant effects are reported as the difference in the growth in lung function over the eight-year period from the least to the most polluted community, with negative differences indicative of growth deficits with increasing exposure. We also considered two-pollutant models obtained by simultaneously regressing the growth in lung function over the eight-year period on pairs of pollutants.

In addition to examining the growth in lung function over the eight-year period, we analyzed the FEV_1 measurements obtained in 746 subjects during the last year of follow-up (average age, 17.9 years) to determine whether exposure to air pollution was associated with clinically significant deficits in attained FEV_1. We defined a low FEV_1 as an attained FEV_1 below 80 percent of the predicted value, a criterion commonly used in clinical settings to identify persons who are at increased risk for adverse respiratory conditions. To determine the predicted FEV_1, we first fitted a regression model for observed FEV_1 (using log-transformed values) with the following predictors: log-transformed height, body-mass index, the square of the body-mass index, sex, race or ethnic group, asthma status, field technician, and interactions between sex and log-transformed height, sex and asthma, and sex and

race or ethnic group. This model explained 71 percent of the variance in the attained FEV_1 level. For each subject, we then computed the predicted FEV_1 from the model and considered subjects to have a low FEV_1 if the ratio of observed to predicted FEV_1 was less than 80 percent. Linear regression was then used to examine the correlation between the community-specific proportion of subjects with a low FEV_1 and the average level of each pollutant from 1994 through 2000. This model included a community-specific random effect to account for residual variation. Regression procedures in SAS software[16] were used to fit all models. Associations denoted as statistically significant were those that yielded a P value of less than 0.05, assuming a two-sided alternative hypothesis.

RESULTS

From 1994 through 2000, there was substantial variation in the average levels of study pollutants across the 12 communities, with relatively little year-to-year variation in the annual levels within each community (Fig. 1). From 1994 through 2000, the

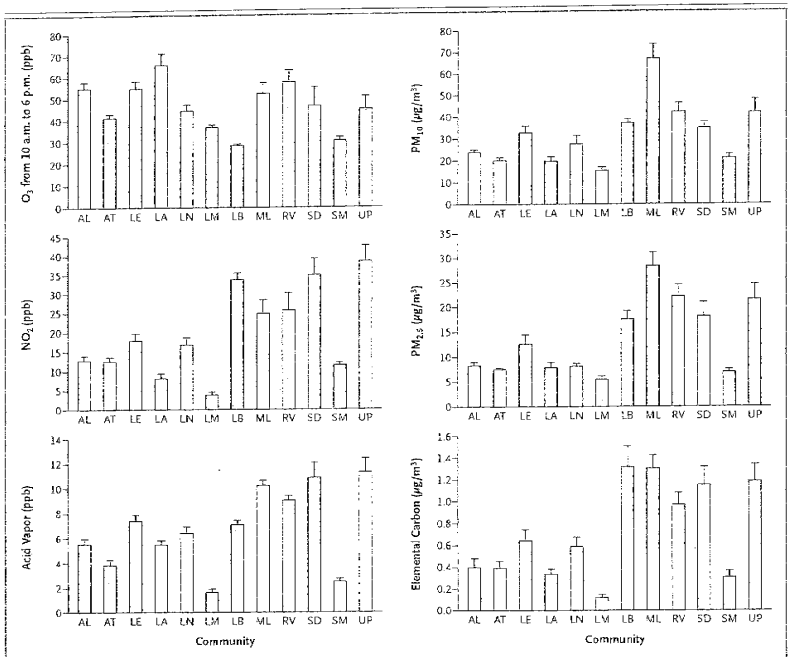

Figure 1. **Mean (+SD) Annual Average Levels of Pollutants from 1994 through 2000 in the 12 Study Communities in Southern California.**
AL denotes Alpine, AT Atascadero, LE Lake Elsinore, LA Lake Arrowhead, LN Lancaster, LM Lompoc, LB Long Beach, ML Mira Loma, RV Riverside, SD San Dimas, SM Santa Maria, and UP Upland. O_3 denotes ozone, NO_2 nitrogen dioxide, and PM_{10} and $PM_{2.5}$ particulate matter with an aerodynamic diameter of less than 10 μm and less than 2.5 μm, respectively.

average levels of ozone were not significantly correlated across communities with any other study pollutant (Table 1). However, correlations between other pairs of pollutants were all significant, ranging from an R of 0.64 ($P<0.05$) for nitrogen dioxide and organic carbon, to an R of 0.97 ($P<0.001$) for PM_{10} and organic carbon. Thus, nitrogen dioxide, acid vapor, and the particulate-matter pollutants can be regarded as a correlated "package" of pollutants with a similar pattern relative to each other across the 12 communities.

Among the girls, the average FEV_1 increased from 1988 ml at the age of 10 years to 3332 ml at the age of 18 years, yielding an average growth in FEV_1 of 1344 ml over the eight-year period (Table 2). The corresponding averages in boys were 2082 ml and 4464 ml, yielding an average growth in FEV_1 of 2382 ml over the eight-year period. Similar patterns of growth over the eight-year period were observed for FVC and MMEF (Table 2).

Although the average growth in FEV_1 was larger in boys than in girls, the correlations of growth with air pollution did not differ significantly between the sexes, as shown for nitrogen dioxide in Figure 2. The sex-averaged analysis, depicted by the regression line in Figure 2, demonstrated a significant negative correlation between the growth in FEV_1 over the eight-year period and the average nitrogen dioxide level ($P=0.005$). The estimated difference in the average growth in FEV_1 over the eight-year period from the community with the lowest nitrogen dioxide level to the community with the highest nitrogen dioxide level, represented by the slope of the plotted regression line in Figure 2, was −101.4 ml.

Estimated differences in the growth of FEV_1, FVC, and MMEF during the eight-year period with respect to all pollutants are summarized in Table 3. Deficits in the growth of FEV_1 and FVC were observed for all pollutants, and deficits in the growth of MMEF were observed for all but ozone, with several combinations of outcome variables and pollutants attaining statistical significance. Specifically, for FEV_1 we observed significant negative correlations between the growth in this variable over the eight-year period and exposure to acid vapor ($P=0.004$), $PM_{2.5}$ ($P=0.04$), and elemental carbon ($P=0.007$), in addition to the above-mentioned correlation with nitrogen dioxide. As with FEV_1, the effects of the various pollutants on FVC and MMEF did not differ significantly between boys and girls. Significant deficits in FVC were associated with exposure to nitrogen dioxide ($P=0.05$) and acid vapor ($P=0.03$), whereas deficits in MMEF were associated with exposure to nitrogen dioxide ($P=0.02$) and elemental carbon ($P=0.04$). There was no significant evidence that ozone, either the average value obtained from 10 a.m. to 6 p.m. or the one-hour maximal level, was associated with any measure of lung function. In two-pollutant models for any of the measures of pulmonary function, adjustment for ozone did not substantially alter the effect estimates or significance levels of any other pollutant (data not shown). In general, two-pollutant models for any pair of pollutants did not provide a significantly better fit to the data than the corre-

Table 1. **Correlation of Mean Air-Pollution Levels from 1994 through 2000 across the 12 Study Communities.***

Pollutant	O_3 (10 a.m.–6 p.m.)	NO_2	Acid Vapor†	PM_{10}	$PM_{2.5}$	Elemental Carbon	Organic Carbon
				R value			
O_3							
1 Hr max	0.98	0.10	0.53	0.31	0.33	0.17	0.25
10 a.m.–6 p.m.		−0.11	0.35	0.18	0.18	−0.03	0.13
NO_2			0.87	0.67	0.79	0.94	0.64
Acid vapor†				0.79	0.87	0.88	0.76
PM_{10}					0.95	0.85	0.97
$PM_{2.5}$						0.91	0.91
Elemental carbon							0.82

* Unless otherwise noted, values are the 24-hour average pollution levels. O_3 denotes ozone, NO_2 nitrogen dioxide, and PM_{10} and $PM_{2.5}$ particulate matter with an aerodynamic diameter of less than 10 μm and less than 2.5 μm, respectively.
† Acid vapor is the sum of nitric, formic, and acetic acid levels.

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TABLE 2. Mean Levels of Growth in Pulmonary Function during the Eight-Year Study Period, from 1993 to 2001.*

Pulmonary-Function Measure	Girls			Boys		
	Age of 10 yr	Age of 18 yr	Average 8-yr growth	Age of 10 yr	Age of 18 yr	Average 8-yr growth
FVC (ml)	2262	3790	1528	2427	5202	2775
FEV_1 (ml)	1988	3332	1344	2082	4464	2382
MMEF (ml/sec)	2311	3739	1428	2287	4709	2422

* Levels at the ages of 10 and 18 years are derived from the growth model described in the Methods section. FVC denotes forced vital capacity, FEV_1 forced expiratory volume in one second, and MMEF maximal midexpiratory flow rate.

sponding single-pollutant models; this was not surprising, given the strong correlation between most pollutants.

The association between pollution and the growth in FEV_1 over the eight-year period remained significant in a variety of sensitivity analyses (Table 4). For example, estimates of the effect of acid vapor and elemental carbon (model 1 in Table 4) changed little with adjustment for in-utero exposure to maternal smoking (model 2), presence in the home of a gas stove (model 3) or pets (model 4), or parental level of education (model 5). To account for possible confounding by short-term effects of air pollution, we fitted a model that adjusted for the average ozone, nitrogen dioxide, and PM_{10} levels on the three days before each child's pulmonary-function test. This adjustment also had little effect on the estimates of the long-term effects of air pollution (model 6). Table 4 also shows that the effects of pollutants remained large and significant in the subgroups of children with no history of asthma (model 7) and those with no history of smoking (model 8). The effects of pollutants were not significant among the 457 children who had a history of asthma or among the 483 children who had ever smoked (data not shown), although the sample sizes in these subgroups were small. Model 9 demonstrates that the extremes in pollutant levels did not drive the observed associations; in other words, we found similar effect estimates after eliminating the two communities with the highest and lowest levels of each pollutant. Finally, model 10 shows the effects of pollutants in the subgroup of subjects who underwent pulmonary-function testing in both 1993 and 2001 (i.e., subjects who participated in both the first and last year of the study). The magnitudes of effects in this subgroup were similar to those in the entire sample (Model 1), suggesting that observed effects of pollutants in the entire sample cannot be attributed to biased losses to follow-up across communities. These sensitivity analyses were also applied to the other pollutants and to FVC and MMEF, with similar results.

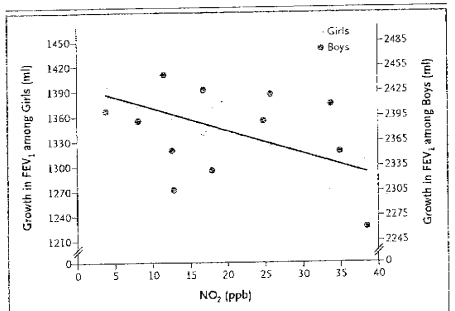

Figure 2. Community-Specific Average Growth in FEV_1 among Girls and Boys During the Eight-Year Period from 1993 to 2001 Plotted against Average Nitrogen Dioxide (NO_2) Levels from 1994 through 2000.

Pollution-related deficits in the average growth in lung function over the eight-year period resulted in clinically important deficits in attained lung function at the age of 18 years (Fig. 3). Across the 12 communities, a clinically low FEV_1 was positively correlated with the level of exposure to nitrogen dioxide ($P=0.005$), acid vapor ($P=0.01$), PM_{10} ($P=0.02$), $PM_{2.5}$ ($P=0.002$), and elemental carbon ($P=0.006$). For example, the estimated proportion of children with a low FEV_1 (represented by the regression line in Fig. 3) was 1.6 percent at the lowest level of exposure to $PM_{2.5}$ and was 4.9 times as great (7.9 percent) at the highest level of exposure to $PM_{2.5}$

Table 3. Difference in Average Growth in Lung Function over the Eight-Year Study Period from the Least to the Most Polluted Community.*

Pollutant	FVC		FEV_1		MMEF	
	Difference (95% CI)	P Value	Difference (95% CI)	P Value	Difference (95% CI)	P Value
	ml		*ml*		*ml/sec*	
O_3						
10 a.m.–6 p.m.	−50.6 (−171.0 to 69.7)	0.37	−22.8 (−122.3 to 76.6)	0.62	85.6 (−130.0 to 301.1)	0.40
1-Hr max	−70.3 (−183.3 to 42.6)	0.20	−44.5 (−138.9 to 50.0)	0.32	45.7 (−172.3 to 263.6)	0.65
NO_2	−95.0 (−189.4 to −0.6)	0.05	−101.4 (−164.5 to −38.4)	0.005	−211.0 (−377.6 to −44.4)	0.02
Acid vapor	−105.2 (−194.5 to −15.9)	0.03	−105.8 (−168.8 to −42.7)	0.004	−165.0 (−344.8 to 14.7)	0.07
PM_{10}	−60.2 (−190.6 to 70.3)	0.33	−82.1 (−176.9 to 12.8)	0.08	−154.2 (−378.3 to 69.8)	0.16
$PM_{2.5}$	−60.1 (−166.1 to 45.9)	0.24	−79.7 (−153.0 to −6.4)	0.04	−168.9 (−345.5 to 7.8)	0.06
Elemental carbon	−77.7 (−166.7 to 11.3)	0.08	−87.9 (−146.4 to −29.4)	0.007	−165.5 (−323.4 to −7.6)	0.04
Organic carbon	−58.6 (−196.1 to 78.8)	0.37	−86.2 (−185.6 to 13.3)	0.08	−151.2 (−389.4 to 87.1)	0.19

* Values are the differences in the estimated rate of eight-year growth at the lowest and highest observed levels of the indicated pollutant. Differences are scaled to the range across the 12 study communities in the average level of each pollutant from 1994 through 2000 as follows: 37.5 ppb of O_3 (measured from 10 a.m. to 6 p.m.), 46.0 ppb of O_3 (the one-hour max mal level), 34.6 ppb of NO_2, 9.6 ppb of acid vapor, 51.4 μg of PM_{10} per cubic meter, 22.8 μg of $PM_{2.5}$ per cubic meter, 1.2 μg of elemental carbon per cubic meter, and 10.5 μg of organic carbon per cubic meter. CI denotes confidence interval.

(P=0.002). Similar associations between these pollutants and a low FEV_1 were observed in the subgroup of children with no history of asthma and the subgroup with no history of smoking (data not shown). A low FEV_1 was not significantly correlated with exposure to ozone in any group.

DISCUSSION

The results of this study provide robust evidence that lung development, as measured by the growth in FVC, FEV_1, and MMEF from the ages of 10 to 18 years, is reduced in children exposed to higher levels of ambient air pollution. The strongest associations were observed between FEV_1 and a correlated set of pollutants, specifically nitrogen dioxide, acid vapor, and elemental carbon. The effects of these pollutants on FEV_1 were similar in boys and girls and remained significant among children with no history of asthma and among those with no history of smoking, suggesting that most children are susceptible to the chronic respiratory effects of breathing polluted air. The magnitude of the observed effects of air pollution on the growth in lung function during this age interval was similar to those that have been reported for exposure to maternal smoking[17,18] and smaller than those reported for the effects of personal smoking.[17,19]

Cumulative deficits in the growth in lung function during the eight-year study period resulted in a strong association between exposure to air pollution and a clinically low FEV_1 at the age of 18 years. In general, lung development is essentially complete in girls by the age of 18 years, whereas in boys it continues into their early 20s, but at a much reduced rate. It is therefore unlikely that clinically significant deficits in lung function at the age of 18 years will be reversed in either girls or boys as they make the transition into adulthood. Deficits in lung function during young adulthood may increase the risk of respiratory conditions — for example, episodic wheezing that occurs during a viral infection.[20] However, the greatest effect of pollution-related deficits may occur later in life, since reduced lung function is a strong risk factor for complications and death during adulthood.[21-27]

Deficits in lung function were associated with a correlated set of pollutants that included nitrogen dioxide, acid vapor, fine-particulate matter ($PM_{2.5}$), and elemental carbon. In southern California, the primary source of these pollutants is motor vehicles, either through direct tailpipe emissions or downwind physical and photochemical reactions of vehicular emissions. Both gasoline- and diesel-powered engines contribute to the tons of pollutants exhausted into southern California's air every day, with diesel vehicles responsible for disproportionate amounts of nitrogen dioxide, $PM_{2.5}$, and ele-

Table 4. **Sensitivity Analysis of the Effects of Acid Vapor and Elemental Carbon on Growth in FEV_1 over the Eight-Year Study Period.***

Model	Acid Vapor	Elemental Carbon
	Difference (95% Confidence Interval)	
Main model (model 1)†	−105.8 (−168.8 to −42.7)	−87.9 (−146.4 to −29.4)
Additional covariates‡		
Main model + in-utero exposure to maternal smoking (model 2)	−108.8 (−173.3 to −44.2)	−85.8 (−147.4 to −24.1)
Main model + exposure to gas stove (model 3)	−106.0 (−181.5 to −30.6)	−84.8 (−154.7 to −14.9)
Main model + pets in home (model 4)	−108.4 (−171.6 to −45.2)	−89.8 (−149.1 to −30.6)
Main model + parental level of education (model 5)	−100.7 (−167.2 to −34.2)	−80.9 (−142.7 to −19.0)
Main model + short-term effects of pollution (model 6)§	−112.4 (−201.4 to −23.3)	−103.2 (−181.8 to −24.5)
Subgroup effects		
No history of asthma (model 7)¶	−98.1 (−166.4 to −29.8)	−88.9 (−149.2 to −28.6)
No history of smoking (model 8)	−115.6 (−233.7 to 2.5)	−113.3 (−214.9 to −11.6)
After exclusion of communities with lowest and highest levels of pollution (model 9)**	−106.7 (−192.3 to −21.2)	−94.7 (−173.7 to −15.7)
Complete follow-up (model 10)††	−132.4 (−226.2 to −38.7)	−97.4 (−195.6 to 0.9)

* Values are the differences in the estimated rate of eight-year growth at the lowest and highest observed levels of the indicated pollutant. Differences are scaled to the range across the 12 study communities in the average level of each pollutant from 1994 through 2000 as follows: 9.6 ppb of acid vapor and 1.2 μg of elemental carbon per cubic meter.

† Model 1 is equivalent to effect estimates for FEV_1 in Table 3 and is based on data on 1759 children.

‡ The main model was adjusted for each of the covariates listed.

§ Values were adjusted for the average levels of O_3, NO_2, and PM_{10} on the three days before each child's pulmonary-function test.

¶ The analysis includes data on 1302 children with no history of doctor-diagnosed asthma.

‖ The analysis includes data on 1276 children with no history of active tobacco smoking at any time during follow-up.

** The analysis excludes children from the two communities with the lowest and highest levels of each pollutant. This leaves 1507 children (excluding those from Lompoc and Upland) in the analysis of acid vapor and 1484 children (excluding those from Lompoc and Long Beach) in the analysis of elemental carbon.

†† The analysis includes 713 children who underwent pulmonary-function testing in both 1993 and 2001 (i.e., those observed throughout the study).

mental carbon. In the current study, however, we could not discern the independent effects of pollutants because they came from common sources and there was a high degree of intercorrelation among them; similar difficulties have also been encountered in other studies of lung function and air-pollutant mixtures.[1,2,9,28-30] Since ozone is also formed during photochemical reactions involving fuel-combustion products, one might expect ozone to be correlated with the other study pollutants and therefore to show similar associations with lung function. However, the Children's Health Study was specifically designed to minimize the correlation of ozone with other pollutants across the 12 study communities. Thus, although ozone has been convincingly linked to acute health effects in many other studies,[11] our results provide little evidence that ambient ozone at current levels is associated with chronic deficits in the growth of lung function in children. Only a few other studies have addressed the long-term effects of ozone on lung development in children, and results have been inconsistent.[31] Although we found little evidence of an effect of ozone, this result needs to be interpreted with caution given the potential for substantial misclassification of exposure to ozone.[32,33]

The mechanism whereby exposure to pollutants could lead to reduced lung development is unknown, but there are many possibilities. Our observation of associations between air pollution and all three measures of lung function — FVC, FEV_1, and MMEF — suggests that more than one process is involved. FVC is largely a function of the number and size of alveoli, with differences in volume pri-

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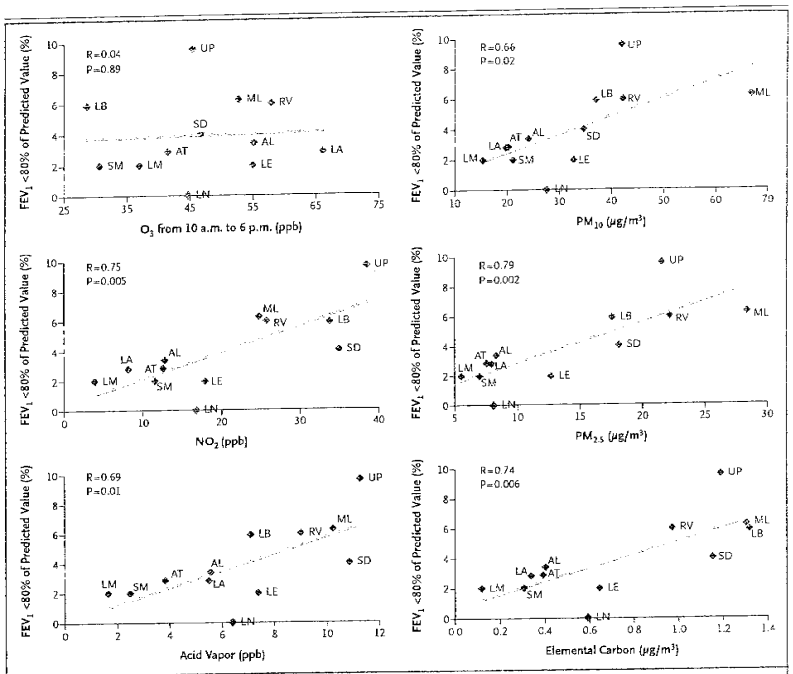

Figure 3. **Community-Specific Proportion of 18-Year-Olds with a FEV_1 below 80 Percent of the Predicted Value Plotted against the Average Levels of Pollutants from 1994 through 2000.**

The correlation coefficient (R) and P value are shown for each comparison. AL denotes Alpine, AT Atascadero, LE Lake Elsinore, LA Lake Arrowhead, LN Lancaster, LM Lompoc, LB Long Beach, ML Mira Loma, RV Riverside, SD San Dimas, SM Santa Maria, and UP Upland. O_3 denotes ozone, NO_2 nitrogen dioxide, and PM_{10} and $PM_{2.5}$ particulate matter with an aerodynamic diameter of less than 10 μm and less than 2.5 μm, respectively.

marily attributable to differences in the number of alveoli, since their size is relatively constant.[34] However, since the postnatal increase in the number of alveoli is complete by the age of 10 years, pollution-related deficits in the growth of FVC and FEV_1 during adolescence may, in part, reflect a reduction in the growth of alveoli. Another plausible mechanism of the effect of air pollution on lung development is airway inflammation, such as occurs in bronchiolitis; such changes have been observed in the airways of smokers and of subjects who lived in polluted environments.[35,36]

A strength of our study was the long-term, prospective follow-up of a large cohort, with exposure and outcome data collected in a consistent manner throughout the study period. As in any epidemiologic study, however, the observed effects could be biased by underlying associations of the exposure and outcome to some confounding variables. We adjusted for known potential confounders, includ-

ing personal characteristics and other sources of exposure to pollutants, but the possibility of confounding by other factors still exists. Over the eight-year follow-up period, approximately 10 percent of study subjects were lost to follow-up each year. Attrition is a potential source of bias in a cohort study if loss to follow-up is related to both exposure and outcome. However, we did not see evidence that the loss of subjects was related to either baseline lung function or exposure to air pollution. In addition, we observed significant associations between air pollution and lung growth in the subgroup of children who were followed for the full eight years of the study, with effects that were similar in magnitude to those in the group as a whole, thus making loss of subjects an unlikely source of bias.

We have shown that exposure to ambient air pollution is correlated with significant deficits in respiratory growth over an eight-year period, leading to clinically important deficits in lung function at the age of 18 years. The specific pollutants that were associated with these deficits included nitrogen dioxide, acid vapor, $PM_{2.5}$, and elemental carbon. These pollutants are products of primary fuel combustion, and since they are present at similar levels in many other areas,[37,38] we believe that our results can be generalized to children living outside southern California. Given the magnitude of the observed effects and the importance of lung function as a determinant of morbidity and mortality during adulthood, continued emphasis on the identification of strategies for reducing levels of urban air pollutants is warranted.

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USC UNIVERSITY OF SOUTHERN CALIFORNIA

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Researchers Link Childhood Asthma to Exposure to Traffic-related Pollution

USC investigators show proximity to freeways poses respiratory risk

LOS ANGELES (Sept. 20) —Living near a freeway may mean more than the annoying rumble of cars and trucks: For children, it brings an increased risk of asthma, according to researchers at the Keck School of Medicine of the University of Southern California.

Scientists studying air pollution levels in 10 Southern California cities found that the closer children live to a freeway, the greater their chance of having been diagnosed with asthma. They report their findings in the November issue of the journal *Epidemiology*.

Researchers also found that children who had higher levels of nitrogen dioxide, or NO_2, in the air around their homes were more likely to have developed asthma. NO_2 is a product of pollutants emitted from combustion engines, such as those in cars and trucks.

"These results suggest that tailpipe pollutants from freeway traffic are a significant risk factor for asthma," says lead author James Gauderman, Ph.D., associate professor of preventive medicine at the Keck School. "Considering the enormous costs associated with childhood asthma, today's public policy toward regulating pollutants may merit some re-evaluation."

"These results have both scientific and public health implications," says David A. Schwartz, M.D., director of the National Institute of Environmental Health Sciences, the federal agency that funded the study. "They strengthen an emerging body of evidence that air pollution can cause asthma, and that exposure to outdoor levels of nitrogen dioxide and other traffic-related air pollutants may be a significant risk factor for this illness."

Researchers looked at the pollution-asthma link in 208 children who were part of the USC-led Children's Health Study, the longest investigation ever into air pollution and kids' health. The study has tracked the respiratory health of children in a group of Southern California cities since 1993.

The investigators placed air samplers outside the home of each student to measure NO_2 levels. In addition, they determined the distance of each child's home from local freeways, as well as how many vehicles traveled within 150 meters (about 164 yards) of the child's home. Finally, they estimated traffic-related air pollution levels at each child's

home using models that take weather conditions, vehicle counts and other important factors into account.

-more-

In all, 31 children (15 percent) had asthma. Scientists found a link between asthma prevalence in the children and NO_2 levels at their homes. For each increase of 5.7 parts per billion in average NO_2 – which represents a typical range from low to high pollution levels among Southern California cities – the risk of asthma increased by 83 percent. Risk of wheezing and current asthma medication use also rose as NO_2 levels increased.

They also found that the closer the students lived to a freeway, the higher the NO_2 levels outside their homes. NO_2 levels also corresponded with traffic-related pollution estimates from the group's statistical model.

It was not surprising, then, when they found that the closer the students lived to a freeway, the higher the students' asthma prevalence. For every 1.2 kilometers (about three-quarters of a mile) the students lived closer to the freeway, asthma risk increased by 89 percent. For example, students who lived 400 meters from the freeway had an 89 percent higher risk of asthma than students living 1,600 meters away from the freeway.

Interestingly, the researchers saw that air pollution from freeway traffic influenced NO_2 concentrations at homes more strongly than pollution from other types of roads. Traffic counts within 150 meters of homes (which primarily comprised traffic from smaller streets) were only weakly correlated with measured NO_2.

In any community, a freeway is a major source of air pollution. "Cars and trucks traveling on freeways and other large roads may be a bigger source of pollutants that matter for asthma than traffic on smaller roads," Gauderman says. Scientists also find it difficult to get good data on traffic on smaller streets, which may make it harder to find associations between asthma and local traffic.

Gauderman cautions that researchers do not yet know that NO_2 is to blame for the asthma. NO_2 travels together with other airborne pollutants, such as particulate matter, so it may be a marker for other asthma-causing pollutants.

Study sites included the cities of Alpine, Atascadero, Lake Elsinore, Lancaster, Long Beach, Mira Loma, Riverside, San Dimas, Santa Maria and Upland.

The Children's Health Study is supported by the NIEHS, California Air Resources Board, the Southern California Particle Center and Supersite, the Environmental Protection Agency and the Hastings Foundation.

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W.J. Gauderman, E. Avol, F. Lurmann, N. Kuenzli, F. Gilliland, J. Peters and R. McConnell, "Childhood Asthma and Exposure to Traffic and Nitrogen Dioxide," *Epidemiology*. Vol. 16, No. 6, November 2005.

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Contact: Kathleen O'Neil
(323) 442-2830

Air Pollution Found to Pose Greater Danger to Health than Earlier Thought

USC-led study shows significant death risk linked to airborne particles

LOS ANGELES (Sept. 20) – Experts may be significantly underestimating air pollution's role in causing early death, according to a team of American and Canadian researchers, who studied two decades' worth of data on residents of the Los Angeles metro area.

When the epidemiologists examined links between particle pollution and mortality within more than 260 Los Angeles neighborhoods, they found that pollution's chronic health effects are two to three times greater than earlier believed. The study appears in the November issue of *Epidemiology* but was published early on the journal's Web site.

Among participants, for each increase of 10 micrograms per cubic meter ($\mu g/m^3$) of fine particles in the neighborhood's air, the risk of death from any cause rose by 11 to 17 percent, according to Michael Jerrett, Ph.D., associate professor of preventive medicine at the Keck School of Medicine of the University of Southern California and the paper's lead author. Fine particle levels can differ by about 20 $\mu g/m^3$ from the cleanest parts of Los Angeles to the most polluted.

"By looking at the effects of pollution within communities, not only did we observe pollution's influence on overall mortality, but we saw specific links between particulate matter and death from ischemic heart disease, such as heart attack, as well as lung cancers," Jerrett says. Ischemic heart disease mortality risks rose by 25 to 39 percent for the 10 $\mu g/m^3$ increase in air pollution.

Earlier studies took one or two pollution measures from several cities and compared health effects among cities. This study digs more deeply, taking pollution measures at 23 sites within Los Angeles to more accurately reflect air pollution exposure where residents live and work.

Researchers examined data from 22,906 residents of Los Angeles, Riverside, San Bernardino and Ventura counties in the American Cancer Society's Cancer Prevention Study II since 1982. They determined air pollution exposure in 267 different zip codes where participants lived. The vast number of participants allowed scientists to control for dozens of factors that influence health outcome, such as smoking, diet and education. Finally, they compiled causes of death for the 5,856 participants who died by 2000.

When considering air pollution, the epidemiologists specifically looked at levels of particulate matter, a mixture of airborne microscopic solids and liquid droplets. That includes acids (such as nitrates), organic chemicals, metals, dust and allergens.

-more-

Small particles less than 2.5 micrometers in diameter pose the greatest problems to health because they can penetrate deep into the lungs and sometimes even enter the bloodstream. In this study, the researchers tracked this particulate matter, called $PM_{2.5}$ for short, across the neighborhoods of Los Angeles. It is often found in smoke, vehicle exhaust, industrial emissions and haze, driven by the burning of fossil fuels. Scientists also tracked ozone pollution, but found no link between ozone levels and mortality.

Increased deaths from heart disease jibe with the scientists' earlier research showing links between air pollution and atherosclerosis, a thickening of artery walls that may lead to heart attack and stroke. They believe particulate matter may promote inflammatory processes, including atherosclerosis, in key tissues. "We have convincing evidence that those causes of death that we might expect from inflammation, ischemic heart disease and lung disorders, are elevated in areas of higher pollution levels," he says.

Researchers also saw more than a twofold increased risk of death from diabetes, although numbers of diabetes-related deaths were smaller than those from heart disease, making findings less reliable. "People who are diabetic may be more susceptible to day-to-day fluctuations in air pollution," Jerrett says. "They may experience a state of greater inflammation—related to insulin resistance—that makes their lungs more receptive to receiving harmful particles."

Jerrett notes that findings might have been affected by participants who moved during the study or who changed their lifestyle since 1982. Another limitation is that scientists could only use participants' zip codes, rather than their home addresses, to determine their home neighborhood.

Researchers will conduct a similar study in New York City to try to duplicate findings. They hope to determine whether Los Angeles' tailpipe-emission-driven pollution poses a greater danger than that in the eastern United States, where power plants and factories contribute more heavily to pollution. They also plan to better understand pollution's effects on diabetes, and will use more specific measures to assess pollution within neighborhoods.

Because of the large number of participants in the American Cancer Society's study (more than a million people in 150 cities), policymakers in the past have relied heavily on findings from the study to set the nation's air-quality standards.

"These findings should give us some pause to think about what we need to do as a society," Jerrett says. "Restrictions on tailpipe emissions have gotten tighter, but there are more trucks and cars on the roads and people are driving farther. This study may cause us to reflect on how we use our cars, what cars we drive and whether we can do anything to make tailpipe emissions from all vehicles less harmful to health."

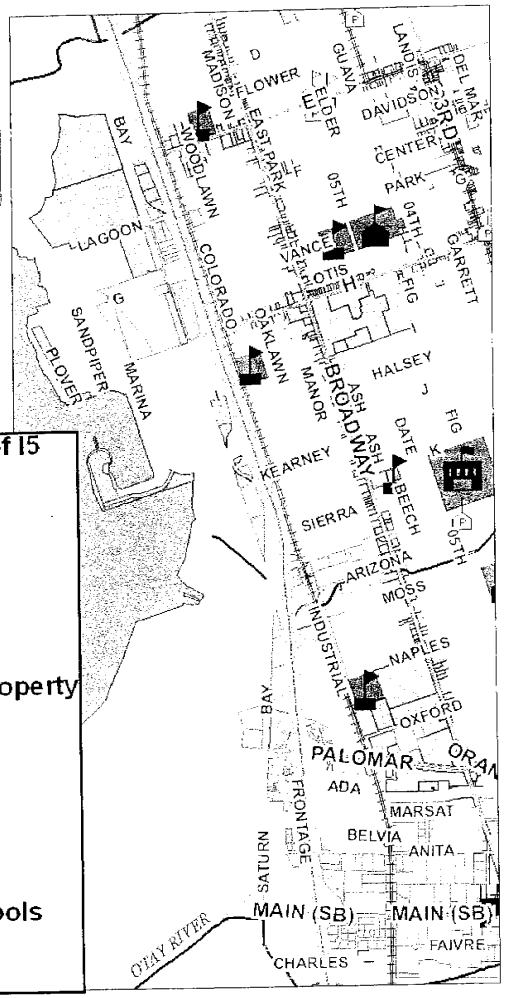
The Health Effects Institute and the National Institute of Environmental Health Sciences supported the research.

# # #

Michael Jerrett, Richard T. Burnett, Renjun Ma, C. Arden Pope III, Daniel Krewski, K. Bruce Newbold, George Thurston, Yuanli Shi, Norm Finkelstein, Eugenia E. Calle and Micheal J. Thun, "Spatial Analysis of Air Pollution and Mortality in Los Angeles," *Epidemiology*. Vol. 16, No. 6 (published early on Epi Fast-Track, www.epidem.com.

For American Cancer Society information, contact David Sampson at (213) 368-8523.

500 Foot Buffer of the I-5 Freeway in West Chula Vista



For more information, please contact Georgette Gomez at Environmental Health Coalition
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[1]California Air Resources Board. Air Quality and Land Use: A Community Health Perspective, April 2005.

BILL NUMBER: **SB 352** CHAPTERED
BILL TEXT

CHAPTER 668
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AMENDED IN SENATE MARCH 24, 2003

INTRODUCED BY **Senator Escutia**

FEBRUARY 19, **2003**

An act to amend Section 17213 of the Education Code, and to amend Section 21151.8 of the Public Resources Code, relating to public schools.

LEGISLATIVE COUNSEL'S DIGEST

SB 352, Escutia. Schoolsites: sources of pollution.

Existing law sets forth various requirements regarding the siting, structural integrity, safety, and fitness-for-occupancy of school buildings, including, but not limited to, a prohibition of the approval by the governing board of a school district of the acquisition of a schoolsite by a school district, unless prescribed conditions relating to possible exposure to hazardous substances are satisfied, and a prohibition on the approval of a related environmental impact report or negative declaration.

This bill would, in addition, prohibit the approval by the governing board of a school district of a schoolsite that is within 500 feet from the edge of the closest traffic lane of a freeway or other busy traffic corridor, unless prescribed conditions are met and would make conforming and other technical, nonsubstantive changes.

Existing law requires the lead agency to consult with prescribed agencies to identify facilities that might reasonably be anticipated to emit hazardous materials, within 1/4 of a mile of the schoolsite.

This bill would define "facility" for this purpose and would require the lead agency to consult to identify freeways and other busy traffic corridors, as defined, large agricultural operations, and railyards, within 1/4 of a mile of the schoolsite, and would make conforming and other technical, nonsubstantive changes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) Many studies have shown significantly increased levels of pollutants, particularly diesel particulates, in close proximity to freeways and other major diesel sources. A recent study of Los Angeles area freeways measured diesel particulate levels up to 25 times higher near freeways than those levels elsewhere. Much of the pollution from freeways is associated with acute health effects, exacerbating asthma and negatively impacting the ability of children to learn.

(b) Cars and trucks release at least forty different toxic air contaminants, including, but not limited to, diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Levels of these pollutants are generally concentrated within 500 feet of freeways and very busy roadways.

(c) Current state law governing the siting of schools does not specify whether busy freeways should be included in environmental impact reports of nearby "facilities." Over 150 schools are already estimated to be within 500 feet of extremely high traffic roadways.

(d) A disproportionate number of economically disadvantaged pupils may be attending schools that are close to busy roads, putting them at an increased risk of developing bronchitis from elevated levels of several pollutants associated with traffic. Many studies have confirmed that increased wheezing and bronchitis occurs among children living in high traffic areas.

(e) It is therefore the intent of the Legislature to protect school children from the health risks posed by pollution from heavy freeway traffic and other nonstationary sources in the same way that they are protected from industrial pollution.

SEC. 2. Section 17213 of the Education Code is amended to read:

17213. The governing board of a school district may not approve a project involving the acquisition of a schoolsite by a school district, unless all of the following occur:

(a) The school district, as the lead agency, as defined in Section 21067 of the Public Resources Code, determines that the property purchased or to be built upon is not any of the following:

(1) The site of a current or former hazardous waste disposal site or solid waste disposal site, unless if the site was a former solid waste disposal site, the governing board of the school district concludes that the wastes have been removed.

(2) A hazardous substance release site identified by the Department of Toxic Substances Control in a current list adopted pursuant to Section 25356 of the Health and Safety Code for removal or remedial action pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.

(3) A site that contains one or more pipelines, situated underground or aboveground, that carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood.

(b) The school district, as the lead agency, as defined in Section 21067 of the Public Resources Code, in preparing the environmental impact report or negative declaration has consulted with the administering agency in which the proposed schoolsite is located, pursuant to Section 2735.3 of Title 19 of the California Code of

Regulations, and with any air pollution control district or air quality management district having jurisdiction in the area, to identify both permitted and nonpermitted facilities within that district's authority, including, but not limited to, freeways and other busy traffic corridors, large agricultural operations, and railyards, within one-fourth of a mile of the proposed schoolsite, that might reasonably be anticipated to emit hazardous air emissions, or to handle hazardous or acutely hazardous materials, substances, or waste. The school district, as the lead agency, shall include a list of the locations for which information is sought.

(c) The governing board of the school district makes one of the following written findings:

(1) Consultation identified none of the facilities or significant pollution sources specified in subdivision (b).

(2) The facilities or other pollution sources specified in subdivision (b) exist, but one of the following conditions applies:

(A) The health risks from the facilities or other pollution sources do not and will not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the school.

(B) The governing board finds that corrective measures required under an existing order by another governmental entity that has jurisdiction over the facilities or other pollution sources will, before the school is occupied, result in the mitigation of all chronic or accidental hazardous air emissions to levels that do not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the proposed school. If the governing board makes this finding, the governing board shall also make a subsequent finding, prior to the occupancy of the school, that the emissions have been mitigated to these levels.

(C) For a schoolsite with a boundary that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor, the governing board of the school district determines, through analysis pursuant to paragraph (2) of subdivision (b) of Section 44360 of the Health and Safety Code, based on appropriate air dispersion modeling, and after considering any potential mitigation measures, that the air quality at the proposed site is such that neither short-term nor long-term exposure poses significant health risks to pupils.

(D) The governing board finds that neither of the conditions set forth in subparagraph (B) or (C) can be met, and the school district is unable to locate an alternative site that is suitable due to a severe shortage of sites that meet the requirements in subdivision (a) of Section 17213. If the governing board makes this finding, the governing board shall adopt a statement of Overriding Considerations pursuant to Section 15093 of Title 14 of the California Code of Regulations.

(d) As used in this section:

(1) "Hazardous air emissions" means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the project is located. As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air from any substance identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code.

(2) "Hazardous substance" means any substance defined in Section

25316 of the Health and Safety Code.

(3) "Acutely hazardous material" means any material defined pursuant to subdivision (a) of Section 25532 of the Health and Safety Code.

(4) "Hazardous waste" means any waste defined in Section 25117 of the Health and Safety Code.

(5) "Hazardous waste disposal site" means any site defined in Section 25114 of the Health and Safety Code.

(6) "Administering agency" means any agency designated pursuant to Section 25502 of the Health and Safety Code.

(7) "Handle" means handle as defined in Article 1 (commencing with Section 25500) of Chapter 6.95 of Division 20 of the Health and Safety Code.

(8) "Facilities" means any source with a potential to use, generate, emit or discharge hazardous air pollutants, including, but not limited to, pollutants that meet the definition of a hazardous substance, and whose process or operation is identified as an emission source pursuant to the most recent list of source categories published by the California Air Resources Board.

(9) "Freeway or other busy traffic corridors" means those roadways that, on an average day, have traffic in excess of 50,000 vehicles in a rural area as defined in Section 50101 of the Health and Safety Code, and 100,000 vehicles in an urban area, as defined in Section 50104.7 of the Health and Safety Code.

SEC. 3. Section 21151.8 of the Public Resources Code is amended to read:

21151.8. (a) An environmental impact report or negative declaration may not be approved for any project involving the purchase of a schoolsite or the construction of a new elementary or secondary school by a school district unless all of the following occur:

(1) The environmental impact report or negative declaration includes information that is needed to determine if the property proposed to be purchased, or to be constructed upon, is any of the following:

(A) The site of a current or former hazardous waste disposal site or solid waste disposal site and, if so, whether the wastes have been removed.

(B) A hazardous substance release site identified by the Department of Toxic Substances Control in a current list adopted pursuant to Section 25356 of the Health and Safety Code for removal or remedial action pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.

(C) A site that contains one or more pipelines, situated underground or aboveground, that carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood, or other nearby schools.

(D) A site that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor.

(2) The school district, as the lead agency, in preparing the environmental impact report or negative declaration has notified in writing and consulted with the administering agency in which the proposed schoolsite is located, pursuant to Section 2735.3 of Title 19 of the California Code of Regulations, and with any air pollution control ~~dist~~ district or air quality management district having jurisdiction in the area, to identify both permitted and nonpermitted

facilities within that district's authority, including, but not limited to, freeways and busy traffic corridors, large agricultural operations, and railyards, within one-fourth of a mile of the proposed schoolsite, that might reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. The notification by the school district, as the lead agency, shall include a list of the locations for which information is sought.

(3) The governing board of the school district makes one of the following written findings:

(A) Consultation identified no facilities of this type or other significant pollution sources specified in paragraph (2).

(B) The facilities or other pollution sources specified in paragraph (2) exist, but one of the following conditions applies:

(i) The health risks from the facilities or other pollution sources do not and will not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the proposed school.

(ii) Corrective measures required under an existing order by another agency having jurisdiction over the facilities or other pollution sources will, before the school is occupied, result in the mitigation of all chronic or accidental hazardous air emissions to levels that do not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the proposed school. If the governing board makes a finding pursuant to this clause, it shall also make a subsequent finding, prior to occupancy of the school, that the emissions have been so mitigated.

(iii) For a schoolsite with a boundary that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor, the governing board of the school district determines, through analysis pursuant to paragraph (2) of subdivision (b) of Section 44360 of the Health and Safety Code, based on appropriate air dispersion modeling, and after considering any potential mitigation measures, that the air quality at the proposed site is such that neither short-term nor long-term exposure poses significant health risks to pupils.

(C) The facilities or other pollution sources specified in paragraph (2) exist, but conditions in clause (i), (ii) or (iii) of subparagraph (B) cannot be met, and the school district is unable to locate an alternative site that is suitable due to a severe shortage of sites that meet the requirements in subdivision (a) of Section 17213 of the Education Code. If the governing board makes this finding, the governing board shall adopt a statement of Overriding Considerations pursuant to Section 15093 of Title 14 of the California Code of Regulations.

(4) Each administering agency, air pollution control district, or air quality management district receiving written notification from a lead agency to identify facilities pursuant to paragraph (2) shall provide the requested information and provide a written response to the lead agency within 30 days of receiving the notification. The environmental impact report or negative declaration shall be conclusively presumed to comply with this section as to the area of responsibility of any agency that does not respond within 30 days.

(b) If a school district, as a lead agency, has carried out the consultation required by paragraph (2) of subdivision (a), the environmental impact report or the negative declaration shall be conclusively presumed to comply with this section, notwithstanding

any failure of the consultation to identify an existing facility or other pollution source specified in paragraph (2) of subdivision (a).

(c) As used in this section and Section 21151.4, the following definitions shall apply:

(1) "Hazardous substance" means any substance defined in Section 25316 of the Health and Safety Code.

(2) "Acutely hazardous material" means any material defined pursuant to subdivision (a) of Section 25532 of the Health and Safety Code.

(3) "Hazardous waste" means any waste defined in Section 25117 of the Health and Safety Code.

(4) "Hazardous waste disposal site" means any site defined in Section 25114 of the Health and Safety Code.

(5) "Hazardous air emissions" means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the project is located. As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air from any substances identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code.

(6) "Administering agency" means an agency designated pursuant to Section 25502 of the Health and Safety Code.

(7) "Handle" means handle as defined in Article 1 (commencing with Section 25500) of Chapter 6.95 of Division 20 of the Health and Safety Code.

(8) "Facilities" means any source with a potential to use, generate, emit or discharge hazardous air pollutants, including, but not limited to, pollutants that meet the definition of a hazardous substance, and whose process or operation is identified as an emission source pursuant to the most recent list of source categories published by the California Air Resources Board.

(9) "Freeway or other busy traffic corridors" means those roadways that, on an average day, have traffic in excess of 50,000 vehicles in a rural area, as defined in Section 50101 of the Health and Safety Code, and 100,000 vehicles in an urban area, as defined in Section 50104.7 of the Health and Safety Code.

Steve Power

From: John Hoegemeier [hoegjohn@yahoo.com]
Sent: Wednesday, November 02, 2005 12:31 PM
To: Steve Power
Subject: Input on Chula Vista DEIR, Re; Freight Rail Noise

Steve,

We appreciate the detailed work done on this DEIR. The considerations for rail noise are comprehensive.

L-1 There is one change we would like to requestt. With freight volumes increasing, especially the volumes crossing the border to Mexico at San Ysidro, there is the strong possibility that the night time freight train volumes could double from one each way to two each way within the DEIR evaluation period. The last sentence on the bottom of page 439 states that there is no plan to expand freight service on the freight line. Although the number on on line customers in Chula Vista is not expected to increase, the number of though carloads, and hence the numbers of trains is very likely to increase.

My calculations for the CNEL are in close agreement with those in the DEIR. We would request that the final EIR address the likelihood of increased freight train volumes.

I have attached a working spreadsheet that shows the 65dB Ldn contours for both the existing 2 train per night volume, and a future volume of up to 4 trains per night. CNEL distances will be higher of course due to the after 10PM occurences.

Thank you, and please contact me if you have any questions.

John Hoegemeeir
Consultant to
San Diego & Imperial Valley Railroad
(619) 417-3930

RESPONSE

L-1 The EIR analyzed the current freight service because there is no plan to expand freight service along the rail line through Chula Vista and it is speculative that the number of carloads and trains would increase. The EIR did analyze a doubling of the number of daily trolley trips for trolley service which likely would increase. Specific forecasts for the plan year 2030 are not available; however, a doubling of the number of daily trolley trips would result in an increase in CNEL by three decibels. This would place the 65 dB(A) CNEL contour at a distance about 500 feet from the tracks. Compliance with the proposed General Plan Update objectives and policies would not expose people to excessive noise because the policies require future projects to comply with the exterior land use-noise compatibility guidelines contained in Table 5.12-7 of this EIR.

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	2
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	3
Existing Train Speed (mph)	45
Future Train Speed (mph)	45
Number of Existing Trains in one Direction	2
Number of Future Trains in one Direction	4
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	0
Existing Number of Night Trains (10 p.m. to 7 am)	2
Future Number of Night Trains (10 p.m. to 7 am)	4
Existing Average Number of Cars	40
Future Average Number of Cars	40
Existing Average Number of Locomotives	2
Future Average Number of Locomotives	2

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive		
National Average (50% front, 50% middle)		1
All Front Mounted		2
All Middle Mounted		3
User Defined	80 % front mounted horns	4

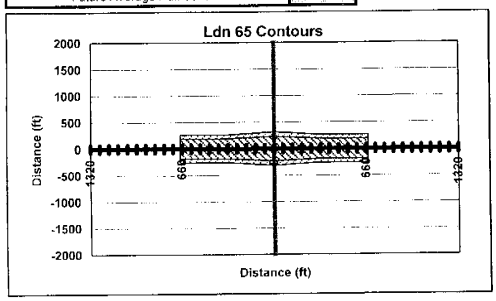
Non Train Noise Environment		
Urban		1
Suburban		2
Rural		3
User Defined Ldn =	50 dBA	4

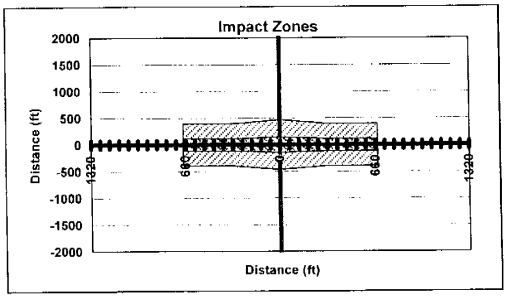
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	231
Future 65 Ldn Contour at X-ing	315
Existing 65 Ldn Contour at 1/2 zone length	190
Future 65 Ldn Contour at 1/2 zone length	263
Zone Length	675
1/2 Zone Length	338

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	467
Severe Impact Distance at X-ing	143
Impact Distance at 1/2 zone length	394
Severe Impact Distance at 1/2 zone length	115
Zone Length	675
1/2 Zone Length	338





FOLEY

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CLIENT/MATTER NUMBER
107841-0104

November 2, 2005

VIA FACSIMILE AND U.S. MAIL

Steve Power, AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Public Comment on Recirculated Draft EIR for General Plan Update

Dear Mr. Power:

We present this letter and attachments as a public comment to the Recirculated Draft Environmental Impact Report ("DEIR"), dated September 2005, for the City of Chula Vista's ("City") General Plan Update ("GPU").

Public review of the initial December 2004 Draft EIR emphasized that pursuant to CEQA Guidelines Section 15088.5, the Draft EIR was inadequate and needed to be revised and recirculated. As a result, the City appropriately decided to revise and recirculate the EIR. Although the revised document addresses many of the concerns raised by the public during the initial comment period, many issues are not sufficiently addressed. Further revision and recirculation of the document is again warranted to disclose and analyze significant adverse impacts to housing.

M-1 **1. Maximum Mid-Rise Development Within Transit Focus Area ("TFA").**

At the October 4, 2005 City Council Meeting, Mayor Padilla requested that staff prepare an option for the Proposed GPU to limit development within the TFA to mid-rise projects only. We understand that at the November 1, 2005 City Council meeting (yesterday evening), the Council reviewed the proposed revision and directed staff to include the mid-rise limit option in the proposed GPU. We believe that the TFA mid-rise option is consistent with, and covered by the DEIR because it would result in reduced intensity and density of potential development in the TFA. We encourage the City Council to adopt the mid-rise option for the TFA.

M-2 **2. Adverse Impacts to Housing.**

As you are aware, the City has not revised the Housing Element of its General Plan in several years. Although the City is currently updating the General Plan, it is improperly excluding any update of the Housing Element. As a result, DEIR improperly relies on the outdated "expired" Housing Element, and thus fails to adequately address impacts to housing. As a local government within the planning jurisdiction of the San Diego Association of Governments, the City missed its June 30, 2005 legislative deadline to update it Housing Element. (See, Gov. Code §65588(e)(5).)

RESPONSE

M-1 The comment requests that the City Council adopt the mid-rise option for the TFA. This comment addresses the proposed project itself, not the EIR and will be forwarded to the decision makers for their consideration.

M-2 This comment suggests that the dEIR improperly relies on the outdated "expired" Housing Element, and thus fails to adequately address impacts to housing. The current Housing Element is not expired. The current Chula Vista Housing Element covers the five-year period from 1999 to 2004, and was originally self-certified by the City on December 19, 2000, pursuant to a state-approved program for jurisdictions in the San Diego region. Jurisdictions within the San Diego Association of Government's COG are currently working on Housing Element updates for the 2005 to 2010 planning cycle. As stated on Page 574 in the recirculated dEIR, Chula Vista currently anticipates adoption of the Housing Element update in 2006. Pursuant to California Government Code Section 65588.1 (a) the planning period of existing housing elements prepared pursuant to subdivision (b) of Section 65588 shall be extended through the housing element due date prescribed in subdivision (e) of Section 65588. Local governments shall continue to implement the housing program of existing housing elements and the annual review pursuant to Section 65400.

The recirculated dEIR appropriately relies on the existing Housing Element, located in Chapter 7 of the General Plan Update, which is still in effect. Amendments to the Housing Element are not a part of the proposed project.

The California Department of Housing and Community Development ("HCD") recently indicated in response to a Public Records Act request that not only did the City fail to update its Housing Element by the June 30, 2005 deadline, the HCD has no public record of any communication from the City anytime during the past year concerning its Housing Element.

M-3 Although the revised DEIR discloses that there are additional unmitigable, significant adverse impacts not disclosed in the initial EIR (including land use, population, visual quality, and noise impacts), the DEIR does not acknowledge the significant impact to housing. The DEIR should therefore include an analysis based upon a draft Revised Housing Element, and should be recirculated for review and comment.

3. Additional Comments Attached.

Attached are additional comments prepared by expert consultants: The Planning Center and Urban Crossroads. The Planning Center is an environmental and planning firm founded 30 years ago. The Planning Center has prepared thousands of environmental documents pursuant to CEQA, including numerous EIRs for General Plans. It has successfully completed certified EIRs for General Plans for the Cities of Anaheim, Rancho Cucamonga, and Fontana, as well as the County of Riverside, and is currently completing General Plan Update EIRs for Rancho Mirage, Palm Springs, and the City of San Bernardino. The Project Manager for this review, JoAnn Hadfield, has an urban planning and civil engineering education and 22 years of environmental experience preparing CEQA compliance documents.

Thank you for this opportunity to provide comments on the DEIR. Please make sure my office is on your notice list for actions related to the GPU process.

Very truly yours,

John C. Lemmo

Attachments
cc: Mayor Steve Padilla
Earl Jentz

RESPONSE

M-3 See Response to Comment M-2 above.

THE PLANNING CENTER

Governmental Services
Planning & Urban Design
Environmental Studies
Landscape Architecture

1580 Metro Drive
Costa Mesa, CA 92626
Phone: 714.966.9220
Fax: 714.966.9221
costamesa@planningcenter.com

November 2, 2005

Mr. Earl Jentz
397 3rd Avenue, Suite A
Chula Vista, CA 91910

Subject: Review of the Recirculated Draft Environmental Impact Report for the City of Chula Vista General Plan Update, September 2005

Dear Mr. Jentz:

This letter provides the results of our Third-Party adequacy review of the Recirculated Draft Environmental Impact Report (DEIR) for the City of Chula Vista's General Plan Update. This effort follows our review the City's original General Plan EIR (December 2004) and includes both a determination of whether changes were made to adequately address our previous comments, and an assessment of the supplemental environmental information and conclusions provided in the revised document. As with our previous review, our review focuses on compliance with the California Environmental Quality Act (CEQA) and CEQA Guidelines, as amended through January 1, 2005.

Our review comments are included on the following pages. We have organized our comments as follows:

- **Overview Comments** – these comments summarize our primary concerns with respect to legal adequacy and issues which are still outstanding with the Recirculated DEIR.
- **Comments by EIR Section** – this section provides an assessment of the revisions and modified conclusions of the Recirculated Draft DEIR by chapter or technical section reference. This section also identifies key comments from our previous review that have not been addressed. An updated peer review of transportation issues by Urban Crossroads is summarized in this section and attached to this package.

M-4 Our review of the original Draft EIR emphasized that pursuant to CEQA Guidelines Section 15088.5, the Draft EIR was inadequate and needed to be revised and recirculated. The revised document is substantially improved and addresses many of our concerns. As detailed in the attached comments however, it remains inadequate and many issues remain to be addressed. Moreover, we believe that recirculation of the document is again warranted to disclose a new significant impact. Although the revised document discloses that there are additional unmitigatable, significant adverse impacts not disclosed in the original EIR (including land use, population, visual quality, and noise impacts), it does not acknowledge a significant impact to housing. We believe that housing impacts are

RESPONSE

M-4 This comment states that the Population and Housing section does not acknowledge a significant impact to housing. The dEIR acknowledges a significant impact to housing as a result of the proposed project. Threshold 1 of the Housing and Population section of the dEIR states that impacts to housing and population would be significant if the proposed project would induce substantial population growth in an area, either directly or indirectly. As stated on Page 581 of the dEIR:

> Because the Preferred Plan and any of the Scenarios would induce growth it is a significant impact in accordance with Threshold 1

Furthermore, it concludes that because the General Plan Update establishes greater capacity for development, the impact remains significant and not mitigated.

inadequately addressed and that implementation of the Preferred Plan would result in a significant impact. Under Section 15088.5, recirculation is required when: "new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification." Under this provision, "significant new information" requiring recirculation includes, a disclosure that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

Overall, the Draft EIR is inadequate and if not revised, supplemented, and recirculated, meaningful public review of the environmental consequences of the proposed General Plan Update will have been precluded. Moreover, without supplemental information presented in understandable manner, the City's decision-makers will not be able to make an informed decision on the General Plan Update.

The Planning Center is an environmental and planning firm founded 30 years ago. We have prepared thousands of environmental documents pursuant to CEQA, including numerous EIRs for General Plans. We have successfully completed certified EIRs for General Plans for the Cities of Anaheim, Rancho Cucamonga, and Fontana, as well as the County of Riverside, and currently are completing General Plan Update EIRs for Rancho Mirage, Palm Springs, and the City of San Bernardino. Our Project Manager for this review, JoAnn Hadfield, has an urban planning and civil engineering education and 22 years of environmental experience preparing CEQA compliance documents.

We appreciate this opportunity to be of service. If you have any questions regarding our review or specific comments, please contact us.

Sincerely,

JoAnn C. Hadfield
Associate Director of Environmental Services

Attachments

REVIEW OF THE RECIRCULATED DRAFT EIR

OVERVIEW COMMENTS

M-5 **The new "Population and Housing" section is cursory and does not acknowledge a significant impact to housing.**

The existing conditions for this topical section consists of one four-line paragraph to address both housing and population on a Citywide basis. The only information provided on housing is the total number of units Citywide. There is no assessment of adequacy, condition, distribution or affordability of the City's housing supply. Similarly, there is no quantified or geographical analysis of housing units that would be displaced by the project. Although population is acknowledged as a significant impact, this section concludes that housing impacts are less than significant because displaced housing units can be accommodated within the General Plan area. The ability of the General Plan land use designations to accommodate additional units does not mitigate the housing that will be lost or eliminate the need for 'construction or replacement of housing elsewhere.' The displacement of people and housing units should both be considered undisclosed, significant adverse impacts of the proposed project thus requiring recirculation of the Draft EIR.

The Recirculated DEIR fails to adequately evaluate or mitigate significant visual quality impacts. A visual simulation of the mass and scale of potential development in the Urban Core (particularly the H-Street corridor) should be provided to disclose impacts.

The Recirculated DEIR concludes that community character and visual quality impacts would be significant and relates both these impacts in part to acknowledging increases in massing, height and intensity in the Urban Core. The 'scale' of allowed development under the Preferred Plan in the Urban Core can and should be evaluated in the EIR with visual simulations of potential massing and height of structures.

General Plan policies without specified timelines do not mitigate significant impacts for which CEQA mandates the provision of feasible mitigation measures.

For example, the new policy (LUT #49.14 in Section 5.2 Landform/Aesthetics) says "Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan." Policy LUT 2.6 requires this study but notes that "all land use policies contained in the General Plan shall apply until modified as a result of study findings and appropriate amendments to the plan." As such, this study is meaningless and does not control building height or development .This policy cannot act as mitigation because it does not include a timeline requirement for preparation of this special study. CEQA mandates the implementation of feasible mitigation measures for significant impacts. The design guidelines must be prepared and implemented prior to development in the Urban Core that would result in significant impacts.

RESPONSE

M-5 This comment states that the existing conditions section consists of a four-lined paragraph to address the housing and population on a Citywide basis and that there was no quantified or geographical analysis of housing units. The dEIR contains Table 5.17-1, which summarizes the current population and the total number of housing units within each of the planning areas. This table lists the population and dwelling units for the existing conditions as well as the projected scenarios for the Northwest, Southwest, and East Planning areas as well as the Bayfront.

This comment states that the displacement of people and housing units should both be considered undisclosed, significant adverse impacts. Displacement of people and housing units is disclosed on Pages 579 and 580. With regard to housing, the document states:

> Development of the land uses under the Preferred Plan and all three Scenarios would result in houses being temporarily displaced in the Northwest and Southwest Planning Area of the City as individual projects are completed that conform to the plan. (Page 579-580)

And with regard to population it states:

> People will be displaced as individual projects are developed in the Northwest and the Southwest planning areas. (Page 580)

The comment suggests that the discussion should conclude that there is a significant adverse impact because of the displacement causing the need to recirculate the dEIR. The comment fails to provide any analysis or facts for the determination of this conclusion. Additionally, it fails to recognize that the threshold against which the impact is assessed includes the condition ". . . necessitating the construction or replacement of housing elsewhere."

As established in Appendix G of the State CEQA Guidelines, the displacement of housing and population is addressed in two sections of the dEIR. Section 5.17 evaluates the project in light of two thresholds:

- Threshold 2: Displaces substantial numbers of existing housing, necessitating the construction or replacement of housing elsewhere;
- Threshold 3: Displaces substantial numbers of people, necessitating the construction or replacement of housing elsewhere.

The dEIR concludes that because the plan results in a substantial increase in housing within the plan boundaries, construction elsewhere is not required, but is accommodated with the project area (Page 581 of the dEIR). The dEIR discusses the significant physical effects that would result from the provision of housing that would be allowed with the approval of the General Plan Update (Page 581 of the dEIR). Impacts resulting from the projected population growth and the

REVIEW OF THE RECIRCULATED DRAFT EIR

OVERVIEW COMMENTS

The new "Population and Housing" section is cursory and does not acknowledge a significant impact to housing.

The existing conditions for this topical section consists of one four-line paragraph to address both housing and population on a Citywide basis. The only information provided on housing is the total number of units Citywide. There is no assessment of adequacy, condition, distribution or affordability of the City's housing supply. Similarly, there is no quantified or geographical analysis of housing units that would be displaced by the project. Although population is acknowledged as a significant impact, this section concludes that housing impacts are less than significant because displaced housing units can be accommodated within the General Plan area. The ability of the General Plan land use designations to accommodate additional units does not mitigate the housing that will be lost or eliminate the need for 'construction or replacement of housing elsewhere.' The displacement of people and housing units should both be considered undisclosed, significant adverse impacts of the proposed project thus requiring recirculation of the Draft EIR.

M-6 **The Recirculated DEIR fails to adequately evaluate or mitigate significant visual quality impacts. A visual simulation of the mass and scale of potential development in the Urban Core (particularly the H-Street corridor) should be provided to disclose impacts.**

The Recirculated DEIR concludes that community character and visual quality impacts would be significant and relates both these impacts in part to acknowledging increases in massing, height and intensity in the Urban Core. The 'scale' of allowed development under the Preferred Plan in the Urban Core can and should be evaluated in the EIR with visual simulations of potential massing and height of structures.

General Plan policies without specified timelines do not mitigate significant impacts for which CEQA mandates the provision of feasible mitigation measures.

For example, the new policy (LUT #49.14 in Section 5.2 Landform/Aesthetics) says "Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan." Policy LUT 2.6 requires this study but notes that "all land use policies contained in the General Plan shall apply until modified as a result of study findings and appropriate amendments to the plan." As such, this study is meaningless and does not control building height or development .This policy cannot act as mitigation because it does not include a timeline requirement for preparation of this special study. CEQA mandates the implementation of feasible mitigation measures for significant impacts. The design guidelines must be prepared and implemented prior to development in the Urban Core that would result in significant impacts.

RESPONSE

development permitted by the Preferred Plan or any of the Scenarios and associated mitigation measures are described in the individual sections of this report.

Furthermore, as discussed on page 580, the dEIR recognizes that people will be displaced as individual projects are developed in the Northwest and the Southwest planning areas. The increase in the numbers of units within these planning areas; however, will be able to accommodate those displaced because the Preferred Plan projects an increase of 3,913 residential units in the Southwest Planning Area, and 7,815 units in the Northwest Planning Area will be able to accommodate the existing population. The extent to which these projects would require construction of housing elsewhere, and, thereby, have a significant housing and population impact as it relates to Thresholds 2 and 3 in the dEIR, will depend upon the nature of each individual project and will require review when details of those projects are known.

M-6 This comment requests a visual simulation of mass and scale of potential development in the Urban Core be provided. The proposed project is a General Plan Update. While it designated land uses, it does not propose any specific use, and no project data is available. Visual simulations are appropriate at a project level when building design and specific locations are available. Detail needed to create visual simulations at this stage in the planning process is highly speculative. The dEIR analyzed the visual quality impacts of the Preferred Plan and all three Scenarios by evaluating whether the plans would result in substantial changes to landforms and visual quality throughout the General Plan area. The dEIR concluded that the increased density within the Urban Core and Montgomery Subareas would result in increased building heights and mass (Pages 212-213 of the dEIR). In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses.

REVIEW OF THE RECIRCULATED DRAFT EIR

OVERVIEW COMMENTS

The new "Population and Housing" section is cursory and does not acknowledge a significant impact to housing.

The existing conditions for this topical section consists of one four-line paragraph to address both housing and population on a Citywide basis. The only information provided on housing is the total number of units Citywide. There is no assessment of adequacy, condition, distribution or affordability of the City's housing supply. Similarly, there is no quantified or geographical analysis of housing units that would be displaced by the project. Although population is acknowledged as a significant impact, this section concludes that housing impacts are less than significant because displaced housing units can be accommodated within the General Plan area. The ability of the General Plan land use designations to accommodate additional units does not mitigate the housing that will be lost or eliminate the need for 'construction or replacement of housing elsewhere.' The displacement of people and housing units should both be considered undisclosed, significant adverse impacts of the proposed project thus requiring recirculation of the Draft EIR.

The Recirculated DEIR fails to adequately evaluate or mitigate significant visual quality impacts. A visual simulation of the mass and scale of potential development in the Urban Core (particularly the H-Street corridor) should be provided to disclose impacts.

The Recirculated DEIR concludes that community character and visual quality impacts would be significant and relates both these impacts in part to acknowledging increases in massing, height and intensity in the Urban Core. The 'scale' of allowed development under the Preferred Plan in the Urban Core can and should be evaluated in the EIR with visual simulations of potential massing and height of structures.

M-7 **General Plan policies without specified timelines do not mitigate significant impacts for which CEQA mandates the provision of feasible mitigation measures.**

For example, the new policy (LUT #49.14 in Section 5.2 Landform/Aesthetics) says "Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan." Policy LUT 2.6 requires this study but notes that "all land use policies contained in the General Plan shall apply until modified as a result of study findings and appropriate amendments to the plan." As such, this study is meaningless and does not control building height or development .This policy cannot act as mitigation because it does not include a timeline requirement for preparation of this special study. CEQA mandates the implementation of feasible mitigation measures for significant impacts. The design guidelines must be prepared and implemented prior to development in the Urban Core that would result in significant impacts.

RESPONSE

M-7 This comment states that policies without timelines for mitigation do not mitigate impacts. Specifically, Policy LUT 49.14, which calls for a special study in the H Street transit focus area, is meaningless and cannot act as mitigation. Policy LUT 49.14 states the following:

> Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan. (see also LUT 2.6).

This policy is considered in the EIR but is not presented as mitigation for reducing visual quality impacts. In addition, Policies LUT 49.11 through 49.24 are considered in the EIR and policies associated with Objectives LUT 2, 3, 10, and 11 are presented as reducing visual quality impacts. They are not, however, presented as sufficient mitigation for impacts to visual quality. Page 214 states:

> Conformance with the proposed General Plan Update objectives and policies reduce visual quality impacts within the General Plan Update Area resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time.

M-8 **Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).**

CEQA (Guidelines Section 15126.6) mandates that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376)."

The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

The alternatives have not been redefined and they are not meaningful or understandable. Decision-makers cannot make informed decisions based on the statistical analysis such as the combined land uses of the other scenarios (e.g. Table 11-1). The alternatives have not been defined for their ability to reduce significant impacts. The alternatives section should also review project objectives and not just refer the reader back to their location at the beginning of the document. Clear comparison of alternatives for their ability to achieve project objectives and reduce environmental impacts (particularly significant impacts) has not been provided.

Without the evaluation of additional project alternatives that meet CEQA requirements, City decision-makers will not have been afforded the opportunity to comply with their mandate to "minimize environmental damage and balance public objectives."

Pursuant to CEQA Guidelines Section 15021 (a), "A public agency should not approve a project as proposed, if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects of the proposed project." Since the EIR does not provide project alternatives that eliminate any significant impacts of the proposed project, City decision-makers do not have the required information to comply with this CEQA mandate. A revised EIR is required that provides additional alternative that minimize environmental impacts while attaining the basic objectives of the City's General Plan Update.

The following Air Quality issues are not adequately addressed in the Recirculated Draft EIR:

Lack of Analyses on Nonattainment Pollutants

Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

M-8 This comment states that meaningful alternatives have not been evaluated. The dEIR presents a reasonable range of alternatives. Chapter 10 provides a detailed analysis of the No Project alternative, which evaluates development under the existing General Plan. Chapter 11 provides a discussion of three alternatives: (1) Reduced Project Alternative, (2) Community Character Alternative and (3) Reduced Traffic Impact Alternative. For each of these alternatives the purpose for the alternative is identified.

The purpose of the Reduced Project Alternative was to "... evaluate the potential for reducing traffic and traffic-related impacts, such as noise and air quality, and evaluating the potential for reducing the effects on land use and community character" (Page 637). The purpose of the Community Character Alternative was to "... consider the potential to reduce community character effects resulting from increased height and mass of buildings throughout the General Plan area" (Page 644). The purpose of the Reduced Traffic Impact Alternative was to avoid potential traffic effects by increasing the physical capacity of impacted roadways. For each of these alternatives, an issue-by-issue analysis was provided and the extent to which they reduced or eliminated impacts was identified.

Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).

CEQA (Guidelines Section 15126.6) mandates that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376)."

M-9 The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

The alternatives have not been redefined and they are not meaningful or understandable. Decision-makers cannot make informed decisions based on the statistical analysis such as the combined land uses of the other scenarios (e.g. Table 11-1). The alternatives have not been defined for their ability to reduce significant impacts. The alternatives section should also review project objectives and not just refer the reader back to their location at the beginning of the document. Clear comparison of alternatives for their ability to achieve project objectives and reduce environmental impacts (particularly significant impacts) has not been provided.

Without the evaluation of additional project alternatives that meet CEQA requirements, City decision-makers will not have been afforded the opportunity to comply with their mandate to "minimize environmental damage and balance public objectives."

Pursuant to CEQA Guidelines Section 15021 (a), "A public agency should not approve a project as proposed, if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects of the proposed project." Since the EIR does not provide project alternatives that eliminate any significant impacts of the proposed project, City decision-makers do not have the required information to comply with this CEQA mandate. A revised EIR is required that provides additional alternative that minimize environmental impacts while attaining the basic objectives of the City's General Plan Update.

The following Air Quality issues are not adequately addressed in the Recirculated Draft EIR:

Lack of Analyses on Nonattainment Pollutants

Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

M-9 This comment states that the Reduced Project Alternative is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. As stated on Page 637 of the dEIR, the Reduced Project Alternative was designed primarily to reduce traffic and traffic-related impacts, such as noise and air quality, and evaluating the potential for reducing the effects on land use and community character. In light of the primary purpose for the alternative to reduce impacts resulting from traffic and other traffic-related impacts, it was determined that a land use plan was not necessary to evaluate the effectiveness of the alternative. This is true because the basic data required to assess the effect is based on relative numbers of acres and units, and not specifically on mapped locations. Tables 11-3 and 11-4 of the dEIR provide a comparison of the land use acres and the residential units for the Preferred Plan, all three scenarios with the Reduced Project Alternative.

TABLE 11-3
ACRES BY SCENARIO/ALTERNATIVE FOR THE UPDATE AREAS

	Land Use				
Scenario	Commercial	Industrial	Open Space	Park	Public
1	967	632	219	409	935
2	903	606	141	416	786
3	982	996	205	357	982
Adopted	955	598	515	154	980
Existing	450	252	–	17	180
Preferred	914	796	227	458	860
Reduced	903	592	259	458	786

TABLE 11-4
RESIDENTIAL UNITS BY SCENARIO/ALTERNATIVE FOR THE UPDATE AREAS

	Subarea			
Scenario	Montgomery	Otay Ranch	Urban Core	Total
1	7,679	11,658	17,090	36,427
2	8,400	15,585	15,664	39,649
3	8,997	8,805	16,178	33,980
Adopted	4,724	7,541	10,481	22,746
Existing	4,963	–	9,499	14,462
Preferred	8,174	14,241	16,756	39,322
Reduced	7,679	8,805	15,664	32,623

As indicated on Page 642 of the dEIR and stated in Appendix H of the Traffic Impact Report, the Reduced Project Alternative represents a 10 percent reduction in traffic. This assessment allows the evaluation of the effectiveness of the alternative to reduce the project's impacts on land use, visual quality/landform alteration, traffic, air quality, noise, utilities and services, and water quality.

As stated on Page 649 of the dEIR, the purpose of the Reduced Traffic Impact Alternative was to avoid potential traffic effects by increasing the physical capacity of impacted roadways. This alternative would upsize the classification of all roadways segments identified as being significantly impacted under the Preferred Plan and each of the Scenarios to reduce these impacts. Upsizing the roadway segments would improve traffic flow and alleviate peak hour congestion.

Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).

CEQA (Guidelines Section 15126.6) mandates that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376)."

The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

M-10 The alternatives have not been redefined and they are not meaningful or understandable. Decision-makers cannot make informed decisions based on the statistical analysis such as the combined land uses of the other scenarios (e.g. Table 11-1). The alternatives have not been defined for their ability to reduce significant impacts. The alternatives section should also review project objectives and not just refer the reader back to their location at the beginning of the document. Clear comparison of alternatives for their ability to achieve project objectives and reduce environmental impacts (particularly significant impacts) has not been provided.

Without the evaluation of additional project alternatives that meet CEQA requirements, City decision-makers will not have been afforded the opportunity to comply with their mandate to "minimize environmental damage and balance public objectives."

Pursuant to CEQA Guidelines Section 15021 (a), "A public agency should not approve a project as proposed, if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects of the proposed project." Since the EIR does not provide project alternatives that eliminate any significant impacts of the proposed project, City decision-makers do not have the required information to comply with this CEQA mandate. A revised EIR is required that provides additional alternative that minimize environmental impacts while attaining the basic objectives of the City's General Plan Update.

The following Air Quality issues are not adequately addressed in the Recirculated Draft EIR:

Lack of Analyses on Nonattainment Pollutants

Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

M-10 The alternatives were not redefined as part of the recirculated EIR, except for the modification of the Community Character Alternative. The potential historic policy was removed from that alternative and an equivalent policy was incorporated into the Preferred Plan. The remaining alternatives provide the decision maker with a reasonable range of understandable alternatives that have the potential to lessen adverse environmental impacts. These alternatives were designed to meet the requirement that they have the potential to achieve most of the objectives of the project while reducing or eliminating impacts. The review of the project objectives as they relate to the alternatives will be provided as part of the findings prepared for the project. The basis for this comparison is provided below.

The No Project Alternative would reduce impacts while still attaining objectives of the City. The No Project Alternative would meet several of the stated objectives presented on Pages 16–18 of the EIR. These include:

- Protect and increase the industrial land use base to provide for higher-value added jobs, and to support the retention and expansion of local businesses and industries.
- Ensure that services and infrastructure expand to match needs created by growth and redevelopment, and to support economic prosperity.
- Continue to develop Chula Vista as a city with a distinct identity.
- Provide and maintain sufficient land for siting a major, four-year college or university, and ensure surrounding land use types, mixes, and residential densities necessary to support its viability and realization.
- Support and encourage sustainable development patterns and practices, such as resource conservation, environmental management, transportation management, and compact development in both public and private projects.
- Provide ample access to, and connections between, Chula Vista's open space and trails network and the regional network, in accordance with the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, and Otay Valley Regional Park Concept Plan.

The Reduced Project Alternative is considered environmentally preferable to the proposed project because it would provide greater amounts of open space and park land. The Reduced Project Alternative would reduce impacts while still attaining objectives of the City. The Reduced Project Alternative would meet several of the stated objectives presented on Pages 16 – 18 of the EIR. These include:

- Continue to expand the local economy by providing a broad range of business, employment and housing opportunities that support an excellent standard of living, and improve the ability for residents to live and work locally.
- Provide for sufficient land use capacity and density to support revitalization and redevelopment of western Chula Vista.

Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).

CEQA (Guidelines Section 15126.6) mandates that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376)."

The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

M-10 The alternatives have not been redefined and they are not meaningful or understandable. Decision-makers cannot make informed decisions based on the statistical analysis such as the combined land uses of the other scenarios (e.g. Table 11-1). The alternatives have not been defined for their ability to reduce significant impacts. The alternatives section should also review project objectives and not just refer the reader back to their location at the beginning of the document. Clear comparison of alternatives for their ability to achieve project objectives and reduce environmental impacts (particularly significant impacts) has not been provided.

Without the evaluation of additional project alternatives that meet CEQA requirements, City decision-makers will not have been afforded the opportunity to comply with their mandate to "minimize environmental damage and balance public objectives."

Pursuant to CEQA Guidelines Section 15021 (a), "A public agency should not approve a project as proposed, if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects of the proposed project." Since the EIR does not provide project alternatives that eliminate any significant impacts of the proposed project, City decision-makers do not have the required information to comply with this CEQA mandate. A revised EIR is required that provides additional alternative that minimize environmental impacts while attaining the basic objectives of the City's General Plan Update.

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Lack of Analyses on Nonattainment Pollutants

Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

- Provide a mix of land uses that meets community needs and generates sufficient revenue to sustain exemplary community services, facilities and amenities.
- Ensure that services and infrastructure expand to match needs created by growth and redevelopment, and to support economic prosperity.
- Continue to develop Chula Vista as a city with a distinct identity.
- Re-emphasize and revitalize the older, downtown Chula Vista core area as the heart of the city through a combination of public, civic, shopping, employment, entertainment, and residential uses.
- Provide and maintain sufficient land for siting a major, four-year college or university, and ensure surrounding land use types, mixes, and residential densities necessary to support its viability and realization.
- Support and encourage sustainable development patterns and practices, such as resource conservation, environmental management, transportation management, and compact development in both public and private projects.
- Provide ample access to, and connections between, Chula Vista's open space and trails network and the regional network, in accordance with the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, and Otay Valley Regional Park Concept Plan.

The Community Character Alternative is considered environmentally preferable to the proposed project. The Community Character Alternative would reduce impacts while still attaining objectives of the City. The Community Character Alternative would meet several of the stated objectives presented on Pages 16 – 18 of the EIR. These include:

- Protect and increase the industrial land use base to provide for higher-value added jobs, and to support the retention and expansion of local businesses and industries.
- Continue to develop Chula Vista as a city with a distinct identity.
- Re-emphasize and revitalize the older, downtown Chula Vista core area as the heart of the city through a combination of public, civic, shopping, employment, entertainment, and residential uses.
- Provide and maintain sufficient land for siting a major, four-year college or university, and ensure surrounding land use types, mixes, and residential densities necessary to support its viability and realization.
- Support and encourage sustainable development patterns and practices, such as resource conservation, environmental management, transportation management, and compact development in both public and private projects.
- Provide ample access to, and connections between, Chula Vista's open space and trails network and the regional network, in accordance with the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, and Otay Valley Regional Park Concept Plan.

Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).

CEQA (Guidelines Section 15126.6) mandates that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376)."

The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

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Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

- Conserve Chula Vista's sensitive biological and other valuable natural resources.
- Protect Chula Vista's important historic resources.

The Reduced Traffic Impact Alternative would reduce transportation impacts while still attaining objectives of the City. The Reduced Traffic Impact Alternative would meet several of the stated objectives presented on Pages 16 – 18 of the EIR. These include:

- Continue to expand the local economy by providing a broad range of business, employment and housing opportunities that support an excellent standard of living, and improve the ability for residents to live and work locally.
- Maintain and enhance a high quality-of-life for the City's residents by developing and sustaining a healthy, strong and diverse economic base.
- Protect and increase the industrial land use base to provide for higher-value added jobs, and to support the retention and expansion of local businesses and industries.
- Provide for sufficient land use capacity and density to support revitalization and redevelopment of western Chula Vista.
- Provide a mix of land uses that meets community needs and generates sufficient revenue to sustain exemplary community services, facilities and amenities.
- Ensure that services and infrastructure expand to match needs created by growth and redevelopment. and to support economic prosperity.
- Foster a sustainable circulation/mobility system that provides mode of transportation choices, is well-integrated with the city's land uses, and connects the city both internally and to the region.
- Continue to develop Chula Vista as a city with a distinct identity.
- Ensure sufficient housing capacity, density, and variety to meet existing and future needs, and to support the provision of affordable housing.

Meaningful alternatives that 'have the ability to reduce or eliminate significant impacts' have not been evaluated in the Recirculated Draft EIR. The Preferred Plan results in 10 significant, unavoidable adverse environmental impacts and only the Reduced Traffic Alternative eliminates any significant impacts (and it only eliminates the significant traffic impact).

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The alternatives have not been defined as meaningful land use alternatives to attain project objectives and reduce environmental impacts. The Reduced Project alternative arbitrarily selects the least intensive scenarios by district of the scenarios evaluated in the EIR. It is primarily a statistical alternative and is not supported by a land use plan that can be readily compared to the Preferred Plan. Similarly, the Reduced Traffic Alternative is defined by an arbitrary and unreasonable widening of all arterials and roadways that would not achieve acceptable levels of service under the Preferred Plan.

The alternatives have not been redefined and they are not meaningful or understandable. Decision-makers cannot make informed decisions based on the statistical analysis such as the combined land uses of the other scenarios (e.g. Table 11-1). The alternatives have not been defined for their ability to reduce significant impacts. The alternatives section should also review project objectives and not just refer the reader back to their location at the beginning of the document. Clear comparison of alternatives for their ability to achieve project objectives and reduce environmental impacts (particularly significant impacts) has not been provided.

M-11 **Without the evaluation of additional project alternatives that meet CEQA requirements, City decision-makers will not have been afforded the opportunity to comply with their mandate to "minimize environmental damage and balance public objectives."**

Pursuant to CEQA Guidelines Section 15021 (a), "A public agency should not approve a project as proposed, if there are feasible alternatives or mitigation measures that would substantially lessen any significant effects of the proposed project." Since the EIR does not provide project alternatives that eliminate any significant impacts of the proposed project, City decision-makers do not have the required information to comply with this CEQA mandate. A revised EIR is required that provides additional alternative that minimize environmental impacts while attaining the basic objectives of the City's General Plan Update.

The following Air Quality issues are not adequately addressed in the Recirculated Draft EIR:

Lack of Analyses on Nonattainment Pollutants

Page 318. The analysis did not sufficiently evaluate the threshold of significance – expose sensitive receptors to substantial pollutant concentrations. The air quality analysis neglected to demonstrate that

RESPONSE

M-11 This comment states that the EIR does not provide alternatives that eliminate any significant impacts. CEQA does not require that alternatives "eliminate" significant impacts. Section 15126.6(a) of the CEQA guidelines requires that a reasonable range of alternatives be described that ". . . would avoid or substantially lessen any of the significant effects of the project . . ." Mira Mar Mobile Community v. City of Oceanside (2004) 119 CA4th 477 indicates that alternatives need only be environmentally superior to the project in some respects. The dEIR determined that Reduced Project Alternative and the Community Character Alternative would be environmentally preferable to the preferred project or any of the Scenarios. As discussed on Pages 636 and 644 of the recirculated dEIR, each alternative reduces specific impacts.

M-12 vehicle exhaust which is the largest source of emissions in San Diego County would or would not expose sensitive receptors to substantial pollutant concentrations. A screening analysis was performed for CO, which is in a state of attainment, but not the ozone precursors (NOx), PM10 and PM2.5 which are in a state on nonattainment. These pollutants have severe health effects with diesel exhaust being classified as carcinogenic. The air quality analysis is deficient for not providing a quantitative analysis of these pollutants. With all this new development there would be many more heavy diesel truck usage. There is no analysis of the health effects of diesel particulates on the most vulnerable segments of the population of Chula Vista due to the General Plan update and scenarios.

Insufficient Analysis of the Chula Vista Carbon Dioxide Reduction Plan

Page 318, Air Quality Plans. The General Plan update and scenarios have not been evaluated for consistency with the Chula Vista Carbon Dioxide Reduction Plan. Which scenario produces the greatest reduction in carbon dioxide? Would the General Plan scenarios obstruct the implementation of this plan? Quantification of carbon dioxide emitted under each scenario is necessary to evaluate which plan would be the most preferable plan in the goal of reducing carbon dioxide emissions.

The following Noise issues are not adequately addressed in the Recirculated Draft EIR:

Insufficient Analysis on Vibration Impacts

Page 339, Railway and Trolley Operations. Vibration from existing and future railway usage was not accounted for in the analysis. The General Plan update has policies which promote the use of transit oriented transportation. As such, railway usage should be predicted to increase. However, neither vibration from current or future railway usage was analyzed. This analysis of railways is deficient until existing and future railway vibration as well as other sources of vibration are analyzed.

Insufficient Analysis on Future Aircraft Operations

Page 341, Aircraf: Operations. Future aircraft operations were not accounted for in the noise analysis. Aviation forecasts project increases in both passenger and air freight usage. However, only current aircraft operations are analyzed. This analysis of aircraft noise is deficient until future aircraft noise is analyzed.

Flawed Truck Estimate

Appendix G. The basis for the fleet mix percentages used in the modeling of traffic noise are incorrect. Based on the vehicle fleet presented in the EMFAC2002 model for San Diego County, the average percentage of heavy duty gas and diesel trucks is 3.1% whereas the DEIR used 1%. The EMFAC2002 model also has a medium duty truck mix of 7.74% as opposed the DEIR's assumption that only 2% of the fleet vehicle mix is medium duty trucks. The freeway percentages of trucks seems low also. Please verify with Caltrans as to the proper truck usage on highways. The presence of trucks greatly increase noise levels from traffic. The use of lower medium and heavy duty truck estimates would underestimate the noise impact. Based on these much higher truck estimates, noise levels would be substantially higher than was predicted in the DEIR.

RESPONSE

M-12 The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations was determined to be self-mitigated because, as discussed on page 406 of the dEIR, the adoption of Policies EE 6.4 and EE 6.10 will avoid the effect. As stated on page 406 of the dEIR Policy EE 6.4 states:

> Avoid siting new or re-powered energy generation facilities, and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.
>
> Policy EE 6.10 is as follows:
>
> The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the HRA shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

Additionally, this comment states that there is no screening analysis for ozone precursors (NOx), PM10 and PM2.5. Ozone precursors (NOx) are not a point source pollutant, therefore a hotspot analysis was not performed for the General Plan Update for Ozone. As discussed on Page 390 of the dEIR, about half of smog-forming emissions in the San Diego Air Basin are generated by motor vehicles. In addition, the occasional transport of smog-filled air from Los Angeles only adds to the SDAB's ozone problem. More strict automobile emission controls, including more efficient automobile engines, have played a large role in the steady decrease in ozone levels.

PM_{10} emissions result from construction of projects and from daily operations in the City. Therefore, a hotspot analysis is not appropriate for the General Plan Update for Ozone. Mitigation is achievable for fugitive dust from construction activities, but the only measures that would reduce those vehicle emissions from daily operations are those that reduce miles traveled on area roads. The General Plan Update includes measures aimed at promoting pedestrian activity and reducing trip lengths and therefore reducing vehicle emissions. The dEIR includes mitigation for PM_{10} impacts. Mitigation Measure 5.11-1 on page 417 and 418 of the dEIR requires standard construction measures during construction. With the application of these standard construction measures, significant impacts resulting from projected PM_{10} impacts from construction would be mitigated. Currently, there is no screening model available for $PM_{2.5}$ pollutants.

This comment states that there is no analysis of diesel particulates on the most vulnerable segments of the population. The dEIR addresses the health risks associated with vehicle emissions of diesel particulates on page 406. The dEIR on page 406 recognizes that diesel-exhaust particulate matter emissions are TACs and that these emissions pose a potential hazard to residents. Based on a report from the California Air Resources Board it was clear that health risks can be as high as 1,700 cancers in a million at 20 meters from a high-volume freeway. Accepting this concern, the General Plan Update includes two policies that address this and other toxic effects.

vehicle exhaust which is the largest source of emissions in San Diego County would or would not expose sensitive receptors to substantial pollutant concentrations. A screening analysis was performed for CO, which is in a state of attainment, but not the ozone precursors (NOx), PM10 and PM2.5 which are in a state on nonattainment. These pollutants have severe health effects with diesel exhaust being classified as carcinogenic. The air quality analysis is deficient for not providing a quantitative analysis of these pollutants. With all this new development there would be many more heavy diesel truck usage. There is no analysis of the health effects of diesel particulates on the most vulnerable segments of the population of Chula Vista due to the General Plan update and scenarios.

Insufficient Analysis of the Chula Vista Carbon Dioxide Reduction Plan

M-13 Page 318, Air Quality Plans. The General Plan update and scenarios have not been evaluated for consistency with the Chula Vista Carbon Dioxide Reduction Plan. Which scenario produces the greatest reduction in carbon dioxide? Would the General Plan scenarios obstruct the implementation of this plan? Quantification of carbon dioxide emitted under each scenario is necessary to evaluate which plan would be the most preferable plan in the goal of reducing carbon dioxide emissions.

The following Noise issues are not adequately addressed in the Recirculated Draft EIR:

Insufficient Analysis on Vibration Impacts

M-14 Page 339, Railway and Trolley Operations. Vibration from existing and future railway usage was not accounted for in the analysis. The General Plan update has policies which promote the use of transit oriented transportation. As such, railway usage should be predicted to increase. However, neither vibration from current or future railway usage was analyzed. This analysis of railways is deficient until existing and future railway vibration as well as other sources of vibration are analyzed.

Insufficient Analysis on Future Aircraft Operations

Page 341, Aircraft Operations. Future aircraft operations were not accounted for in the noise analysis. Aviation forecasts project increases in both passenger and air freight usage. However, only current aircraft operations are analyzed. This analysis of aircraft noise is deficient until future aircraft noise is analyzed.

Flawed Truck Estimate

Appendix G. The basis for the fleet mix percentages used in the modeling of traffic noise are incorrect. Based on the vehicle fleet presented in the EMFAC2002 model for San Diego County, the average percentage of heavy duty gas and diesel trucks is 3.1% whereas the DEIR used 1%. The EMFAC2002 model also has a medium duty truck mix of 7.74% as opposed the DEIR's assumption that only 2% of the fleet vehicle mix is medium duty trucks. The freeway percentages of trucks seems low also. Please verify with Caltrans as to the proper truck usage on highways. The presence of trucks greatly increase noise levels from traffic. The use of lower medium and heavy duty truck estimates would underestimate the noise impact. Based on these much higher truck estimates noise levels would be substantially higher than was predicted in the DEIR.

RESPONSE

M-13 This comment states that there is insufficient analysis of the Chula Vista Carbon Dioxide Reduction Plan. In November 2002, Chula Vista adopted the Carbon Dioxide (CO_2) Reduction Plan in order to lower the community's major greenhouse gas emissions, strengthen the local economy, and improve the global environment. The CO_2 Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels (City of Chula Vista 2002b). This discussion is provided on pages 382 and 399 of the dEIR. The evaluation of the plan was limited to the extent that the General Plan Update would or would not obstruct the implementation of the plan under Threshold 1 of Section 5.11.3. This threshold evaluates the potential of the project to "Conflict with or Obstruct Implementation of the Applicable Air Quality Plan." As noted in the dEIR, the plan establishes 20 action measures to achieve an 80 percent reduction in CO_2 by the year 2010. The basis for the conclusion in the EIR that the proposed update did not obstruct the CO_2 Plan was based on the fact that the General Plan Update included several of those measures, as discussed on page 399 of the dEIR. These include:

- Enhanced pedestrian connections to transit
- Increased housing density near transit
- Site design with transit orientation
- Increased land use mix
- Bicycle lanes, paths, and routes
- Increased employment density near transit

M-14 This comment states that there is insufficient analysis of vibration impacts. The effect of vibration on future development as a result of the establishment of land use designations resulting from the General Plan Update is speculative. While the land use designations are known, specific uses and type of construction is unknown. Because of the need to have building specifics in order to analyze the effect of vibration, this analysis needs to be done on a case-by-case basis during the CEQA process for subsequent proposed projects.

vehicle exhaust which is the largest source of emissions in San Diego County would or would not expose sensitive receptors to substantial pollutant concentrations. A screening analysis was performed for CO, which is in a state of attainment, but not the ozone precursors (NOx), PM10 and PM2.5 which are in a state on nonattainment. These pollutants have severe health effects with diesel exhaust being classified as carcinogenic. The air quality analysis is deficient for not providing a quantitative analysis of these pollutants. With all this new development there would be many more heavy diesel truck usage. There is no analysis of the health effects of diesel particulates on the most vulnerable segments of the population of Chula Vista due to the General Plan update and scenarios.

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M-15 Page 341, Aircraft Operations. Future aircraft operations were not accounted for in the noise analysis. Aviation forecasts project increases in both passenger and air freight usage. However, only current aircraft operations are analyzed. This analysis of aircraft noise is deficient until future aircraft noise is analyzed.

Flawed Truck Estimate

M-16 Appendix G. The basis for the fleet mix percentages used in the modeling of traffic noise are incorrect. Based on the vehicle fleet presented in the EMFAC2002 model for San Diego County, the average percentage of heavy duty gas and diesel trucks is 3.1% whereas the DEIR used 1%. The EMFAC2002 model also has a medium duty truck mix of 7.74% as opposed the DEIR's assumption that only 2% of the fleet vehicle mix is medium duty trucks. The freeway percentages of trucks seems low also. Please verify with Caltrans as to the proper truck usage on highways. The presence of trucks greatly increase noise levels from traffic. The use of lower medium and heavy duty truck estimates would underestimate the noise impact. Based on these much higher truck estimates, noise levels would be substantially higher than was predicted in the DEIR.

RESPONSE

M-15 This comment states that there is insufficient analysis of aircraft operations. There are no airports within the city of Chula Vista. The nearest airport is Brown Field, located to the south in the city of San Diego. As discussed on Page 161 of the EIR, the adopted Brown Field Airport Land Use Compatibility Plan (ALUCP) established the Airport Influence Area for this airport, which encompasses a limited area of the East Planning Area. A small portion of the plan area is within the Brown Field Airport Influence Area. The Preferred Plan designates a portion of the Otay Valley District area within the Airport Influence Area as Active Recreation and a limited portion for Light Industrial and Open Space. These uses are consistent with the land uses indicated in the adopted Airport Land Use Compatibility Plan.

The noise effects from aircraft activity using Brown Field are discussed on page 455 and noise contours for that facility are provided on Figure 5.12-5. As shown on Figure 5.12-4, the primary source of aircraft noise in the vicinity of the plan area is due to aircraft operations associated with Brown Field. Two other airfields in the area include the Rodriguez Airport and the Imperial Beach Naval Auxiliary Landing, however, the noise contours and flight paths don't impact the General Plan Area boundaries. As concluded in that discussion, from examination of the noise contours for the Brown Field facility, noise from the facility will not impact the plan area (Pages 454-455 of the EIR). Because of the absence of an airport in the city and the lack of regular overflights, a more detailed aircraft analysis was not performed. As discussed on Page 455 of the dEIR, the Preferred Plan designates a portion of the Otay Valley District area within the Airport Influence Area as Active Recreation and a limited portion for Light Industrial and Open Space. These uses are consistent with the land uses indicated in the Airport Land Use Compatibility Plan.

M-16 This comment states that there is a Flawed Truck Estimate, the average percentage of heavy trucks presented in EMFAC 2002 is 3.1 percent and the dEIR used 1 percent, and the average for medium trucks presented in the EIR is 2 percent while EMFAC uses 7.74 percent. As detailed in the Carbon Monoxide Hot Spot Analysis appendix G, and referenced on page 407 of the dEIR, the air quality analysis used the EMFAC2002 default assumptions for the regional traffic mix distribution. The 1 percent heavy truck and 2 percent medium trucks referenced for Appendix G was used for local streets as part of the noise analysis. As referenced, the traffic volumes used for the noise analyses were obtained from the engineer at the City of Chula Vista for local roads, and from Caltrans for the segments of the freeway nearest the project site.

Using different truck mixes for different analyses is appropriate because the issues at hand stem from different sources. Emissions, as provided by EMFAC2002, are regional and reflect an average fleet condition. Noise analyses is highly localized and is influenced by a specific mix on a particular roadway.

STATUS OF PREVIOUS COMMENTS

M-17 This section reviews updates in the EIR by topical section and also reviews our previously submitted comments to identify which issues have not been adequately addressed.

Previous Comment: Despite potentially significant impacts, there is no "Population and Housing" section in the EIR.

Recirculated Draft EIR

The Housing and Population section is cursory and does not adequately address potential impacts of the General Plan. Housing impacts would be significant. Provision of land use designations within the city to accommodate new housing does not replace the 'need to provide replacement housing elsewhere.' Moreover, the nature of the existing housing that would be impacted is not disclosed. If older, lower cost housing is lost, newer housing will not replace this housing in kind and people will be displaced. Without further analysis both significance thresholds of housing represent significant impacts that need to be disclosed in a Recirculated EIR.

Threshold 1

Correctly concludes that population increase would be substantial.

Threshold 2

M-18 The EIR acknowledges that the General Plan would "result in houses being temporarily displaced in the Northwest and Southwest Planning Area of the City as individual projects are completed that conform to the plan." It does not identify the number, type, location, or condition of the units that would ultimately be removed. The analysis seems to rest on two assumptions to conclude that the impact is not significant: 1) the timing is considered "temporary" and 2) the planned number of units allowed under the General Plan exceeds the number to be removed with implementation of the General Plan. Neither assumption is adequate justification for a less than significant conclusion. A temporary impact does not mean it is not significant, particularly because temporary in General Plan timeframes (build out by 2030) could be a long time. Furthermore, the fact that the General Plan allocates additional land designated for housing

M-19 units does not mean that the housing is not displaced. Housing that is eliminated will require replacement. The Draft EIR needs to identify the location of properties that will change from housing to an alternate use, and identify the condition of housing, type and affordability of housing. Mitigation needs to be provided to assure that available, affordable housing is offered to displaced families.

Threshold 3

The EIR acknowledges that people will be displaced, but does not quantify this impact or identify how the people will be accommodated in future housing. Without additional information and mitigation, this is a significant impact that has not been appropriately disclosed.

M-20 **Previous Comment: The EIR fails to provide the rationale for using customized Thresholds of Significance that may lower environmental standards for the City.**

Recirculated Draft EIR

The LOS standard has been revised to LOS D for the Urban Core.

RESPONSE

M-17 This comment states that the housing impacts would be significant and the provision of land use designations does not replace the need to provide replacement housing elsewhere. See Response to Comment M-5. The provision of land use designations does not result in displacement of housing, as it does not provide for housing elsewhere. The dEIR recognizes the fact that development in accordance with the land use designations established by the General Plan Update could cause people to be displaced as individual projects are developed but, at the General Plan level, that displaced housing would be provided within the project boundary.

M-18 This comment states that the EIR does not identify the number, type, location, or condition of the units that would ultimately be removed. Because the project is a General Plan Update no units are proposed to be removed. With a horizon year of 2030, the number, type, location, or condition of the units that could ultimately be removed would be speculative and cannot be known at this time.

M-19 This comment states that the draft EIR needs to identify properties that will change from housing to an alternate use and identify the condition of housing, type, and affordability of housing. No existing housing is designated for an alternate use. Areas that are currently residential will remain residential. Densities will increase and in certain areas mixed use will be permitted. As stated on page 578, the proposed General Plan targets the higher density and higher intensity development into specific areas to protect stable residential neighborhoods and to create mixed-use urban environments that are oriented to transit and pedestrian activity.

M-20 This comment addresses the proposed project itself, not the EIR and will be forwarded to the decision makers for their consideration.

M-21 **Previous Comment: The EIR concludes that the General Plan Update would result in significant, unavoidable adverse impacts to energy, transportation, air quality, and utilities (water supply). Without additional or more appropriate analysis to substantiate otherwise, the EIR should also categorize Land Use and Noise as significant, unavoidable, adverse impacts of the proposed project.**

Recirculated Draft EIR

Significant Impacts:

- Energy
- Transportation – 15 non-urban segments and all but 5 freeway segments
- Air Quality – RAQS inconsistency
- Water Supply
- Land Use - Adversely Affect Community Character
- Visual – substantially degrade the existing visual character or quality (includes Urban Core – high rise buildings between 3rd and 4th St in mixed use transit focus area)
- Noise – exposure of existing sensitive receivers to noise
- Utilities - water supply
- Population – significant

Approval of the General Plan Update would require City decision-makers to adopt a Statement of Overriding Consicerations concluding that the benefits of the proposed project override all of these of these significant impacts, an unprecedented level in our experience of preparing General Plan EIRs.

RESPONSE

M-21 This comment addresses the proposed project itself, not the EIR and will be forwarded to the decision makers for their consideration.

41 Corporate Park, Suite 300 Irvine, CA 92606 949.660.1994 main 949.660.1911 fax www.urbanxroads.com

November 1, 2005

Ms. Joann Hadfield
THE PLANNING CENTER
1580 Metro Drive
Costa Mesa, CA 92626

Subject: Reissued City of Chula Vista General Plan Update Transportation Study Peer Review

Dear Ms. Hadfield:

Urban Crossroads Inc. is please to provide this peer review of the reissued City of Chula Vista General Plan Update Transportation Study (Kimley Horn and Associates, September, 2005). The study evaluates existing and several broad General Plan alternatives.

The detailed results of our review are summarized in the remainder of this letter. A key concern of the previous review was the recommendation of a reduced LOS standard (LOS E) for a large area of the City located south of the SR-54, west of the I-805 Freeway, north of L Street and east of the I-5 Freeway, without properly emphasizing this change and its effect upon the analysis. The new study now recommends retaining LOS D for the entire City, including this area. This is generally consistent with current City policy that allows up to two hours of LOS D during the day. There is a new sentence in paragraph 2 of page 7 the traffic study mentioning that the capacity of a roadway "is equal to its maximum LOS D volume."

M-22 The previous transportation study failed to indicate the need for growth management program (GMP) analysis. The new study mentions that Section 19.09.030 of the City's

RESPONSE

M-22 As discussed in the City's Guidelines for Traffic Impact Studies in the City of Chula Vista (February 13, 2001), Growth Management Oversight Committee (GMOC) analysis is necessarily limited to existing and near-term conditions because it is based on observed conditions, with the data being collected by a specially equipped vehicle. Pursuant to Chula Vista's Growth Management Program and Ordinance, the City monitors the actual performance of designated arterials to determine their LOS based upon observed average travel speed. Although this method is a highly accurate means to determine the current performance of a roadway, it cannot be utilized to predict the performance of roadways under future long-term conditions because it is designed to analyze short-term effects. Therefore, it is not feasible, or technically correct, to evaluate long term conditions using GMOC procedures. ADT-based analysis of roadway and freeway segments provide an appropriate means to identify the impacts of the plan alternatives because it is widely considered to be the most reliable method currently available for this purpose. Existing GMOC analysis of designated city streets is published annually by the City of Chula Vista.

Municipal Code requires that the General Plan should be consistent with other adopted programs and policies of the City of Chula Vista, including the GMP. However, the discussion (page 4 of the traffic study report) suggests that it GMP analysis has not been completed because this is a long range analysis, rather than a short range analysis. This leaves open the question of how the General Plan update can be demonstrated to comply with GMP requirements, when the requisite analysis has not been performed. There are various methods of predicting future travel speeds on an arterial roadway, including the methods of the 2000 Highway Capacity Manual (HCM), which could be applied in this circumstance. The report specifically notes that the GMP analysis must follow the procedures of the HCM.

M-23 An area of key concern from the review of the original transportation study (December 2004) was the downgrading of specific facilities, specifically H Street from Broadway to Hilltop Drive. The rationale for downgrading H Street in the December 2004 study was predicated on the difficulty of acquiring right of way due to existing development patterns. The September 2005 study has not been revised in this section and H Street is still presented to be downgraded due to the difficulty of acquiring right of way. As indicated in the review letter dated February 2005, the General Plan is a long range planning tool and right of way could be required as part of the process of approving redevelopment of existing uses as they become outdated and subject to turnover.

M-24 The new report still does not identify a funding source or implementation mechanism for grade separating the San Diego Trolley line at E Street and H Street.

M-25 The existing conditions analysis in the Environmental Impact Report (EIR) indicates that H Street from the I-5 Freeway to Broadway experiences LOS D operations under existing conditions and identifies this as an unacceptable operation, in accordance with the currently adopted standards. No mitigation, other than adopting a less stringent standard, is proposed or evaluated in the traffic study report.

RESPONSE

M-23 City staff has developed the updated circulation element based on an assessment of the feasibility of implementation in terms of technical, economic and other considerations. As discussed on page 353 of the recirculated dEIR, in the case of this segment of H Street, it was determined that the widening assumed in the adopted General Plan was not feasible, even under long-term conditions, given the surrounding development context.

M-24 The City will be receiving funds in accordance with the recent authorization of the Safe, Accountable, Flexible, Efficient Transportation Equity Act- Legacy for Users (SAFETEA-LU). Project 3482 provides 2.16 million to accommodate the improvements at H Street, and the City is seeking to extend this funding to include H Street and other interchanges. Other funding sources will be investigated.

M-25 The Transportation Study focused on the long-term transportation related impacts of the General Plan Update, using existing conditions as a baseline for comparison (Plan to Ground analysis). The existing performance standard of LOS C is not appropriate in more urbanized contexts, such as Chula Vista's Urban Core. The Transportation Study focused on the long-term transportation related impacts of the General Plan Update, using existing conditions as a baseline for comparison (Plan to Ground analysis). The existing performance standard of LOS C is not appropriate in more urbanized contexts, such as Chula Vista's Urban Core. There are a number of reasons why LOS D is an acceptable performance standard for the Urban Core Circulation Element. Several are related to concepts of urban context and driver expectation. As discussed above, the City of San Diego applies a three-tiered approach, with LOS C in newly developing areas, LOS D in more urbanized locations, and LOS E in the Centre City area. As discussed in a memo from San Diego (see Appendix D of the Transportation Study), drivers in a downtown environment do not expect to pass through built-up areas at high speed. Instead, given the type and intensity of uses, the ability to attract and accommodate visitors becomes a higher priority in the Urban Core or other downtown areas than moving cars. Adhering to an LOS C performance standard would likely require street widening to provide additional capacity, with associated impacts to urban character (e.g., wide, pedestrian-unfriendly streets), not to mention the public costs of acquiring right-of-way.

Level of Service D is widely used in numerous other cities in the region, many with a primarily suburban character. The San Diego Traffic Engineering Council/Institute of Transportation Engineers (SANTEC/ITE) Traffic Impact Study Guidelines have established LOS D as an acceptable performance standard, regardless of urban/suburban/rural locale. The cities of Coronado, El Cajon, Encinitas, Escondido, National City, Poway, San Marcos, Solana Beach, and Vista use this performance standard. Given that LOS D is widely used in the San Diego region as a minimum performance standard and given that the City's existing performance standard of LOS C is not appropriate for a more urbanized context, the selection of the LOS D performance standard for the Urban Core is appropriate and is implemented in the General Plan.

The presentation of proposed future conditions has been revised to more directly identify the proposed changes in acceptable LOS for the "urban core" of the City of Chula Vista. The acceptable service volumes have been revised to show lower acceptable service volumes compared to the previous draft of the EIR. For example, a 4 lane Gateway Street is now identified as having an acceptable (LOS D) service volume of 43,200 VPD, rather than the previous value of 48,000 vehicles per day (VPD). Similarly the acceptable service volume for a lane Urban Arterial has been reduced from 42,000 VPD to 37,800 VPD. This change correlates to proposing an acceptable standard of LOS D, rather than the previously recommended LOS E in the older version of the EIR.

M-26 Although the report cites right of way limitations along H Street as the primary reason for downgrading this facility, the report also notes that H Street has been designated as a Bus Rapid Transit (BRT) route in the South Bay Transit First – Tier One Plan, San Diego Association of Governments, 2003. The discussion of BRT (page 7) makes no mention of dedicated bus lanes and briefly describes the BRT concept as consisting of various strategies to increase vehicle speeds and enhance rider comfort, including fewer stops and assigning priority to a transit vehicle in the traffic stream (traffic signal prioritization techniques or "queue jumper" lanes). Right of way limitations and their impact on the ability to provide queue jumper lanes should be explicitly addressed in the environmental report.

The traffic report (page 14) indicates that the travel demand forecasting used in the analysis was conservative and did not consider BRT service in the assumptions. A separate traffic model that is not described in any detail is referenced in the report as being used to quantify the benefits of BRT service. The traffic report further states that the reduction in vehicular traffic due to BRT in the H Street corridor were "nominal" (page 16), and would only reduce daily traffic volumes by around 500 vehicles per day.

RESPONSE

M-26 Appendix B of the Transportation Study provides an assessment of alternative Transit First implementation strategies on H Street, including roadway widening between the transit station and Broadway. Page 333 of the dEIR summarizes these strategies as follows.

> Tier One Plan was prepared by SANDAG (formerly the Metropolitan Transit Development Board) in May 2003. The Transit First concept (also described as Bus Rapid Transit [BRT]), involves the implementation of enhanced transit service strategies designed to improve the attractiveness and viability of transit to capture trips that typically travel by single-occupancy passenger cars. The overall intent is to use improved buses that emulate light rail service by increasing vehicle speeds and rider comfort and convenience. Vehicle speeds are increased due to fewer stops along a give route through the application of a variety of traffic engineering methods (such as traffic signal priority and queue jumper lanes) to assign priority to a transit vehicle in the traffic stream. The South Bay Transit First Plan provides a feasibility analysis of alternative route alignments and station designs throughout the city of Chula Vista.
>
> As part of transit and mobility improvements, SANDAG manages the TransNet program. The City is working with SANDAG to obtain TransNet funding for circulation and mobility improvements. A TransNet extension was approved by San Diego County residents allowing the continuation of transportation funding for 40 years starting at the expiration of the current program in 2008 and continuing until 2048. One third of the entire TransNet revenues are allocated to local jurisdictions. Another third is allocated to regional freeways. TransNet revenues allocated to Chula Vista will increase at a higher rate than the region average due to population growth in Chula Vista. These local revenues are allocated by the City Council for local roadways in Chula Vista. In addition, TransNet will finance freeway improvements on I-805 and I-5 as planned in the RTIP from revenues allocated to regional freeways.

The City is currently conducting a detailed study of BRT options on H Street.

The presentation of proposed future conditions has been revised to more directly identify the proposed changes in acceptable LOS for the "urban core" of the City of Chula Vista. The acceptable service volumes have been revised to show lower acceptable service volumes compared to the previous draft of the EIR. For example, a 4 lane Gateway Street is now identified as having an acceptable (LOS D) service volume of 43,200 VPD, rather than the previous value of 48,000 vehicles per day (VPD). Similarly the acceptable service volume for a lane Urban Arterial has been reduced from 42,000 VPD to 37,800 VPD. This change correlates to proposing an acceptable standard of LOS D, rather than the previously recommended LOS E in the older version of the EIR.

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M-27 The traffic report (page 14) indicates that the travel demand forecasting used in the analysis was conservative and did not consider BRT service in the assumptions. A separate traffic model that is not described in any detail is referenced in the report as being used to quantify the benefits of BRT service. The traffic report further states that the reduction in vehicular traffic due to BRT in the H Street corridor were "nominal" (page 16), and would only reduce daily traffic volumes by around 500 vehicles per day.

RESPONSE

M-27 The travel demand forecasted for the dEIR on the traffic study used a conservative assumption that future transit services would be limited to existing services. The traffic report contains the results of a roadway segment analysis assuming implementation of the Regional Transit Vision. These details are described in Table 1.2-1 of the Transportation Study. The results of the roadway segment analysis found that the RTV scenario would reduce 24-hour traffic volumes by a nominal amount (about 500 vehicles per day: less than one percent) on H Street between I-5 and Broadway. Even with Regional Transit Vision, the General Plan Update would continue to have significant impacts on seven segments.

SUMMARY

Based upon our review, it appears that the proposed change in the City of Chula Vista LOS standards is emphasized to a much greater extent than was previously the case. Although the revised analysis would still benefit from further comparisons of existing and future traffic volumes to better illustrate the impact of continued growth on traffic conditions in the City of Chula Vista, The analysis is much more direct in addressing the effects of the proposed changes in LOS standards and how these changes effect the findings and conclusions of the traffic section of the EIR.

Urban Crossroads, Inc. is pleased to provide this review of the Reissued City of Chula Vista General Plan Transportation Study report. Please feel free to contact me at (949) 660-1994 x210 if you have any questions regarding our review of this study.

Sincerely,

URBAN CROSSROADS, INC.

Carleton Waters, P.E.
Principal

CW:DM:cg
JN:02707-05

Steve Power

From: Nick Aguilar [naguilar@ucsd.edu]
Sent: Monday, October 31, 2005 7:32 AM
To: Steve Power
Cc: naguilar@ucsd.edu; cfriday@sdcoe.net; rcastrui@sdcoe.k12.ca.us
Subject: Comments to Steve Power, City of Chula Vista Environmental Projects Manager Re: Sections 5.13.3.1 - 5.13.3.3.6 of the Draft General Plan Update Environmental Impact Report From Nick Aguilar, San Diego County Board of Education ,District 2.

Mr. Steve Power AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Powers,

Please include the following comments regarding Sections 5.13.3.1 - 5.13.3.3.6 in the Environmental Impact Report ("Report") of the Draft General Plan Update:

N-1 1. The information in section 5.13.3 of the Report is inconsistent and not sufficiently complete to support the finding articulated in Section 5.13.3.5 that no significant impacts to the provision of school services would result and no mitigation is required. In that regard, section 5.13.3 states at the top of page 478, "As seen in Table 5.13-10, no additional elementary schools would be required in the west upon buildout of the Preferred Plan..." However, Table 5.13-10, at the bottom of page 477, identifies an additional new elementary school need of 3.87 in the Nortwest and 1.75 in the Southwest for a total of 5.60 new elementary schools needed in west Chula Vista.

N-2 2. The the finding articulated in Section 5.13.3.5 that no significant impacts to the provision of school services would result and no mitigation is required is also inconsistent with the statement in section 5.13.3 that, "Proposed development and the projected increase in the number of elementary, middle school, and high school students under any of the scenarios (Preferred Plan and Scenarios 1,2, or 3) would have a substantial impact on the existing schools since they are already at or near capacity regardless of which is ultimately selected."

N-3 3. Although the Report lists associated policies, at pages 479 and 480, that address school services needs, which seems to mitigate the statement at page 478 of the Report that, "Specific sites for CVESD and SHUHSD have not met been determined. Siting and construction of the facilities could have a potential environmental impact.", none of the policies listed at pages 479 and 480 of the Report address the impacts of significant increases in the cost to purchase the land for future school sites. Spicifically, the Draft General Plan Update ("Plan") fails to identify potential school sites to be zoned for school uses instead of other uses, such as residential, business, industrial or commercial that make the land more expensive to purchase. For example, in the Otay Ranch development in the east side of Chula Vista, the cost of land has forced SUHSD to purchase a smaller site on which it will be forced to build double or multi-level school facilities, thereby exposing the students and that community to significant environmental impacts.

PR-113

RESPONSE

N-1 Section 5.13.3 of the EIR has been revised to make the appropriate corrections. The text now indicates that 5.60 new elementary schools will be needed as follows:

As seen in Table 5.13-10, 5.6 elementary schools would be required in the west upon buildout of the Preferred Plan; two would be required in the east.

N-2 The recirculated dEIR indicates that proposed General Plan Update would result in increased population in each of the Update areas of the city and that demand for schools will continue to increase as the population of the city increases. The EIR acknowledges that population growth resulting from development of the Preferred Plan or any of the scenarios would result in a significant impact to school services because the existing schools are at or near capacity. However, impacts to the provision of school services would be avoided because the policies in the General Plan Update require that school facilities are sufficient to accommodate projected population generated by the proposed update (PFS 10.1) in accordance with the guidelines and limitations of Government Code 65995(b) (Policy PFS 9.1). The dEIR also calls for the City to maintain a set of set of quantitative level of service measures (growth management threshold standards) to assess the relative impact of new facility and service demands created by growth (GM 1.1), and apply those standards, as appropriate, to approval of discretionary projects (GM 1.1), and establishes the authority of the City Council to withhold discretionary approval and subsequent building permits for projects out of compliance with those standards (GM 1.11). Therefore, impacts to the provision of school services are avoided by the implementation of self-mitigating Policies PFS 9.1, PFS 10.1, GM 1.1, and GM 1.11.

N-3 The EIR specifies the need for 7.60 elementary schools and one additional SUHSD school in addition to the already planned middle and high schools. However, specific sites have not been determined because the provision of school facilities is the responsibility of the school district when additional demand warrants. When proposed as part of a development project, the potential environmental effects can be reviewed by the City of Chula Vista as a Lead Agency pursuant to CEQA. When school construction or modification is completed by the school district, the district is the Lead Agency for purposes of CEQA. At such time that school sites are proposed, they will be reviewed pursuant to CEQA and their environmental impacts analyzed at that time.

Steve Power

From: Nick Aguilar [naguilar@ucsd.edu]
Sent: Monday, October 31, 2005 7:32 AM
To: Steve Power
Cc: naguilar@ucsd.edu; cfriday@sdcoe.net; rcastrui@sdcoe.k12.ca.us
Subject: Comments to Steve Power, City of Chula Vista Environmental Projects Manager Re: Sections 5.13.3.1 - 5.13.3.3.6 of the Draft General Plan Update Environmental Impact Report From Nick Aguilar, San Diego County Board of Education ,District 2,

Mr. Steve Power AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Mr. Powers,

Please include the following comments regarding Sections 5.13.3.1 - 5.13.3.3.6 in the Environmental Impact Report ("Report") of the Draft General Plan Update:

1. The information in section 5.13.3 of the Report is inconsistent and not sufficiently complete to support the finding articulated in Section 5.13.3.5 that no significant impacts to the provision of school services would result and no mitigation is required. In that regard, section 5.13.3 states at the top of page 478, "As seen in Table 5.13-10, no additional elementary schools would be required in the west upon buildout of the Preferred Plan..." However, Table 5.13-10, at the bottom of page 477, identifies an additional new elementary school need of 3.87 in the Nortwest and 1.75 in the Southwest for a total of 5.60 new elementary schools needed in west Chula Vista.

2. The the finding articulated in Section 5.13.3.5 that no significant impacts to the provision of school services would result and no mitigation is required is also inconsistent with the statement in section 5.13.3 that, "Proposed development and the projeeted increase in the number of elementary, middle school, and high school students under any of the scenarios (Preferred Plan and Scenarios 1,2, or 3) would have a substantial impact on the existing schools since they are already at or near capacity regardless of which is ultimately selected."

3. Although the Report lists associated policies, at pages 479 and 480, that address school services needs, which seems to mitigate the statement at page 478 of the Report that, "Specific sites for CVESD and SHUHSD have not met been determined. Siting and construction of the facilities could have a potential environmental impact.", none of the policies listed at pages 479 and 480 of the Report address the impacts of significant increases in the cost to purchase the land for future school sites. Spicifically,
N-4 the Draft General Plan Update ("Plan") fails to identify potential school sites to be zoned for school uses instead of other uses, such as residential, business, industrial or commercial that make the land more expensive to purchase. For example, in the Otay Ranch development in the east side of Chula Vista, the cost of land has forced SUHSD to purchase a smaller site on which it will be forced to build double or multi-level school facilities, thereby exposing the students and that community to significant environmental impacts.

RESPONSE

N-4 The cost of purchasing land for school sites is not an environmental issue and, therefore, not addressed in the EIR. However, the proposed Public Facilities and Services Element contains the following objective and associated policies that address school siting and location:

Objective PFS 10

Efficiently locate and design school facilities.

Policies:

PFS 10.1: Coordinate and make recommendations to the school districts, property owners and developers on the location, size and design of school facilities relative to their location in the community. Suggest to the school districts that they consider joint use and alternative structural design such as multi-story buildings where appropriate

PFS 10.2: Coordinate with the school districts to maximize student safety at school campuses and public library facilities.

PFS 10.3: Require that proposed land uses adjacent to a school site be planned in such a manner as to minimize noise impacts and maximize compatibility between the uses.

PFS 10.4: Encourage the central location of new schools within the neighborhoods or areas they serve so as to further community development and enhance the quality of life.

Impacts to the provision of school services would be avoided because these policies require that school facilities are sufficient to accommodate projected student population generated by the proposed General Plan Update.

N-5 4.The Report fails to mention or provide mitigation for the impact of the inadequacy of statutory funding, both in terms of their amount and availability, for the construction of new school facilities needs identified in the Plan. While the developers may be able to meet their school facility funding obligations by paying the statutory fees, that is no consolation to students and parents who are forced to attend schools that may be of lower quality than schools in other parts of Chula Vista because of the inadequacy of the statutory funding. For example, the Report makes no mention of alternative funding sourees, such as a portion on the incremental tax generated by redevelopment, that may be used to supplement the school districts' limited schools facility statury funding.

N-6 5. The Report fails to provide any data or other authoritative source to support the statement/conclusion at page 478 that, "...the demographics of households moving into downtown redevelopment areas may have a significantly lower student generation rate than the current household composition." In fact, the recent experience in the redevelopment of downtown City of San Diego has been reported as just the opposite. That is, that the San Diego Unified School District is experiencing great difficulty in providing adequate school facilities in the downtown neighborhoods because the number of students moving into the downtown redeveloped area is much larger than planned.

In conclusion, I would appreciate the inclusion of my comments in the final version of this report and in any discussions with the Planning Commission and/or the Chula Vista City Counsel.

Sincerely yours,

Nick Aguilar, Member
San Diego County Board of Education, District 2

RESPONSE

N-5 Conformance to statutory requirements for the payment of school fees ensures that project impacts to school services remain below a level of significance. Since October 1, 1998, major changes in state law have been enacted which significantly alter the role of cities and local agencies in imposing mitigation measures for projects. The fees set forth in Government Code §65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code §65996(a)]. The provisions of Senate Bill 50 are "deemed to provide full and complete school facilities mitigation" [Government Code §65996(b)].

Provision of school facilities is the responsibility of the school district when additional demand warrants.

N-6 The EIR indicates that a change in demographics in the downtown area may have a lower student generation rate than the current household composition. The EIR used a conservative approach by utilizing the same generation throughout the General Plan area, including the downtown area. Therefore, for elementary students, CVESD provided a generation rate of 0.385 for single-family units and 0.2255 for multi-family units. Similarly, for middle school students, SUHSD provided generation rates of 0.11 for single family units and 0.098 for multi-family units; for high school students, the District provided generation rates of 0.221 for single family units and 0.196 for multi-family units (see pages 476-477 of the dEIR).

CHULA VISTA ELEMENTARY SCHOOL DISTRICT

84 EAST "J" STREET • CHULA VISTA, CALIFORNIA 91910 • 619 425-9600

EACH CHILD IS AN INDIVIDUAL OF GREAT WORTH

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SUPERINTENDENT
LOWELL J. BILLINGS, Ed.D.

October 18, 2005

RECEIVED
OCT 20 2005

Mr. Mark Stephens
Principal Planner
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Re-Circulation of Draft General Plan Update, Otay Ranch GDP Amendments, and related Draft EIR

Dear Mr. Stephens:

Thank you for the opportunity to review and comment on the re-circulation of the draft general plan update as noted above.

Please be advised that the Chula Vista Elementary School District (the "District") first commented on the City of Chula Vista General Plan Update on March 1, 2005. Your response to our letter was received July 19, 2005. Copies of both of these letters are enclosed for your reference.

O-1 The District's major concern and challenge continues to be housing new students brought on by growth in the eastern part of the City and the redevelopment in western Chula Vista. The District remains optimistic that the City will do everything possible to help identify and acquire school sites as needed and that mitigation will be established before projects receive final approval.

We look forward to continued collaboration with the City of Chula Vista on this most important issue.

If additional information is needed, please give me a call at (619) 425-9600, Extension 1373.

Sincerely,

Susan Fahle
Assistant Superintendent
for Business Services & Support

SF:dp
Enclosures (2)

RESPONSE

O-1 These comments do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

CITY OF
CHULA VISTA
PLANNING AND BUILDING DEPARTMENT

CHULA VISTA ELEMENTARY
SCHOOL DISTRICT

JUL 2 2 2005

PLANNING DEPARTMENT

July 19, 2005

Ms. Susan Fahle
Assistant Superintendent for Business Services and Support
Chula Vista Elementary School District
84 East J Street
Chula Vista, CA 91910

RE: CITY OF CHULA VISTA GENERAL PLAN UPDATE

Dear ~~Ms. Fahle~~ Susan:

O-2 This letter is in response to your letter dated March 1, 2005, regarding the "City of Chula Vista Draft General Plan". Thank you for your comments. I will respond below to the concerns and questions you raised.

The City recognizes that your planning for school capacity is based upon detailed demographic analyses and that neighborhoods change over time. As a consequence, your planning efforts are based on conservative assumptions in order to insure adequate services for the community through the neighborhood lifecycle.

Two of your points deal with the difficulty to accommodate growth in the northwestern portion of Chula Vista in regard to finding additional school sites and identifying adequate financing. The City does provide for this in the General Plan.

First, the General Plan Diagram will have a footnote on the diagram clarifying that there may be a need to site an elementary school in northwestern Chula Vista. In the eastern portion of the city, a "floating" symbol is used on the diagram to denote the location of a future school in a certain vicinity of large, undeveloped areas. However, we do not do this in the west, as we wish to avoid the situation where current property owners may misinterpret a floating symbol as indicating their property may be taken for a school site.

In addition, the plan includes the following policy:

> PFS 9.3 Assist school districts in identifying and acquiring school sites for new construction in needed time frames.

In regards to financing, the City is ready to facilitate the District's efforts to finance new schools to the fullest legal extent of the City's ability to do so. The plan includes the following policy:

RESPONSE

O-2 This attachment reflects correspondence between the City and the CVESD. This comment does not address the adequacy of this EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

PFS 9.4 Assist school districts in identifying sources of funding for the expansion of facilities in western Chula Vista as needed based on growth.

We look forward to continuing to work with the School District to support your efforts to provide school services to the community.

Please let me know if you wish to discuss these items further or have additional concerns. My direct extension is (619) 409-5959. Also, please note that we currently plan to release a revised Draft EIR on the General Plan Update and General Development Plan Amendment for public review by the first of August.

Sincerely,

Mark Stephens
Principal Planner

cc: Jim Sandoval
Nancy Lytle
Ed Batchelder
Dan Forster
Duane Bazzel
Rick Rosaler
Jeff Barfield
Luis Hernandez
Marilyn Ponseggi
Steve Power
Lori Madigan
Dana Smith
Jim Hare
Mary Ladiana
John Mullen

H:/Planning/General_Plan/Draft_Elements/GPU_CVESD_Response_Letter_07-06-05.doc

11/15/2005 TUE 14:35 FAX

CHULA VISTA ELEMENTARY SCHOOL DISTRICT

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PAMELA B. SMITH

SUPERINTENDENT
LOWELL J. BILLINGS, Ed.D.

March 1, 2005

Mr. Mark Stephens
Principal Planner
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: City of Chula Vista Draft General Plan

Dear Mr. Stephens:

O-3 Thank you for the opportunity to review and comment on the draft general plan for the City of Chula Vista.

The City of Chula Vista's rapid eastern growth and changing identity in the West provides challenges for the Chula Vista Elementary School District due to high land and construction costs, limitations on eligibility and funds for school construction, and changing demographics.

At the same time that nine hundred new students arrived for school in eastern Chula Vista neighborhoods, the District experienced a decrease of 600 students in more established areas. These 600 students represent the entire population of a small elementary school. It might seem that the City's redevelopment program will reduce student populations in western Chula Vista, and temporarily that may be the observable outcome, but we are not confident that the reduction in student enrollment will continue long term. As we have all noted, neighborhoods go through cycles: families with small children buy a home; the children grow and leave the home; later the grown children may return with children of their own; eventually the parents may sell the home; and, a new young family arrives with their own small children. The District needs to plan for the maximum number of students that a neighborhood will generate at the height of its life cycle.

For us the proposed development in northeastern Chula Vista will be the most challenging aspect of this plan. This area is not one where the student population is declining. The new housing will require additional school capacity. We anticipate a solution that will require additional school sites, expansion of existing campuses, and possibly some reconstruction of existing facilities. The District currently has no land to build schools to accommodate children from the proposed mixed-use projects. We will look

RESPONSE

O-3 This attachment reflects correspondence between the City and the CVESD. This comment does not address the adequacy of this EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

to the City for assistance in locating school sites in this planning area. Though we support the City's plan for redevelopment, we must highlight the importance of mitigating of the impact of this growth on the school system. It is essential that a mitigation agreement is completed before the projects receive final approval.

While bringing many new students to our District, eastern Chula Vista is a lesser challenge due to good planning and the collaboration of the area developers. The SPA Plans for eastern Chula Vista (Otay Ranch) generally have designated elementary school sites to serve children from the new developments. The developers of Villages in Otay Ranch have been willing to form community facilities districts (CFDs) to help finance the needed schools. We will continue to encourage participation in CFDs, in lieu of paying the statutory fee of $1.89 per square foot of assessable construction, as development in the remaining villages is planned.

The District has built seven new elementary schools during the years 2000 – 2004 and is currently constructing School No. 43. With City development still on the rise, the District appreciates the advance notification from the City regarding new development whether in the eastern or western area of Chula Vista so that we can plan for boundary changes and/or new schools.

If additional information is needed, please give me a call at (619) 425-9600, Extension 1371.

Sincerely,

Susan Fahle

Susan Fahle
Assistant Superintendent
for Business Services and Support

SF:dp
cc: Lowell J. Billings, Superintendent

October 28, 2005

To the Chula Vista EIR-GPU staff:

In my opinion, the EIR for the General Plan Update is inadequate in at least three areas:

P-1 1. Re: **WATER**: The GPU-EIR, I believe, is patently inadequate on the issue of water supply. With a projected population growth of forty percent in northwest Chula Vista alone, the EIR contains no discernible plan for meeting water needs.
The language which is supposed to address the water supply issue is so vague that it is meaningless. Approving the EIR without more sufficient planning for water supply is, I believe, unwise and definitely not in the best interests of Chula Vistans.

2. Re: Revitalization of western Chula Vista. Translate as: **Gentrification**. No provisions are mentioned in the GPU-EIR regarding **relocation** of fixed-income Chula Vistans when their homes are torn down and replaced with luxury housing, affordable only to wealthy out-of-state'rs who wish to commandeer Chula Vista as their personal playground. And how many "mom-and-pop" businesses will be bulldozed? The abuse of Eminent Domain laws in order to dump the poor and serve the rich is not an appropriate goal, nor even an acceptable "accidental resullt", of a General Plan Update.

3. Re: Environmental impact of proposed **highrises** in Chula Vista: At the 9/21/05 Developer Expo sponsored by the city, five land parcels on Third Avenue, E Street and Landis Avenue were reviewed. Numerous citizens stated their opposition to highrises ANYWHERE in Chula Vista. At the Expo and a few days prior, I collected signatures of Seniors and others who strongly support a 45 foot height limit for future building in west Chula Vista. We support **low-rises**. NOT mid- or highrises. Because these signatures were collected over a period of only a few hours, it is my belief that thousands of similar signatures could be obtained in a very short period of time. Also, I am clarifying, on record, that it is not a matter of a project at Fourth and H Streets, or in the H Street corridor, or in any other "corridor". A sizeable number of Chula Vistans do not believe skyscrapers are appropriate for this city. Thus we urge the city planners to completely delete zoning for highrises in the General Plan Update.

Signed: Jackie McQuade

Jackie McQuade
Grandparents of America, Chula Vista Chapter
339 East J Street
Chula Vista, CA 91910

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NOV 0 9 2005
ENVIRONMENTAL PLANNING

RESPONSE

P-1 The City of Chula Vista has protective measures in place regarding water supply and distribution. The goal of the City of Chula Vista's Growth Management Program is to ensure that the supply of water required by existing and future residents is available from suppliers and is at a level of quality necessary for its intended use. The Growth Management Program has two objectives regarding water supply and distribution: (1) Ensure that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth; and (2) Ensure that water quality standards are not jeopardized during growth and construction.

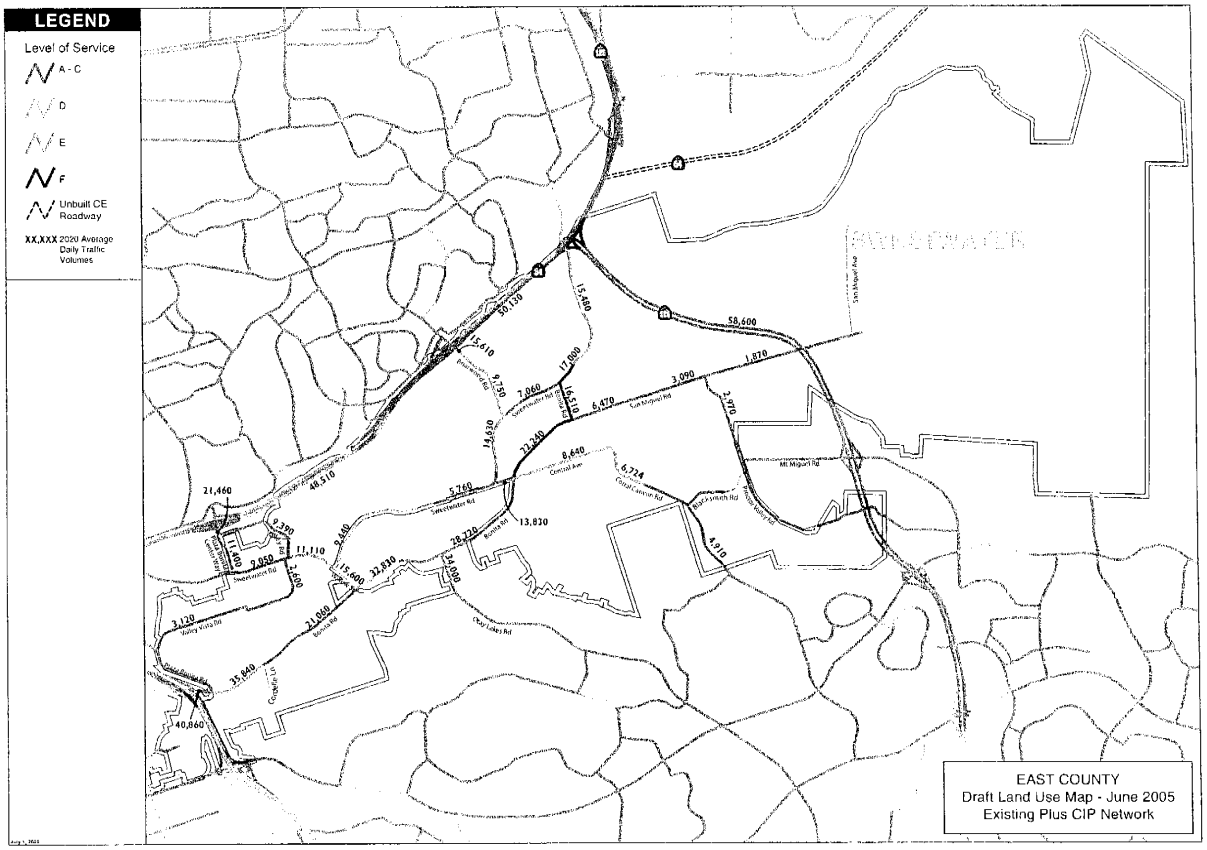
The Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050C, requires a Water Conservation Plan (WCP) to be submitted with all Sectional Planning Area (SPA) Plans. If a SPA Plan is not required, a WCP is required to be submitted with Tentative Subdivision Maps. The Growth Management Program further requires that a Water Conservation Plan be submitted for all major development projects, defined as residential projects consisting of 50 dwelling units or greater, or commercial and industrial projects with 50 Equivalent Dwelling Units (EDUs) of water demand or greater.

The City of Chula Vista also ensures that an adequate supply and quality of water is provided to accommodate new master planned developments, prior to project approval, by implementing a set of project processing requirements for applicants to follow through each stage of development. Processing requirements for General Development Plans, Sectional Planning Area Plans/Public Facilities Finance Plans and Tentative Maps.

The dEIR concluded that there was not a guaranteed supply of water to serve the City upon buildout of the General Plan Update, and identified that constraint as a significant and unmitigable impact. As part of the discussion of water availability, the dEIR discussed the role of the San Diego County Water Authority and the Urban Water Management Plan (UWMP) in forecasting and planning for water needs.

The Urban Water Management Plan prepared by the San Diego County Water Authority included an increment of supply resulting from the transfer of water from the Imperial Irrigation District (IID). The agreement that provides for that water transfer is being challenged on two fronts. A group of farmers and the Imperial Valley Board of Supervisors is challenging the agreement. In addition, environmental groups are challenging the lining of the All American Canal in federal court. Lining of the canal is required to prevent leakage and make water available for the San Diego water transfer (Los Angeles Times Nov. 7, 2005).

In light of these cases, the assumption that the IID water transfer water will be available is questionable for use in the dEIR. Because the dEIR concluded that there is no guaranteed source of water guaranteed, this limitation is immaterial to the analysis in or the conclusion of the dEIR.



County of San Diego GP2020 | WILSON & COMPANY | Roadway Network Planning Workshop

Figure 2
Sweetwater Community Planning Area
Roadway Segment Level of Service and Average Daily Traffic Volumes

October 28, 2005

To the Chula Vista EIR-GPU staff:

In my opinion, the EIR for the General Plan Update is inadequate in at least three areas:

1. Re: **WATER**: The GPU-EIR, I believe, is patently inadequate on the issue of water supply. With a projected population growth of forty percent in northwest Chula Vista alone, the EIR contains no discernible plan for meeting water needs. The language which is supposed to address the water supply issue is so vague that it is meaningless. Approving the EIR without more sufficient planning for water supply is, I believe, unwise and definitely not in the best interests of Chula Vistans.

P-2 2. Re: Revitalization of western Chula Vista. Translate as: **Gentrification**. No provisions are mentioned in the GPU-EIR regarding **relocation** of fixed-income Chula Vistans when their homes are torn down and replaced with luxury housing, affordable only to wealthy out-of-state'rs who wish to commandeer Chula Vista as their personal playground. And how many "mom-and-pop" businesses will be bulldozed? The abuse of Eminent Domain laws in order to dump the poor and serve the rich is not an appropriate goal, nor even an acceptable "accidental resullt", of a General Plan Update.

P-3 3. Re: Environmental impact of proposed **highrises** in Chula Vista: At the 9/21/05 Developer Expo sponsored by the city, five land parcels on Third Avenue, E Street and Landis Avenue were reviewed. Numerous citizens stated their opposition to highrises ANYWHERE in Chula Vista. At the Expo and a few days prior, I collected signatures of Seniors and others who strongly support a 45 foot height limit for future building in west Chula Vista. We support **low-rises**. NOT mid- or highrises. Because these signatures were collected over a period of only a few hours, it is my belief that thousands of similar signatures could be obtained in a very short period of time. Also, I am clarifying, on record, that it is not a matter of a project at Fourth and H Streets, or in the H Street corridor, or in any other "corridor". A sizeable number of Chula Vistans do not believe skyscrapers are appropriate for this city. Thus we urge the city planners to completely delete zoning for highrises in the General Plan Update.

Signed: Jackie McQuade

Jackie McQuade
Grandparents of America, Chula Vista Chapter
339 East J Street
Chula Vista, CA 91910

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NOV 02 2005
ENVIRONMENTAL PLANNING

RESPONSE

P-2 See Response to Comment M-5. The EIR does not address socioeconomic effects of the proposed project. CEQA limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect.

P-3 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

SWEETWATER

Community Planning Group

October 27, 2005

RECEIVED
OCT 31
ENVIRONMENTAL PLANNING

Steve Power, AICP
Environmental Program Manager
City of Chula Vista
276 Fourth Ave
Chula Vista, CA 91910
RE: Chula Vista 2020 Update RDEIR

Dear Mr. Power,

Please accept these comments on the RDEIR.

Q-1 We are concerned about the potential strains that increasing population places upon public infrastructure under the "Preferred Plan." We appreciate that policies "GM 1.1, 1.5, 1.9, and 1.11" attempt to compensate for public infrastructure and service demands created by new development.[i] However, existing and projected failing Levels of Service (LOS) in the transportation network under the "Preferred Plan" create serious doubts that growth demands will be met adequately.

Q-2 The range in LOS predicted for SR-54 and SR-125 also creates concern that neither local nor regional growth impacts are sufficiently understood or mitigated for. For example, traffic models in the County 2020 Update[ii] predict LOS "A-C" for SR-54 & SR-125 while Table 5.10-4 in the RDEIR for the City 2020 Update predict LOS "F." Models that predict the entire range of potential outcome demonstrate how tenuous the foundation is for long range planning.

Q-3 The City's existing failure to meet basic standards in acres of parkland available per resident also demonstrates that meeting public infrastructure demand is a challenge in many areas. Although the City standard is three acres of parkland per resident, Table 5.13-13 shows only 1.95 acres available overall with serious parkland deficits in both the northwest and southwest sectors of the city.[iii]

Q-4 The reality is that the current pattern of growth and impact fees has not provided enough public infrastructure to meet basic standards. Demand strains the infrastructure of both Chula Vista and neighboring communities.

RESPONSE

Q-1 The proposed General Plan Update is specifically intended to provide for the orderly growth of the city of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted by land use policy would provide needed housing for all income levels, create compact and pedestrian-friendly urban development, and protect natural resources. As indicated on Page 373 of the dEIR, many of the traffic improvements are operational in nature, and will improve arterial progression during the peak commuting hours. This is likely to translate into higher vehicles speeds and possibly an improvement in LOS on certain segments. While operational improvements will not increase the 24-hour capacity of a segment, which is based on the number of lanes, they will improve traffic flow and reduce peak hour congestion. Operational improvements would reduce impacts but not to a level less than significant. If the City Council decides to adopt the Preferred Plan, the adoption of a Statement of Overriding Considerations for these impacts will be required.

Q-2 The travel demand forecast developed for the General Plan update is based on the most current series of SANDAG employment and population forecasts, the transportation network contained in the Regional Transportation Plan, and the current horizon year 2030. The model results correlate closely with SANDAG modeling results based on similar assumptions.

Q-3 This comment addresses available parkland deficiencies in western Chula Vista. The Chula Vista Municipal Code, Section 17.10 (the Park Development Ordinance – PDO) applies a standard of 3 acres of park land for every 1,000 people to all new development. Since the park demand forecast as resulting from the adoption of the Plan or any of the Scenarios results from population associated with new development, compliance with the PDO assures provision of 3 acres of dedicated park land for every 1,000 people for all new development.

It should be noted that the park requirement is citywide and can be met anywhere in the city. While the change in population resulting from the proposed General Plan Update stems from land use changes in the Update Areas, the park need can be met in other areas of the city.

Q-4 These comments refer to the General Plan Update's policies and do not reflect on the adequacy of the EIR. The comment, however, will be forwarded to the appropriate City decision making body. Comment noted.

If the City chooses to accommodate substantial population growth and densification, then new policies that promote and pay for patterns of growth that will de-emphasize the automobile should be implemented.

Q-5 For example, all redevelopment within park deficient sectors of the city should be required to include public spaces to the greatest extent feasible. Creating public spaces or neighborhood parks with a sense of place and then linking them with pedestrian or bicycle paths and public transportation can reduce rather than induce vehicle trips.

Q-6 Please include a new policy that states, "Redevelopment within park deficient areas of the city shall include provisions for public spaces, mini-parks and non-motorized pathways to the maximum extent feasible."

Q-7 Another potential way to reduce the number and length of vehicle trips is to enhance existing parks and open spaces to encourage recreation closer to home. Implementing the proposal to convert Proctor Valley Road into a Multiuse Trail through the Bonita Meadows Open Space Preserve can create a sense of place that both new and existing development will want to utilize. By enhancing the 200-acre Bonita Meadows Preserve, many would be able recreate without using a vehicle at all. Increased recreation close to home provides greater opportunity to reduce lengthy vehicle trips.

Commercial development that emphasizes plazas and mixed uses rather than auto-dominated strips can also mitigate the impacts of increasing population.

Thank you for considering these comments,

Co Chair Sheri Todus

[i] GM 1.1: Maintain a set of quantitative level-of-service measures (growth management "threshold standards"), as a tool to assess the relative impact of new facility and service demands created by growth, and apply those standards, as appropriate, to approval of discretionary projects.

GM 1.5: As part of the Growth Management Program, conduct an ongoing Development Monitoring Program focused on new development activity and related infrastructure and public facility construction to determine compliance with Threshold Standards and other City policies and programs.

GM 1.9: Require that all Major Development projects prepare a Public Facilities Financing Plan (PFFP) that articulates infrastructure and public facilities requirements and costs and funding mechanisms.

GM 1.11: Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with applicable Threshold Standards.

[ii] County of San Diego GP2020, Figure 2 Sweetwater Community Planning Area, Roadway Segment Level of Service and Average Daily Traffic Volumes

[iii] **TABLE 5.13-13**

PUBLIC PARK ACREAGE PER POPULATION (YEAR 2004)

Planning Area	Park Acres	Population	Park Acres/1,000 Population
Bayfront	26.77	0 -	
Northwest	42.72	56,931	0.75
Southwest	57.92	53,562	1.08
East	279.95	98,707	2.84
TOTAL	407.36	209,200	1.95

RESPONSE

Q-5 As indicated on page 114 of the dEIR, the proposed General Plan includes Objective 27 which serves to "Establish a program for development to provide public amenities and/or community services necessary to support urban development," including implementing Policy LUT 27.1 which requires "Enhanced pedestrian connections between parks, public spaces, and neighborhoods by means of paths and open space areas."

Q-6 These comments refer to the General Plan Update's policies and do not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Q-7 Comment noted. See Response to Comment R-3.

Friends of Bonita/Sunnyside
Friends of Bonita Meadows

Steve Power, AICP
Environmental Program Manager
City of Chula Vista
276 Fourth Ave
Chula Vista, CA 91910

RE: Chula Vista RDEIR 2020 Update

Dear Mr. Power,

R-1 The RDEIR states that the City's "Preferred Plan" would accommodate a 47% increase in population and a 55% increase in housing units. It also states that impacts of accommodating increased population are significant and without mitigation (p. 581-582). Because our transportation system, parks and other public infrastructure have been over-burdened by our current system of growth management, the magnitude and pace of growth accommodated by this plan is likely to increase the overall burden on public infrastructure. Growth simply does not pay for itself.

R-2 While it would seem prudent to slow the pace of this ambitious population increase, we realize that none of the Scenarios considered accommodate less than a 41% increase in population. Therefore, it is important for new development to fully mitigate new demand for services and infrastructure to the maximum extent feasible. Policies intended to achieve this goal should be incorporated extensively in to the General Plan Update. In this spirit, we would emphasize and expand the following smart growth principles that should be further developed into General Plan Policies:

- **Create walkable neighborhoods**
- **Create a high density of neighborhood parks, pocket parks, plazas, green belt paths, and public spaces that reduce automobile use and dominance.**
- **Preserve open space, natural beauty, and critical environmental areas**
- **Provide a variety of transportation choices**
- **Foster distinctive, attractive communities with a strong sense of place**
- **Encourage community and stakeholder collaboration in development decisions**

R-3 An example of a project that incorporates many of these principles is our proposal to convert Proctor Valley Road into a Multiuse Trail through the Bonita Meadows Open Space Preserve. A Multiuse Trail through the Bonita Meadows Open Space Preserve can create a sense of place that both new and existing development will want to utilize. Enhancing the 200-acre Bonita Meadows Preserve can allow many individuals to recreate without using a vehicle at all. Increased recreation close to home provides greater opportunity to reduce lengthy vehicle trips.

R-4 In conclusion, if a plan of population growth and densification will be accommodated, then its impacts should be fully mitigated. Require growth to pay for public infrastructure. Incorporate innovative design policies into new projects and redevelopment projects. Following these principles can protect quality-of-life and mitigate many aspects of growth.

Thank you for considering these comments,

Michael J. Roark
Friends of Bonita/Sunnyside
3645 Proctor Valley Rd
Bonita, CA 91902

Sheri Todus
Friends of Bonita Meadows
6001 Bonita Meadows Lane
Bonita, CA 91902

RESPONSE

R-1 This comment addresses growth inducing impacts associated with the proposed General Plan Update. Growth inducement is addressed in the dEIR in Chapter 7. As stated on page 600 of the dEIR, "the proposed General Plan Update is specifically intended to provide for the orderly growth of the city of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted by land use policy would provide needed housing for all income levels, create compact and pedestrian-friendly urban development, and protect natural resources. The General Plan Update would result in a more inclusive community, maintain a balance between housing and employment, and foster a stable economic base and diverse employment opportunities."

R-2 The dEIR addresses impacts to public services and utilities in Sections 5.13 and 5.14 respectively. The analysis addresses the provision of water, sewer, and integrated waste management services and facilities, fire protection, law enforcement, parks and recreation, schools, and libraries. These sections provided mitigation for impacts identified as significant. Additionally, the City Council adopted the Threshold Standards Policy for Chula Vista in November 1987, which established "quality of life" indicators for water and sewer services and facilities. These topics were addressed in the policy in terms of a goal, objective(s), threshold, and implementation measures. These standards are intended to preserve and enhance the environment and City residents' quality of life as growth occurs.

R-3 This comment requests the conversion of Proctor Valley Road into a multiuse trail though Bonita Meadows Open Space Preserve. The City of Chula Vista does not control the Preserve and therefore does not have the authority to convert Proctor Valley Road into a multiuse trail through the Preserve.

R-4 The proposed General Plan Update includes Objective GM 1, which requires concurrent public facilities and services. As discussed on page 465, the proposed General Plan includes policy GM 1.9 which "Require that all Major Development projects prepare a Public Facilities Financing Plan (PFFP) that articulates infrastructure and public facilities requirements and costs and funding mechanisms."

ctv

California Transportation Ventures Inc.

October 31, 2005

Mr. Ed Batchelder
Deputy Planning Director
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RECEIVED
NOV

Re: Comments on General Plan Update

Dear Mr. Batchelder:

Thank you for the opportunity to review the General Plan Update. The South Bay Expressway (formerly called the SR-125 South Toll Road) is being implemented through an innovative public-private partnership that has resulted in over $600 million in private investment in the facility. We have all worked hard as a region to reach this point, and continue to work toward the South Bay Expressway opening in late 2006.

We support the City revised policies LUT 14.8 and 14.9 (previously policies LUT 12.8 and 12.9) relative to the future implementation of La Media Road crossing the Otay Valley.

S-1 The General Plan Update removes language from Section 5.2 (Circulation Plan, page LUT-50) describing the reservation of an option for future extension of La Media Road on Figure 5.13 East. We assume that the removal of the language is meant to emphasize that implementation of La Media Road will be studied in the future, consistent with revised policies 14.8 and 14.9. But, it appears that Figure 5.13E (Circulation Plan East) has not been revised as part of the General Plan Update Proposed Edits to December 2004 Draft. Therefore, while we assume that policies LUT 14.8 and 14.9 will guide future implementation of La Media Road, the lack of explanatory text to Figure 5.13E makes it difficult to understand the City's intent relative to the timing of future La Media Road. Also see comment below in our comments on the EIR, as they relate to this same issue.

S-2 The Recirculated Draft EIR describes the changes made to the document since the previous EIR was circulated. For Section 5.10, Traffic, the summary of changes on page xiii lists the following: "The document was revised to reflect changes in policies, specifically the elimination of reference to the future evaluation of La Media crossing the Otay Valley. La Media Road across the Otay Valley remains in the General Plan." We point out that policy LUT 14.8 references that the need for, timing and ultimate construction of La Media Road crossing the Otay Valley will be analyzed as part of pending updates of other plans. Thus, it does not appear that the policy has changed in a fundamental way that would require the elimination of the referenced text. Our concern is that the text helped to explain that the roadway was shown on the General Plan for long term planning, but implementation of the roadway has not been analyzed in any kind of detail and the General Plan EIR does not include implementation level CEQA clearance for the road.

880 Kuhn Drive, Chula Vista, CA 91914 • tel 619.591.4200 fax 619.591.4291

RESPONSE

S-1 This comment does not reflect on the adequacy of the EIR. Comment noted. The exact timing of the La Media Road improvements is not known at this time, and its schedule is likely to be impacted by the availability of funding sources, environmental analysis, and other considerations. For the purposes of the General Plan Update, La Media Road is anticipated to be in place by the Year 2030.

S-2 This comment states that the dEIR eliminated the reference to the future evaluation of La Media crossing the Otay Valley, but it does not appear that the policy has changed. The reference in the previous dEIR was included as an explanation as to why the roadway segment was not being removed from the Circulation Element. Because the roadway will remain in the circulation system, this explanation was not considered necessary. As such the explanation was removed from the recirculated draft. Policy LUT 14.8 remains in the General Plan Update.

S-3 The description of the non-Urban Core roadway network changes proposed as part of the General Plan update has been changed. In the previous Traffic Technical Report, (December 31, 2004) one change, on page 11, was the removal of La Media Road and the Otay River Valley Bridge. The text in the EIR was slightly different from that in the Traffic Report, in that it did not identify the removal, but stated the option for this link was reserved, pending further evaluation of the need (page 287 of the previous EIR). In the current documents, the text referencing the removal of La Media Road and the Otay River Valley Bridge no longer appears. The list of non-Urban Core roadway network changes proposed does not include the removal of that link (see Recirculated EIR page 350). We assume that future implementation of La Media Road will be pursuant to policies LUT 14.8 and 14.9, and that these changes in the text do not change the City's underlying approach to future La Media Road as expressed in the LUT policies. If this is not the case, the City should clarify its intent relative to the roadway.

S-4 The traffic modeling (Appendix E, Traffic Technical Report) includes La Media Road in the year 2030. No traffic modeling was included prior to year 2030, so we cannot determine if it is expected that La Media Road would be implemented before 2030. On the assumption that the City has not modeled La Media Road prior to the year 2030, it appears that the City anticipates the extension of La Media to occur in the 2030 time frame.

S-5 The Transportation Section (Section 5.10) identifies that the Preferred Plan will have an impact to segments of SR-125 (SR-54 to Mount Miguel Road, then to H Street), resulting in a Level of Service of "F." The adopted General Plan as shown in Table 1.4-3 of Appendix E, Traffic Technical Report, results in a level of service "F0" for the segment from SR-54 to Mt. Miguel Road, and "C" for the segment from Mt. Miguel Road to "H" Street. It appears that this impact is forecast to occur at the time the SR-125 operates as a freeway, not a tollway.

The mitigation measure identified for this impact is to widen SR-125 by one general purpose lane or equivalent capacity in HOV or managed lanes. The one additional lane is identified for scenarios 1, 2 and 3, and it is unclear if the additional lane will also be needed for the Preferred Plan. Mitigation Measure 5.10.2 also notes that such mitigation is not within the authority of the City of Chula Vista. While it appears this impact is forecast to occur after the facility is no longer operating as a tollway, we point out that to the extent such an impact were to occur while SR-125 is a toll facility, we would likely control the over-capacity situation through pricing. We acknowledge that others may construct an additional lane at some time in the future, beyond our franchise agreement period.

Sincerely,

SAN DIEGO EXPRESSWAY, L.P.
By: California Transportation Ventures, Inc., its general partner

Greg Hulsizer
Chief Executive Officer

cc: Marilyn Ponseggi – City of Chula Vista
File

(CTV LTR-05-798)

880 Kuhn Drive, Chula Vista, CA 91914 • tel 619.591.4200 fax 619.591.4291

RESPONSE

S-3 This comment states that the reference to the removal of La Media Road across the Otay River Valley was included in the earlier version of the traffic report, but omitted from the current version. The previous traffic appendix referenced the removal of La Media Road across the Otay River Valley. The current traffic report has been corrected to reflect the fact that the proposed land use and transportation element does not affect the status of La Media Road in this location.

S-4 See Response to Comment S-1 above.

S-5 This comment states that it appears that the additional lane for SR-125 would only be needed after the facility becomes a freeway, and clarification is needed as to whether this applies to the Preferred Plan. The additional lane is required for the Preferred Plan. The table provided on page 373 of the dEIR refers to the Preferred Plan as Scenario 4, and indicates that one additional general purpose lane or equivalent capacity is needed. This is true whether the road is operating as a tollway or a freeway. As indicated on Page 31 of the Traffic Technical Report, all 2030 analyses considered SR-125 as operating as a tollway.

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Patty Talamantes
South Bay Expressway
880 Kuhn Drive

Chula Vista, CA 91914

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Ed Batchelder
City of Chula Vista
276 Fourth Avenue

Chula Vista, CA 91910

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COMMENTS:

Patty Talamantes
South Bay Expressway
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California Transportation Ventures Inc.

October 31, 2005

Mr. Ed Batchelder
Deputy Planning Director
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments on General Plan Update

Dear Mr. Batchelder:

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Sincerely,

SAN DIEGO EXPRESSWAY, L.P.
By: California Transportation Ventures, Inc., its general partner

Greg Hulsizer
Chief Executive Officer

cc: Marilyn Ponseggi – City of Chula Vista
File

(CTV LTR-05-798)

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File #

November 1, 2005

Mr. Ed Batchelder
General Plan Project Manager
City of Chula Vista
Planning & Building Department
276 Fourth Avenue
Chula Vista, California 91910

Steven Power AICP
Environmental Project Manager
City of Chula Vista
Planning & Building Department
276 Fourth Avenue
Chula Vista, California 91910

Re: Draft General Plan Update, Otay Ranch General Development Plan Amendment and Draft Environmental Impact Report

Gentlemen:

T-1 This firm represents Jewels of Charity, Inc. ("Jewels"). Set forth below are summary comments on behalf of Jewels on the City of Chula Vista's draft General Plan Update ("GPU"), draft Otay Ranch General Development Plan amendments ("GDP") and a related draft Environmental Impact Report ("DEIR").

T-2 Jewels provided the City with its views on the original versions of the GPU, GDP and DEIR circulated by the City in late 2004. Since the fundamental provisions of these three documents affecting Jewels have not materially changed in the re-circulated versions of these documents, Jewels adopts and resubmits the comments which it made in writing and at various public hearings on the prior documents. These include, specifically, my letter of February 14, 2005 to Paul Hellman, Environmental Project Manager of the City of Chula Vista with comments on the previous DEIR; comments made on behalf of Jewels at the February 14, 2005 meeting of the Planning Commission of the City; and comments made at the City Council's public hearing on the GPU, GDP and DEIR held on February 24, 2005.

RESPONSE

T-1 Comment noted. It is acknowledged that Berkowitz, Lichtstein, Kuritsky, Guisullo & Gross, LLC is representing Jewels of Charity, Inc.

T-2 Comment noted. The letter of February 14, 2005 to Paul Hellman with comments on the previous dEIR and the comments made at the City's Planning Commission are attached and are addressed below. The meeting on February 24, 2005 was a workshop for the City Council and the public and no official public comment was accepted at that time, therefore, those comments will not be addressed.

Additional Comments on GPU and GDP Amendments

In addition to Jewels' previously submitted comments, the following are submitted:

T-3 1. Development Agreement. Jewels is party to an Amended and Restated Pre-Annexation Development Agreement with the City, passed, approved and adopted by the City Council on March 18, 1997, with the agreement entered into on and dated as of the same date. This agreement affects acreage covered by the GPU and proposed amendment to the GDP. This agreement creates vested development rights in Jewels. Without belaboring the provisions of the agreement itself, Jewels has the right to develop land in accordance with the land use framework in effect as of the date of the agreement, including the General Development Plan/Sub-Regional Plan for the Otay Ranch adopted by the City and the County of San Diego on October 28, 1993, and the City of Chula Vista General Plan in effect in March 1997. The proposed amendments to the GPU, Section 4.8 (page LUT-36) recognize that:

> "Property owners who have achieved a vested rights status retain the ability to develop in accordance with the land use designations in effect at the time of vesting prior to adoption of the General Plan Update."

While Jewels' prior comments on the GPU and GDP, and the summary comments below, are submitted in the belief that the proposed amendments are in many cases inappropriate, Jewels retains its right to act under and in accordance with the referenced Development Agreement.

2. General Comments.

T-4 (a) Jewels believes that the proposed amendments make fundamental changes in the existing land use plan without sufficient analysis or justification. These changes include the establishment of a Regional Technology Park, the shift from "villages" to "Town Centers", changes to the University area, and certain assumptions regarding public transportation. Jewels believes that the case has not been made for these changes, that there is an insufficient factual basis for the changes and that the DEIR analysis of these changes is insufficient.

(b) The proposed amendments would have an inequitable economic impact on various landowners. Certain landowners have benefitted in a material way, while others are penalized. The public need for these shifts in economic benefits is not clear.

RESPONSE

T-3 This comment states that Jewels retains its right to act under and in accordance with the Amended and Restated Pre-Annexation Development Agreement with the City. This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

T-4 The comment does suggest that the dEIR analysis of the Town Center, changes to the University area and assumptions regarding public transportation is insufficient, but does not indicate where or how they are insufficient. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

(c) Thoughtful consideration of the configuration of, requirements for and impact of the University study area essentially have been postponed in the amendments. The integration of this use with surrounding land uses is critical. The surrounding uses cannot be adequately planned or development of these areas implemented until such time as adequate consideration of the realistic prospects for and design of a University campus are ascertained.

(d) Discussion in the amendments of the need for and location of public transportation is circular. The transit plan is premised on certain densities and land uses. The land uses and densities in the amendments are premised on the existence of specific public transportation improvements, including the BRT system.

DEIR Comments

As is set forth above, Jewels resubmits the comments on the DEIR which are set forth in my February 14, 2005 letter to Mr. Hellman. Please advise if you require another copy of this letter.

Jewels reserves the right to respond to any changes in the DEIR, GPU or GDP amendments or to other comments on these documents.

Very truly yours,

Bernard S. Berkowitz

cc: Mr. David Rowlands
Mr. Rick Rosaler
Ms. Deborah Durkin

BERKOWITZ, LICHTSTEIN,
KURITSKY, GUISULLO & GROSS, LLC
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File # 34305-4

February 14, 2005

Mr. Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments on Draft Environmental Impact Report ("DEIR")
City of Chula Vista General Plan Update

Dear Mr. Hellman:

T-5 This firm represents Jewels of Charity, Inc. (Jewels). The following are preliminary comments on behalf of Jewels on the Draft Environmental Impact Report for the City of Chula Vista General Plan Update EIR #05-01 dated December 31, 2004.

As an overview it is our understanding the DEIR focuses on two primary components: (1) physical development potential and (2) the goals/policies and subsequent action items/implementation procedures. The Otay Ranch being the largest master planned community, San Diego County Board of Supervisors and the Chula Vista City Council approved the Otay Ranch GDP in October 1993.

Jewels believes that a number of the changes proposed in the General Plan Update are unnecessary and unresponsive to the community as a whole and inequitable, especially in the transfer of allowable developable units of various land affected by these changes. Jewels will comment on the current draft of the General Plan Update in due course.

Land use and Transportation Element

T-6 1. The DEIR appears to base its analysis (if not in totality) on the use of the University Site exclusively for University purposes, thereby setting the stage for a new designation of "Town Center" dependent upon the support of a University. The DEIR deletes any current designated and approved secondary land use in the event that university concept does not occur.

RESPONSE

T-5 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

T-6 The dEIR analyzed the previously approved land uses in Chapter 10.0, Plan to Plan – No Project Alternative. In the Chapter 10 analyses, comparisons are provided between the environmental effects of the adopted General Plan in effect today to that proposed under the Preferred Plan. This includes the existing GDP and the secondary land uses of the University site.

Although this site was designated and approved as a university in the 1993 approved General Plan, and the fact that numerous committees have been formed and gone by the wayside to date in bringing a University to a state of realization, the DEIR is deficient in its analysis in the event a university fails to occur. Planned density in the Town Center and all of the ancillary infrastructure support depicted in the DEIR would be unnecessary and inappropriate without the actual existence of a university.

Jewels believes that until the site is so utilized, the DEIR should address the environmental issues in retaining the previously approved 940 developable units in the existing GDP as a secondary land use and not distribute the developable units elsewhere as proposed in the land uses incorporated in the DEIR.

T-7 2. The DEIR is recommending the elimination of Otay Valley Road West of La Media Road to Heritage Road. With the proposed land uses and changes within the Otay River Valley area as well as access to and from Main Street to the East Planning Area, the DEIR is silent as to sufficient traffic analysis as to the impact on access to open space and active open space recreation along the Otay River Valley. Further analysis and studies are needed as it pertains to this elimination.

T-8 The DEIR traffic studies does not address the elimination or removal of Alta Road from SR 125 to Otay Mesa. Under the previous approved GDP three viable accesses were planned and approved as access across the river valley to connect the eastern territories to Otay Mesa. Without this section of Alta Road only two north and south access crossings (SR 125 and La Media located west of SR 125) will remain to connect the entire eastern territory south to Otay Mesa. Further studies into the elimination of this viable connector is needed.

Jewels of Charity reserves the right to submit a response to changes in the DEIR made in response to the foregoing and reserves the right to submit additional comments at public hearings and otherwise.

Very truly yours,

BERNARD S. BERKOWITZ

RESPONSE

T-7 See Response to Comment V-12.

T-8 Page 350 of the Transportation Section 5.10 identifies the removal of Alta Road south and east of Eastlake Parkway as part of the circulation system used in the traffic analysis. Alta Road south and east of Eastlake Parkway has been removed to be consistent with the County of San Diego East Otay Mesa Specific Plan, which has removed the portion of the roadway in the unincorporated areas.

VERBATIM TRANSCRIPT
CLOSE OF PUBLIC REVIEW PERIOD FOR
DRAFT EIR 05-01
FEBRUARY 14, 2005

Bernard Berkowitz - "433 Northfield Ave., W. Orange, New Jersey, Jewels of Charity. I represent Jewels of Charity, a public charity which owns land on the proposed university site. I send in some comment; I don't know whether or not they were received, but I have another copy which I'll leave with the City Clerk.

T-9 The DEIR appears to base its analysis on the use of the university site exclusively for university purposes, thereby, setting the stage for a new designation of Town Center dependent upon the support of a university. The DEIR deletes any current designated and approved secondary land use in the event that university concept does not occur. Although this site was designated and approved as a university site in the 1993 approved General Plan, and the fact that numerous committees have been formed and gone by the way side to date in bringing you a university to a state of realization, the DEIR is deficient on its analysis in the event the university fails to materialize.

T-10 Planned density in the town center and all of the ancillary infrastructure support depicted in the DEIR would be unnecessary and inappropriate without the actual existence of a university. Jewels of Charity believed that until the site is so utilized, the DEIR should address the environmental issues in retaining the previously-approved 940 developable units in the existing GDP as a secondary land use and not distribute the developable units elsewhere as proposed in the land uses incorporated in the DEIR."

RESPONSE

T-9 The comment suggests that the amendments proposed for the GPU and GDP and the analyses in the dEIR of the proposed changes are based on inappropriate assumptions. It also indicates that the dEIR lacks an analysis of a comparison between the proposed changes and the adopted General Plan and GDP. A comparison of the affects of the changes proposed by the Preferred Scenario to the Adopted General Plan and GDP is provided in Chapter 10.0, Plan to Plan – No Project Alternative.

As stated on Page 604 of Chapter 10, "In the event that the plan update is not approved, the currently adopted General Plan would remain in effect." In the Chapter 10 analyses, comparisons are provided between the environmental effects of the adopted General Plan in effect today to that proposed under the Preferred Scenario.

Each of the existing elements of the adopted General Plan is listed, along with a thorough description of existing land use categories. An analysis of the environmental effects of the proposed GPU on each of these elements as compared to the Adopted Plan is then provided.

T-10 See Response to Comment T-6. The EIR analyzed the impact of the Preferred Plan, which contains the Village Nine Town Center and the University and two alternative plans, which also contained the University and Village Nine Town Center.

The Corky McMillin Companies
Realty • Mortgage • Land Development • Homes • Commercial

October 27, 2005

City of Chula Vista
Planning and Building Department
Attn: Steve Power, AICP, Environmental Projects Manager
276 Fourth Avenue
Chula Vista, CA 91910

RE: Recirculated Draft Environmental Impact Report for the Chula Vista General Plan / Otay Ranch General Development Plan Update

Dear Mr. Power,

The McMillin Companies appreciates the opportunity to evaluate the recirculated Draft Environmental Impact Report prepared for the update of the City's General Plan and the Otay Ranch General Development Plan. We offer the following comments on the draft documents.

U-1 1. The McMillin Companies has proposed amendments to the General Plan and the Otay Ranch GDP as part of the update process to modify the land uses currently prescribed by the GP and GDP for the Eastern Urban Center. These revisions only appear as part of the Preferred Alternative and are not reflected in any of the other alternative scenarios, despite changes occurring around the EUC which may affect our ability to develop and market the currently prescribed land uses. These proposed land uses should be considered as part of any alternative that the Council may consider for approval.

U-2 2. The draft General Plan circulation plan includes the extension of La Media Road across the Otay River Valley, however language in the circulation table on page 208 of the strikeout version of the draft Otay Ranch General Development Plan has been revised to identify Rock Mountain Road, rather than Otay Mesa Road as the southerly end of La Media Road. This table should be revised to match the General Plan policy language and circulation plan by designating Otay Mesa Road as the southerly terminus of La Media Road.

U-3 3. As part of the General Plan Update process, the City in encouraging the development of higher density residential development in many areas of the City. The population coefficients that are currently applied may not accurately reflect the new demographic that is generated from this type of development. The City should

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RESPONSE

U-1 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

U-2 This circulation table has been revised in the Otay Ranch GDP Chapter 2, Mobility, Section B.

U-3 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

include provisions in the General Plan and Otay Ranch General Development plan to allow population coefficients for the P-C District to be determined at the SPA plan level.

We appreciate having the opportunity to comment on the City's General Plan and Otay Ranch General Plan update and look forward to receiving a copy of the Final Environmental Impact Report when it is completed.

Sincerely,

Todd Galarneau
Vice President

cc: Mayor Stephen Padilla
Councilmember Castenada
Councilmember Davis
Councilmember McCann
Councilmember Rindone
Dave Rowlands, City Manager
Jim Sandoval, Director of Planning and Building
Ken Baumgartner
Guy Asaro

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Michael A. McAndrews
(213) 612-2449
mmcandrews@orrick.com

November 1, 2005

VIA EMAIL AND DHL

Mr. Ed Batchelder
General Plan Project Manager
City of Chula Vista
Planning & Building Department
276 Fourth Avenue
Chula Vista, California 91910

Steve Power AICP
Environmental Projects Manager
City of Chula Vista
Planning & Building Department
276 Fourth Avenue
Chula Vista, California 91910

Re: Draft General Plan Update, Otay Ranch General Development Plan Amendment and Draft Environmental Impact Report

Gentlemen:

V-1 This firm represents The Stephen & Mary Birch Foundation, Inc. (the "Foundation"). Set forth below are summary comments on behalf of the Foundation on the City of Chula Vista's draft General Plan Update ("GPU"), draft Otay Ranch General Development Plan amendments ("GDP") and a related draft Environmental Impact Report ("DEIR").

V-2 The Foundation provided the City with its views on the original versions of the GPU, GDP and DEIR circulated by the City in late 2004. Since the fundamental provisions of these three documents affecting the Foundation have not materially changed in the re-circulated versions of these documents, the Foundation adopts and resubmits the comments which it made in writing and at various public hearings on the prior documents. These include, specifically, my letter of February 14, 2005 to Paul Hellman, Environmental Project Manager of the City of Chula Vista with comments on the previous DEIR; comments made by me on behalf of the Foundation at the February 14, 2005 meeting of the Planning Commission of the City; and comments made by me at the City Council's public hearing on the GPU, GDP and DEIR held on February 24, 2005.

Additional Comments on GPU and GDP Amendments

In addition to the Foundation's previously submitted comments, the following are submitted:

V-3 1. Development Agreement. The Foundation is party to an Amended and Restated Pre-Annexation Development Agreement with the City, passed, approved and adopted by the City Council on March 18, 1997, with the agreement entered into on and dated as of the same date. The Foundation, as successor-in-interest to SNMB, Ltd. also is beneficiary of that certain Amended and Restated Pre-Annexation and Development Agreement between SNMB and the City, likewise

RESPONSE

V-1 It is acknowledged that Orrick represents the Stephen and Mary Birch Foundation, Inc. and these comments were made on behalf of the Foundation.

V-2 Comment noted. The letter of February 14, 2005 to Paul Hellman with comments on the previous dEIR and the comments made at the City's Planning Commission are attached and are addressed below. The meeting on February 24, 2005 was a workshop for the City Council and the public and no official public comment was accepted at that time, therefore, those comments will not be addressed.

V-3 This comment does not reflect on the adequacy of the EIR. The comment does suggest that the dEIR analysis of the Town Center, changes to the University area and assumptions regarding public transportation is insufficient, but does not indicate where or how they are insufficient. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

ORRICK

adopted on and dated as of March 18, 1997. These agreements affect acreage covered by the GPU and proposed amendment to the GDP. These agreements create vested development rights in the Foundation. Without belaboring the provisions of the agreements themselves, the Foundation has the right to develop land in accordance with the land use framework in effect as of the date of the agreements, including the General Development Plan/Sub-Regional Plan for the Otay Ranch adopted by the City and the County of San Diego on October 28, 1993, and the City of Chula Vista General Plan in effect in March 1997. The proposed amendments to the GPU, Section 4.8 (page LUT-36) recognize that:

> "Property owners who have achieved a vested rights statues retain the ability to develop in accordance with the land use designations in effect at the time of vesting prior to adoption of the General Plan Update."

While the Foundation's prior comments on the GPU and GDP, and the summary comments below, are submitted in the belief that the proposed amendments are in many cases inappropriate, the Foundation retains its right to act under and in accordance with the referenced Development Agreements.

2. General Comments.

(a) The Foundation believes that the proposed amendments make fundamental changes in the existing land use plan without sufficient analysis or justification. These changes include the establishment of a Regional Technology Park, the shift from "villages" to "Town Centers", changes to the University area, and certain assumptions regarding public transportation. The Foundation believes that the case has not been made for these changes, that there is an insufficient factual basis for the changes and that the DEIR analysis of these changes is insufficient.

(b) The proposed amendments would have an inequitable economic impact on various landowners. Certain landowners have benefited in a material way, while others are penalized. The public need for these shifts in economic benefits are not clear.

(c) The new proposed limitation on development of and improvements near the so-called "Birch-Patrick Estate House" (new LUT-69.2) is not justified, has not been discussed with the Foundation as landowner and in general is unsupported by any analysis of which the Foundation is aware. The specific land intended to be covered is not delineated.

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Additionally, this house is referred to as "Gardens by the Lake", and should be so designated in the GPU.

(d) Thoughtful consideration of the configuration of, requirements for and impact of the University study area essentially have been postponed in the amendments. The integration of this use with surrounding land uses is critical. The surrounding uses cannot be adequately planned or development of these areas implemented until such time as adequate consideration of the realistic prospects for and design of a University campus are ascertained.

(e) Discussion in the amendments of the need for and location of public transportation is circular. The transit plan is premised on certain densities and land uses. The land uses and densities in the amendments are premised on the existence of specific public transportation improvements, including the BRT system.

DEIR Comments

As is set forth above, the Foundation resubmits the comments on the DEIR which are set forth in my February 14, 2005 letter to Mr. Hellman. Please advise if you require another copy of this letter.

The Foundation reserves the right to respond to any changes in the DEIR, GPU or GDP amendments or to other comments on these documents.

Very truly yours,

Michael A. McAndrews

cc: Mr. David D. Rowlands, Jr.
Mr. Rick Rosaler
Mr. Christopher G. Patek

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Michael A. McAndrews
(213) 612-2449
mmcandrews@orrick.com

February 14, 2005

VIA FEDEX AND E-MAIL (PHELLMAN@CI.CHULA-VISTA.CA.US)

Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Re: Comments on Draft Environmental Impact Report ("DEIR")
City of Chula Vista General Plan Update

Dear Mr. Hellman:

This firm represents the Stephen & Mary Birch Foundation, Inc. (the "Foundation"). Set forth below are summary comments on the DEIR made on behalf of the Foundation.

Initially, the Foundation believes that a number of the changes proposed in the draft General Plan Update to the City's current general plan and the Otay Ranch General Development Plan are unnecessary, not responsive to community needs, premised on assumptions that in many cases are unrealistic, and in a number of instances are inequitable in their impact on various land owners affected by these changes. The Foundation will comment on the current draft General Plan Update in due course.

The following are the Foundation's comments on the DEIR:

V-4 1. Regional Technology Park. The General Plan Update proposes a Regional Technology Park covering a portion of what is now designated as Village 8 in the Otay Ranch General Development Plan. The DEIR does not sufficiently analyze the impact of this proposed use, and the underlying assumptions about the use are inaccurate.

(a) The DEIR analysis of the Regional Technology Park assumes that a university complex will be developed east of SR-125 and that the BRT system will be completed. The impact of siting the Regional Technology Park as proposed in the General Plan Update, and its impact on traffic, utilities, transportation requirements and the remaining factors analyzed in the DEIR, should be evaluated on the assumption that the university is not built, and that proposed transportation improvements are not completed. These are realistic alternative scenarios which require study in the DEIR.

RESPONSE

V-4 The Preferred Plan specifies that there would be a Town Center at the intersection of La Media and Rock Mountain Road with the eastern half of Village 8 being designated for a Regional Technology Park (RTP). Other Scenarios place mixed use at this intersection and do not designate an RTP on the western half of the Village. It is possible to construct differing scenarios with the components evaluated in the dEIR that were not necessarily included in the project description as part of the Preferred Plan or any of the Scenarios. Not all possible land use configurations were considered in the dEIR. Should a land use plan be proposed that differs from those analyzed in the dEIR, consideration will have to be given to the adequacy of the EIR to address the effects of that proposal.

ORRICK

V-5 (b) The Land Use and Transportation Element citywide objectives, in particular Objective 4 and Objective 5, require that adjacent land uses be compatible with one another. The DEIR does not adequately analyze whether the Regional Technology Park is compatible with residential and other proposed adjacent uses, including a high school. The proposed location of the Regional Technology Park isolates proposed residential development to the south and west, and separates this residential development from like uses in Village 7. If a Regional Technology Park is constructed at all, it should be sited further south, possibly adjacent to Otay Valley Road, to meet these LUT objectives.

V-6 (c) As is further discussed in Section 3, below, the DEIR should analyze whether the Town Center at the intersection of Rock Mountain Road and La Media Road is required or justified if a Regional Technology Park is not constructed.

V-7 2. Community Park. The General Plan Update designates approximately 82 acres in Village 4 for a "major" community park facility, which to some extent would eliminate park acreage in Village 2 and other villages. (The parks to be eliminated should be specified.) The DEIR does not analyze the impact of this change, compared to the uses designated in the current general plans, on traffic, convenience to proposed residential locations, and the integration of this park with surrounding land uses, which include open space (which includes critical and sensitive habitat) and industrial uses.

Additionally, the DEIR does not adequately discuss access to the proposed community park facility from Village 4, Village 7, Rock Mountain Road and La Media Road.

V-8 3. Establishment of Town Centers. The General Plan Update establishes a "Town Center" designation which provides higher density housing and commercial development than previously contemplated in "village cores", which to a large extent are replaced by the Town Center concept. The DEIR does not compare the cumulative impact of these changes from currently planned uses on the villages in question, or on regional concerns such as traffic, transportation and access from surrounding residential land uses. As is discussed in Section 4, below, the Town Center designations also need to be analyzed if proposed transportation improvements, including the BRT System, are not made.

V-9 The proposed Town Center at the intersection of Rock Mountain Road and La Media Road should be analyzed under the assumption that the proposed Regional Technology Park is not constructed. Matters to be considered are whether the increased density contemplated for this Town Center, and other increased residential densities surrounding it, would adversely impact the current Village 8 as a site for residential development. Impacts on traffic, utilities and transportation systems under this scenario should be analyzed.

PR-145

RESPONSE

V-5 The discussion of the RTP on page 166 of the dEIR indicates that the purpose of the RTP is to provide for a new employment center that provides for economic development and a stronger jobs/housing balance. The resulting jobs/housing balance in Otay Ranch enhances planning principles, as expressed in the existing GDP. These principles include creating balanced communities by providing work places in or near the residential communities; minimizing reliance on automobile use by siting employment close to residential communities; and awareness of the relationship between vibrant, healthy communities and having sufficient economic and employment opportunities located within the community. The proposed RTP is intended to bring employment opportunities to the Otay Ranch area. They are not considered incompatible with residential uses.

It should be noted that no specific uses are permitted as a result of the General Plan Update. Individual discretionary actions will be required for particular projects. These actions will be subject to CEQA and will, as necessary, consider specific land use compatibility. Without information concerning a specific project, further consideration of compatibility would be speculative.

V-6 Consideration of whether the Town Center at the intersection of Rock Mountain Road and La Media Road is required is a planning issue, and not an EIR issue.

V-7 The traffic analysis conducted for the Preferred Plan and each of the Scenarios considered the location of an approximately 80-acre park in Village 4 (Pages 50, 61, 72, and 94). Therefore, the impact of the change on traffic has been addressed in the transportation section of the document. The issue of "convenience" to the proposed residential locations is a planning issue and not a subject of the EIR. Consideration of the impacts of the proposed land use changes in the Otay Ranch area to sensitive biological resources is presented in Section 5.3 of the dEIR. Specific access to the community park in Village 4 will depend upon the design of the park and its relationship to Village 4 and Village 7. The park plan has not yet been developed and specific access from either Rock Mountain Road or La Media has not been established.

V-8 The Transportation Section 5.10 of the dEIR and the Transportation Study (Appendix E of the dEIR) analyzed the Preferred Plan and each of the Scenarios for the Town Center and neighboring uses. Other than a reference to traffic and transportation, the comment does not indicate what other cumulative affects should be considered. As noted on page 171 of the dEIR, the Town Center in Village Eight will contain a new Transit Station designed for the BRT. It increases multi-family residential densities accommodating intensified mixed-use commercial activities including retail, office and residential. The design of the Town Center Arterial promotes pedestrian orientation and provides an extensive grid-like street pattern to the village. The amendment also establishes a development envelope consistent with the City's MSCP Subarea Plan, and preserves Rock Mountain as open space

V-9 See Response to Comment V-4.

RRICK

Both the Town Center at the intersection of Rock Mountain Road and La Media Road and the university site Town Center east of SR-125 do not appear to be required, or are predicated on inaccurate assumptions, if the university proposal does not go forward or the Regional Technology Park is not constructed.

V-10 4. Bus Rapid Transit System. The General Plan Update's land use analysis, and the related analyses in the DEIR, presume that the BRT system will be constructed, and will follow alignments suggested in the general plan. Since there is no certainty that the system will be constructed, or completed in the manner contemplated by the DEIR, the land use designations in the General Plan Update need to be analyzed on the assumption that the system is not completed. This would include the impact on Town Centers, the Regional Technology Park, the university study area, and the Eastern Urban Center.

A number of statements in the DEIR appear to predicate the change from the "village core" concept to the Town Center concept on the need to justify an expansion of the BRT system. For example, in Section 5.1 of the DEIR (page 135) the following statement appears:

> "The increase in intensity and density of uses proposed [in Village 2] are necessary to support transit service to Village 2..."

Similar statements are made with respect to Village 4 and the Town Centers. This analysis is inapt. The proposed public transportation system should be designed to serve, and justified by, the transportation needs of a sensibly planned community. The community should not be planned (and, in this instance, appropriate land uses changed) to justify the construction of a public transportation system, the case for which cannot otherwise be made.

V-11 5. High School Site. The DEIR states that a specific site for a proposed Sweetwater Union High School District high school in the East planning area has not yet been determined. This is incorrect. Agreements have been signed for, and work has begun on, a high school site on the southeast portion of Village 7, adjacent to Rock Mountain Road. This impacts not only the validity and usefulness of the studies of the area in the DEIR, but requires additional analysis of proposed land adjacent uses to the high school site, including the Town Center for Village 8 and the proposed Regional Technology Park. The Regional Technology Park, located directly across the street from the high school site, does not appear to be a compatible or appropriate adjacent land use.

V-12 6. Otay Valley Road. The General Plan Update proposes, and the DEIR assumes, that Otay Valley Road, a long-established and planned road, will be eliminated west of La Media Road. There is insufficient consideration of the impact of this on access to open space and active recreation areas along the Otay River valley, as well as to existing and planned utility installations in that area.

RESPONSE

V-10 The land use discussion in the dEIR presumes that the BRT will exist. The circulation analysis, however, does not divert trips from area roads because of ridership on the BRT. As such, the impact analysis conducted for the General Plan Update represents a worst case analysis. Whether the community should be planned to promote public transportation or public transportation should be designed to serve a transportation need is a planning issues and not an environmental issue subject to CEQA.

V-11 The comment is incorrect in its assumption that the DEIR discussion is referencing the planned high school for Village 7. The DEIR discussion referenced in the comment does not apply to the approved high school currently under construction in Village 7, but rather the Preferred Plan's recognition that an additional high school will be necessary in the East Area, most likely in the east portion of the Otay Ranch Subarea. This future facility has been accommodated in the DEIR at a program level, with its land use acreage and impacts included in the analysis Eastern University District of the Otay Ranch Subarea. One potential location has tentatively been identified on the EUC and impacts associated with it addressed in the analysis for that district. However, no final location has been determined, pending a study of high school needs and potential locations by the Sweetwater Union High School District. Any future high school will require project-level review under CEQA at the time it is proposed.

However, the Sweetwater Union High District high school that was referenced in the comment is shown in Village 7 on the adopted Otay Ranch General Development Plan. It is also shown as a planned facility on the Preferred Plan for the General Plan Update. As such, it does not reflect an area of change, but the planned facility's land use is accommodated in both the Plan to Plan Analysis, Chapter 10, the No Project Alternative of the EIR, and in Chapter 5, the environmental analysis. As shown on Table 5.1-5, the 50-acre high school site is reflected in the Public type land use category for the Adopted General Plan and for the Preferred and three Scenarios for the General Plan Update.

V-12 The traffic analysis conducted for the dEIR considered the elimination of Otay Valley Road west of La Media. As indicated in Chapter 5, Section 5.10, Page 350, elimination of the referenced Otay Valley Road has been accommodated by the reclassification of Rock Mountain Road from a four-lane Class I Collector to a six-lane Prime Arterial. The elimination of the referenced section of Otay Valley Road occurs in an area designated for preservation in the City's Otay Valley Preserve. The circulation impacts identified in the dEIR considered the elimination of this roadway segment and the change to the status of Rock Mountain Road. The Otay Ranch Resource Management Plan provides access, staging areas, trails and appropriate buffering as described on Page 148 of the dEIR. As started on Page 167 of the Final EIR, access to open space and active recreation areas will be addressed at the SPA Plan level.

ORRICK

Additionally, given the uses and densities proposed in what is currently Village 8, and in those portions of the East planning area located east of SR-125, the lack of another arterial road connecting Main Street to these areas will overcrowd the east-west roads which are shown in the General Plan Update. The traffic impact of the elimination of Otay Valley Road west of La Media Road, in light of the intense uses in these eastern areas, is not properly analyzed or justified

V-13 7. Certain Open Space Designations. The DEIR preferred plan land uses map (Figure 3-6 to the DEIR) shows an irregularly shaped parcel south and west of the intersection of Rock Mountain Road and La Media Road (adjacent to the proposed Town Center at that intersection) as Open Space. This parcel is not designated as open space under the MSCP, and in prior land use maps is shown as development area. The DEIR should explain the proposed use and analyze the impact of this change.

Additionally, Figure 3-6 designates the active rock quarry in the same vicinity as Open Space. This area is not within the jurisdiction of the City of Chula Vista, and in any case should be designated "not a part" rather than given a land use designation in the General Plan Update.

V-14 8. Health Care Facilities. The DEIR does not discuss the requirements for health care facilities in the East planning area. The propriety of the land use designations in the draft General Plan Update are affected by the location (or the absence) of health care facilities in the East planning area. These facilities will have material environmental impact and should be a part of the DEIR analysis.

V-15 9. FAA Facility. The DEIR, and the preferred land use proposal being analyzed, fail to recognize the Federal Aviation Administration VORTEC site located in Village 7. This site is not available for development, and most likely will not be in the foreseeable future. It should be shown as "not a part" on the land use map and the assumptions regarding land uses, adjacencies, traffic and other environmental impacts in the affected area adjusted to reflect this fact.

The Foundation reserves the right to submit additional comments at public hearings and otherwise, and to respond to changes in the DEIR made in response to the foregoing.

Very truly yours,

Michael A. McAndrews

cc: Mr. Chris Patek

DOCSLA1:491383.3

PR-147

RESPONSE

V-13 The irregular shaped parcel to the southwest of the Town Center referenced in the comment is identified in the Biology section of the dEIR as an area that is changed to "development" under the GDP/RMP/MSCP. As such, the area is not restricted from development as part of the City's biological resources open space preserve system. However, under the proposed General Plan Update, the area will retain the Open Space designation as shown on the adopted General Plan. Thus no change for the area will result of the proposed action.

V-14 Provision of health care facilities is not an issue area to be evaluated in this document pursuant to CEQA. While the Public Facilities and Services Element of the General Plan Update discusses the provision of health care and other social services their provision in and of themselves is not an environmental issues under CEQA. Under the existing and proposed General Plan and Otay Ranch General Development Plan, health care facilities are specific land uses that are permitted within land use designations that accommodate commercial and office professional zones, or such facilities can be accommodated in the PC Zone (Planned Community) with an approved Sectional Planning Area (SPA) plan. The provision of facilities supporting health care activities could be future actions subject to CEQA. The physical effect of permitting those facilities would be subject to review when proposed, and consideration of specific development at this time is speculative.

V-15 The City has previously evaluated the planned land use for Village 7 under an adopted SPA plan. Although the VORTEC was not a part of the approved SPA, future land uses and density were attributed to the site in accordance with the adopted Otay Ranch GDP. This land use was accommodated for and analyzed in the EIR for the Village 7 SPA. Alternative land uses for the Vortec site are not proposed to change in any of the land use Scenarios or in the Preferred Alternative. The city acknowledges that the future planned uses in the area occupied by the Vortec cannot occur until which time the Vortec is moved and a project-level SPA amendment is approved with CEQA review. The existing Vortec is, however, reflected in both the baseline condition evaluated in Chapter 5 and under the No Project Alternative.

VERBATIM TRANSCRIPT
CLOSE OF PUBLIC REVIEW PERIOD FOR
DRAFT EIR 05-01
FEBRUARY 14, 2005

Michael McAndrews - "Attorney representing Stephen & Mary Birch Foundation, Orrick Herrington & Sutcliffe, 777 S. Figueroa St., 32nd Floor, Los Angeles CA 90017. We submitted written comments earlier today and I'll leave a copy with the Clerk. I do want to highlight one or two thoughts. These comments pertain to the east planning area where the Foundation owns a significant amount of land.

V-16 The fundamental issue that the Foundation has is that the DEIR in analyzing the GPU analyzes a fundamental change in the land use for the east planning area. This change is predicated on what we feel are inappropriate assumptions. The City desires a university; the plan plans for a university regardless of feasibility. A regional technology park in theory could benefit a university; so we'll plan a regional technology park. Town centers would benefit a regional technology park and the university; so we'll plan town centers. The bus rapid transit system, if we have additional density in a town center, would be appropriate for the laudable goal of public transit, but these hypothesis in the GPU and in the DEIR fail to do a fundamental thing; that is, provide the City's decision-makers, yourselves and the City Council with a comparison to the changes from the existing General Plan and Otay Ranch General Development Plan.

The problem with the DEIR is that it fails to provide information to you and the City Council as to, if in fact these occurred. What's the impact; the differential impact from the existing plans that are out there now.

V-17 Two problems; the first is, there is no analysis of the alternatives of any of these components not occurring; the university regional technology park, bus rapid transit system, town center. If these things do not occur for reasons that are extrinsic to what's in the plan; what is the impact on the environment and what is the impact on the decision-makers.

V-18 The second is; where is the analysis of the difference between what is current planned and what is set forth in the General Plan Update. That comparative analysis is critical to the decision that you and the City Council will make going forward on this General Plan.

V-19 I would note in passing, that changes beside being fundamentally different from the existing plan has strikingly different impacts on the various land owners and the impacts surprisingly follow ownership lines very, very closely.

In addition to these fundamental issues there are two or three things that are not in the EIR that need to be.

V-20 The first is; Village 7 currently contains an agreed high school site for Sweetwater Union High School District's next high school at the intersection of

RESPONSE

V-16 A comparison of the affects of the changes proposed by the Preferred Scenario to the Adopted General Plan is provided in Chapter 10.0, Plan to Plan – No Project Alternative. As stated on Page 604 of Chapter 10, "In the event that the plan update is not approved, the currently adopted General Plan would remain in effect." In the Chapter 10 analyses, comparisons are provided between the environmental effects of the adopted General Plan in effect today to that proposed under the Preferred Scenario. Each of the existing elements of the adopted General Plan is listed, along with a thorough description of existing land use categories. An analysis of the environmental effects of the proposed GPU on each of these elements as compared to the Adopted Plan is then provided.

V-17 In Chapter 5, the components of the GPU mentioned in the comment have been evaluated as part of the Preferred Alternative and in various combinations of Scenarios 1 through 3. In addition, these components were addressed in the discussion of the No Project Alternative in Chapter 10 of the dEIR. The comment asks where are the impacts discussed if the regional technology park, bus rapid transit system, and town center do not occur. This situation would be represented by the Plan to Ground Analysis as presented in Chapter 5, Environmental Impact Analysis. As stated on Page 89, "(the) plan-to-ground analysis compares the proposed General Plan Update with existing baseline conditions.

The impact on the environment if these components do not occur is represented by the existing baseline conditions for each of the issue areas (e.g. land use, landform alteration, transportation, biological resources). In addition, a comparative evaluation of the impacts on each issue area that compares the preferred plan to each of the three scenarios is provided. For example, Table 5.10-3, Page 353 provides the levels of service for major roadway segments in the east under the existing condition, the Preferred Plan, and the three scenarios.

V-18 As stated in Chapter 11, page 636, together with the three land use scenarios and the Preferred Scenario, four additional alternatives were evaluated as required by CEQA. One of these, the No Project Alternative, described fully in Chapter 10, would continue to implement the adopted General Plan and General Development Plan. In other words, it provides a comparison between what is currently planned and what is proposed under the Preferred Alternative. Each major issue area included in the detailed impact analysis in Chapter 5 has been considered in the analyses for the No Project Alternative and the other three alternatives--the Reduced Project Alternative, the Community Character Alternative, and the Reduced Traffic Impact Alternative. See also the Response to Comment V-16.

V-19 Comment noted. The comment does not pertain to the adequacy or content of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body.

V-20 See Response to Comment V-11.

Rock Mountain Road and SR-125; its not accounted for and I would note that there are significant land use changes adjacent to that site (a technology park and town center).

V-21 Secondly, there is no real analysis of the necessity for health care facilities in the east planning area. Whether the health care facilities are built or not, that impact needs to be looked; it has significant environmental impact.

V-22 The third is, there is no treatment of the FAA's vortec site in Village 7. Its treated as part of the planning area; its in fact, not available for development and won't be.

V-23 Finally, the elimination of Otay Valley Road west of La Media cuts off a major source of access to the entire east planning area and is covered very briefly in the DEIR and we don't feel adequately.

Thank you."

RESPONSE

V-21 See Response to Comment V-14.

V-22 See Response to Comment V-15.

V-23 See Response to Comment V-12.

CROSSROADS II

RESIDENTS WORKING TOGETHER TO KEEP CHULA VISTA A GREAT PLACE TO LIVE

Will T. Hyde
Co-Founder, 1919-2004

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President

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Jim Peterson

Fred Cowles

Carlene Scott

Gerry Scott

November 2, 2005

Steve Power AICP
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista CA 91910

HAND DELEIVERED AT PLANNING COMMISSION PUBLIC HEARING

SUBJECT: Comments on Recirculated Draft Environmental Impact Report
Proposed City of Chula Vista General Plan Update

Dear Steve,

Crossroads II has reviewed the proposed General Plan Update (GPU) Recirculated Environmental Impact Report (RDEIR) and finds that it is inaccurate and inadequate in disclosing environmental impacts that may result from adoption of the GPU.

W-1 We believe that the RDEIR is in violation of CEQA in that it fails to explain how the timing of the release of this document does not constitute "piecemeal" planning in that it is being released just before anticipated release of EIRs for the Bayfront and Urban Core Specific Plan. The CEQA Guidelines specifically state, "This section follows the principle that the EIR…must show the big picture of what is involved."

We have, in addition to the above comment, attached specific comments on various sections of the RDEIR.

We look forward to receiving a copy of the Final EIR.

Patricia Aguilar
President

ATTACHMENT – 8 pages

262 Second Avenue Chula Vista CA 91910 619.427.7493 FAX 619.691.1651
e-mail: xroads2@cox.net website: crossroads2.org

RESPONSE

W-1 This comment states that the timing of the GPU constitutes piecemealing in that it is being released before the anticipated release of the EIRs for the Urban Core Specific Plan and the Bayfront. The dEIR for the GPU is not piecemealing. The GPU is a program level document that establishes general land use categories and densities for the Urban Core.

The Urban Core Specific Plan will be consistent with the GPU and will constitute the next level of project refinement and detail. Site specific uses and development standards will be established in the Urban Core Specific Plan. It is appropriate that the Urban Core Specific Plan be considered after adoption of the GPU since it will serve to implement the policies and objectives established by GPU for the Urban Core area.

As discussed in the dEIR (pages 584-585), the Port of San Diego is the lead agency for the proposed Chula Vista Bayfront Master Plan. Only a portion of the actual Bayfront area is within the City of Chula Vista. The Notice of Preparation for the Bayfront Master Plan EIR describes the construction of approximately 2,000 residential units and over 1,000,000 square feet of retail and commercial use in the Bayfront area. The dEIR considered land use designations for the Bayfront Planning Area under the adopted General Plan which constitutes a worst case scenario. The cumulative analysis was based on the existing General Plan and the proposed Master Plan, and found that development under the adopted General Plan resulted in greater impacts.

TRANSPORTATION

The Transportation section of the Recirculated Draft EIR (RDEIR) sets an inappropriate threshold for judging the significance of traffic impacts due to adoption of the GPU. Further, it does not fully disclose the traffic impacts that could occur as a result of adopting the GPU. Specifically:

W-2 (1) The City of Chula Vista has an adopted a traffic circulation threshold. It is:

> *Citywide – Maintain LOS C or better, except LOS D can occur for no more than two hours during peak periods.*
> *West of I-805 – Signalized intersections that do not meet the former standard may continue to operate at their 1991 LOS, but should not worsen.*

Threshold 2 (Circulation Impacts) in the Transportation section of the RDEIR establishes a completely new traffic circulation threshold that has NOT been adopted by the city, nor have any public hearings been held on adopting a new threshold. The FEIR must revise Threshold 2 and reanalyze traffic impacts using the adopted traffic circulation threshold as the basis for determination of significance.

This issue was raised in our September 10, 2004 response to the NOP. In addition, this same error occurred, and was pointed out during the comment period on the December 2004 version of this DEIR.

W-3 (2) The RDEIR does not disclose the traffic model assumptions that are used in the Transportation analysis. Table 1.4-1 in Appendix E identifies 11 analysis scenarios (model runs) that offer various combinations of several assumptions, including differing assumptions about land uses in Otay Mesa, whether or not SR-125 is assumed to be a toll road or a freeway, and differing assumptions about whether or not the Regional Transit Vision is implemented or not. It is impossible to judge the validity of the traffic analysis without knowledge of the most fundamental assumptions behind them. A discussion regarding which of the 11 assumption scenarios is used in the traffic analysis, and why that particular one is used, must be incorporated into the FEIR to fully inform the decision-makers and public.

W-4 Other undisclosed assumptions include:

- Assumptions made regarding Bayfront land uses,
- Assumptions regarding potential grade separated-trolley crossings. **This issue was raised in our September 10, 2004 response to the NOP.**

RESPONSE

W-2 This comment states that the transportation section sets an inappropriate threshold for judging the significance of traffic impacts. The comment references the GMOC threshold for corridors of LOS C except for a period of no more than two hours during which LOS D can occur, with the inclusion of the proposed project. This is a short-term corridor threshold used to evaluate specific projects. The existing performance standard of LOS C is not appropriate for the long-range analysis in the GPU EIR. See Response to Comment M-25.

W-3 This comment requests a disclosure of traffic model assumptions that are used in the analysis. It questions which of the 11 assumption scenarios was used in the traffic analysis and why they were used. The traffic technical study reports 11 model runs that were used as part of the evaluation of the General Plan Update. The impact analysis of plan alternatives discussed in the dEIR was based on ". . . Year 2030 conditions based on a plan-to-ground assessment . . ." (Appendix E:Page 33and Page 349 of the dEIR). The model runs associated with this analysis are specified as Scenarios II, III, IV, and V as addressing Scenarios 1, 2, 3, and the Preferred Plan and described in Table 1.4-1 of the traffic technical report. The dEIR has been revised to include Table 1.4.1 as follows:

The project's circulation impacts were determined based on a comparison of long-term future conditions to existing conditions (i.e., "plan-to-ground"). The traffic implications of proposed land use/transportation network alternatives were evaluated using the SANDAG TRANPLAN regional traffic model, which is based on Series 10 employment and population projections for the San Diego region. This computerized model takes land use and transportation network information as inputs and estimates the volumes of traffic on existing and future roadways under long-term future conditions using the four-step Urban Transportation Planning Process. Table 5.10-3 summarizes the land use and network assumptions for each alternative evaluated in the study. The planning "horizon year" for this study is the Year 2030. Regional transportation infrastructure was modeled using SANDAG's "reasonably expected" Mobility 2030 assumptions. The impact analysis assumed that the city was built out in 2030, but that the surrounding area was consistent with the SANDAG land use assumptions for the year 2030.

W-4 This comment states that the dEIR does not disclose the modeling assumptions concerning the Bayfront and grade separated trolley crossings. The comment indicates that Bayfront land uses and grade separated trolley crossings were not specified. The traffic analysis assumed the currently adopted circulation system except as modified by the network changes identified on pages 350–353 of the dEIR.

The traffic analysis did not assume grade separated trolley crossings. The analysis used the adopted Bayfront Master Plan as explained on pages 584-585 of the dEIR. The effect of grade separation was evaluated, but the impact analysis assumed the worst case, no separation condition. This analysis evaluated different options for the trolley line to pass beneath E Street and H Street. In all cases, the traffic study recommended that H Street be constructed as a six-lane roadway from I-5 to Broadway, regardless of the option selected given high forecasted volumes on that segment. The discussion of grade separation can be found in Appendix A, Benefits of Trolley Grade Separation, to the traffic technical study (see Appendix E of the dEIR).

W-5 (3) The RDEIR fails to disclose the potential impact on city streets due to the fact that SR-125 will be a toll road. Because it will be a toll road, many people will use city streets to avoid paying the toll. "Toll avoidance" behavior is a known phenomenon among traffic engineers. Published studies have examined and verified it. The failure to disclose, discuss and analyze this issue in the RDEIR is especially egregious in this case because the GPU proposes a circulation plan that provides a free, parallel alternative to SR-125 – the combination of La Media and Otay Lakes Rd. between SR-905 and Bonita Rd.

W-6 (4) Further, the RDEIR does not disclose the fact the City of San Diego is considering changes to the Otay Mesa Community Plan. New land uses in Otay Mesa may put additional traffic pressure on La Media- Otay Lakes Rd., which will join SR-905 in Otay Mesa to Bonita Rd. in Chula Vista. Because the RDEIR does not disclose the assumptions underlying the Transportation analysis, the decision-maker cannot know what Otay Mesa land use assumptions are being made, and therefore cannot come to an informed judgment regarding the validity of the traffic analysis. (See item 2 above.) The FEIR must explicitly disclose and analyze the Otay Mesa land use issue as it may affect traffic in Chula Vista.

RESPONSE

W-5 This comment states that the dEIR fails to disclose the potential impact due to the fact that SR-125 will be a toll road. As indicated on page 31 of the traffic technical report (see Appendix E), "All Year 2030 scenarios assume that SR-125 will operate as a tollway." The dEIR has been revised to include the following:

> The future condition was determined for the Preferred Plan and each of the scenarios was evaluated by comparing the existing level of service to the future levels of service by scenario (see Table 5.10-4). In addition, all Year 2030 scenarios assume that SR-125 will operate as a tollway. The following results are organized by each component of Threshold 2.

The impact analysis presented in the dEIR was based on this assumption, which is the most conservative.

W-6 This comment states that the dEIR does not disclose the fact that the City of San Diego is considering changes to the Otay Mesa Community Plan. The analysis did consider the potential Otay Mesa Community Plan under consideration by the City of San Diego. See Response to Comments E-6 and E-7 Pages 50 and 51 of the traffic technical report discuss the Otay Mesa Community Plan update being considered by the City of San Diego. That discussion concluded that:

> Given the relatively limited and localized impacts associated with the Otay Mesa community plan update under Buildout conditions, it is concluded that results of the analysis contained in Section 1.4 and 1.5 of this report are valid in the context of the City of San Diego's proposed action. No additional analysis is recommended.

Sections 1.4 and 1.5 as referred to in this conclusion are the basis for the impact analysis and significance conclusions presented in the dEIR.

AIR QUALITY

Threshold 1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

W-7 The RDEIR is inadequate in that it fails to disclose feasible mitigation measures for conflicts with applicable air quality plans, which is identified as a significant adverse impact that can only be mitigated by changing the RAQS, which are not under the jurisdiction of the city. Mitigation measures that can be implemented by the city include: reduction in proposed density; seeking grants that would allow the city to reward people who purchase clean vehicles or install solar power; and requiring better energy efficiency in construction of new buildings. While these mitigation measures will probably not reduce the impact to the Conflict threshold to less than significant, these and other such measures would reduce the significance of the impact somewhat, are under the jurisdiction of the city, and should be identified in the FEIR.

Threshold 4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

The RDEIR incorrectly analyzes impacts of the GPU in relation to Air Quality Threshold 4. The RDEIR concludes, "The potential for development under the preferred plan to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating..." But this conclusion is unrelated to the threshold. The threshold is not "violate an air quality standard" or "contribute to an existing violation." The threshold is, "Expose sensitive receptors to substantial pollutant concentrations." So, while the Policy EE-6.4 may self-mitigate against violating an air quality standard or contributing to an existing violation, it does not self-mitigate against exposure of sensitive receptors to pollutant concentrations.

On the contrary, the GPU may deliberately expose sensitive receptors to substantial pollutant concentrations. The California Air Resources Board (CARB) *Air Quality and Land Use Handbook* (April 2005) contains the following:

> *Recommendation*
> *Avoid siting new sensitive land uses within 500 ft. of a freeway, urban roads with 100,000 vehicle/ day, or rural roads with 50,000 vehicles/day.*

The GPU ignores this recommendation form the CARB, which is based on an extensive series of health studies. The GPU deliberately sites *"new sensitive land uses"* (high density, residentially designated land) within 500 ft. of I-5. This impact is NOT self-mitigated by Policy EE-6.4. The FEIR should fully disclose these facts, should find that the impact of the GPU on sensitive

RESPONSE

W-7 This comment states that the dEIR is inadequate because it fails to disclose feasible mitigation measures for conflicts with applicable plans. The conclusion in the dEIR that the proposed General Plan Update will conflict with applicable plans is based on the fact that because the proposed land use changes would be inconsistent with the adopted General Plan upon which the RAQS was based, the General Plan Update would not conform to the current RAQS (see page 415 of the dEIR). If a project is inconsistent with the City's General Plan, it is not consistent with the growth assumptions in the RAQS. Consequently, the proposed General Plan Update would conflict with the adopted air plan. Issues associated with reducing air quality impacts are discussed under subsequent thresholds.

As discussed in Section 5.11.3.1 (page 399) of the dEIR, the City has a CO_2 Reduction Plan that aims to reduce CO_2 emissions to 80 percent of 1990 levels by the year 2010. The plan established 20 action measures in order to achieve this goal. Several of those measures are directly supported by the proposed General Plan Update. These include:

- Enhanced pedestrian connections to transit
- Increased housing density near transit
- Site design with transit orientation
- Increased land use mix
- Bicycle lanes, paths, and routes
- Increased employment density near transit

Although measures, such as pedestrian trails, on-street bicycle paths, and an emphasis on public transit, have been incorporated into the proposed General Plan Update to lessen air quality impacts, because the General Plan Update is not consistent with the growth assumptions used to develop the RAQS, there is a conflict with an applicable plan. It should be noted, however, that the nature of the General Plan Update's land use plan and policies could very well represent an improvement to air quality, in that it stresses walkable communities and transit oriented/mixed use development.

AIR QUALITY

Threshold 1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

W- The RDEIR is inadequate in that it fails to disclose feasible mitigation measures for conflicts with applicable air quality plans, which is identified as a significant adverse impact that can only be mitigated by changing the RAQS, which are not under the jurisdiction of the city. Mitigation measures that can be implemented by the city include: reduction in proposed density; seeking grants that would allow the city to reward people who purchase clean vehicles or install solar power; and requiring better energy efficiency in construction of new buildings. While these mitigation measures will probably not reduce the impact to the Conflict threshold to less than significant, these and other such measures would reduce the significance of the impact somewhat, are under the jurisdiction of the city, and should be identified in the FEIR.

Threshold 4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

W-8 The RDEIR incorrectly analyzes impacts of the GPU in relation to Air Quality Threshold 4. The RDEIR concludes, "The potential for development under the preferred plan to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating..." But this conclusion is unrelated to the threshold. The threshold is not "violate an air quality standard" or "contribute to an existing violation." The threshold is, "Expose sensitive receptors to substantial pollutant concentrations." So, while the Policy EE-6.4 may self-mitigate against violating an air quality standard or contributing to an existing violation, it does not self-mitigate against exposure of sensitive receptors to pollutant concentrations.

On the contrary, the GPU may deliberately expose sensitive receptors to substantial pollutant concentrations. The California Air Resources Board (CARB) *Air Quality and Land Use Handbook* (April 2005) contains the following:

> *Recommendation*
> *Avoid siting new sensitive land uses within 500 ft. of a freeway, urban roads with 100,000 vehicle/ day, or rural roads with 50,000 vehicles/day.*

The GPU ignores this recommendation form the CARB, which is based on an extensive series of health studies. The GPU deliberately sites *"new sensitive land uses"* (high density, residentially designated land) within 500 ft. of I-5. This impact is NOT self-mitigated by Policy EE-6.4. The FEIR should fully disclose these facts, should find that the impact of the GPU on sensitive

RESPONSE

W-8 This comment states that the dEIR incorrectly analyzes impacts in relation to Threshold 4 in that it concluded that the potential for development under the Preferred Plan to result in a land use that would violate an air quality standard or contribute to an existing violation is self mitigating. The comment addresses the statement on page 419 of the dEIR in Section 5.11.5 Mitigation Measures. This statement is an error and refers to Threshold 2 rather than Threshold 4. The text of this paragraph has been revised.

The analysis of Threshold 4 is presented on Pages 403 and 415, with the Level of Significance Prior to Mitigation presented on Pages 416 and 417 of the dEIR. That conclusion is that the potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because Policy EE 6.4 of the proposed General Plan Update avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of a highway. In addition, pollutant concentrations resulting from CO hotspots is self-mitigated and not significant because the adoption of Policy LUT 14.2 requires the City to optimize and maintain the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels.

The statement under Section 5.11.5 on Page 419 has been modified in the Final EIR to reflect this conclusion. There are no new impacts as a result of the modification.

The California Air Resources Board Air Quality and Land Use Handbook is "advisory and does not establish regulatory standards of any kind." However, comments will be forwarded to the appropriate City Decision making body.

receptors (Threshold 4) is significant, and then either propose mitigation measures or a new alternative to the Preferred Plan and its Scenarios that precludes new residential development within 500 ft. of freeways.

PUBLIC SERVICES

W-9 Parks and Recreation

The Parks and Recreation sub-section of the Public Services section of the RDEIR contains an error in table 5.13-12. This table identifies two parks in the Central area that footnote 2 calls "proposed but not yet programmed." The Public Facilities and Services element of the GPU (Fig. 8-8/PFS-39) refers to the Woodlawn Avenue/F St. park as a "potential" park, not a future park. As such it should not be counted in a table labeled "Existing and Future Park and Recreation Facilities."

W-10 Further, the RDEIR is incorrect when it concludes that "Impacts to the provision of park and recreation services would be avoided because...complying with Objective GM1." Objective GM1 is "Concurrent public facilities and services." The policies under this objective refer to the threshold standards in the city's Growth Management program. However, the city's Growth Management threshold for parkland only applies east of I-805. (See page 489 of the RDEIR.) Therefore, there is no city standard requiring that parks west of I-805 be constructed concurrently with need. Therefore, impacts to provision of park and recreation facilities west of I-805 are not avoided by complying with Objective GM1, because GM1 only applies east of I-805. Therefore, the RDEIR conclusion that impacts to provision of parks and recreation services are avoided by compliance with GM1 is incorrect. The FEIR should conclude that impacts to provision of park and recreation services are potentially significant due to the fact that GM1 dos not apply city-wide.

Schools

W-11 The Schools sub-section of the Public services section of the RDEIR is misleading because it contains a critical internal contradiction regarding the number of additional elementary schools needed as result of new development west of I-805. Table 5.13-10 indicates that under the Preferred Plan 3.87 additional elementary schools are needed in northwest, 1.75 additional elementary schools are needed in southwest, and 2 additional elementary schools are needed in the east. Then the following conclusion is stated: "As seen in Table 5.13-10, no additional elementary schools would be required in the west upon build out of the Preferred Plan; two would be needed in the east." (page 478) Either the above conclusion or the table is incorrect.

The issue of providing additional schools on the west side is a critical one for the decision makers and public. As the EIR states (page 478), "School sites in western Chula vista have little capacity for facility expansion. A significant level of funding, which is not currently

RESPONSE

W-9 The comment states that there is an error in Table 5.13-12 of the GPU EIR. It states that because Fig. 8-8 of the GPU PFS depicts the Woodlawn/F St. park as a "Potential" park, and the footnote to Table 5.13-12 of the EIR states that the park is "proposed but not yet programmed" that the park should not be counted in the table 5.13-12 titled "SUMMARY OF EXISTING AND FUTURE PARK AND RECREATION FACILITIES". Figure 8-8 of the GPU PFS depicts existing, potential and future parks. Potential and Future parks are both planned for; however, Potential parks are not a part of an adopted implementing plan and Future parks are. As a result and to add clarity, a footnote will be added to Table 5.13-12 of the GPU EIR stating "Note: Future parks and recreation facilities include proposed parks that are not yet planned or programmed"

W-10 This comment states that the dEIR is incorrect when it concludes that impacts to the provision of park and recreation services would be avoided by complying with Objective GM1. The conclusion that there are no impacts to the provision of parks does not rely on Objective GM 1.

Section 5.13.5.4, Level of Significance Prior to Mitigation, indicates that the Chula Vista Municipal Code, Section 17.10 (the Park Development Ordinance – PDO) applies a standard of three acres of park land for every 1,000 people to all new development, and since the park demand forecast as resulting from the adoption of the Plan or any of the Scenarios results from population associated with new development, compliance with the PDO assures provision of three acres of dedicated park land for every 1,000 people for all new development. As a result, there is no significant impact to parks as a result of the adoption of the proposed General Plan Update. Reference to Policies PFS 14.5, PFS 15.7 and GM 1.1 and 1.11 are also noted as reducing the potential for impacts related to the provision of parks.

W-11 The comment states that the schools subsection of the public services section contains a critical contradiction. See Response to Comment N-1.

available, would be required to add the needed capacity and upgrade outdated classrooms." For these reasons, the issue of the number of new elementary schools needed on the west side must be clarified in the FEIR.

HOUSING AND POPULATION

Threshold 1: Substantial Population Growth

W-12 The RDEIR describes the regional process of forecasting growth, whereby SANDAG distributes regional housing and population growth figures. Although population is acknowledged as a significant impact, the RDEIR fails to acknowledge or analyze the fact that the proposed GPU proposes an increase in population and housing **well beyond** SANDAG's forecast. The FEIR must disclose this fact, and then analyze its rationale as well as its potential environmental consequences for the local area. The same comment applies to the GROWTH INDUCEMENT section of the RDEIR.

Thresholds 2/3: Displaces Substantial Numbers of Existing Housing/People

W-13 This section of the RDEIR remains as inadequate as the December 2004 edition, and for the same reasons. There is no quantified or geographical or affordability analysis of housing units that would be displaced by the proposed GPU. This section concludes that housing impacts are less than significant because displaced housing units can be accommodated within the General Plan area. The nature of the existing housing that would be impacted is not disclosed. If older, lower cost housing is lost, newer housing will not replace this housing in kind, and people will be displaced.

The analysis seems to rest on two assumptions to conclude that the impact is not significant: 1) the timing is considered "temporary" and 2) the planned number of units allowed under the General Plan exceeds the number to be removed with implementation of the General Plan. Neither assumption is adequate justification for a less than significant conclusion. A temporary impact does not mean it is not significant, particularly because temporary in General Plan timeframes (build out by 2030) could be a long time. Without further analysis both significance thresholds of housing represent significant impacts that should have been disclosed in the RDEIR. The re-designation and intensification of land use categories, particularly within the Urban Core area, has the potential to displace substantial numbers of existing homes and people, and represents a potentially significant impact that must be addressed in the FEIR.

This issue was raised in our September 10, 2004 response to the NOP.

RESPONSE

W-12 SANDAG's growth projections are based on the current adopted land use plans and policies as they stand today. Therefore, SANDAG used the adopted General Plan land uses to determine the projected population growth. This represents the increase in population from SANDAG's projections and the General Plan Update projections. SANDAG produces these long-range forecasts of population, housing, employment, and demographic characteristics approximately every four years. The growth projections will be revised by SANDAG based on the General Plan Update once SANDAG forecasts their long-range projections again.

Page 579 of the dEIR concluded that while there will not be a substantial increase in regional population as a result of the proposed Preferred Plan or any of the Scenarios, there will be a substantial increase in the population in the City of Chula Vista compared to the existing condition. This is considered a significant impact. However, the proposed General Plan Update is specifically intended to provide for the orderly growth of the City of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted by land use policy would provide needed housing for all income levels, create compact and pedestrian-friendly urban development, and protect natural resources. The General Plan Update would result in a more inclusive community, improve the balance between housing and employment, and foster a stable economic base and diverse employment opportunities (Page 578 of the dEIR).

The General Plan Update would provide guidance to citizens, developers, City staff, and decision-makers over the next 25 years, through the Year 2030. It pays particular attention to "Smart Growth" principles being promoted throughout the country, California, and the region through SANDAG's Regional Comprehensive Plan. The Smart Growth principles are incorporated in the General Plan's Vision and Themes, which guide the Land Use Plan and also provide the basis for many of the Land Use and Transportation Element's policies (Pages 578 and 579 of the dEIR).

The dEIR concluded that growth inducing impacts from implementation of the General Plan Update were significant and not mitigated. Page 601 of the dEIR states that because the General Plan establishes land uses that can accommodate growth, thereby removing a barrier to growth in the city, it is growth inducing. The issues discussed in the Environmental Impact Analysis section of the dEIR address the direct and indirect effects of this growth. Since there are impacts resulting from issues associated with this growth, the growth-inducing impacts of the proposed General Plan Update area considered significant and not mitigated.

W-13 See Response to Comment M-5.

LANDFORM ALTERATION/AESTHETICS

Threshold 1: Scenic Resources and Vistas

W-14 The RDEIR concludes that implementation of policies in the GPU will not result in a significant impact to scenic resources because the policies provide opportunities to improve the city's appearance, and refers to Policy 13.4 that requires special design considerations adjacent to designated scenic routes.

However, the RDEIR fails to disclose that the number of designated scenic routes has been substantially reduced from the current adopted General Plan. The FEIR should analyze this reduction, explain the rationale for it, and consider the proposed reduction in scenic routes to be a potentially significant impact on scenic resources.

RESPONSE

W-14 This comment states that the dEIR fails to disclose the number of designated scenic routes that have been substantially reduced from the current adopted General Plan. The Preferred Plan increases the mileage of the designated scenic routes. Scenic Routes are designated in Figure 5.4 of the GPU.

ALTERNATIVES

W-15 The scenario forming the basis for the "Reduced Project Alternative" is not credible. This scenario was developed by "taking a combination of the least developed, highest park and open space components for the Preferred Plan and each of the scenarios for the areas that change." This does not represent a real alternative; instead it is just a combination of various elements of the proposed plan.

A better way of defining the "Reduced Project" alternative would be to use SANDAG's forecast for the region, which would reduce projected 2030 population by about 20,000 people. This should form the basis of the "Reduced Project" alternative.

RESPONSE

W-15 See Response to Comments M-8 and M-9.

SIERRA CLUB

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November 2, 2005

Mr. Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: Sierra Club San Diego Chapter comments on the DEIR for the Chula Vista General Plan Update

Dear Mr. Hellman:

The Sierra Club San Diego Chapter welcomes the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Chula Vista General Plan Update (GPU). A Sierra Club San Diego Chapter representative served on the Environment, Open Space, and Sustainable Development Subcommittee.

Some of the changes to the EIR do more honestly evaluate the effects of the GPU. More significant and unmitigatable impacts are now acknowledged. This makes a stronger case for not accepting the GPU in its current form.

Recirculation of the DEIR was a good move but it is still premature. The housing element is currently being revised. Waiting for this element would hopefully provide mitigation for some of the plans deficiencies, particularly the displacement issues. It is difficult to understand why the city of Chula Vista is in such a big hurry to rush through its GPU. Other jurisdictions are taking more time and allowing for more public discussion and contemplation.

Baseline:

X-1 Baselines should be on the street evaluations of present conditions not an unimplemented existing plan or an outdated housing element. In particular the DEIR should not use citywide averages. 2000 Census data sbows the percentage of the population below the federal poverty level for the 25 census tracts in Chula Vista west of the 805 is 15,712 out of 107,695 people, or 15%. The numbers for eastern Chula Vista are 3,169/72,841 or 4.3%. The percentage for the entire county is 338,399 out of 2,722,408, or 12%. This is a huge difference between the east and the west. The GPU and the DEIR do not adequately address these differences.

X-2 The population and housing section needs to insure these people are not displaced. If some relocation is necessary to implement this plan it must be mitigated fully by payment of moving expenses, simultaneous replacement of housing affordable to the people displaced through a program funded by the developer and/or government and be acceptable to the people involved.

RESPONSE

X-1 The EIR used the current population and the total number of housing units within each of the planning areas for the baseline comparisons (page 574 and Table 5.17-1). The total number of housing units in the City of Chula Vista planning area as of January 1, 2004 was 74,231, with a population of 222,300 people. Within the incorporated City boundaries, there were 70,067 housing units and 209,200 people. Table 5.17-2 compared the increase in population and housing units for the Preferred Plan and all three Scenarios using existing conditions as the baseline for analysis and not the existing General Plan. The EIR does not address socioeconomic effects of the project. Section 15131 (b) of the CEQA Guidelines limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect. Since the relative poverty levels of Chula Vista communities are socio economic issues independent of physical changes, they were not addressed in the EIR.

X-2 This comment states that the displacement of people and housing units should both be considered undisclosed. significant adverse impacts. See Response to Comment M-5.

X-3 **Air Quality:** The significant negative impacts of the reduction in air quality caused by the GPU must and can be mitigated for. A plan for getting the regulations changed is not satisfactory. This is just an acknowledgement that more people and more traffic means dirtier air. The number one mitigation that would work is a reduction in density.

X-4 The city could go a step further than its current excellent policies to curb global warming and reduce CO_2 emissions by seeking grants that would allow it to actually reward people who choose to buy clean air vehicles and install solar panels. The CCA program is a positive step if it is implemented in a way that will significantly increase the amount of renewable energy produced within the city.

The city has the power to require every developer to produce 40% or more of the power needed for his/her development. The city needs to use that power. The city could also require 40% better energy efficiency in all new construction instead of only 20% and LEED standard of Gold. Since the majority of power produced is from fossil fuels, these new standards would have a significant impact on air quality as well as upon energy availability.

X-5 The power plant is a significant polluter of the air in Chula Vista. Eliminating the need for that plant would help air quality considerably. It is not acceptable to say that the power plant is outside of the GPU area. Its impacts are felt within the area and should be addressed in the DEIR. The cloud of pollution from the plant impacts the health of the people now living in the southwestern part of Chula Vista. The GPU is suggesting placing more people in this plume with the proposed projects in the Palamar trolley area, along south Broadway and South Third. Even if a cleaner power plant were to replace the existing one it is inappropriate to place people in range of its discharges. There is ample data available to provide a detailed analysis of these health effects. The ARB handbook suggests a distance of 1000 feet between a power plant and sensitive receptors (old, young and people with respiratory problems). This would include medical facilities, nursing homes, day care, schools, and residences.

There are way too many homes within 500 feet of 805 and 5 right now. The new Air Quality Review Board's Handbook includes much data verifying the health risks especially to children from living within 500 feet of a busy road. There are many homes planned for along 125 and it backs up to the fence of Eastlake High School. Current state law says that schools need to be sited further than 500 feet from a freeway. A freeway should not be sited adjacent to an existing school. (ARB Handbook pp 8-10 http://www.arb.ca.gov/ch/landuse.htm) The proposed high density residential at E and H Street trolley stations needs to be sited more than 500 feet from I-5. (See also: KEY STUDIES ON AIR POLLUTION AND HEALTH EFFECTS NEAR HIGH-TRAFFIC AREAS Compiled by the Environmental Law and Policy Center and the Sierra Club) Health assessments or having people sign liability releases are neither ethical nor acceptable alternatives to not placing residences in unhealthy locations.

http://www.nrdc.org/health/effects/fairpoll.asp lists some of the many negative health effects caused by the breathing of diesel exhaust and the accompanying particulate matter. The city is exemplary in requiring all the garbage trucks to use bio-diesel and the buses to use CNG, but there are numerous other trucks particularly in the Main Street area. As the city grows denser there will be more truck traffic to serve the increased businesses and residences. The city must take a proactive role in encouraging fleets of trucks that frequent the city streets, as well as school buses to switch to bio-diesel or other cleaner burning fuels. The city also needs to enforce the new regulations limiting the amount of time trucks may idle.

Two simple mitigations involve landscaping. Two-stroke landscaping tools are used way too frequently in the city. There is a need for an ordinance restricting their use. Developers should also be required to plant more trees and other vegetation. Electric-powered or lesser polluting construction equipment should be mandated and closer supervision of construction sites to make sure all BMP's are followed would make sure that increased construction did not further degrade air quality.

RESPONSE

X-3 This comment recommends a reduction in density over that of the Preferred Plan to reduce negative impacts to air quality. The General Plan Update includes alternative transit measures, such as pedestrian trails, on-street bicycle paths, and an emphasis on public transit to lessen air quality impacts (page 399 of the dEIR). The nature of the General Plan Update's land use plan and policies could very well represent an improvement to air quality, in that it stresses walkable communities and transit oriented/mixed use development (page 415 of the dEIR). Furthermore, it is likely that with the next regional growth forecast conducted by SANDAG and the associated air quality management plan that air quality improvements will be forecast. However, any type of change to the adopted General Plan would lead to a plan inconsistency. Because of the plan inconsistency and the timing of revisions to the RAQS, and until such time that the region is in compliance with the Ozone and PM_{10} standards, the impact remains significant and unmitigated.

X-4 This comment does not reflect on the adequacy of the EIR. The comment, however, will be forwarded it to the appropriate City Decision making body.

X-5 The recirculated dEIR discussed the following five industrial facilities, including the power plant, in the City of Chula Vista regarding their emission inventories and health risk assessments:

1. BF Goodrich/Rohr Industries
2. Hanson Aggregates at 7th and Main
3. Hanson Aggregates at Rock Mountain
4. Duke Energy, South Bay Power Plant (SBPP)
5. Ogden Power Pacific at the Otay Landfill

Table 5.11-11 of the dEIR provides the results of these health risk assessments. This table presents the maximum lifetime cancer risk, cancer burden, and chronic and acute Total Health Hazards Index (THI) for each facility. Public notification and risk reduction requirements are based on these levels. Public notification is required if the maximum incremental cancer risk is 10 in 1,000,000 or greater and a significant risk is defined as 100 in 1,000,000. In addition, public notification is required and a significant risk is determined if the cancer burden, chronic THI or acute THI is 1.0 or greater. None of the Chula Vista facilities addressed in the Program Report are required to perform Public Notification or Risk Reduction because all are below the Public Notification and Risk Reduction levels.

The California Air Resources Board Air Quality and Land Use Handbook is "advisory and does not establish regulatory standards of any kind." However, comments will be forwarded to the appropriate City Decision making body.

Air Quality: The significant negative impacts of the reduction in air quality caused by the GPU must and can be mitigated for. A plan for getting the regulations changed is not satisfactory. This is just an acknowledgement that more people and more traffic means dirtier air. The number one mitigation that would work is a reduction in density.

The city could go a step further than its current excellent policies to curb global warming and reduce CO_2 emissions by seeking grants that would allow it to actually reward people who choose to buy clean air vehicles and install solar panels. The CCA program is a positive step if it is implemented in a way that will significantly increase the amount of renewable energy produced within the city.

The city has the power to require every developer to produce 40% or more of the power needed for his/her development. The city needs to use that power. The city could also require 40% better energy efficiency in all new construction instead of only 20% and LEED standard of Gold. Since the majority of power produced is from fossil fuels, these new standards would have a significant impact on air quality as well as upon energy availability.

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X-6 There are way too many homes within 500 feet of 805 and 5 right now. The new Air Quality Review Board's Handbook includes much data verifying the health risks especially to children from living within 500 feet of a busy road. There are many homes planned for along 125 and it backs up to the fence of Eastlake High School. Current state law says that schools need to be sited further than 500 feet from a freeway. A freeway should not be sited adjacent to an existing school. (ARB Handbook pp 8-10 http://www.arb.ca.gov/ch/landuse.htm) The proposed high density residential at E and H Street trolley stations needs to be sited more than 500 feet from I-5. (See also: KEY STUDIES ON AIR POLLUTION AND HEALTH EFFECTS NEAR HIGH-TRAFFIC AREAS Compiled by the Environmental Law and Policy Center and the Sierra Club) Health assessments or having people sign liability releases are neither ethical nor acceptable alternatives to not placing residences in unhealthy locations.

X-7 http://www.nrdc.org/health/effects/fairpoll.asp lists some of the many negative health effects caused by the breathing of diesel exhaust and the accompanying particulate matter. The city is exemplary in requiring all the garbage trucks to use bio-diesel and the buses to use CNG, but there are numerous other trucks particularly in the Main Street area. As the city grows denser there will be more truck traffic to serve the increased businesses and residences. The city must take a proactive role in encouraging fleets of trucks that frequent the city streets, as well as school buses to switch to bio-diesel or other cleaner burning fuels. The city also needs to enforce the new regulations limiting the amount of time trucks may idle.

Two simple mitigations involve landscaping. Two-stroke landscaping tools are used way too frequently in the city. There is a need for an ordinance restricting their use. Developers should also be required to plant more trees and other vegetation. Electric-powered or lesser polluting construction equipment should be mandated and closer supervision of construction sites to make sure all BMP's are followed would make sure that increased construction did not further degrade air quality.

RESPONSE

X-6 The recirculated dEIR concluded that the potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because of Policy EE 6.4 of the proposed General Plan Update avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of highway (Page 406 of the dEIR).

The California Air Resources Board Air Quality and Land Use Handbook is "advisory and does not establish regulatory standards of any kind." We will, however, forward it to the appropriate City Decision making body.

X-7 This comment does not reflect on the adequacy of the EIR. Comment is noted and will be forwarded to the appropriate City decision making body.

X-8 Of course the best way to prevent a further worsening of air quality and increase of smog is to reduce the number of C and D streets. Idling cars create more emissions (and idling trucks cause even more problems.) Every time there is an event at Coors and cars are in line for hours air quality suffers. The delays now being experienced during rush hour and due to road construction are greatly degrading our air quality with no further increase in population. The proposed increases in population in the GPU must be mitigated by reducing traffic significantly. This would require the investment of significant money into a transportation system that is cheaper, more efficient and convenient than using a car. This would be way beyond anything that SANDAG would fund. A commitment to this expenditure of funds needs to be included as mitigation.

X-9 The worsening of the current congestion on I-5, 54 and 805 during daily rush hours must be considered when evaluating the effects likely to be caused by the addition of the Urban Core and the Bayfront proposed retail, residential and commercial. The additional construction in South San Diego and the 80,000 new residents yearly in Tijuana also need to be considered.

Housing squeeze play | As Tijuana grows at breakneck speed, it also struggles to provide adequate, affordable homes. The city faces huge trade-offs in its sprawling developments.; [1,2,3 Edition]

Sandra Dibble. **The San Diego Union - Tribune**. San Diego, Calif.: Nov 14, 2004. pg. A.1

Chula Vista is near the end of the county's cul de sac. Traffic from the south has to go through Chula Vista to get to San Diego. Saying this is Caltrans' problem is not satisfactory. This is Chula Vista's problem, and Chula Vista needs to do something about it.

X-10 The 1,000- foot buffer (without all the loop holes) around the landfill needs to be reinstated. Light industry in the buffer zone is acceptable, but it needs to be of an adequate size to protect residents. Also there needs to be a 500 foot or more buffer between most industrial uses and residential. The maps for the southwestern area of Chula Vista and the east do not appear to reflect this buffer. Again the ARB Handbook is very specific, and these standards need to be used as mitigation for these uses near residential.

All of the suggestions in the ARB Handbook should be incorporated into the GPU in order to protect the health of all residents. The peaker plant off of Main Street was sited way too close to residential. The GPU is suggesting moving the car repair, etc. shops to south Broadway. This could cause a conflict with current residential uses nearby. The handbook has minimal buffer distances that need to be considered. The Cumulative impacts of siting many different types of activities near residential is documented in the handbook and needs to be discussed in the FEIR with the only acceptable mitigation being placing them an appropriate distance from residential.

Traffic: The extension of La Media Road over the Otay River should not be considered. The number one reason is the negative consequences to the habitat to be preserved as part of the OVRP. Even a bridge of the same height as the 125 bridge would have huge negative impacts upon these habitats. Nowhere is this analyzed in the RDEIR. Previous analysis is not relevant since the population is much greater now and the amount of open space much less. Therefore, every threat to habitat areas has been magnified in impact. This extension is foolish because it gives a ready alternative to the toll road less than a mile away. See for a case in point: http://www.smh.com.au/news/opinion/for-whom-the-toll-bells-underground-avoidance-and-more-trafficabove/2005/10/10/1128796465397.html. If there is an easy near by alternative people will use it to the detriment of our neighborhoods. There should be an analysis of the impact of this avoidance behavior on the neighborhoods of western and eastern Chula Vista. There are already many drivers avoiding congestion on the existing freeways using city streets.

Parking is a traffic related issue that needs to be dealt with. Virtually every residence has two cars, many more than two. This is because at least two adults are working to support the

RESPONSE

X-8 Alternative transit measures, such as pedestrian trails, on-street bicycle paths, and an emphasis on public transit, have been incorporated into the proposed General Plan Update to lessen air quality impacts (pages 399 and 415 of the dEIR). The nature of the General Plan Update's land use plan and policies could very well represent an improvement to air quality, in that it stresses walkable communities and transit oriented/mixed use development. Furthermore, it is likely that with the next regional growth forecasts conducted by SANDAG and the associated air quality management plan that air quality improvements will be forecast. A significant and not mitigated air quality impact was identified (Page 416 of the dEIR). Improved levels of service would reduce the potential for hot spot air quality impacts. Hotspot air quality impacts are discussed on Pages 406 and 407 of the dEIR. It was determined that no significant impact occurs regarding CO hotspots.

X-9 The recirculated dEIR analyzed the current effort underway to plan for the development of the Bayfront Planning Area within the City as well as the Urban Core Specific Plan. Cumulative impacts are not specifically assigned to Tijuana. To the extent that environmental conditions are a result of the contributions from Mexico, they are included in the baseline on which the impact analysis is based. For example, traffic volumes on area roads do not distinguish between vehicle trips originating in the United States or Mexico. As such, modeled conditions reflect contributions from both countries. This comment does not address the adequacy of the dEIR. Comment is noted and will be forwarded to the appropriate City decision making body.

X-10 As discussed in Response to Comments D-3 and D-4, above, this comment request that Scenarios 2 and 3 be revised in order to address inconsistencies between the Policy LUT 79.5 and the propose residential uses around the landfill buffer, land uses proposed under Scenarios 2 and 3. Policy LUT 79.5 of the General Plan Update limits land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks. Policy LUT 79.5 addresses the Preferred Plan land uses. The EIR concludes that significant impacts under Scenarios 2 and 3 would occur because both scenarios place residential uses adjacent to the landfill and would be in conflict with this proposed policy. The Preferred Plan is recommended by City staff. If the City Council decides to adopt Scenarios 2 or 3, the adoption of a Statement of Overriding Considerations for these impacts will be required.

As discussed above, the Preferred Plan is recommended by City staff. The recirculated dEIR concluded that significant impacts would occur with the approval of Scenario 2 or 3 as a result of the placement of residential uses within the 1,000-foot buffer of the Otay Landfill. Mitigation Measure 5.11-2 was established to reduce these impacts. Mitigation Measure 5.11-2 states the following:

5.11-2 No residential use shall be permitted or constructed within 1,000 feet of the Otay Landfill while the landfill is open and operating, unless a project specific analysis is completed demonstrating to the satisfaction of the Environmental Review Coordinator that odor effects are below the odor thresholds for common compounds emitted by the landfill for less than two percent of the time. One such compound would be hydrogen sulfide with an odor threshold of .0045 ppm.

Of course the best way to prevent a further worsening of air quality and increase of smog is to reduce the number of C and D streets. Idling cars create more emissions (and idling trucks cause even more problems.) Every time there is an event at Coors and cars are in line for hours air quality suffers. The delays now being experienced during rush hour and due to road construction are greatly degrading our air quality with no further increase in population. The proposed increases in population in the GPU must be mitigated by reducing traffic significantly. This would require the investment of significant money into a transportation system that is cheaper, more efficient and convenient than using a car. This would be way beyond anything that SANDAG would fund. A commitment to this expenditure of funds needs to be included as mitigation.

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X-12 **Traffic**: The extension of La Media Road over the Otay River should not be considered. The number one reason is the negative consequences to the habitat to be preserved as part of the OVRP. Even a bridge of the same height as the 125 bridge would have huge negative impacts upon these habitats. Nowhere is this analyzed in the RDEIR. Previous analysis is not relevant since the population is much greater now and the amount of open space much less. Therefore, every threat to habitat areas has been magnified in impact. This extension is foolish because it gives a ready alternative to the toll road less than a mile away. See for a case in point: http://www.smh.com.au/news/opinion/for-whom-the-toll-bells-underground-avoidance-and-more-trafficabove/2005/10/10/1128796465397.html. If there is an easy near by alternative people will use it to the detriment of our neighborhoods. There should be an analysis of the impact of this avoidance behavior on the neighborhoods of western and eastern Chula Vista. There are already many drivers avoiding congestion on the existing freeways using city streets.

X-13 Parking is a traffic related issue that needs to be dealt with. Virtually every residence has two cars, many more than two. This is because at least two adults are working to support the

RESPONSE

X-11 This comment does not reflect on the adequacy of the EIR. The California Air Resources Board Air Quality and Land Use Handbook is "advisory and does not establish regulatory standards of any kind." However, comments will be forwarded to the appropriate City decision making body. Comment noted.

X-12 The dEIR does not evaluate the impacts of the retention of the existing circulation system classifications or location. It addresses the proposed changes to that system. No changes are proposed for the La Media Road extension across the Otay River valley. The exact timing of the La Media Road improvements is not known at this time, and its schedule is likely to be impacted by the availability of funding sources, environmental analysis, and other considerations. For the purposes of the General Plan Update, La Media Road is anticipated to be in place by the Year 2030.

X-13 Objectives LUT 30, 31 and 32 of the General Plan Update address parking in detail. All projects will have to confirm to the City of Chula Vista parking standards in effect at the time of approval. The General Plan Update will not result in land uses being inconsistent with the City's parking requirements.

family. Looking at voter registration rolls one can see that there actually are 3 or more adults in many of the residences in Chula Vista and the rest of San Diego. The amount of parking needs to be increased. In Southwestern Chula Vista it is difficult for two cars to pass each other on some of the streets because the narrow streets are lined with parked cars. One of the worst streets is Oxford. Suggesting that Oxford become part of a city center for the southwest makes no sense.

X-14 It is important to use current information about average number of residents per household when estimating the amount of traffic generated by the new residences. The predictions in the DEIR are based upon old assumptions and conditions, not current ones. The traffic situation is likely to become far worse than predicted quite quickly.

X-15 **Population and Housing:** The GPU clearly creates significant unmitigated impacts in both these areas. Possibly when the housing element is adopted some of the impacts may be mitigated, but at this time they are significant. Adding the significant amount of residences suggested by this GPU will displace many existing residents. Many of these residents now live in lower priced older housing. Building a $300,000 dwelling will not provide housing for someone now living in a low rent rental, a trailer, or a paid for house. Possible mitigations: Any developer of housing should be required to build an adequate percentage of housing affordable to the people who will be displaced by the implementation of the GPU to insure that they will have a place to live. Affordable housing must be provided simultaneously with jobs providing adequate wages to afford the housing or there is no smart growth advantage. Priority in hiring needs to be given to local residents as well as priority in housing, if there is going to be any possibility of reducing commuting.

For the last 8 years the city of Chula Vista has been providing significantly more residences than jobs. It has been developing as a bedroom community. This has significantly effected the traffic situation.

Table B.3-13 Region-Wide Historical Population, Housing, and Employment Data

Jurisdiction	1990	2000	2004	% Change 1990-2000	% Change 2000-2004
City of Chula Vista					
Total Population	135,160**	174,319**	209,133*	29%	17%
Total Housing Units	49,846**	59,333**	70,067*	19%	15%
Total Employment***	60,740	70,540	74,180	16%	5%

The significant density and housing increases in the GPU, especially in Otay Ranch would indicate a continuance of this pattern. There is a technology/research park along 125 in the plan, but the city has already allowed two sbopping centers to occupy a part of this land. Shopping Centers do not provide the job quality needed to afford the houses being built in Otay Ranch, even if two or more families share a home. The university and the educational and commercial acreage shown for West Fairfield as well as the provision for added industrial in several areas offer the possibility of more quality jobs, but on the surface it appears the GPU will continue this troubling trend because instead of slowing down housing growth and allowing jobs to catch up it is accelerating the housing. The EIR needs to analyze the consequences upon Community Character, traffic, population and air quality of this troubling trend.

X-16 **Public Services:** There are places reserved in the east for new parks and schools, but nowhere on the maps are similar places shown in the west. The schools are already overcrowded in the west. The amount of park acreage is already inadequate. (Even if the two new parks predicted are considered.) The two libraries in the west have limited if any space for expansion. The new Animal Shelter is already full to capacity and in need of expansion. Hoping that San Diego will be able to sell Chula Vista additional sewage capacity considering the situation of San Diego is not adequate future planning.

RESPONSE

X-14 The traffic impact analysis was evaluated using the SANDAG TRANPLAN regional traffic model, which is based on Series 10 employment and population projections for the San Diego region. This computerized model takes land use and transportation network information as inputs and estimates the volumes of traffic on existing and future roadways under long-term future conditions using the four-step Urban Transportation Planning Process. This process includes trip generation, mode split, trip distribution and traffic assignments. These are the accepted parameters for assessing regional traffic impacts. The comment provided does not identify an alternative approach to trip generation rates.

X-15 See Response to Comment M-5. Additionally, the analysis conducted in the dEIR was completed for the land use designations in the Preferred Plan and three Scenarios and compared the effect of those scenarios to the adopter General Plan and the existing conditions. To the extent that the proposed plan represents a given jobs housing balance, the analysis evaluated the effect of that jobs housing balance on the issues of transportation, community character, population and housing, and air quality.

X-16 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

X-17 It is extremely questionable that there is adequate water for these 100,000 new residents. Sweetwater authority wisely has responded to the NOP for this update that they can only respond to individual projects, and "**there is always a vulnerability when you must rely on an external source to provide water supply.**" Sweetwater can currently supply all its customers from local sources during wet times of the year, but this obviously will not be the case if it must go from providing 3.22 mgd to 15.91 mgd. It seems very foolish to force Sweetwater to increase its reliance on CWA water, when so many other places in CA are also relying on this water. San Diego and Sweetwater both have reservoirs that can provide up to 6 months storage if something were to happen to an aqueduct. On the other hand Otay is completely dependent on aqueduct 4 for all its water. Otay Water District is busily building more tanks to increase its storage from the current 5 days. An agreement with San Diego will get it to 10 days. It does not seem likely that its hope the CWA will bail it out in a disaster from its reservoirs is realistic since other water authorities are counting upon this water for their customers as well. OWD is counting on conservation and the use of recycled water to increase its supply from .09 mgd to 8.01 mgd required by the preferred plan. If an earthquake breaks an aqueduct Otay customers may find themselves in a difficult position. This unreliability is a big reason that all this density should be questioned.

X-18 **Energy:** The city has done a lot to promote energy conservation and with the CCA program will hopefully be providing greener energy in the future, but the city needs to start mandating green building, 40% energy conservation, and the use of solar on all new construction. The city has the power to require these things and should use that power.

Storm Water:

X-19 It is extremely important that improved BMP's for storm water runoff be a part of this DEIR. The RWQRB recently sent Chula Vista a letter informing them of the need to do more for their new permit. Instead of arguing about it the city should insure that more is done in new construction. These improved standards need to be incorporated in pre-construction regulations. The ordinance preventing the use of devises to trap and filter runoff from roofs needs to be changed. With increasing mid-rise buildings and possible parking structures these filters become even more important. The GPU will increase impermeable surfaces considerably. This will increase runoff. There needs to be stricter guidelines to prevent stream gouging and erosion from storm runoff in new development. This is a great problem in canyons near existing developed areas. Some kind of retention basins have to be devised, possibly underground, to hold the run-off for treatment before discharge or preferably to allow the run-off to soak into the ground.

X-20 **Landform Alterations/Biological Resources:** It is noted that the recirculated DEIR now finds significant adverse impacts in these areas. The new language proposing to be more sensitive to the OVRP when uses are planned adjacent to it is a positive change. Being satisfied with the situation however is not commendable. There are mitigations that would not restore what has been lost but help prevent further damage.

Chula Vista needs to implement greater incentives and penalties to use green technologies for water conservation and reclamation, source reduction, and energy choices. It needs to have stricter laws requiring the reduction of pesticides and fertilizers.

It needs to increase the percentage of native plants required in every new project-residential, commercial, educational, and industrial. The San Diego Chapter of the California Native Plants Society would be happy to make suggestions about appropriate plants. At the very least any construction within 1,000 feet of an open space area should be required to use native plants.

RESPONSE

X-17 See Response to Comment P-1.

X-18 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

X-19 Development of the Preferred Plan would increase the residential, commercial, and industrial uses within the city compared to existing conditions, which would result in an increase in the amount of impervious surfaces and ornamental landscaping, and therefore an increase in runoff. The recirculated dEIR concludes that compliance with policies associated with the proposed Objective EE 2 would minimize the potential for adverse impacts to surface water and groundwater quality resulting from development completed in compliance with the proposed General Plan Update. As discussed on page 327 of the dEIR, conformance with policy EE 2.4 would ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy. Policy EE 2.5 would include construction and land development techniques to minimized water quality impacts. This would be achieved by the preparation and implementation of an approved SWPPP and monitoring/testing program, with pollution control technology, and/or best management practices pursuant to direction by the SWRCB and the applicable RWQCB office. The conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant.

X-20 The comment makes recommendations for the City relative to green technology, appropriate plants, and conservation. Although this comment does not address the adequacy of the dEIR, the GPU has objectives and policies in place in regards to green technologies, water conservation and reclamation, the use of pesticides and fertilizers, and energy conservation and choices. Additionally, the MSCP contains standards and regulations for any development adjacent to the MSCP Preserve.

X-21 The city should not permit any plant listed as invasive by the City of San Diego, University of California Cooperative Extension, California Invasive Plant Council, California Department of Food and Agriculture, and the California Native Plant Society to be planted anywhere in any new project in the city. Currently every open space "preserve area" is infested with Tamarisk, Arundo, Pampas Grass and other plants that often can be traced to near by homes or upstream areas. Education is what the MSCP calls for, but it obviously has not been implemented in existing developments. Ordinances, CCRs and deed restrictions need to be used in new developments, and the city needs to follow through with homeowners in existing developments. The city is also guilty of potentially causing infestation of open space with its planting of ornamental grasses along Auto Park Way. These grasses produce abundant seeds carried by wind and birds. Native grasses should have been planted here. In fact the city should be a good role model and tear them all out and replace them with appropriate native grasses.

X-22 The scenario that would allow the filling in of a part of Wolf Canyon is not consistent with the promise of long-term preservation in the MSCP. Also some of the grading practices are questionable along Wolf Canyon. One wonders if the result might not be the landslides suffered in Oceanside due to expansive clay soils.

In Salt Creek Canyon a golf course and a community park have been allowed to intrude upon the canyon. Non-native plants have been planted around over views. This is not consistent with the major revegetation of the area after the sewer lines were put in.

X-23 The suggestion to put the Wolf Canyon sewer line under the road is much preferable than using the canyon and has the potential to preserve more of its biological resources than was done at Salt Creek. The lower part of Salt Creek goes through the land designated for the University. There need to be very strict guidelines to protect this part of the creek from further destruction. Alta Road must not cross the canyon as previously agreed and no commercial recreation should occur at its mouth in the OVRP. There also need to be concrete guidelines insuring the preservation of the fragile and rare alkaline riparian nature of Salt Creek. The MSCP does not deal with this.

The expansion of Knott's is mentioned, but no mitigation is suggested nor is it obvious as to how this can happen since it now has houses close to it.

X-24 It is notable that the Wild Life Refuge is mentioned in the section on West Fairfield. We are in disagreement with the designation of the Fenton Ponds as "developed." Jurisdictional or not they are clearly water bodies in a flood plain that need to be protected under the no loss of wetlands provisions of both the city of San Diego and the city of Chula Vista MSCP sub area plans.

The preferred plan for West Fairfield designating low density, low- rise commercial or educational job creating development with the express purpose of protecting the Wildlife Refuge is noted and applauded. We would prefer to see a specified buffer size of 500 feet or more instead of "as appropriate" and will pursue this issue in project EIR's.

The south side of the Otay River has very visible housing coming down to the edge of the river. There needs to be some assurance that the same thing will not happen on the north side. Surely houses can be kept up away from the river and hidden from view. This was not done with the commercial and industrial development, but the city now has a chance to do things the right way.

We are concerned that the wildlife corridors are not large enough to allow for the safe movement of wildlife between Salt Creek Canyon, Wolf Canyon, Pogee Canyon, Mother Miguel Mountain and the Otay River. There are places where the corridor is quite narrow, other places where it is alongside a busy road, and there is no safe crossing of Olympic Parkway. The pedestrians are going to have an overpass, but the wildlife have nothing. Salt Creek as previously mentioned has a community park in its canyon right across from a swimming pool and pond in a development. An animal would have to walk in the creek itself to pass this area. There appears to be planned development on the north side of Wolf Canyon between the canyon and the remnants

RESPONSE

X-21 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

X-22 The recirculated dEIR concluded that a significant land use impact would occur from application of residential land use designation to a portion of Wolf Canyon as proposed by Scenario 2 (EIR page 157). This impact would be significant because a boundary adjustment is required prior to the adoption of the designation of residential use in this area, and since that determination has not yet been made, specific mitigation is unavailable at this time. The impacts to land use as a result of Scenario 2 remain significant and unmitigated.

X-23 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

X-24 The recirculated dEIR concluded that significant impacts to nearby wildlife in the San Diego Wildlife Refuge would result from development within the West Fairfield District under the Preferred Plan and all three Scenarios. The designation of existing land uses for more intensive development adjacent to the Wildlife Refuge is a significant impact because more intensive land uses could affect sensitive species (Section 5.1.3 of the dEIR). Mitigation Measure 5.1-2 listed below was developed to reduce these impacts to below a level of significance.

5.1-2 At the time projects are proposed within the West Fairfield District, a detailed land use assessment shall be performed showing, to the satisfaction of the Environmental Review Coordinator, that the proposed project is compatible with adjacent land uses. Any development adjacent to the San Diego Wildlife Refuge shall adhere to the land use adjacency guidelines defined in the Chula Vista Subarea Plan, Section 7.5.2. These include, but are not limited to: sufficient buffers and design features, barriers (rocks/boulders, signage, and appropriate vegetation) where necessary, lighting directed away from the refuge, and berms or walls adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization.

The city should not permit any plant listed as invasive by the City of San Diego, University of California Cooperative Extension, California Invasive Plant Council, California Department of Food and Agriculture, and the California Native Plant Society to be planted anywhere in any new project in the city. Currently every open space "preserve area" is infested with Tamarisk, Arundo, Pampas Grass and other plants that often can be traced to near by homes or upstream areas. Education is what the MSCP calls for, but it obviously has not been implemented in existing developments. Ordinances, CCRs and deed restrictions need to be used in new developments, and the city needs to follow through with homeowners in existing developments. The city is also guilty of potentially causing infestation of open space with its planting of ornamental grasses along Auto Park Way. These grasses produce abundant seeds carried by wind and birds. Native grasses should have been planted here. In fact the city should be a good role model and tear them all out and replace them with appropriate native grasses.

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X-26 We are concerned that the wildlife corridors are not large enough to allow for the safe movement of wildlife between Salt Creek Canyon, Wolf Canyon, Pogee Canyon, Mother Miguel Mountain and the Otay River. There are places where the corridor is quite narrow, other places where it is alongside a busy road, and there is no safe crossing of Olympic Parkway. The pedestrians are going to have an overpass, but the wildlife have nothing. Salt Creek as previously mentioned has a community park in its canyon right across from a swimming pool and pond in a development. An animal would have to walk in the creek itself to pass this area. There appears to be planned development on the north side of Wolf Canyon between the canyon and the remnants

RESPONSE

X-25 The recirculated dEIR concluded that for Scenarios 1, 2, and 3, significant impacts to neighborhood community character have been identified due to redesignation of land uses in the Montgomery Subarea from open space to an industrial designation on lands adjacent to protected habitat within the City's MSCP Preserve in the area south of Faivre Street, east of Broadway, and north of the Otay River Valley (Section 5.1.3 of the dEIR). Development with industrial uses south of Main Street would otherwise be consistent with existing nearby and adjacent industrial and retail uses to the north and would not physically divide or adversely affect the community. However, future industrial use adjacent to protected habitat is a significant impact and requires mitigation. Mitigation Measure 5.1-1 listed below was developed to reduce these impacts to below a level of significance.

5.1-1 To mitigate the impacts of establishing planned industrial uses along the Otay River Valley, future projects for this area shall be evaluated and required to incorporate sufficient buffers, source water protection devices, setbacks, and design features to avoid edge effects to sensitive biological resources to the satisfaction of the Environmental Review Coordinator.

X-26 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

of Pogee Canyon. Pogee Canyon itself has been so fragmented by the ill- advised placement of the road on its floor that its habitat value is highly questionable. Aggressive steps need to be taken to ensure that ten years from now Pogee will not look like Telegraph Canyon—a sea of non-native invasive plants with more concrete than natural channels.

X-27 The large areas of active recreation east of Heritage Road in the OVRP will likely act as a barrier to wildlife movement in the river. The area closest to Salt Creek is not now accessible by road. The addition of roads and parking lots will greatly degrade the adjoining habitat. This would be a good location for a nature center to interpret the significant cultural resources in the area, but not for commercial type recreation.

X-28 Present conditions in "preserve" areas illustrate that the MSCP has been less than totally effective in preserving habitat for species. More stringent regulations need to be incorporated in the FEIR to insure the protection of the lands to be added to open space preserve area. Examples might be: regulations that forbid invasive non-native plants anywhere within 1000 feet of natural areas, requiring hard lined buffers around habitat areas, the enlargement of wildlife corridors, their sheltering from human encroachment with appropriate native plantings, and the reduction of impermeable surfaces. (The trails along many of the roads are a good example of this.)

X-29 **Community Character and Quality of Life:** The GPU causes unmitigatable negative impacts. The EIR should do an analysis of the effects of substituting in western Chula Vista assessment districts and developer's fees as in eastern Chula Vista for the protection of the Cummings Initiative. Even though zoning is an implementation item the fact that Table 5-4 is included in the GPU make this analysis necessary here. The implications of this table are that the new residential categories will allow for multiple zoning that would not be reachable if the two-year increments of the Cummings Initiative were in force. This would have extreme effects upon the character of communities within the western part of the city.

X-30 **Otay Ranch GDP:** It is not clear if the amendments shown in the plan have already been adopted or not. Construction has continued throughout the GPU process. There is some concern that the mandated number of acres for parks for several villages is achievable only by counting a community park several villages away. This seems like double counting. The villages were supposed to have neighborhood parks and a community park that they shared. Now several villages have an inadequate amount of acreage within the village. The purpose of this threshold was to insure that children had a park within a half-mile of their home that they could bike or walk to. Counting acreage in a community park means that they will most likely be driven there for games and activities. What happened to idea of walkable, pedestrian oriented villages? With minimum densities some of these villages are like small cities.

X-31 **Conclusion:** After examining the GPU and the DEIR we would urge a reduction in density to mitigate some of the "unmitigatable" effects and restore some of the quality of life to residents. The analysis of the Community Character Alternative still is not adequate. If in addition to reducing building heights the alternative also reduced densities one notch everywhere we believe there would be a corresponding reduction in unmitigatable effects. Community Character would be improved and the biological resources would have greater protection.

Thank-you for your consideration of our comments,

Ellen Shively

Ellen Shively
Conservation Chair, Sierra Club, San Diego Chapter

RESPONSE

X-27 This comment addresses the proposed project itself and does not reflect on the adequacy of the EIR. This comment will be forwarded to the decision makers for their consideration.

X-28 The Subarea Plan addresses regulations such as FESA, CESA, the state Fish and Game Code, and Section 404 of the Clean Water Act. The Subarea Plan also contains adjacency guidelines to direct development adjacent to the preserve. Compliance with Objective EE 1 and Policy EE 1.1 of the General Plan Update would ensure that impacts to sensitive biological resources resulting from development associated with the General Plan Update would be avoided because the policies in the proposed plan ensure conservation of core biological resource areas and associated habitat linkages. In addition, implementation of the Subarea Plan would contribute significant conservation outside Chula Vista Subarea within the Chula Vista MSCP Planning Area in the unincorporated County of San Diego MHPA.

X-29 The Cummings Initiative establishes a two year pacing mechanism on how frequently a residential zoning category can be elevated to the next higher density. The land use policies in the General Plan Update establishes the long range vision and does not interfere with the application of the Cummings Initiative. Further, as called for in the Cummings Initiative a "Public Facilities and Services" element is included in the General Plan. The protection of adequate facilities and services is accommodated through the City's Growth Management Program that has established quality of life threshold standards.

The Cummings initiative is applied to zoning activities. There are no rezones proposed as part of the current project. As such the Cummings initiative does not apply to a General Plan amendment.

X-30 The comment raises concerns about the consistency between the GPU and the Otay Ranch GDP and adequacy of parkland in the Otay Ranch master planned community. Concurrent amendments to the Otay Ranch GDP are being processed with the General Plan Update to make the GDP consistent with the GPU. The Otay Ranch GDP requires that 3 acres of parkland per 1,000 residents be provided in the Otay Ranch. This obligation has been divided between 7-acre minimum neighborhood parks in each village with the balance being provided in the 70-acre community park in Village Four. The master planning for the community park is underway and construction is schedule to start in 2008.

X-31 This comment addresses the Community Character Alternative. It does not give specifics as to why the Community Character Alternative analysis is not adequate. Comment noted.

October 29, 2005

RECEIVED
OCT
ENVIRONMENTAL PLANNING

Mr. Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista CA 91910

Dear Mr. Hellman:

The revised draft EIR recently was distributed with a section 5.17 Housing and Population providing a narrative about housing in Chula Vista for the years, 2005-2020. While it is nice to see some discussion about housing in the revised EIR when none at all appeared in the first draft EIR, the revision does not address some of the points I raised in my letter of February 12, 2005 (Attachment I) about the Housing section (or the lack thereof) in the first EIR.

My February 12 letter listed the following goals from the 1999-2004 Housing Element:

Goal 1: Conserve Existing Affordable Housing Stock

Goal 3: Ensure That an Adequate and Diverse Housing Supply is Available to Meet the City's Existing and Future Needs

Goal 4: Increase Home Ownership Opportunities for Low- and Moderate-Income Households

Goal 5: Enable Homeless Individuals and Families to Find Permanent Housing

Y-1 The letter went on to state that the 1999-2004 Housing element included an assessment of the city's success in meeting the goals in the Housing Element for the period immediately previous to the 1999-2004 plan and that a similar assessment for the 1999-2004 was missing from the draft plan for the 2005-2020 period. This assessment still is missing from the draft EIR. Why is this assessment necessary? Because it will give us a baseline for tackling one of the toughest and largest problems facing San Diego County and Chula Vista.

There is a crisis in affordable housing in San Diego County. The situation is worse than during the period covered by the plan up to 1999 and immensely worse than during the period 1999-2004. Attachment II points out that San Diego County is the second worst county in the U.S. in the ability of residents to buy a home. Attachment III

RESPONSE

Y-1 See Responses to Comments M-2 and M-5.

Y-2 shows that only 11% of County residents can buy a home, down from 17% as recently as a year ago. Chula Vista bears a responsibility , as do all cities and towns in this County, to acknowledge this problem and come up with concrete plans to address it. A first step for Chula Vista is an honest, straightforward, and public assessment of the Housing goals the city set for itself in 1999.

Y-3 Beyond that in Section 5.17 or somewhere in the EIR there should be specific definitions for the terminology "Low-..." and "Moderate-Income Households" and specific goals for these categories of residents. No such specific terminology and goals appears anywhere in the EIR and the present narrative of 5.17 gives the appearance that Chula Vista wants to paper over the city's responsibility with regard to the County's housing crisis and not do our part to resolve it.

Y-4 Chula Vista's record with regard to the amount of affordable housing available in the city in comparison with nearby cities in the County is not good (Attachment IV). The city geographically closet to us, National City, has almost four times the percentage of affordable housing units and the mayor of National City over a year ago announced plans to increase the amount of affordable housing in the city. In February, the city established a task force on affordable housing (Attachment V) and already the results have been dramatic. Within recent weeks the city has announced affordable housing initiatives targeted at two of the groups who should be of concern to any city: seniors and hospital workers (Attachments VI and VII). (Providing affordable housing for people who serve residents of Chula Vista should be of great concern. We shouldn't think that these people – our police and fire force, city staff, our health care workers, those who work in city commercial establishments, etc. – should only be here to serve us and not give any consideration as to where they have to live in order to do so...Tijuana, Imperial County, wherever. We should develop precise plans for where they can live in our city.)

Doing our part in Chula Vista to solve the affordable housing crisis in San Diego County is not going to be easy. But we must make a start by assessing our progress on the goals the city set in the past and come up with specific, measurable goals now which will guide us in the coming years.

Sincerely,

David A. Wood

David A. Wood
429 D Woodlawn Avenue
Chula Vista

RESPONSE

Y-2 This comment does not pertain to the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Y-3 The EIR does not address socioeconomic effects of the proposed project. According to Section 15131 of California Environmental Quality Act (CEQA), economic or social information may be included in an EIR or may be presented in whatever form the agency desires. However, Section 15131(b) limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect.

Y-4 This comment addresses the amount of affordable housing in Chula Vista and does not pertain to the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Att. Letter Z

February 12, 2005

Mr. Paul Hellman
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista CA 91910

Dear Mr. Hellman:

My comments on the Draft Environmental Impact Report (DEIR) for the Chula Vista General Plan Update (GPU) follow.

Y-5 The DEIR claims that this is "a comprehensive update of the City of Chula Vista General Plan" but it is not. It does not include the update of the the required Housing Element. (More on this later.) It does not reflect impacts from significant proposed projects such as Espanada. It also does not address the potential impacts of the Urban Development Corporation on resident and public input as a result of the elimination of three city committees providing planning and environmental oversight of development projects.

Y-6 The draft General Plan calls for an increase of over 100,000 people in the city by the year 2020 without any assessment of the impact of the plan on the displacement of people living in areas selected for redevelopment to meet this targeted population increase. One of the areas chosen for redevelopment under the "Urban Core Specific Plan" is Woodlawn and Colorado Avenues from G to H Streets, now containing 164 condominiums in the Holiday Gardens complex. The area is targeted for "Mixed Use Transit Focused Area" allowing buildings of eight plus stories with commercial, office, and residential uses. If the city's plans are realized, all the present homes in this area will be demolished and there are no city plans at this point where the present residents of Holiday Gardens could obtain nearby moderate income housing. Furthermore, the city also is pursuing a far more comprehensive effort under the "Urban Core" plan to eliminate all existing housing between E and H Streets and Interstate 5 and Broadway and replace it with four five-block long streets, many mid-block "paseos", a one block wide, five block long greenspace, and housing, which from all indications will be targeted at higher income residents. This plan, if implemented, will result in the loss of over 2,000 units of low and middle income housing. (Another 300+ units will be lost if the "Urban Core" plan for H Street to extend the Chula Vista Shopping Center to Interstate 5 is implemented.) The effect of eliminating this storehouse of affordable housing should be addressed somewhere in the EIR.

Y-7 While it is impossible to know what might be included in an up-to-date Housing Element covering the period starting in 2005 because it is not available, some Goals that were stated in the Housing Element that covered the period 1999-2004 bear mentioning because they relate to a problem that has increased enormously since that Housing Element was written: namely, the supply of affordable housing has diminished and the price of housing has escalated, making the purchase of a home out of the reach of all but a

PR-173

RESPONSE

Y-5 See Responses to Comments M-3 and M-5.

Y-6 The project will result in a substantial increase in population over the existing condition, and an increase in population over the currently approved plan. This is recognized in Chapter 7 of the EIR. As indicated in that chapter, the issues discussed in the analysis section of the document address the direct and indirect effects of this growth. Development of the land uses defined in the update would result in a substantial number of houses being displaced. Replacement of that housing, however, would not occur elsewhere, but would be provided within the same planning area. Similarly, displacement of people would not necessitate the construction of replacement housing elsewhere, outside of the planning area.

Y-7 See Responses to Comments M-3 and M-5.

small percentage of local residents. Those Goals from the 1999-2004 Housing Element were:

Goal 1: Conserve Existing Affordable Housing Stock

Goal 3: Ensure That an Adequate and Diverse Housing Supply is Available to Meet the City's Existing and Future Needs

Goal 4: Increase Home Ownership Opportunities for Low- and Moderate-Income Households

Goal 5: Enable Homeless Individuals and Families to Find Permanent Housing

The 1999-2004 Housing Element included an assessment of the city's success in meeting the Goals stated in the previous Housing Element. Because there is no up-to-date Housing Element in the draft GPU, we are not able to review the city's success in meeting the above goals. From all indications the situation with regard to the amount of affordable housing in the city deteriorated during this period. Because increasing the amount of affordable housing in Chula Vista should be a even larger focus of the city than when the plan for 1999-2004 was written, I suggest that consideration of the draft GPU and draft EIR be postponed until a new Housing Element covering the period starting in 2005 is ready for review and comment.

Sincerely,

David A. Wood

David A. Wood
429D Woodlawn Avenue
Chula Vista CA 91910

Union Tribune January 1, 2005

25.05 DOW JONES Closed at 10,622.88 | 1.24 NASDAQ Closed at 2,090.00 | 4.15 S&P 500 Closed at 1,18

BUSINESS

STOCK MARKET

County 2nd-worst in U.S. for affording to buy home

Bottom 11 spots are all in California, survey shows

By Roger M. Showley, STAFF WRITER

San Diego County's high housing prices, coupled with its relatively low wages, make it the second-least-affordable area in the country, the National Association of Home Builders, or NAHB, reported yesterday.

In the Washington-based group's first "housing opportunity index" issued in nearly three years, the builders said San Diego County ranked 161st out of 162 markets surveyed, exceeded only by the Santa Barbara metropolitan area.

The index, which measured the percentage of households able to afford the median-priced single-family home in the third quarter of last year, stood at 5.4 percent for San Diego. It was the lowest level recorded for San Diego by the builders in 12 years of tracking such figures.

The figure was based on a median price of $470,000 for 23,006 new and existing home purchases analyzed for the July-September period, and a median household income of $63,400.

Put another way, there were only 1,242 homes sold in that period within reach of the typical household.

Robert Rivinius, chief executive of the California Building Industry Association, noted that the index found California was home to the 11 least-affordable housing markets in the nation. And of the bottom 25 markets, 19 were

SEE **Housing, C4**

Housing affordability vari

Among 162 metropolitan areas surveye highly variable housing prices and incom different affordability levels, according t home sales by the National Association Fargo Bank.

All figures for 3rd quarter 2004

	Ho oppo in
MOST AFFORDABLE	
Lima, Ohio	9(
Saginaw-Bay City-Midland, Mich.	8(
Lansing-East Lansing, Mich.	8(
Canton-Massillon, Ohio	8(
Youngstown-Warren, Ohio	8(
LEAST AFFORDABLE	
Santa Barbara-Santa Maria-Lompoc	4.
San Diego County	5.
Salinas	5.
Los Angeles-Long Beach	6.
Orange County	7.

** The housing opportunity index, or HOI, represents median income able to buy the median-priced home prevailing interest rate for a z fixed-rate loan, 10 perce devoted to housing.*

SOURCE: National Association of Home Builders

Los Angeles Times
SUNDAY, APRIL 24, 2005 K11

February affordability index

The percentage of households earning enough to buy a median-priced existing single-family home

County	Median home price	Minimum income	Monthly payment*	Affordability index	Affordability a year ago
Los Angeles	$473,550	$109,831	$2,746	**17%**	22%
Orange	663,600	153,909	3,848	**11**	17
San Diego	580,860	134,719	3,368	**11**	15
Riverside	369,814	85,771	2,144	**16**	27
San Bernardino	300,662	69,733	1,743	**24**	38
Ventura	632,320	146,655	3,666	**15**	22

*Based on a 30-year mortgage with an average rate of 5.71% and 20% down payment, includes principal, interest, taxes and insurance.

Source: California Assn. of Realtors

Los Angeles Times

H COUNTY OPINION

National City wants to address blight, especially along its commercial corridors. *Roni Galgano / Union-Tribune photos*

Regional affordable housing comparison

City	Apartments	Senior	For sale	Section 8	Housing stock	Total affordable units (percent)
National City	1,316	534	15	1,044	15,422	19
Chula Vista	641	818	0	2,455	71,844	5.4
El Cajon	796	239	0	2,523	35,414	10
La Mesa	258	210	4	688	24,987	5
San Diego	6,307	3,141	4,177	12,043	489,000	5.2
Encinitas	108	13	0	136	24,901	1.1
Lemon Grove	76	232	0	464	8,765	8.8
Imperial Beach	15	99	0	419	9,784	5.4
Totals	**9,517**	**5,286**	**4,196**	**19772**	**680,117**	**5.7**

SOURCE: SANDAG

[illegible] redevelopment can boost city ser- [illegible] in indirect ways, right?

[illegible] we increase the downtown [illegible] up the retail base [illegible] that [illegible] sales tax goes [illegible] When we build that hotel [illegible] restaurant out there on 2[illegible] TOT and all that [illegible]

and rehabilitation of apartment communities that are blighted. There are much more funding re[illegible] that we can go after, including [illegible] federal low income tax cr[illegible]

What do you have planned for a themed cultural area, Filipino Village?

Filipino Village is on Plaza Boule- [illegible] celebrate this diversity, make it more of a regional attraction and unite this district. But Filipino Village is mainly putting window dressing to make it a unified district while parts of Highland Avenue are really blighted. We're going to improve the street and we're going to do building facade rehab and strengthen those local businesses. Already, we're beginning to see signs of interest on Highland Avenue similar to downtown in that developers are coming in and proposing mixed use projects, condominiums. Four- or five-story buildings over retail.

Ten years from now, looking back what do you hope to have accomplished in redevelopment?

The mayor and council have a very aggressive agenda. I like to think of it as revitalizing the city. When cities starting picking up their housing development in the '90s, we didn't. Not until less than a year ago did we start seeing [illegible] new housing development [illegible] We're doing downtown, w[illegible] bor District specific plans [illegible] along Plaza and Highland. So we're laying the

PR-177

Union Tribune
2/5/05

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National City to get task force on housing

Affordable homes the aim of 20-member group

By Tanya Sierra
STAFF WRITER

NATIONAL CITY — The Community Development Commission will appoint a 20-member task force to look for affordable housing options in National City, in response to public concern over city redevelopment.

The mix of community members, city officials and others will be called the Affordable Housing Task Force, said Community Redevelopment Director Ben Martinez.

The Community Development Commission gave the City Council an affordable housing action plan this week. It calls for creating a task force, improving the city's inclusionary housing strategy, updating the city's general housing plan, updating the redevelopment agency's five-year plan and improving the city's density bonus program, which helps create affordable [illegible] with developer incentives.

[illegible] group will meet for up to six months before making a [illegible] recommendation to the City Council, Martinez said.

"We're going to be [illegible] look at inclusionary housing ordinances that other cities have adopted," he said. "We

SOU

SAN DIEGO

Union Tribune 10/14/05

Public loan in the works for housing proposal

Seniors complex given a boost in National City

By Tanya Sierra
STAFF WRITER

NATIONAL CITY — City officials are planning to lend a private developer $1 million to demolish a low-budget motel and build an affordable housing complex for seniors.

The developer, Willow Partners, is proposing 80 apartments at what is now the Ha'Penny Inn on East Plaza Boulevard. Construction could be completed by 2007.

National City's redevelopment commission has committed $2.7 million to help build the project. Redevelopment agencies are required to set aside 20 percent of their income each year for affordable housing.

This week the city's Community Development Commission voted to lend Willow Partners $1 million to prevent a delay in starting the project. The developer asked for the money because it narrowly lost a bid for federal tax credits this funding cycle.

Federal tax credits are incentives to attract private developers to build low-income housing. The state's Tax Allocation Committee doles out the credits twice a year.

In National City's case, Willow Partners, which has completed two senior housing projects in the state and has five others under construction, be-

Loan, B10

Attachment #III

Union Tribune 10/5/2005

SOUTH

TJ POLIC
Fatal shooting of a
may be related to seiz

INTERNI
Woman gets one
for selling nonexister

SAN DIEGO COUNTY

96 town homes planned for hospital workers OK'd

By Tanya Sierra
STAFF WRITER

NATIONAL CITY — Paradise Valley Hospital received approval last night to proceed with plans to build 96 town homes for employees of the medical center.

Despite some complaints from residents that the project is too dense, the City Council unanimously approved the housing development planned for Seventh Street and Arcadia Avenue.

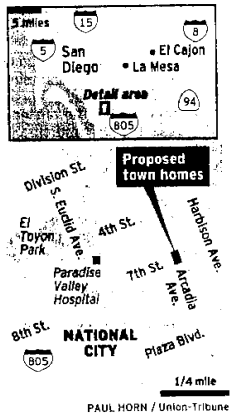
Hospital employees will be able to buy the town homes for about $50,000 under market value, hospital CEO Alan Soderblom said.

"We have considerable interest from our employees," he said at last month's planning commission meeting.

Of the medical center's 1,400 employees, only 10 percent live in the city, Soderblom said.

If workers don't buy all 96 homes, the remaining ones will be available to the general public.

SEE Town homes, B4



PAUL HORN / Union-Tribune

High-ri
in Chul

By Amy Oakes, STAFF WRIT

CHULA VISTA — A contr
condominium project propo
and Fourth Avenue has bee

With the project known a
consideration, Mayor Steve
hopes the city's general pla
ceed.

Opposition to Españada
heated, he said, that it becar
of the proposed general plar
development for the next 30

"When you boil everythi

PR-180

To City Clerk

Date: November 2, 2005

TO: City of Chula Vista City Council and Planning Commission
C/o Ed Batchelder, Mayor Stephen Padilla, Jim Sandoval, Steve Powers

FROM: Terry Thomas, Former Member of Resource Conservation Commissioner And representative of the Environment Subcommittee (EOSSD) on the General Plan Update Steering Committee for the past three years (2002-2005).
1996-September, 2005 and Professor Emeritus, Microbiology and Env. Biology
terrytom@ix.netcom.com
1339 Second Avenue, Chula Vista, CA 91911-4404

Terry Thomas 11-2-05

Submitted by Terry Thomas to compare/contrast recirculated dEIR GPU Oct 2005

Z-1 **RE It had been stated by Steve Powers (GPU dEIR Environmental Administrator) and others that the RCC comments of the original dEIR GPU stated at their meeting of February 7, 2005, submitted to you here as an attachment, were not and WILL NOT be specifically responded to by the final or recirculated EIR. It is my determination that certain ones need to be responded to as a mitigation or response in the final EIR. Also, I have added other items from my review as a homeowner and long term resident of Chula Vista. Thank you for your careful consideration.**

KEY: Items listed and numbered originally from the RESOURCE CONSERVATION COMMISSION Meeting of February 7, 2005 and their RECOMMENDATIONS/ COMMENTS ON THE CHULA VISTA GENERAL PLAN UPDATE DRAFT EIR (EIR 05-01)

Comments marked TT are my official comments and questions to the draft recirculated EIR for the Chula Vista General Plan Update and I officially request a response to these comments and questions. Thank you very much.

Z-2 1. Extend draft EIR public review period by 15 days.
TT **Thank you for the recirculation of the draft EIR and extending the outreach to the community.**

Z-3 2. Support the mandated use of green technologies with respect to municipal infrastructure and land use projects.
TT Still not mandated for City of Chula Vista Municipality projects. Although the City of Chula Vista has used solar technology in Police Dept and Civic Center. Needs to make greater commitment to things such as eliminating certain pesticides use, deconstruction to reduce solid waste. Greater incentives and penalties to use green technologies for water conservation and reclamation, source reduction of solid waste as a way of doing business, and energy choices.

PR-181

RESPONSE

Z-1 Comment noted. In accordance with Section 15088.5(f)(1), when an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and are not required to respond to those comments received during the earlier circulation period. In conformance with this section, the City is not responding to those comments received in response to the previous document. The City will respond to any comments that are submitted by the end of the public review period for the recirculated General Plan Update EIR.

Z-2 This comment does not pertain to the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Z-3 This is not a comment on the dEIR, but reflects the desire for the City to promote green technologies. The proposed General Plan Policy EE 7.6 demonstrates the City's commitment to promoting green technologies. Policy EE 7.6 states "Encourage the construction and operation of "green buildings," considering such programs as the Leadership in Energy and Environmental Design (LEED) Green Building Rating System."

Could not the tree lighting, some new recreational and parking facility lighting be generated by solar energy?

Z-4 3. Traffic impacts attributable to the unavailability of parking must be addressed in Transportation Demand Management plans for areas with traffic level of service "D" or worse, through options such as cell phone parking areas and low-cost, short-loop shuttles. Also, the responsibility of developers to provide parking structures may possibly mitigate other demands on community resources. Incorporate photovoltaic systems into parking structures to help mitigate air pollution.

TT There is still not a shuttle proposal from Southwest Chula vista to the Marina Park area, broadway, and H Street transit and E Street Transit loops. Shuttle presently proposed serves Urban core. Shuttle loops need to include the Palomar Station and Third Avenue/Palomar Transit area in the loop, especially on weekends when other services are limited or absent to that area. TT

Z-5 4. Incorporate SANDAG Congestion Management Program proposals as General Plan Update policies, including non-traditional strategies that focus on near-term, low-cost efforts such as transportation demand management (rideshare programs, transit pass subsidies, flexible work hours, telecommuting, etc.), transportation system management (signal synchronization, peak period parking restrictions, bicycle paths, etc.), and project design guidelines to encourage walking, bicycling, ridesharing, and transit use. These strategies, if used consistently and effectively, can help local jurisdictions better address new development impacts at the onset, reducing the need for more capital-intensive regional solutions in the future.

TT Urban core Planning group also addressing this need. Need to get same amenities and basic needs in Southwest CV also. Shuttle, sidewalks, gutters, design review. There are still NO sidewalks or walkways on South part of Palomar Street near 5th Avenue. This needs to be part of General Plan mandate – the excuse that a future project will take care of this has been echoed for the years and we stillhave wheelchairs and children using the street to pass on that side of the street. The Healthy Neighborhood movement does address the need to enhance pedestrian and other mobility choices, so this need has taken on an even more urgent mode.

Ordinances NEED to be enforced and incentives or initial grants provided during transition periods. More collaboration between Schools and City need to be made regularly and often. Schools must be mandated to open their parking lots in the evening for evening classes, community meetings, and recreational opportunities for the neighborhood and residents. Collaboration needs to be mandated in the General Plan and not rely completely on specific plans. Good example is ROP center on Second Avenue. Classes starting and ending at the same time create unnecessary congestion of cars looking for street parking. Parking areas on Castle Park campus should be available for this evening parking to facilitate the

RESPONSE

Z-4 A Transportation Demand Management plan (TDM) is not proposed as part of the General Plan Update. Parking is considered an issue associated with development of specific projects and zoning requirements. The General Plan notes that parking detail, both in kind-i.e., structured of surface parking-and in quantity-number of spaces per type of use, will be determined as part of the amendment to the zoning Ordinance necessitated by the adoption of the General Plan Update. This comment requests shuttle service from southwest Chula Vista to the Marina Park area, Broadway, and the H Street and E Street Transit loops. This comment does not pertain to the adequacy of the dEIR. Comment noted.

Z-5 This comment requests the addition of policies that incorporate SANDAG's CMP proposals. It does not reference the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body.

expansion of evening programs at this site. This is just an example that is repeated in other western Chula Vista areas.

5. More completely address the historical significance of Chula Vista's long-term industries (e.g., Salt Works, agriculture, railroad, military).

Z-6 **TT General Plan should support the Salt Works industry for its special and historical technological significance. It is an important part of our community industry character. Also, the area is significant in relation to the biological resources, habitats, and plays a role in the Pacific Flyway and natural history of the California tern and other organisms. This area would be great for Environmental Education site and also a controlled staging area for the Otay Valley Regional Park to facilitate the goals of the wildlife preserve and guidelines of the cognizant agencies such as Fish and Wildlife and State and local conservation groups to preserve, enhance, monitor, and maintain the unique and special habitats and special environment created by the marriage between nature and technology in this area. This would be a great spot for Environmental Education for all ages, degrees of exploration, ecotourism, and global significance. I would support this effort and would love to join others to contriubute to its special success now and into the future.**

6. The need for a heritage house, an international house, and a museum housing local cultural and paleontological resources should be promoted now and established within the next 30 years.

Z-7 **TT The Otay Church in Southwest Chula Vista would be a great place for a Heritage and International House Museum. This would expedite reaching the goal for this recommendation. Also, it would be close to the Transit focus area for this Southwest area and would make another contribution to the International Theme of this area. The Paleontological resources currently going to the Natural History Museum would make a dynamite drawing point that would fit into various sites: Bayfront or Bird Ranch or Make a combo, Agricultural, Mining, and Paleontology museum at the site where Hanson is (when they move to Rock mountain) and link it to the OVRP projects. I have been advocating this for years and would be interested in facilitating it once there is a potential location and identified or donated site. TT**

7. Address environmental justice in the General Plan Update and EIR, using the Regional Comprehensive Plan as a model, including compliance with the following policies: Locate energy facilities, such as power plants and/or transmission lines, so that lower income and minority communities are not disproportionately negatively affected (Regional Comprehensive Plan, Chapter 6, page 380).

Z-8 **TT dEIR revisions and amendments have improved Environmental Justice items. Need improved compliance, restrictions and monitoring in established mixed-use neighborhoods, especially in reference to hazardous wastes, air pollutants, noise, and EMF radiation. Will certain kinds of**

RESPONSE

Z-6 The discussion of industrial history is recognized in the dEIR. Section 5.4.1.2 recognizes the Western Salt Works as an important historic resource in the city. The City understands that industrial historic resources may be important. In accordance with proposed General Plan Policy LUT 12-6, future projects are required to consider their potential impact of historic structures including industrial buildings and sites.

Z-7 This comment discusses the need for a heritage house, an international house, and a museum housing local cultural and paleontological resources. This comment does not reflect on the adequacy of the dEIR. Comment noted.

Z-8 The EIR does not address environmental justice. CEQA limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect.

industries be restricted in the port area or adjacent to infill residence projects. For example, no dry cleaning businesses using perchlorate, no car painting, no idling buses, certain kind of light restrictions, noise restrictions.

TT New proposed dEIR amendments Include 1000 feet away from Otay Landfill and current Bayfront power plant (from sensitive receptors and 500 feet away from major highway. Needs to be more restrictive in some areas and in reference to active recreation siting. For example, area below the bridge should not be used for high level recreational areas, since Carbon dioxide and carbon monoxide and other gases may pocket in that area. What are the plans for the area under the new 125 Bridge? What impact will they have on the MSCP, resources, and environment and sensitive receptors in general? How mitigated for noise, air, oil and grease, and water runoff pollution.

- A significant buffer zone of at least 1,000 feet should be mandated between past, present, and future waste sites that would impact on sensitive receptors both human and in nature that would result in morbidity, mortality, and well-being of the people and the natural resources and community welfare.
  - **TT Environmental Health advocates feels satisfied with dEIR language at this time. I personally would like to see greater than 1000 feet in some areas so do support a study to determine if greater than 1000 feet needed in some projects.**

- Do not issue permits for certain types of industries, businesses, or operations that would impact the health of sensitive receptors.

  TT Methyl bromide, perchlorate, metal plating industry, and certain other emitters must be restricted to location and some businesses of this type may need to be re-sited. Will they be? Will certain businesses be phased out in areas where residents are built up. I do not support the idea that an industry MAY have a toxic reduced technology in the FUTURE and so should get the permit NOW. Permits should be restricted on basis of current standards and technology in use and possible. Will it be?

8. Eco-tourism, environmental research and education, and economic and environmental sustainability need to be more comprehensively addressed.

Z-9 **TT Great improvement in the recirculated EIR, but Economic Element does not do this area its due importance with respect to the GPU *per se*, especially in the area of ENVIRONMENTAL technology, ECO-tourism, Green technology and building industry, eco-marketing, ENERGY conservaton and bottom-line benefits.**

9. Air quality health impacts of the South Bay Power Plant to Chula Vista should be addressed.

Z-10 **TT To be more fully addressed by the Bayfront port district EIR also.**

RESPONSE

Z-9 This comment discusses the need to address eco-tourism, environmental research and education, and economic and environmental sustainability. CEQA limits the discussion of environmental impacts to physical changes in the environment. Comment noted.

Z-10 The potential for the placement of sensitive receptors in the vicinity of the South Bay Power Plant is addressed in the dEIR. Air quality impacts associated with the potential siting of residential uses within 1,000 feet of the plant is considered a significant adverse impact (Section 5.11.3.3). The power plant occurs in the Bayfront district of the city, outside the area of change covered by this document. The discussion in the dEIR indicates that while the nature of power generation on the Bayfront is speculative, it was ". . . assumed that an air quality effect could occur if sensitive uses are placed within 1,000 feet of the plant."

The plant is permitted by the California Energy Commission and is required to meet stringent air quality standards. The Air Resources Board publishes the results of the air modeling for regional sources of pollution including the power plant. That modeling indicates that there is a projected cancer risk of 2.2 increased cancers in 1,000,000 as a result of emissions from the plant, at the point of highest concentration. This is below the 10 in 1,000,000 standard used to assess a significant cancer risk. The report also indicates that the plant is below the threshold for acute and chronic health risk (APCD 2003).

In addition, the dEIR establishes a mitigation measure that insures that no residential use will be placed within this 1,000-foot region while these facilities are operating unless a health risk assessment demonstrates that there is no significant health risk.

Z-11 10. The draft EIR lacks an analysis of pending EPA and CARB regulation of toxic air contaminants (e.g., mercury).

Z-12 **11.** The draft EIR lacks an analysis of cumulative environmental impacts with respect to the Baja California/Tijuana region. **Although SANDAG is making inroads re this, Chula Vista needs to play larger role in the collaboration process. Will impact traffic, air pollution, economics, environment, public health and socio-cultural-educational opportunities, institututions, and quality of life. How are we considering the cumulative impacts in our region?**

Z-13 **12. The draft EIR needs to address socio-economic impacts that would result from physical changes to the environment. This needs to be better addressed in the dEIR especially with respect to housing, jobs, cultural arts, entertainment, mobility, jobs, and health/safety and fulfilling the GPU vision and goals TT Needs expansion re social impacts and mitigating resources, services, and amenities provided by the city and other agencies. How done?**

Z-14 13. The lack of certain potential mitigation measures that can reduce the significant unmitigated impacts of the proposed General Plan Update is problematic.

TT Water was tested for the Otay River and ponds. I understand these were the standard coliform and mineral lab tests. Is this correct? Are there plans to also test the fish themselves to test for heavy metals (lead, mercury, etc.) and also for certain pesticides and organics that accumulate in the food chain. Will this be done?

TT Traffic, transit, and parking needs to be better addressed in the Southwest Chula Vista Bridge over the Otay River needs better lighting and reflective markings. What mitigation measures to make OVRP available to mobility-challanged individuals? What safety and security measures.

TT What would be the mitigation re feral cats or domestic cats in biological resource adjacent areas. Will the new residences restrict the type of predatory pets to mitigate impact on birds and Pacific flyway visitors?

TT When testing for noise impacts on residences 500 feet or less away from highways and/or noisy all-night businesses, are you testing during the normal sleeping hours as well as the early morning and evening hours? What are the City's enforceable standards for noise pollution. If highway noise exceeds the standards, will a mitigation measure DEMAND that walls or other measures be made to reduce the noise impact on the residents, schools or other sensitive receptor cadres.

Z-15 14. The Preferred Plan would obliterate Chula Vista's small town character.
TT Much improvement by using the harmonizing concept and Community character focus and form based growth concepts, design and

RESPONSE

Z-11 The comment questions the analysis of toxic air contaminants, specifically mercury, from power plants and industrial air emissions. The dEIR addresses the Rohr Industries/BF Goodrich plant, the South Bay Boatyard, the South Bay Power Plant, Hanson Aggregates'/Nelson and Sloan, Marine Service Commercial Diving Company, the Otay Landfill, and the Costco Gasoline Facility that are monitored as sources of pollution (Section 5.11.3.3). These facilities are monitored by APCD for toxic air contaminants.

Z-12 Cumulative impacts are not specifically assigned to Tijuana. To the extent that environmental conditions are a result of the contributions from Mexico, they are included in the baseline on which the impact analysis is based. For example, air quality monitoring at the Otay Mesa and Chula Vista monitoring stations include contributions from Mexico to the extent that they influence those ambient conditions. Similarly, traffic volumes on area roads do not distinguish between vehicle trips originating in the United States or Mexico. As such, modeled conditions reflect contributions from both countries.

Z-13 The EIR does not address socioeconomic effects of the proposed project. CEQA limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect.

Z-14 The comment states that the lack of potential mitigation measures to reduce the significant unmitigated impacts of the GPU is problematic. All mitigation measures deemed appropriate have been included in the dEIR.

Z-15 This comment does not pertain to the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

implementation approaches. Thank you very much for the improved harmonizing language, historical resources, MSCP, and low/middle rise standards. Please continue to improve on reducing social impacts, providing healthy resources and recreations for children, families, physically challenged, natural gifts and resources, and people of all ages, abilities, talents, resources, and heritage.
Small Town Character and Big Town Bounty blend very well with our Chula Vista Beauty, Home, and Neighborhood Focus.

Z-16 15. Unnecessary water and energy impacts should be avoided.

Z-17 16. General Plan Update vision input is not reflected in the Preferred Plan, but is better reflected in other alternatives.

TT Community Character alternative better served. However, some scenarios need to be addressed. Example scenario 2 permitting residences replacing MSCP land is not acceptable to the vision and the PROMISE of the mscp to preserve in perpetuity.

Z-18 17. Draft EIR, pages 32 and 55: The description and location of the Country Club View Property is inaccurate. Page 65 and Figure 3-4 might identify the correct location.

Z-19 18. Draft EIR, page 156, Photograph 5.2-3: Caption should state that the view in this photograph is looking east rather than west. OK

Z-20 **19.** Was the proposed deletion of Alta Road assessed with respect to the potential third Otay Mesa border crossing? **TT Please answer this.**

Z-21 20. The statements on pages 297 and 525 of the draft EIR regarding traffic mitigation are inconsistent.

Z-22 21. Draft EIR, Appendix B, GPU Maps: The school site located within the Interstate 5 Corridor District on E Street, between Broadway and I-5, is referred to as Feaster Elementary School on some maps and as Edison Elementary School on others. Fixed

Z-23 **22. The draft EIR does not adequately address the environmental impacts associated with extending La Media Road across the Otay River; elaborate the reasons for this lack of analysis. TT Please do this by referring to impacts on MSCP long range.**

Z-24 23. The draft EIR contains inconsistencies regarding building heights and densities. The relationship of building heights to densities, which are two separate issues, is not adequately addressed.

RESPONSE

Z-16 Energy and water supply impacts were considered significant because there is no contracted source of supply for these two resources, and there can be no means to identify the effort needed to supply that energy or water, and therefore, the effects of that provision.

Z-17 These comments refer to the proposed General Plan Update. They do not reference the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Z-18 The recirculated EIR was revised prior to public review to correct the description and location of the Country Club View Property. This comment does not address the adequacy of the EIR. Comment noted.

Z-19 The recirculated EIR was revised to correct the caption on Photograph 5.2-3.

Z-20 As discussed on page 12 of the Transportation Study, Alta Road was removed in order to be consistent with the East Otay Mesa Specific Plan, which also removes this facility. Analysis and implementation of an East Otay Mesa border crossing would need to be coordinated with the County, in whose jurisdiction the new crossing would be located.

Z-21 The recirculated EIR was revised prior to public review. This comment does not address the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Z-22 The recirculated EIR was revised prior to public review to correct the labeling of schools in the maps attached to the EIR as Appendix B. This comment does not address the adequacy of the dEIR. Comment noted.

Z-23 Comment noted. See Response to Comment X-12.

Z-24 The dEIR addresses the community character impacts that may result from the Preferred Project Alternative. As noted in the Summary section, Table 1-3 indicates that the Preferred Plan will increase massing height and intensity. These impacts are considered self mitigating because Objectives 47 and 48 establish measures that will avoid the effect.

Z-25 **24.** The project objectives as stated in the draft EIR include the protection of stable residential neighborhoods; however, this objective is not supported by the Preferred Plan in certain locations.

TT Certain Mobile Home Parks are stable residential neighborhoods. Do They get the same consideration as buildings.

Z-26 25. The absence of an update of the Housing Element is a deficiency since it would address mitigation of the displacement of residents.
TT How is the displacement of residents addressed in the revised Housing Element and dEIR impacts. How is the mitigation and provisions to reduce the numbers of current and potential homeless residents and visitors situation addressed in the EIR GPU ? How are the homing displacement and subsequet begging by homeless problem addressed at the freeway exits and other locations throughout the city?

Z-27 26. The draft EIR does not address the consistency of the proposed General Plan Update with the Cummings Initiative and the impact of non-incremental zoning changes that would result from adoption of the General Plan Update.
TT Please address this again. See 27, 28, 29 below.

Z-28 27. Include a new, updated Housing Element as part of the General Plan Update. The General Plan Update should be reviewed by the Chula Vista Housing Commission.

Z-29 28. Include policies and options in the Housing Element that mandate community services that help facilitate average and below average income households to find affordable housing.

Z-30 29. Recommend that full and complete relocation assistance be provided to enable displaced residents to obtain equivalent housing locally.

Z-31 30. The description of the scenarios in the draft EIR is inadequate; it is not clear what the scenarios really are and what they really mean.The final EIR should clarify this. **TT Improved**

Z-32 **31.** Clarify and quantify the reductions of impacts attributable to proposed mitigation measures that are identified in the draft EIR. **TT Still needs work to do this.**

Z-33 **32.** Proposed Transit Focus Areas: **How can impacts be adequately addressed in the draft EIR if no height limit is specified for high-rise areas? Recommend a cap of 15 stories in high-rise areas. There is no adequate reason to designate the Third Avenue and 'H' Street area as a Transit Focus Area due to the present lack of enhanced transit service in this area and due to the proximity of this area to the historic downtown area; furthermore, this proposed Transit Focus Area is inconsistent with the results of the General Plan Update vision input. TT What does a transit study area really mean?**

RESPONSE

Z-25 These comments refer to the proposed General Plan Update. This comment does not reflect on the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Z-26 Comment noted. See Response to Comment M-2.

Z-27 The Cummings initiative was approved through Ordinance No. 2309 in 1988, and included in the Chula Vista Municipal Code as Chapter 19.80, Controlled Residential Development (CRD). The CRD Ordinance is a zoning-level mechanism to control the rate of development by limiting residential rezonings to not more than the next highest zoning classification (re R1 to R2) in a two-year period, along with other provisions to address non-residential to residential rezonings. While the CRD Ordinance is not at the General Plan level, zoning actions subsequent to the General Plan Update will need to comply with the terms on the Ordinance

Z-28 Comment noted. See Comment M-2.

Z-29 Comment noted. Page 573 of the dEIR discusses the Affordable Housing Program (AHP) included in the Housing Element. This program requires new projects involving 50 or more units to set aside a minimum of 10 percent of the project's units as affordable to low- and moderate-income households. The AHP, through its Implementation Guidelines, offers flexibility in meeting affordable housing goals by considering alternatives to actual developer built-in production. These alternatives include land set-asides, off-site projects, and in-lieu contributions.

Z-30 This comment does not reflect on the adequacy of the dEIR. The comment, however, will be forwarded it to the appropriate City decision making body. Comment noted.

Z-31 Each of the three scenarios are identified and described in the Project Description section (Chapter 3) of the dEIR. Tables 3-5, 3-6, and 3-7 represent the land uses designated for each scenario. Additionally, the map index contains maps of every scenario within each district.

Z-32 Comment noted. Each section in Chapter 5, Environmental Impact Analysis, of the dEIR includes a conclusion after mitigation which provides analysis of the level of significance after mitigation.

Z-33 These comments request specific changes in the proposed plan. They do not reference the dEIR. One recommendation is for the limitation of the height of high-rise buildings. Subsequent to the publication of the draft document, the City has amended the definition of a high-rise building to place a limit on the maximum number of stories, as requested. A second request is to change the "transit focus area" designation for the area near Third and H Streets, indicating that there are no SANDAG or Chula Vista plans for transit use at this location. The proposed update would establish this transit use at this location. It is part of the proposed action.

What are the standards for determining acceptable vs unacceptable alternatives (preferences based on GPU vision, goals, objectives? Or what?) What opportunity for general public to give input to the choices for this area and URBAN core and BAYFRONT areas?

Z-34 33. The proposed mitigation in the draft EIR for the demolition of historic structures is inadequate. **TT Historic preservation improved in recirculated dEIR and its amendments.**

RESPONSE

Z-34 This comment states that the proposed mitigation in the dEIR for the demolition of historic structure is inadequate. No specifics are provided. Comment noted.

Resubmit by Terry Thomas!

These are the ORIGINAL ITEMS

To City Clerk

See my document of 11-2-05

DRAFT

RESOURCE CONSERVATION COMMISSION
RECOMMENDATIONS/COMMENTS
ON THE
CHULA VISTA GENERAL PLAN UPDATE DRAFT EIR (EIR 05-01)

February 7, 2005

1. Extend draft EIR public review period by 15 days.

2. Support the mandated use of green technologies with respect to municipal infrastructure and land use projects.

3. Traffic impacts attributable to the unavailability of parking must be addressed in Transportation Demand Management plans for areas with traffic level of service "D" or worse, through options such as cell phone parking areas and low-cost, short-loop shuttles. Also, the responsibility of developers to provide parking structures may possibly mitigate other demands on community resources. Incorporate photovoltaic systems into parking structures to help mitigate air pollution.

4. Incorporate SANDAG Congestion Management Program proposals as General Plan Update policies, including non-traditional strategies that focus on near-term, low-cost efforts such as transportation demand management (rideshare programs, transit pass subsidies, flexible work hours, telecommuting, etc.), transportation system management (signal synchronization, peak period parking restrictions, bicycle paths, etc.), and project design guidelines to encourage walking, bicycling, ridesharing, and transit use. These strategies, if used consistently and effectively, can help local jurisdictions better address new development impacts at the onset, reducing the need for more capital-intensive regional solutions in the future.

5. More completely address the historical significance of Chula Vista's long-term industries (e.g., Salt Works, agriculture, railroad, military).

6. The need for a heritage house, an international house, and a museum housing local cultural and paleontological resources should be promoted now and established within the next 30 years.

7. Address environmental justice in the General Plan Update and EIR, using the Regional Comprehensive Plan as a model, including compliance with the following policies:

   - Locate energy facilities, such as power plants and/or transmission lines, so that lower income and minority communities are not disproportionately negatively affected (Regional Comprehensive Plan, Chapter 6, page 380).

- A significant buffer zone of at least 1,000 feet should be mandated between past, present, and future waste sites that would impact on sensitive receptors both human and in nature that would result in morbidity, mortality, and well-being of the people and the natural resources and community welfare.

- Do not issue permits for certain types of industries, businesses, or operations that would impact the health of sensitive receptors.

8. Eco-tourism, environmental research and education, and economic and environmental sustainability need to be more comprehensively addressed.

9. Air quality health impacts of the South Bay Power Plant to Chula Vista should be addressed.

10. The draft EIR lacks an analysis of pending EPA and CARB regulation of toxic air contaminants (e.g., mercury).

11. The draft EIR lacks an analysis of cumulative environmental impacts with respect to the Baja California/Tijuana region.

12. The draft EIR needs to address socio-economic impacts that would result from physical changes to the environment.

13. The lack of certain potential mitigation measures that can reduce the significant unmitigated impacts of the proposed General Plan Update is problematic.

14. The Preferred Plan would obliterate Chula Vista's small town character.

15. Unnecessary water and energy impacts should be avoided.

16. General Plan Update vision input is not reflected in the Preferred Plan, but is better reflected in other alternatives.

17. Draft EIR, pages 32 and 55: The description and location of the Country Club View Property is inaccurate. Page 65 and Figure 3-4 might identify the correct location.

18. Draft EIR, page 156, Photograph 5.2-3: Caption should state that the view in this photograph is looking east rather than west.

19. Was the proposed deletion of Alta Road assessed with respect to the potential third Otay Mesa border crossing?

20. The statements on pages 297 and 525 of the draft EIR regarding traffic mitigation are inconsistent.

21. Draft EIR, Appendix B, GPU Maps: The school site located within the Interstate 5 Corridor District on E Street, between Broadway and I-5, is referred to as Feaster Elementary School on some maps and as Edison Elementary School on others.

22. The draft EIR does not adequately address the environmental impacts associated with extending La Media Road across the Otay River; elaborate the reasons for this lack of analysis.

23. The draft EIR contains inconsistencies regarding building heights and densities. The relationship of building heights to densities, which are two separate issues, is not adequately addressed.

24. The project objectives as stated in the draft EIR include the protection of stable residential neighborhoods; however, this objective is not supported by the Preferred Plan in certain locations.

25. The absence of an update of the Housing Element is a deficiency since it would address mitigation of the displacement of residents.

26. The draft EIR does not address the consistency of the proposed General Plan Update with the Cummings Initiative and the impact of non-incremental zoning changes that would result from adoption of the General Plan Update.

27. Include a new, updated Housing Element as part of the General Plan Update. The General Plan Update should be reviewed by the Chula Vista Housing Commission.

28. Include policies and options in the Housing Element that mandate community services that help facilitate average and below average income households to find affordable housing.

29. Recommend that full and complete relocation assistance be provided to enable displaced residents to obtain equivalent housing locally.

30. The description of the scenarios in the draft EIR is inadequate; it is not clear what the scenarios really are and what they really mean. The final EIR should clarify this.

31. Clarify and quantify the reductions of impacts attributable to proposed mitigation measures that are identified in the draft EIR.

32. Proposed Transit Focus Areas: How can impacts be adequately addressed in the draft EIR if no height limit is specified for high-rise areas? Recommend a cap of 15 stories in high-rise areas. There is no adequate reason to designate the Third Avenue and 'H' Street area as a Transit Focus Area due to the present lack of enhanced transit service in this area and due to the proximity of this area to the

historic downtown area; furthermore, this proposed Transit Focus Area is inconsistent with the results of the General Plan Update vision input.

33. The proposed mitigation in the draft EIR for the demolition of historic structures is inadequate.

(J:\Planning\RCC\2005\RCC Comments - GPU EIR)

Steve Power

From: Rabbia Phillip
Sent: Tuesday, November 08, 2005 8:33 AM
To: Steve Power
Subject: FW: relocationGPU EIR
Importance: High

-----Original Message-----
From: THERESA ACERRO [mailto:thacerro@yahoo.com]
Sent: Sunday, November 06, 2005 2:39 PM
To: Rabbia Phillip
Subject: relocationGPU EIR

AA-1 Rabbia, Could you please forward this to Steve Powers for me? Thank-you. Theresa
Steve Powers,
I sincerely hope that the issue of relocation will be dealt with in the FEIR for the GPU. It obviously is a community character issue. We have spent much time and energy talking about height as a factor of community character, but the ultimate community character factor is the people who live in a city. Displacement of the old, disabled, working poor, and other long time Chula Vista residents by new development in the west will have a profound effect upon the character of our city. Some of the families in the southwest whose property will be changed to industrial by this plan have lived here for over 50 years. The DEIR hints about a possible change in demographics, but does not deal with any of the ramifications of this change or its effects upon community character. Redevelopment needs to work like in El Cajon-helping people to upgrade their homes instead of displacing them.
Theresa Acerro
3730 Festival Court 91911

Yahoo! FareChase - Search multiple travel sites in one click.

RESPONSE

AA-1 See Response to Comment M-5 above.

PLANNING COMMISSION MEETING

HELD AT:
Public Services Building
Council Chambers
276 Fourth Avenue
Chula Vista, California

6 P.M., Wednesday, November 2, 2005

Reported by Kersten Song - CSR
Certificate No. 12796

I N D E X

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1 PRESENT:
2
3
4 COMMISSION:
5 VICKI MADRID, CHAIR
6 BRYAN FELBER, COMMISSIONER
7 PAMELA BENSOUSSAN, COMMISSIONER
8 BILL TRIPP, COMMISSIONER
9
10 MARCO CORTES, COMMISSIONER (ABSENT)
11 DAN HOM, COMMISSIONER (ABSENT)
12 GARY NORDSTROM, COMMISSIONER (ABSENT)
13
14 PLANNING COMMISSION SECRETARY:
15 DIANA VARGAS
16
17 CITY COUNCIL STAFF:
18 STEVE POWER, ENVIRONMENTAL PROJECTS MANAGER
19 JOHN MULLEN, DEPUTY CITY ATTORNEY
20 MARILYN PONSEGGI, ENVIRONMENTAL REVIEW COORDINATOR

ED BATCHELDER, ADVANCE PLANNING MANAGER
CHARLY BULL, ENVIRONMENTAL CONSULTANT

* * *

CHULA VISTA, CALIFORNIA, WEDNESDAY, NOVEMBER 2, 2005
6:00 P.M.

(PROCEEDINGS)

CHAIR MADRID: I am going to call the Planning Commission meeting to order for November 2, 2005.

Please call roLL.

SECRETARY VARGAS: Chair Madrid?

CHAIR MADRID: Here.

SECRETARY VARGAS: Commissioner Bensoussan?

COMMISSIONER BENSOUSSAN: Here.

SECRETARY VARGAS: Commissioner Marco Cortes?

Commissioner Hom?

Commissioner Nordstrom?

Commissioner Felber?

COMMISSIONER FELBER: Here.

SECRETARY VARGAS: Commissioner Tripp?

COMMISSIONER TRIPP: Here.

CHAIR MADRID: I'd like to make a motion to excuse Commissioners Cortes and Hom.

COMMISSIONER FELBER: Second.

CHAIR MADRID: Please vote.

(Voting commences.)

CHAIR MADRID: I'd like to also make a

Motion to excuse Nordstrom due to a conflict of interest.

Should we do that in a separate motion, or is that okay, that we'll include that in the same motion?

MR. MULLEN: It's fine to include that in the same motion.

CHAIR MADRID: Let's go ahead and amend that in that motion.

Motion carries.

CHAIR MADRID: Please stand for Pledge of Allegiance to the Flag, and a Moment of Silence.

(All Stands and Pledges Allegiance to the Flag of the United States.)

CHAIR MADRID: Good evening.

Before beginning tonight's meeting, I'd like to make a few introductory remarks.

The Planning Commission is comprised of seven citizens who serve without pay and are appointed by the City Council.

The Commission has a responsibility for considering General Plan Amendments, Rezoning, Conditional Use Permits, Precise Plans, Subdivisions, and Appeals from the Zoning Administrator and Design Review Committee. Some Commission actions are final

unless appealed to the City Council.

The Chair will call each case by number and Staff will provide an overview of the proposal. The Public Hearing will be open. And if you wish to speak on any item, we ask that you fill out a speaker slip and submit it to our secretary.

When addressing the Commission, please give your name and address, and we ask that you limit your remarks to three minutes.

Upon completion of testimony, the Public Hearing will be closed and the Commission will deliberate and act on each item. Should a request be denied or anyone wish to appeal our recommendations, the appeal must be filed in writing with the Planning Department within ten calendar days of our decision. An appeal fee is required, and costs vary with the complexity of the application.

Any visual aids used during the Staff's presentation are to assist the Commission in a clear understanding of the proposal. Visual aids that are used during the Applicant's presentation do not necessarily represent Staff's position or endorsement of the presentation and are solely reflective of the presenter's views.

We ask that all cell phones and pagers be

turned off. And we appreciate your attendance and participation in this meeting.

Next item on the agenda is Oral Communications.

This is an opportunity for members of the Public to speak to the Planning Commission on any subject matter within the Commission's jurisdiction, but not an item on today's agenda. Each speaker's presentation may not exceed three minutes.

Is there anybody wishing to address the Planning Commission on an item not on the agenda? Seeing none I'll move on to the first item on the agenda. And would you like to make remarks prior to me opening the item, or should I go ahead and address the item?

MS. PONSEGGI: Madam Chair, can you go ahead and open? And then I'll have some remarks.

CHAIR MADRID: Item No. 1 is:

"Public Hearing for DEIR 05-01; Close of Public Review Period for the General Plan update Re-circulated Draft Environmental Impact Report."

Project Manager is Steve Power, Environmental Projects Manager.

MS. PONSEGGI: Madam Chair, I'd like to make a couple of comments before you get started.

As you know this evening, the members of the Public and the Planning Commission will have the opportunity to comment on the recirculated Draft EIR to the General Plan update.

Following the close of this evening's Public Hearing by the Chair, Public Review on the Draft EIR

will close. Comments made this evening by the members of the Public will be included in the Final EIR and responded to in accordance with CEQA.

The Planning Commission can also provide comments on the Draft EIR. Should the Planning Commission choose to comment on the document, it must be in the form of a motion that includes comments. If individual Commissioner's comments are not included in the Commission motion, Commissioners may provide their own individual comments as members of the Public. That should happen after the Commissioners' comments on the DEIR, but prior to the close of the Public Hearing.

Since the purpose of tonight's meeting is to receive comments to be included and responded to in the final EIR, Staff will not be responding to those comments at this time. All comments will be included in the final EIR and responded to.

We can provide you some clarifications if there are items that you are looking for in the

document you haven't been able to find. That kind of clarification we can provide for you, but responded-to comments will go beyond what the intent of the meeting is.

CHAIR MADRID: Thank you.

Are we going to have Staff make any presentation on the document at all?

MS. PONSEGGI: That's the extent of our presentation. And I would request that you just begin

with taking the comments from the Public and then move on through your deliberation.

CHAIR MADRID: Should we go ahead and request any questions from the Planning Commissioners to Staff or --

MS. PONSEGGI: That's fine.

CHAIR MADRID: -- or that's a normal process before we open for Public Hearing?

Any questions of Staff from any of the Planning Commissioners?

COMMISSIONER FELBER: I've got one.

CHAIR MADRID: Commissioner Felber?

COMMISSIONER FELBER: I've got one.

It's kind of an informational question. I think I know the answer, but I just want to make sure.

Once the EIR's final, as we hear in the

future different projects that fit into the general plan, I assume some of them might be minor enough that they won't require it and some may be major enough that they will require a separate EIR for that particular project. Correct?

MS. PONSEGGI: Yes.

COMMISSIONER FELBER: For example, at that time we'll be able to see whatever the impacts are assumed to be on a given project on traffic and water and all the other things we're looking at here for that project, so that incrementally we'll be able to see how it -- how it contributes?

MS. PONSEGGI: The General Plan EIR is a

program level document that looks at things at the first tier, the less-detailed. And as individual projects come forward, they all go through CEQA review. Some of them require EIRs. Some of them go through a negative declaration or a mitigated negative declaration. Some of them are exempt. But every project will go through some form of CEQA review that will tier off of this General Plan EIR.

AB-1 MR. FELBER: So if we had some major project that we see two years from now, let's say five years from now, and all of a sudden we've got problems with water supply, for example, the environmental impact of

that project on the water supply we'll be addressing there, and we'll be able to evaluate that project and impact on it?

MS. PONSEGGI: Absolutely. The General Plan addresses water at the General Plan program level. For each individual project that comes forward, whether it has an EIR or a mitigated negative declaration or negative declaration, will look at the water supply to see whether or not there's a potential impact.

COMMISSIONER FELBER: For example, traffic/water?

MS. PONSEGGI: Right.

COMMISSIONER FELBER: Thank you very much. That's what I thought.

CHAIR MADRID: Commissioner Bensoussan?

COMMISSIONER BENSOUSSAN: I have just a

RESPONSE

AB-1 See Response to Comment P-1.

17 quick question.

AB-2 18 At some point we had talked about whether
19 the -- at the study of the evaluation for the Historic
20 Preservation program that's been referred to throughout
21 the Cultural Resources section of the EIR, there was
22 some talk about putting it in the Appendices of the EIR.
23 And I'm just wondering...I don't see any of those kind
24 of appendix documents. And they may be on a CD or
25 something. But I'm just wondering if that actually

1 happened, if the document itself -- we talked about it
2 on a number of different occasions, since the study's
3 referred to so often that it would be good to have the
4 actual document, which is only twenty-six pages' long,
5 and sort of existing on the shelf in some basement
6 where people can't refer to it, if this is all referred
7 to.
8 So I'm just wondering if that got in to the
9 document?
10 MR. POWER: Technical appendices address
11 traffic drainage, that kind of thing. There's no
12 Historical assessment in the appendices.
13 COMMISSIONER BENSOUSSAN: We had recommended
14 to put it in as a reference in the reference section of
15 the documents since it was referred to so often.
16 So it didn't get in, I guess is what we're
17 saying.
18 MS. PONSEGGI: I would recommend that what
19 you did -- you're correct, it did not get in. But
20 that's why this is a Draft EIR. So I would recommend

RESPONSE

AB-2 An Evaluation of the Historic Preservation in Chula Vista has been attached to the dEIR in Appendix J.

that you make that as part of your comments, and then we can follow up on that with the Final EIR.

COMMISSIONER BENSOUSSAN: Thank you.

CHAIR MADRID: Thank you.

I'm going to open the Public Hearing. But

before I do, I just want to let everyone know that we have a court reporter here tonight taking down, word for word, comments, just to facilitate and expedite the process so that Staff can get exact word comments.

I'll go ahead and open the Public Hearing. And just for the record, I want people to know that nobody has marked "Support" or "Opposition" on any of their requests to speak. And I just randomly grabbed these and started shuffling them. I'm going to shuffle them some more and just start calling people up to the podium.

Theresa Acerro?

(Public Hearing Commences.)

MS. ACERRO: Good evening.

My name's Theresa Acerro. I'm at 3730 Festival Court, in Chula Vista. And actually, I'm going to submit these in writing, but I thought maybe I'd mention one.

In the designation of the West Fairfield area as commercial business and office, with some educational, I think this is very good as a job-oriented usage, and it could help rectify the overall imbalance in the plan between quality jobs and

24 residential growth.

25 For the last eight years, the City of Chula

AB-3

1 Vista has been generating way more homes than jobs.
2 It's becoming a "bedroom community" to the entire
3 County, and I really think that what's -- one of the
4 things lacking in the EIR is there's no analysis of --
5 a full analysis of the negative impacts of the "bedroom
6 community" as essentially on all areas of the plan on
7 energy availability, water availability, traffic,
8 everything.
9 For the last four years, the City has
10 produced 15 percent more homes, but only 5 percent more
11 jobs. The EIR really needs to analyze how this
12 imbalance could be rectified. It's barely mentioned in
13 passing now that there might possibly be this problem.
14 The Staff should also be directed to come up with some
15 other preferred alternative that helps make up this
16 deficit, or jobs, and downplay some of the residential
17 development until the deficit is reduced a little bit,
18 instead of making it worse, which is what the Plan now
19 appears to do.
20 So I can hand this one, I guess, to Mr.
21 Power or to -- okay, thank you.
22 (Hands document to Secretary Vargas.)
23 CHAIR MADRID: Thank you.
24 Laura Hunter?
25 Please state your name and address for the

RESPONSE

AB-3 See Response to Comment R-1.

record.

MS. HUNTER: My name is Laura Hunter. I'm here representing the Environmental Health Coalition. Our address is 401 Mile of Cars Way, Suite 310, in National City.

I also have my comments in writing so I'll submit that.

I just wanted to point out -- make a couple of points.

One is, we really appreciate how much improved this all is. The EIR is much better. That GPU itself is much improved. But we want to make it perfect, so we have two little points that we want to raise.

AB-4 One is that this issue of needing buffers around freeways for locating sensitive receptors. And when I say "sensitive receptors," I mean residences that are going to have children in them, and schools. It is addressed somewhat in EE-6.10, but I was a little -- I wanted to encourage you or the Staff to add some additional updated information in the EIR about assessing those risks.

What we know now is that, minimally, within 500 feet of our freeways, such as I-5, it's not even debatable anymore. The science is very overwhelming,

that respiratory health impacts are exacerbated in this area, the studies on asthma in children who live near a

RESPONSE

AB-4 See Response to Comment M-12.

3 freeway. And one of the recent studies I have -- I've
4 added -- anyway, the information is really becoming
5 overwhelming, and I've attached a summary of those
6 studies that are out to this letter. It's not only
7 asthma. There's a new thing out in the New England
8 Journal of Medicine about lung deficiency in terms of
9 lung development in 10- to 18-year-olds who live,
10 again, near freeways.

AB-5 11 So I would ask in the EIR that you
12 strengthen the language of EE-6.10, which we've made
13 recommendation about, that we are going to avoid
14 location of sensitive receptors within 500 feet. We
15 have offered some language on -- if there's societal or
16 overarching -- overriding considerations that would
17 have to be analyzed, that that would be allowed. But
18 essentially we're going to try avoid doing that. And
19 in fact, I didn't see it in the report itself, but
20 SB-352 -- I don't know if you cited that in the EIR or
21 not, I couldn't find it, -- was passed in 2003. And
22 that basically prohibits schools from being within 500
23 feet of a freeway.
24 Again, there are some conditions, but
25 basically it's a very high standard that has to be met

1 in order to do that.
2 So I've also attached a map of what the
3 500-foot buffer would mean on both sides of I-5 that
4 I'd ask you to look at. And I do have a copy of my
5 letter.
6 The other thing that I still think is a

RESPONSE

AB-5 See Response to Comment K-2.

AB-6

deficiency in the EIR is that you mention the fact that at least two of the major toxic emissions, BF GoodRich and Hex Grubman, and the power plant are located outside of the area that this General Plan focuses on. While that's true, but the air impacts of those plants are blowing right into exactly the area that is impacted. BF Goodrich, in particular, is one of our areas of concern since we do not have an updated emissions inventory of what's coming from that facility.

Again, our main concern is the Hexavalent Chromium emissions. We have old data. We need to get updated data. It should have been the function of this document to get that updated data, if it's going to be complete, about what are the impacts to locating new residential downwind of these facilities.

So these are our two main points. Hopefully, it's explained by letters written to Ed. I think that was the wrong person, but I learned how to

spell your name so I'm going to wear it out writing these letters.

I need to sign this, but I do have copies for the Committee.

(Hands document to Secretary Vargas.)

CHAIR MADRID: Thank you.

MS. HUNTER: Thank you.

CHAIR MADRID: Next speaker is Gerald Scott.

MR. SCOTT: I'm giving my time to Terry.

RESPONSE

AB-6 See Response to Comment X-5.

CHAIR MADRID: Okay. Jackie McQuade?

MS. McQUADE: Jackie McQuade. 339 East J. Street.

And I submitted this, but I want to make sure this gets in so that's why I'm here.

In my opinion, the EIR from the General Plan update is inadequate in at least three areas. Number one: The water.

AB-7 The EIR, I believe, is inadequate on the issue of water supply with a projected population growth of 40 percent in northwest Chula Vista alone. The EIR contains no discernible plan for meeting water needs. The language which is supposed to address the water supply issue is so vague that it is meaningless. Approving the EIR without more sufficient planning for water supply is, I believe, unwise and definitely not

in the best interest of Chula Vistans.

AB-8 Number two: Revitalization of western Chula Vista translates as gentrification.

No provisions are mentioned in the GPU-EIR regarding relocation of fixed-income Chula Vistans when their homes are torn down and replaced with luxury housing afforded only to wealthy out-of-staters who wish to commandeer Chula Vista as their regimented playground. And how many mom-and-pop businesses will be bulldozed? The abuse of eminent domain laws in order to dump the poor and serve the rich is not an appropriate goal, nor even an acceptable accidental result of a General Plan Update.

RESPONSE

AB-7 See Response to Comment P-1.

AB-8 See Response to Comment Y-3.

And number three: The Environmental Impact of Proposed high-rises in Chula Vista at the September 21 Developer Expo Sponsored by the City.

Land parcels on Third Avenue, E Street and Landis Avenue were reviewed. Numerous citizens stated their opposition to high-rises anywhere in Chula Vista. At the Expo and a few days prior, I collected signatures of seniors and others who strongly support a 45-foot height limit for future building in west Chula Vista. We support low-rises, not mid- or high-rises. Because those signatures were collected over a period of only a few hours, it is my belief that thousands of

similar signatures could be obtained in a very short period of time.

AB-9 Also, I am clarifying on record that it is not a matter of a project at Fourth and H Streets, nor in the H Street Corridor or in any other corridor. A sizable number of Chula Vistans do not believe skyscrapers are appropriate for this City.

Thus, we urge the City Planners to completely delete zoning for high-rises in the General Plan Update.

Thank you.

CHAIR MADRID: Thank you.

Next speaker is Nick Aguilar.

MR. AGUILAR: Good evening.

Nick Aguilar. 1045 Surrey Drive. Appearing on behalf of the County Board of Education, as a

RESPONSE

AB-9 This comment states that a number of Chula Vistans do not believe skyscrapers are appropriate for the City of Chula Vista. This comment does not pertain to the adequacy of the EIR. Comment noted.

17 representative of District 2 of that board.

18 I have copies of the statement, but I want

19 to read a couple of -- two of the -- if time permits.

20 The reason I want to distribute those copies

21 to the Board members, because there's a page from the

22 Plan. It's at the back. I think it's important for

23 the Commissioners to see with respect to the tables

24 that I'm going to make reference to in one of the

25 comments.

AB-10

1 While they're distributing that, I'll start

2 reading -- that table refers to comments -- the

3 information in Section 5.13.3 of the report is

4 inconsistent and not sufficiently complete to support

5 the finding articulated in the Section 5.13.3.5, that:

6 "No significant impacts to the provision of

7 school services will result, and that no mitigation is

8 required."

9 In that regard, Section 5.13.3 states at the

10 top of the page, 478, quote:

11 "As seen in Table 5.13-10, no additional

12 elementary schools will be required in the west upon

13 build-out of the Preferred Plan."

14 However, Table 5.13-10, which is part of the

15 Plan, specifically states -- and this table, by the

16 way, is at the bottom of 477. You have a copy of that.

17 That table identifies: "...an additional new

18 elementary school need of 3.87 in the northwest and

19 1.75 in the southwest for a total of 5.60 new

20 elementary schools needed in west Chula Vista."

RESPONSE

AB-10 See Response to Comment Letter N.

21 This is a significant concern, because
22 there's several findings in that Plan that assume that
23 there's no such need and there are no provisions for
24 accommodating those significant needs.
25 The other point that I'll read to you

1 tonight is .5. And that is, that the report also fails
2 to provide any data or other authoritative source to
3 support statements.
4 Last conclusion on page 478 that, quote:
AB-11 5 "The demographics of households moving into
6 downtown redevelopment areas may have significantly
7 lowered student generation rate than the current
8 household composition."
9 In fact, the recent experience in the
10 redevelopment of downtown for the City of San Diego has
11 been reported as just the opposite. That is, that the
12 San Diego Unified School District is experiencing great
13 difficulty in providing adequate school facilities in
14 the downtown neighborhoods because the number of
15 students moving into the downtown redevelopment area is
16 much larger than was anticipated in this Plan.
17 So that brings me to zero seconds of my
18 time. And I appreciate your attention. But please
19 read the other three items in my report, which appear
20 to be technical in nature, but are important,
21 nevertheless. Because the conclusions drawn by the
22 Plan with respect to school facilities are based on
23 these assumptions, and they have significant impacts on

RESPONSE

AB-11 See Response to Comment N-5.

24 our community if they are not protected.

25 Thank you.

1 CHAIR MADRID: Thank you.

2 Next speaker. Patricia Aguilar.

3 MS. AGUILAR: I, too, have some things to

4 distribute.

5 Thank you, Diana.

6 (Hands document to Secretary Vargas.)

7 MS. AGUILAR: Patricia Aguilar, speaking on

8 behalf of Crossroads II.

9 I looked at my notes before I came in this

10 evening. And the last time I was here was February 14.

11 It was Valentine's day, the year 2004, when the

12 previous version of the EIR was before you, and we have

13 this exact same hearing.

14 At that time, this was a year and eight

15 months ago, I requested on behalf of Crossroads II that

16 you consider -- there were so many flaws in the Draft

17 EIR that you consider recirculating the Draft EIR. The

18 Staff subsequently made the decision, to their credit,

19 to go ahead and recirculate the Draft EIR. And I must

20 say that this recirculated draft is significantly

21 improved over the original draft. However, it still

22 contains several flaws. And we have submitted to

23 Mr. Power in writing a detailed list of what we think

24 the most significant flaws are. But I wanted to call

25 to your attention this evening to what we believe is

1 the greatest flaw in the report.
2 If you look at the map that I passed down in
3 front of you, this is a map of the so-called preferred
4 General Plan Update as it applies to northwest Chula
5 Vista, and I specifically want to call your attention
6 to the two most northwesterly areas on this map.
7 They're noted as the "E Street Gateway" and the "H
8 Street Gateway Area." And as you can see, the General
9 Plan calls for the redevelopment of an awful lot of
10 property between Broadway and Interstate 5 on east and
11 west and between C Street and about I Street on the
12 south.
13 Now, the next page of what Diana just passed
14 out shows the number of existing residential units just
15 in a portion of that area that I pointed out on the
16 map. And the portion that's covered in this table
17 includes just from E to H, whereas the Plan covers all
18 the way from about C to I. So this is a smaller area.
19 And within this smaller area, you can tell that there
20 are over 2,300 units, all of which are displaced if the
21 Plan were adopted and implemented.
AB-12 22 So the point I want to make in relation to
23 the EIR is that the EIR fails totally to address this
24 issue. It acknowledges that people will be displaced,
25 but it doesn't quantify them.

1 It says that because the new plan will build
2 new residences, there's no significant impact. We

RESPONSE

AB-12 See Response to Comment M-5.

3 completely disagree with that, the displacement of all
4 those units, housing units. And this is a significant
5 impact which should have been addressed in the
6 recirculated Draft EIR.
7 So we hope this evening that you will agree
8 with us and give direction to Staff to produce some
9 kind of report that analyzes this issue:
10 How many people will be displaced.
11 What the affordability of the units is that
12 will be displaced.
13 What are the options available to these
14 people in terms of relocation assistance.
15 Where will they move to.
16 This is a critical issue.
17 Now, I know there's some -- excuse me for
18 going on but I'm almost done.
19 There is some -- I think Mr. Power told me
20 that under CEQA, this is not an environmental issue.
21 Other people have told me it's the opposite and should
22 be addressed. And I don't know whether it's an
AB-13 23 environmental issue or not. But if not, it's certainly
24 an important socioeconomic issue and should be
25 addressed, either within the context of the final EIR

1 or in the context of a separate sort of Socioeconomic
2 Impact Report, so that these people who live here in
3 this area that I just pointed out to you have some
4 information in front of them as to what the options are
5 for them if they are displaced.
6 So my request is that you give some

RESPONSE

AB-13 See Response to Comment Y-3.

direction to Staff, either as part of the EIR or separately outside of the EIR, to consider preparing a report, some kind of Public report that is issued that addresses this critical issue that is not addressed in the Environmental Impact Report.

Thank you.

CHAIR MADRID: Thank you.

Next and last speaker, Terry Thomas.

MS. THOMAS: Madam Chair and members of the Planning Commission and Staff and friends.

I have just completed nine years for the Resource Conservation Commission, and as part of that I was part of the Environment Open Space and Sustainable Development Subcommittee.

When the RCC met during this last term, in February, we came up with 30 items that referred to the Draft EIR, and one of them was a request to recirculate the Draft EIR, to relook and revamp the Draft EIR. And I do want to thank the City for doing that as a form of

recirculation.

However, the number of the other items were blended into the recirculated Draft EIR and corrected or added in some way/addressed through the recirculated document. However, a number of them have not been. And I understood from a number of people and Staff that they will not be commented on in the recirculated Draft EIR. So therefore I use that as a backbone, those 33 items, as a back bone for my comments, my personal

comments, since I am no longer a member of the RCC.

So on behalf of my neighbors, myself, and also fellow residents who also have these concerns, I would like them to be part of the official documentation. And if they need to be readdressed from the description after your meeting, I would be glad to do whatever needs to be done. However, I would appreciate your maybe considering them as part of your motion, or at least some of them as a part of your motion.

The copies were given to the City Clerk along with the original ones, but in the ones that I have given you, anything starting with a "TT" is my additional comment. The whole thing should be addressed in the view of recirculating the EIR. And Mr. Steve Power said that he was going to do that.

I would like to comment on Item No. 2. I'm going to swiftly go through each of the items that I'm especially concerned about.

In Item No. 2, the request was that the City itself, in its municipal projects and activities, use the green technology. And they have done this, to a certain extent, with major projects as far as solar energy, and relook at some of the chemicals that are used. We would like that to be a policy. And that they would be a model for the industry as well as residents that are building on different projects. So that's what's addressed in Item No. 2.

In Item No. 3...I live in southwest Chula

14 vista, and there is a great need for -- in addition to
15 the transit stations that are projected to be there,
16 shuttle service during the weekends and other places.
17 But also as addressed in Item No. 4, sidewalks,
18 gutters, and amenities that are not being taken care of
19 now in the General Plan.
20 I understand that many of those are specific
21 plan items, but that has been used as an excuse for the
22 last ten years that I'm aware of. And a major
23 thoroughfare like Palomar Street near Fifth Avenue, you
24 need to have sidewalks, especially with the General
25 Plan Update, amenity to have more mobility.

1 And the items referring to the health and
2 welfare as well as the socioeconomic impacts also need
3 to be addressed. And I have addressed them in items
4 within this document.
AB-14 5 However, we have not addressed the Saltworks
6 in Item No. 5.
7 The Saltworks area, as a technology, is also
8 an historical industry in Chula Vista. And at the same
9 time, that area could provide a great resource for
10 environmental education as well as a staging area for
11 the Otay Valley Regional Park. And I would like to see
12 that impact combined in such a way that all of those
13 things could happen without destroying the beautiful
14 habitat and resource of that Saltworks area that is
15 currently being used as an industry. It could be
16 carried out, and I think that things such as

RESPONSE

AB-14 See Response to Comment Z-6.

17 environmental education from -- offer all levels of
18 education would be one solution.
19 Another one that has not been addressed is
20 the international flavor of southwest Chula Vista.
21 It's more than an international flavor. It's actually
22 our heritage. We have also a need to capture that in
23 the General Plan as a heritage and international
24 museum, and also in the architectural design through
25 that whole area as one of the major gateways to and

1 from Mexico.
2 So I would like to, in Item No. 6(c) utilize
3 that as a showcase for other diverse and beautiful
4 ethnic diversity and individual Chula Vista industrial
5 diversity of agriculture, mining, and paleontology from
6 the ancient creatures that have lived here that are
7 unveiling all the time, as well as we have the Otay
8 Church is located in that area. There are possible
9 locations for this international house.
10 Another thing, that the environmental
11 justice has been addressed very nicely by our
12 Environmental Health Coalition. So I would like to
13 reiterate my concerns about the health impacts. And I
14 could tell you, as a microbiologist and as a person
15 who's an avid reader, up to date on that, we need to
16 have, in addition to so-called "risk assessments" for
17 the toxic emitters, we need to have a public park,
18 private and municipal partnerships with the schools and
19 with the work force industries to make a survey
20 throughout the City of Chula Vista as to where the

21 locus of asthma, allergies, cancers and other
22 catastrophic illnesses are located. And with that kind
23 of information, you will definitely see a strong
24 relationship between the particulate matter, toxic waste
25 and hazardous materials that are being emitted by

1 certain industries.
2 For that reason, in the Draft EIR, in our
AB-15 3 new areas, we need to make sure that specific
4 industries such as the old-fashioned way of dry
5 cleaning that use Percolate is not -- there are new
6 ways of doing it. Green technologies that are not
7 harmful, that doesn't use pesticides. Organics. And
8 also heavy metals for the fish that are in the Otay
9 River as well as the ponds are also acidic.
10 We have a very beautiful report on the water
11 in the south as well as the regular coliforms and
12 minerals. It's one of the purest rivers, and that's
13 wonderful. But I think we need to have further
14 assessments for the fish themselves, because I think
15 that we all want to go fishing there and enjoy them.
16 Then, finally, I believe that the other
17 items that the final -- it would be, since we are part
18 of the Pacific flyway, we definitely, if there are
19 high-rises in specific locations, the type of
20 guidelines for the windowing reflection and the roofing
21 should follow the Audubon Society guidelines that
22 people like Jim Pew and others have been espousing. We
23 need to have that as part of the Impact document.

RESPONSE

AB-15 This comment reflects the desire for the City to promote green technologies. The proposed General Plan Policy EE 7.6 demonstrates the City's commitment to promoting green technologies. Policy EE 7.6 states "Encourage the construction and operation of "green buildings," considering such programs as the Leadership in Energy and Environmental Design (LEED) Green Building Rating System."

24 Those kind of guidelines for the reflection, et cetera.
25 And also feral cats, the feral cats would,

1 and have been, and rodents have been shown to have a
2 great impact on the animals that are within the
3 Community Development and in the EIR range.
4 Thank you.
5 CHAIR MADRID: Thank you.
6 MS. THOMAS: May I have an information. Do
7 I need to resubmit this after you've made a vote, or
8 Staff is going to respond to it without me resubmitting
9 it?
10 MR. POWER: Is that the same letter you
11 already submitted?
12 MS. THOMAS: I sent it by e-mail this
13 afternoon, and I will sign the document that I will
14 give to --
15 MR. POWER: We will be signing that.
16 MR. MULLEN: After the close of the Public
17 Hearing tonight, the Public comment on the EIR is
18 concluded. So if anything's received after that, the
19 City may not respond to those comments.
20 If they're comments, you should make sure
21 they're received prior to close of the Public Hearing.
22 MS. THOMAS: So this document I gave to the
23 City Clerk as well as the same document I sent to each
24 of you --
25 MR. POWER: If we have it, it will be

1 responded to.
2 A VOICE: I misunderstood what you said to.
3 I thought what you were saying -- somebody was
4 describing the fact that the presentation that we make
5 before the Planning Commission votes could be
6 considered by the Planning Commission as part of their
7 motion. And then if anybody has an individual item,
8 they need to do it after. No? Then I did
9 misunderstand that.
10 MS. PONSEGGI: If you have a written comment
11 you can submit that. Your oral comments will also go
12 in as part of the final EIR comments.
13 MS. THOMAS: Thank you.
14 MS. PONSEGGI: So the oral comments you just
15 made plus whatever written documentation you just
16 submitted.
17 MS. THOMAS: Thank you very much.
18 (Hands document to Secretary Vargas.)
19 CHAIR MADRID: Thank you.
20 Is there anybody else wishing to address the
21 Planning Commission? Please fill out a form.
22 I think there's some blank forms out in the
23 lobby. Okay.
24 Please state your name and address for the
25 record.

1 MS. CAZARIS: Thank you.
2 Let me see if you can understand me with

3 this cold that I have.
4 Anyway, I just want to take the opportunity
5 to reiterate some statements that were made here.
6 My name is Norma Cazaris, President of South
7 Bay Forum.
8 A few of the speakers addressed the issue
9 regarding displacement of residents, existing
10 residents. I believe it's within that Promenade area.
11 I believe that's what it's called.
12 South Bay Forum, early on when the original
13 Draft EIR came out, did notice that was not part of the
14 report and inquired as to why that was not. And we
15 were informed that it was not considered to be
16 appropriate for that. But anyway, I'm hoping that this
17 body takes the opportunity to make a strong statement
18 about that.
AB-16 19 We're concerned about gentrification issues
20 as well. We've seen what happened in areas like Barrio
21 Logan in San Diego with the Petco Park Development and
22 that, basically, resulting in potential displacement of
23 many long-time residents. We'd hate to see that
24 happen.
25 I understand there's approximately

AB-17 1 2300-units that are affected. And we certainly want to
2 make sure that the needs of those individuals are being
3 taken care of so that we maintain the residents that we
4 have here, long-time, loyal residence residents of
5 Chula Vista. And hoping that there are plans to have
6 some kind of affordable housing provisions made for

RESPONSE

AB-16 See Response to Comment M-5.

AB-17 See Response to Comment M-5.

7 existing residents.
8 Thank you. And I'll fill this in and turn
9 it in.
10 CHAIR MADRID: Thank you.
11 Is there anybody else wishing to address the
12 Planning Commission? I'm going to --
13 MS. PLEMAN: I have one. Any my name is Cil
14 Pleman. C-i-l, P-l-e-m-a-n.
15 Hi. I may be addressing the wrong body. I
16 just got wind of the fact that there are going to be
17 409 units of senior housing in East Lake area, East
18 Lake/Vistas area. And there was some notice that was
19 sent out to some of us in the neighborhood.
20 And I think communication fell through
21 because now I'm not sure if I'm addressing the right
22 board. But when a few of us were talking about that,
23 we were really concerned about the traffic and other
24 issues associated with that kind of dense housing.
25 So am I addressing the correct board?

35

1 CHAIR MADRID: Are you discussing the 400
2 units --
3 MS. PONSEGGI: Madam Chair, I might be able
4 to provide some clarification.
5 I believe there's a community meeting on
6 that this evening. Unfortunately, I don't know the
7 location. I believe it's in the East Lake area.
8 There's an EIR being prepared for that project, and I
9 will give you my card. If you want to call me tomorrow

10 morning, I can get you in touch with the Environmental
11 Project Manager and the Planner on that. But there's a
12 community meeting going on this evening, and likely
13 that's what you have the notice for.
14 MS. PLEMAN: Is that what would happen first
15 before it would come to this body? Would the community
16 meeting happen first?
17 MS. PONSEGGI: The community meeting is an
18 informational meeting. And then an EIR is being
19 prepared right now which will go out for public review.
20 It will come to this body for close of public review
21 just like this EIR's coming in.
22 MS. PLEMAN: Okay, okay.
23 MS. PONSEGGI: It's got a few steps to go.
24 MS. PLEMAN: Well, very good. I'm glad I'm
25 not at the back end of the process.

1 Thank you very much for your time.
2 CHAIR MADRID: Thank you.
3 COMMISSIONER FELBER: Excuse me. Do you
4 know when the notice was? That date, possibly? It's
5 possible they may have, and I know there's none of them
6 out here out front, but if you go by the office on E
7 Street, maybe you can pick one up real quick and maybe
8 even still be able to catch it tonight. Just a
9 suggestion.
10 MS. PLEMAN: Okay, fine.
11 CHAIR MADRID: I'm going to open the Public
12 Hearing up to questions and comments from the
13 Commissioners. And I'll go ahead and start with

14 Commissioner Bensoussan.
15 Did you want to --
16 COMMISSIONER BENSOUSSAN: I have a lot of
17 them. And if somebody has fewer, if they want to go
18 first, go right ahead.
19 COMMISSIONER TRIPP: I'll defer to her or
20 Mr. Felber.
21 CHAIR MADRID: Commissioner Felber?
22 COMMISSIONER FELBER: Okay. I probably
23 don't have as many. I've got a few.
24 I spoke to Alex Alaga a couple of days ago
25 about the transit.

1 One of the things I'm concerned about is
2 that, you know, kind of the Field of Dreams thing. If
3 you build it, in this case maybe they won't come if you
4 put transit in. So I want wanted to make sure we also
5 took into account in the EIR what the impacts will be
6 if people don't use transit as much as they'd like or
7 we'd like, or hope that they would.
8 He assured me in their projections they're
9 using a worst-case transit usage projection so that we
10 don't have this -- shorting ourselves there. So this
11 was good.
12 The other thing I wanted to -- and this was
13 about the clarifying question I asked earlier. I
14 wanted to make sure that as we look at different things
15 we'll have the ability as different projects come up to
16 be able to reevaluate the specific impacts in those

17 cases. So this was great too.

18 One of my concerns all along with the

AB-18 19 redevelopment of the western part of Chula Vista,

20 because there is so little available land, has been the

21 issue of schools. So I appreciate that Mr. Aguilar

22 brought that up. And if there was an inconsistency

23 there, I definitely would second his request, that we

24 get that straightened out. Because the table

25 definitely makes it look clear that schools will be

1 required. I can't imagine that they wouldn't be,

2 especially if we had density. So I would concur with

3 that.

AB-19 4 The idea of the residential displacement

5 that was brought up more than once tonight, again, I

6 don't know either, whether or not that's a requirement

7 in the EIR. But whether it is or isn't, it sounds like

8 it might not be a bad idea.

9 With this GPU, I know there's a lot of fear

10 along a lot of people, within the western parts of

11 Chula Vista in particular, about what's going to happen

12 to me if this Plan gets implemented. So I think it

13 would be -- I'd like to encourage that we do verify

14 whether or not that can or shouldn't be a part of the

15 EIR or not. And if it's not required or doesn't belong

16 there, I do think it probably would not be a bad idea

17 for the City to consider putting something together so

18 that people have an idea of what the options might be

19 and so on.

20 And there are a lot of other good things

RESPONSE

AB-18 See Responses to Comment Letter N.

AB-19 See Response to Comment M-12.

21 brought up tonight to look into and investigate. One
22 of the things, I'm all for the use and proliferation
23 and encouragement of anything we can do, as
24 environmentally friendly as we can, such as the use of
25 green technologies and whatnot.

1 I guess I would caveat that by saying that
2 we also need to make sure that it's justifiable
3 economically and in every other way. So I kind of am
4 reluctant to use language that says "mandate," but
5 strongly encourage use whenever possible, that kind of
6 thing.
7 Certainly there are some emergent green
8 technologies that might be very expensive now, but
9 might be less expensive in the future and much more
10 well-developed. So it might in some cases not be a
11 good thing to mandate it at this time in certain
12 situations.
13 So I'm reluctant to use the word "mandate,"
14 but definitely encourage.
15 Those would be my comments for the moment.
16 Thank you.
17 CHAIR MADRID: Thank you.
18 Would you like to take over, Commissioner
19 Tripp?
20 COMMISSIONER TRIPP: Sure. Thank you.
AB-20 21 Together with Commissioner Felber, I had
22 some concerns with how the environmental mitigation
23 actually gets implemented. And I understand that will

RESPONSE

AB-20 Mitigation Measures listed in the General Plan Update EIR will be implemented on as projects come through the City. Comment noted.

24 be on a project-by-project basis. And that this is
25 kind of the broad sweep of the brush and the dream, if

1 you will, as to how our communities may further develop
2 and accept some of the density that we'll end up
3 getting. I'll be looking forward, as these plans
4 develop, to looking at the impacts that individual
5 projects may have. And I understand that they'll be
6 mitigated as they're implemented.
7 I'm just interested in seeing that they're
8 done with a comprehensive approach so that impacts such
9 as traffic will be addressed, impacts as to the
10 necessity of affordable housing in the community.
11 So that's one of my concerns. And I share
12 it with you, Mr. Felber.
13 At the Growth Management Oversight
14 Commission Meeting the other night, the new
15 representative, I believe from the Environmental Health
16 Coalition, she brought up air quality and how it's
17 important in our communities. And with regard to
18 sensitive receptors, she mentioned that if the number
19 of measuring stations -- I think there's one measuring
20 station in the area of the school district
21 headquarters, along Fifth Avenue. I may have the
22 location incorrect. But my point is, if we're
23 concerned about these sensitive receptors and their
24 proximity to freeways or generators of pollutants, that
25 before we look at mandating measures to address them,

RESPONSE

that we can adequately measure them.

So if the number of measuring stations in our community is controlled by APCD and if we're going to sufficiently address these sensitive receptor issues, we need to be able to measure it.

AB-21 So maybe we need to be talking with APCD or locating more measuring stations. I don't know how that's done. But I'm curious, with regard to air quality, that if we're going to go there, that we have the facts to support where we end up going.

Anyway, that's the end of my comments.

Thanks.

CHAIR MADRID: Thank you, Commissioner Tripp.

I'm going to go ahead and go next and waive Commissioner Bensoussan last. If that's okay with you?

COMMISSIONER BENSOUSSAN: Okay.

AB-22 CHAIR MADRID: I'd like to echo the same comments about possibly a relocation ordinance or something that helps address the relocation of residents on the west side.

Also, maybe we could look at some sort of a formula that will replace as we build new units -- we do have the Inclusionary Housing Ordinance which requires 10 percent of everything that goes in new be

AB-21 See response to Comment M-12.

AB-22 See Response to Comment M-5.

affordable. So I'm not sure if the numbers work out. But maybe we could get them to work out to the level

3 that it would, in fact, offset the loss of these units.
4 But I think that's something that we need to look into.
5 Going on to another subject, and this may be
6 a bit of a question to Staff. One of the items that I
7 see in the report is on -- I guess this is in the very
8 beginning. It's, like, the very second page of the
9 draft. LUT 2.6 discusses conducting a special study to
10 examine the potential of the high land use intensity
11 along taller buildings along the H Street Corridor.
12 I guess what my question is, it goes on to
13 say that all of the -- all of the conditions in this
14 General Plan would apply until -- and be modified after
15 the study's done. That concerns me a little bit.
16 I was wondering if what that study is saying
17 is that no matter what the Commission decides, that
18 study may then turn around and change those
19 recommendations.
20 Is that in fact true?
21 MR. MULLEN: Maybe I could clarify that.
22 To the extent there's a future study, the
23 scope of the study would need to be determined, and the
24 study would need to be completed. And then its
25 conclusions would be brought to you to make any

43

1 appropriate recommendations to the City Council.
2 There would have to -- what that -- what the
3 LUT 2.6 is saying is that the updated General Plan, if
4 it's adopted, would apply until it's amended in the
5 future. And this amendment process would be subject to
6 CEQA, so there would have to be environmental reviews

7 associated with any amendments. And the final product
8 of any amendment, if there were any, would be brought
9 to you and the City Council.
10 So hopefully that clarifies it.
11 CHAIR MADRID: It does. Thank you.
12 I see you standing at the podium.
13 MR. AGUILAR: I apologize for the intrusion,
14 but I wanted to clarify the comments by Commissioner
15 Felber.
AB-23 16 With respect to the inadequacy of the number
17 of schools accounted for on the west side, my comment
18 was actually intended to include both school districts,
19 although I pointed to the contradiction in the Plan
20 itself of having Chula Vista Elementary School
21 District specifically cited.
22 Unfortunately, there is no similar table for
23 the high schools that I was able to locate. But I
24 know, of my personal knowledge, that there is -- and if
25 you look at student-generation numbers, you will see

1 that there's sufficient need for at least one
2 additional high school on the west side and maybe one
3 or two middle schools on the west side generated from
4 the additional students from the increased density plan
5 for the west side of Chula Vista.
6 So I just wanted to make sure that in review
7 of the assessment and response, the points that I was
8 trying to make apply to both districts, and not just
9 the elementary school district.

RESPONSE

AB-23 See Responses to Comment Letter N.

COMMISSIONER FELBER: My comments were intended to reflect both as well. I know, for example, Chula Vista High School is overcrowded as well.

So I agree, both districts need to be looked at.

MR. AGUILAR: Thank you.

CHAIR MADRID: Commissioner Bensoussan?

COMMISSIONER BENSOUSSAN: I have a number of small things and then big things.

Should I give you the small things first?

Okay. Well, I'll just go from the beginning of the book that way.

AB-24 On this same page that Vicki was talking about, LUT 2.6, below that, there's an Objective. It talks about "Objective LUT 3," that was it. And it kind of talks around the "Harmonizing Change," but it

doesn't use the words "Harmonizing Change."

MS. PONSEGGI: Can you clarify if you're looking at the General Plan or you're looking at the EIR?

COMMISSIONER BENSOUSSAN: I'm looking at the EIR on page XI, Summary of Revisions.

A question: This page was prepared after the September 18 meeting when the Mayor's amendment was adopted.

MR. POWER: That's correct.

COMMISSIONER BENSOUSSAN: That's correct?

My assumption is that this paragraph is intended to address the amendments concerned with

RESPONSE

AB-24 The term Harmonizing Change is referred to in the General Plan Update. Comment noted.

"Harmonizing Change" which was part of that amendment, incorporated "Harmonizing Change."

MR. POWER: What it does is it summarizes changes that are made within the document itself. So if you go to the actual Land Use portion of the EIR, there might be more clarification for you. This is basically to tell you what changes were made and where they are, basically.

COMMISSIONER BENSOUSSAN: If you look at this paragraph, a new Objective was added, which is "Direct the urban design and form of new development and redevelopment in a manner that blends with and

enhances Chula Vista's character and qualities, both physical and social." That's the sentence I'm referring to. And I looked elsewhere and I didn't see it.

My point is I didn't really find the word "Harmonizing Change" in this document. And I was wondering why, since that was part of the amendment, the actual words "Harmonizing Change."

MR. BATCHELDER: Madam Chair, I can respond to this.

As Steve indicated, this was taken from the context of the topic "Harmonizing Change." So that term is not in here. That term does appear in the General Plan document in the context of the introduction of the theme, which was added in the Vision and Themes chapter. And again, when it's

17 discussed in the Land Use chapter.
18 So simply, you're not seeing all of the
19 material written in under the notion of "Harmonizing
20 Change." You're just seeing an excerpt of relevant
21 policies as it respects community --
22 COMMISSIONER BENSOUSSAN: So you're saying
23 the term will be in the Plan, but it's not in the EIR?
24 MR. BATCHELDER: It's used in the Plan.
25 It's used sparingly. Because that's a term coined, if you recall,

1 and we added it to the visions and themes shaping the future
2 through the present and past," which, essentially, contains the
3 essence of "Harmonizing Change."
4 COMMISSIONER BENSOUSSAN: I would have
5 thought that the "Harmonizing Change" would, in effect,
6 sort of mitigate impacts to community
7 character. So that's why I'm surprised it wasn't in
8 here.
9 Anyway, that's my comment relevant to this.
10 There's a list of historic properties in
11 here. Let's see. It's on page -- well, it's not a
12 numbered page. Table 5.4-1, under the Cultural
AB-25 13 Resources section of the EIR. And I'm just wondering
14 why it's outdated. It only shows 62 designated
15 structures up through November of '02, and I know there
16 have been some in '03, '04, and '05. I was just
17 wondering why that table is outdated. I'd just like to
18 make that point for when it comes back in the final
19 form, that that could be updated.
20 Okay. I keep coming back to -- on page 251

RESPONSE

AB-25 Table 5.4-1 of the DEIR has been revised to reflect this change.

21 of the Cultural Resources. This is a comment I've made
22 before and I keep coming back to it:
23 "LUT 12.8 as practicable, the City will
24 support and encourage the rehabilitation of sound,
25 historic buildings."

1 In my ever so humble opinion, I think that
2 word "sound" should not be in there because it all
3 lumps unsound buildings, like the Aurora Manor House,
4 for example, into a category of, "Let's not restore
5 them." So I've brought this up before. I just wanted
6 to mention it again. And this may be a typo on page
7 248, may not. It talks about the northwest planning
8 area. It encompasses the downtown area of Chula Vista
9 which contains eight designated historic sites and
10 other potential properties. And are you saying that
11 there's only one historic site downtown? And if not,
12 that should be corrected.
AB-26 13 Going to a little bit more of a substantive
14 issue. I've noticed in the EIR that there doesn't
15 appear to be any analyzing of the negative impacts to
16 the contextual aspects of historic sites in the
17 Preferred Plan.
18 For example, the Preferred Plan calls for
19 the Transit Focus Area at Third and H to include
20 high-rise. And while there are some good mitigations
21 for impacts that would physically alter or demolish
22 historic sites, there's no mitigation or discussion of
23 impacts to the context of historic sites which is

RESPONSE

AB-26 While impacts to historic resources in accordance with Threshold 1 in the dEIR are reduced by the policies associated with Objectives EE 9 and LUT 12, impacts to historic resources would be significant without the Mitigation Measure 5.4-1. Compliance with this mitigation measure would reduce the impact to cultural resources resulting from the adoption of the General Plan Update to below a level of significance.

24 addressed in CEQA, the setting and context.

25 So high-rise buildings next to historic

1 neighborhoods would create an adverse impact. And that
2 hasn't been acknowledged or looked at in here. So I
3 would recommend as a solution to that that we look at
4 doing away with the Transit Focus Area or recommending
5 that the Transit Focus Area at Third and H only go to
6 mid-rise, and not high-rise. Then we wouldn't have
7 those negative impacts associated with high-rise next
8 to historic neighborhoods.
9 Since I'm out on this topic, I think it
10 would be important for Staff to maybe clarify what
11 happened last night in that it appears that it will be
12 yet another alternative analyzed or reported on that
13 would address not having that Transit Focus Area at
14 Third and H. And as a matter of fact, I wasn't at the
15 Council meeting last night, but I would like to explain
16 it for the benefit of the other Commissioners and the
17 Public.
18 MR. BATCHELDER: Madam Chair, at last
19 evening's Council meeting, Council directed and
20 requested that Staff bring back an option, a policy
21 option, with the Plan in December that would provide
22 for mid-rise height limits of the TFA at Third and H
23 Street, along with some other provisions with
24 qualifying intents with TFAs in general.
25 So essentially, I think what Commissioner

Bensoussan is asking for there, that will be an option when the Commissioner sees the project in December.

COMMISSIONER BENSOUSSAN: So this Planning Commission could make that recommendation as part of our motion tonight?

MR. BATCHELDER: That option will be before you as well.

COMMISSIONER BENSOUSSAN: Okay. Going on to some of these other issues.

In terms of mandating green technologies policies, I might offer up the idea of incentivizing green technologies' policies. And I didn't scrutinize that part of the EIR as well as the other parts so I don't know if this instant language is in there, but I think it would be a very good thing if it was in there.

And regarding the thousand feet from the power plant, that's in here somewhere, I recall the Steering Committee for the General Plan Update recommended that it be fifteen hundred feet for

AB-27 residences within power plants. So I don't know if this Commission wants to make a recommendation. I certainly would make one, to make that fifteen hundred feet instead of a thousand feet. And likewise, there was a map that indicated there was five hundred feet from the freeways indicated on the map.

MS. LAURA HUNTER: I passed it on.

COMMISSIONER BENSOUSSAN: I didn't get one.

RESPONSE

AB-27 See Response to Comment K-2.

Did they stay there?

MS. HUNTER: There's a map, a copy of our letter, and one of the studies. Summary of the studies are attached to the letter, also.

COMMISSIONER BENSOUSSAN: So in the 500-foot buffer of I-5, are there already residences in that 500-foot buffer?

MS. HUNTER: Yes, there are. And there is also a school.

One thing I didn't mention earlier, and I'm sorry I didn't, is that the ARB, the Air Resource Board, at the state level has issued this year a recommendation saying don't put any residences or school -- or sensitive receptors within this 500-foot buffer. So they've recognized it, and they've given that as a statewide guidance.

So unfortunately, there's not a lot that we can do. We're going to have to figure out what to do with Wheeler School. And there are plenty of residences. But certainly do no more additional damage by putting anybody else there.

So, yes, there are current residences there.

COMMISSIONER BENSOUSSAN: I agree very

strongly that should be addressed in the EIR.

Also, I was wondering...Mr. Bull could answer this...the Saltworks area, is that part of General Plan Update, or is that actually San Diego where the land where the Saltworks is? Is that Bay front? Is there a reason why that wasn't addressed?

AB-28

RESPONSE

AB-28 Comment noted. The Saltworks area is not a part of the General Plan Update.

7 MR. BULL: I believe the Saltworks, it's
8 south of the Bayfront Planning Area. And I believe part of it
9 is in the City of San Diego and part of it is in the
10 West Fairfield District. We didn't address any single
11 resource specifically in this, but rather tried to
12 outline a series of steps that would take in future
13 projects, as they're coming along, to evaluate the
14 effects at that time.
15 COMMISSIONER BENSOUSSAN: One of the things
16 I've known is, consistently throughout the Cultural
17 Resources area is there's a lot of verbiage where the
18 language kind of just says -- just talks about
AB-29 19 buildings, historic buildings. And the words "historic
20 sites" or "cultural resource" or "cultural landscapes"
21 isn't incorporated into this section very well. The
22 Saltworks, there was a very comprehensive study done on
23 the Saltworks, and it was found to be to the tune of,
24 like, 250 ways significant as a cultural landscape.
25 So I think that that section could be

1 improved by, whenever someone's talking about
2 preservation of historic buildings, to maybe look at
3 the language as saying "historic resources." That
4 would include cultural landscapes.
5 And last, but not least, I agree with my
6 fellow Commissioners, and I really would like to make
7 it in a motion and a recommendation, along with the
8 issue with the Transit Focus Area I brought up on Third
9 and H. I think this Planning Commission should send a

RESPONSE

AB-29 Comment noted.

strong recommendation that if we're in agreement, there should be a socioeconomic study done on affordable housing and displacement of affordable housing.

I know that at one of the recent meetings at our workshops it was brought up, I think maybe Steve Power talked about there was housing -- there was a loss and there was gain of housing. And there was net gain, not net loss. And my analogy to that is that was kind of apples and oranges that we're comparing because we're losing apples and we're gaining oranges. So it's not -- we're really not looking at the net loss of affordable housing. We're just looking at the net gain of housing.

So I would like to see this Commission recommend that a study be done on impacts of the displacement of the residents that occupy the

affordable housing and what options could be available to them. I think that a number of us have that same reaction.

So I guess that's my comments. And I'd like to maybe make a recommendation, or a motion for recommendation.

CHAIR MADRID: I'll second that motion.

COMMISSIONER TRIPP: I'll need to clarify what motion --

COMMISSIONER BENSOUSSAN: Yeah, I really hadn't given the motion quite yet.

CHAIR MADRID: You didn't?

COMMISSIONER TRIPP: You seconded something.

CHAIR MADRID: I thought the motion was a motion being made to do a study on the relocation?

COMMISSIONER BENSOUSSAN: Yeah, I would like to make two recommendations.

One regarding the study, the Socioeconomic Impact Report that would address the displacement of residents in the affordable housing category and analyze that and offer options for the displaced people. Options recommendations, alternatives, that sort of thing. That's one -- first half of my motion.

And the second half of my motion would be to recommend that -- it would be for this Commission to

recommend -- to limit the Transit Focus Area at Third and H to mid-rise, as it seems that that would go a long way in mitigating the impact of contexts in the historic core.

I'm not so sure I'm very articulate in this but...

MR. BATCHELDER: Madam Chair, just clarification from Staff.

COMMISSIONER BENSOUSSAN: Okay.

MR. BATCHELDER: With respect to this study you mentioned, about displacements, you may be aware, we're going to be coming forward in the very near future with updating the City's housing element. And that may be a more appropriate time that you will be able to include this type of a study with that particular effort.

17 So I don't know if you're wanting this in
18 terms of timing. I'd suggest to you that the
19 appropriate context would be more information in an
20 appropriate discussion forum to be able to bring that
21 forward with the housing element.
22 CHAIR MADRID: I don't think --
23 COMMISSIONER BENSOUSSAN: I'm sorry.
24 CHAIR MADRID: I don't think that the
25 housing element is going to address the kind of detail

1 that Commissioner Bensoussan is wanting to correlate
2 directly to this General Plan. They will look in
3 general at affordable housing and the City. But I know
4 that the Staff over there doesn't have the time to pour
5 over this and connect it to the housing element.
6 I'm concerned that it will be too general
7 and not be specific, and not be specific to the actual
8 displacement that could be happening directed to this
9 document.
10 MR. MULLEN: Maybe I could make one
11 clarification, just to assist you.
12 Why you're here tonight is to make comments
13 and review the Draft Environmental Impact Report. So
14 one of the things that guides you so is CEQA. We've
15 heard different things about what CEQA requires in
16 terms of economic and social impacts. So I just want
17 to make clear that you understand what the actual legal
18 requirement is.
19 The CEQA guideline that's relevant here is
20 CEQA Guideline 15131. What it says in relevant part,

21 subdivision (a):
22 "Economic or social effects of a project
23 shall not be treated as significant effects on the
24 environment."
25 It goes on to indicate that an environmental

1 impact report could basically trace the chain of cause
2 and effect. In other words, you could have an analysis
3 of the impacts related to a project, look at the social
4 and economic impacts, and see what physical impacts are
5 caused on the environment. But typically, you wouldn't
6 have an environmental impact, but look solely in the
7 abstract. You'd have to tie it down to the connections
8 to the physical impacts that are being generated by the
9 project. And there may or may not be any abstract
10 physical impacts that are caused by economic and social
11 impacts. But typically, and CEQA's very clear, you
12 wouldn't look directly at whether economic or social
13 impact is in itself a significant impact on the
14 environment.
15 In this section that I quoted, 15131,
16 concludes by saying:
17 "The focus on the analysis shall be on the
18 physical changes to the environment."
19 I'm not sure if that helps you at all.
20 COMMISSIONER BENSOUSSAN: Could I respond to
21 that?
22 I, for one, can see some physical impacts.
23 For example, where are these people going to go? We

24 could be creating a culture of homeless people that
25 would have a physical impact to the downtown urban core

1 by people actually living on the street, creating trash
2 problems and sanitary problems. I mean, that's a
3 physical result of creating a culture of homelessness
4 by not providing adequate housing.
5 But anyway, regardless of all that, I think
6 it's been brought up over and over and over, there have
7 been many workshops and occasions where Staff has done
8 a good job of trying to explain it in terms of CEQA and
9 in terms of the EIR. And we've heard many times that
10 the housing element is coming. It's coming and it's
11 coming. And we're all waiting for the housing element
AB-30 12 to come. I just think it would send a very good
13 message if we recognize that this is an issue. And it
14 has some connections with the EIR. Maybe not as strong
15 as we'd like them to be, but I think whether or not we
16 have it, we recommend that it be addressed in the final
17 EIR.
18 That's not really my motion. My motion is,
19 it doesn't have to go along with the final EIR. It's
20 just we make a recommendation that a study be done,
21 just like the H Street Corridor recommendation that was
22 made for that study.
23 So that's really, basically, what my motion
24 is on that.
25 MS. AGUILAR: Madam Chair, may I offer a

RESPONSE

AB-30 See Response to Comment M-2.

point of clarification?

CHAIR MADRID: Yes.

MS. AGUILAR: Thank you.

Regarding what Mr. Batchelder said about housing environmental impact, which will not be prepared by his department, rather it will be prepared by Community Development, I met with Amanda Mills who is the director of Housing, and we discussed this very issue.

And she said that the environmental impact report on the housing element will not address this issue of displacement. And I assume it's for the same reason that Mr. Mullen stated, that it's not considered an environmental impact report under CEQA.

So I'm not arguing that it should be included in the EIR. I don't know if it should or shouldn't. I'm just arguing that it should be done morally. It's an issue that should be considered and should be brought to the attention of the City Council, whether it's done inside or outside of the Environmental Impact Report. And I would just urge you to urge Staff to do it in or outside of the Environmental Impact Report, but it will not be done as part of the housing element EIR.

MS. PONSEGGI: Chair, perhaps I could

clarify.

The environmental document for the housing

element will be prepared by the Environmental section of the Planning Division. That environmental document will cover whatever's in the housing element. So to say what is going to be in or out of that document at this point is premature because the element hasn't been prepared yet.

I understand what statements the Housing Manager may have made, but to my knowledge, at this point, it's my section that's going to be responsible for determining the appropriate that environmental document.

CHAIR MADRID: Okay. At this point -- these comments are going to be on the record, so we could conceivably say that point for your initial comment for the relocation study is a comment on the record. And if you'd like to amend your motion, you can go forward with making the motion for the height element.

COMMISSIONER BENSOUSSAN: I would like to make -- as opposed to an individual comment, I would like it to be a Commission recommendation for the study for the displaced housing.

CHAIR MADRID: What I was suggesting is that, from what I'm gathering from what Staff is saying and legal counsel, this isn't the appropriate time or

the vehicle to do this.

Is that correct?

MR. MULLEN: I'm not sure I meant to say that.

All I'm suggesting is that under CEQA the EIR would typically not analyze purely social and

7 economic effects. So if this was the comment that was
8 made, that we should do a housing study within the EIR,
9 I'm not sure that that actually would be accomplished
10 in the EIR.
11 You could certainly make a recommendation
12 that some type of study along the lines that you've
13 described be done, just as there would be an H Street
14 Corridor study within six months after the General
15 Plan's adopted. So if that's sort of the intent of
16 your motion, that's appropriate.
17 However, what was noticed for tonight was
18 just in the Draft Environmental Impact Report. So I
19 would caution you to taking action that's not directly
20 related to the EIR which was noticed.
21 I mean, the General Plan Update is certainly
22 going to be coming back to you in a matter of weeks.
23 So maybe that's the appropriate time to make that
24 motion.
25 COMMISSIONER BENSOUSSAN: Okay. So I defer

1 to you.
2 COMMISSIONER TRIPP: Perhaps some discussion
3 is in order.
4 COMMISSIONER BENSOUSSAN: Yeah.
5 MS. STILLMAN: May I make a comment, Madam
6 Chair? It's relevant to this discussion.
7 CHAIR MADRID: Could you state your name and
8 address.
9 MS. STILLMAN: My name is Georgie Stillman.

10 580 Twin Oaks Avenue.
11 These people that are being displaced, the
12 word "affordable housing" is incorrect. They actually
13 live in substandard, low-income housing, and they will
14 be on the streets. They already are on the streets. I
15 saw a homeless woman by a furniture store just north of
16 the new retail condo apartment development, and I
17 stopped and talked to her. And her house was really
18 just a backyard shack. And I took her to Social
19 Services on Third down there.
20 If you look at all the poor, homeless
AB-31 21 people, any of who have walked the bridge route to
22 Tijuana on foot back and forth, all the homeless
23 people, those people have an enormous environmental
24 impact on a community. We have a large population of
25 subterranean very, very poor people, displaced people,

1 and ethnically mixed. Some of them come up from TJ.
2 But when they are ill and urinating and on the street,
3 they are a real environmental impact.
4 I'm on the RCC. I voted no on the EIR, the
5 one person, because this issue should be addressed. It
6 is an environmental impact.
7 Thank you very much.
8 CHAIR MADRID: Thank you.
9 Your motion still stands?
10 COMMISSIONER BENSOUSSAN: I don't know if
11 it's legal or not. If it's legal, yes. If not --
12 MR. MULLEN: What was noticed for tonight
13 was the comments on the Draft EIR. You could certainly

RESPONSE

AB-31 See Response to Comment M-5.

make this as a comment on the Draft EIR and Staff will respond to it. But what I'm suggesting is I don't think you would -- there wouldn't be a study back in front of you when the General Plan comes back in early December along the lines of what you're talking about.

So in order to actually make that a motion to the Planning Commission, I would recommend that if you're going to entertain that motion, do it when the General Plan's in front of you.

COMMISSIONER BENSOUSSAN: Okay. Then I'll save that motion for this occasion, and hope we have a quorum and I can make that motion then. And I'll just

restrict my motion to the Transit Focus Area mid-rise issue.

CHAIR MADRID: I'll second that issue.

Is there any discussion on that?

COMMISSIONER FELBER: Yes. Clarification.

When you talk about the Transit Focus Area, are you just talking about H Street or E Street or Palomar Transit Focus Areas?

COMMISSIONER BENSOUSSAN: I'm talking about the area on Third and H indicated in the document as Transit Focus Area allowing high-rise

So the one Transit Focus Area that allowed high-rise in the urban core that I felt would cause a negative impact contextually to the historic

17 neighborhoods was the Third and H one.

18 So I would like to make a recommendation

19 limiting that, as the Council did last night, making

20 their recommendation doing a study on another

21 alternative on that.

22 I would like to make a recommendation that

23 we limit that -- we recommend limiting it to mid-rise,

24 Third and H, that area.

25 COMMISSIONER TRIPP: I'll just let you know

1 where I'm standing on height in those areas.

2 I have spoken with -- I see Mr. Jentz is

3 here. I've spoken with Mr. Moot. They're friends of

4 mine.

5 We have no project before us. And I am

6 familiar with doing CEQA documents. I am familiar with

7 findings. And absent having an individual project that

8 is analyzed, impacts of which are analyzed under CEQA,

9 either mitigated or appropriately dealt with in the

10 Environmental Draft Report, I think we should leave the

11 door open on the height issue in this area.

12 And I'm not able to support the motion.

13 CHAIR MADRID: Any more discussion on that?

14 COMMISSIONER BENSOUSSAN: No. I maintain

15 that --

16 CHAIR MADRID: Commissioner Felber, you have

17 any comments?

18 COMMISSIONER FELBER: No, no.

19 CHAIR MADRID: With that motion and a

20 second, I'll go ahead and call a vote on that.

(Voting takes place.)

CHAIR MADRID: Motion carries.

COMMISSIONER TRIPP: Does that carry without --

MR. MULLEN: A motion to carry requires four

votes. Majority --

CHAIR MADRID: Okay, it isn't the majority of the quorum that exists?

MR. MULLEN: No, it is the majority of the Planning Commission. Requires four votes.

CHAIR MADRID: Okay, motion doesn't carry.

COMMISSIONER TRIPP: Do we want to give that another shot or --

COMMISSIONER BENSOUSSAN: Yes. Can I remake the motion?

COMMISSIONER TRIPP: Sure.

COMMISSIONER BENSOUSSAN: Because let me tie it into CEQA.

My motion has to do with the fact that it would be a mitigating factor for the community character impacts to limit it to mid-rise. So it is in the context of the EIR that I made this motion.

COMMISSIONER TRIPP: Ms. Ponseggi, as our Environmental Coordinator for Chula Vista, as the Lead Agency I will look to you to comment on this.

What does CEQA say about this?

MS. PONSEGGI: Well, the fact is that the EIR in its current form does analyze the Preferred

24 Alternative, which includes the fact that there are
25 significant impacts. It includes the high-rise, the

1 TFA at Third and H.
2 There are significant impacts. Whether or
3 not that one issue would mitigate the impact I am not
4 prepared to say at this point.
5 COMMISSIONER TRIPP: And when a specific
6 project is proposed, you would give that project its
7 due environmental review under CEQA?
8 MS. PONSEGGI: Yes.
9 COMMISSIONER TRIPP: And make a
10 determination whether any impacts as identified are
11 mitigable or not mitigable?
12 MS. PONSEGGI: Yes.
13 COMMISSIONER TRIPP: And whether or not an
14 environmental impact report is warranted?
15 MS. PONSEGGI: Yes.
16 COMMISSIONER TRIPP: And if it is adjacent
17 to a redevelopment area where policy makers may desire
18 added density or reduced density, it would analyze the
19 impacts of density or height, or whatever the project
20 was proposing.
21 MS. PONSEGGI: It would analyze all those
22 areas of CEQA, including aesthetics, height, bulk,
23 community character. We would look at all of those
24 things.
25 COMMISSIONER TRIPP: Thank you.

MS. TERRY THOMAS: Madam Chair, may I comment?

CHAIR MADRID: Yes.

MS. TERRY THOMAS: I just wanted to remind you that General Plan Update's Steering Committee had also had a vote on this particular location, and I think it was one abstention which was unanimously voted not to have the high-rise at the H Street-Third Avenue at one of our recent meetings.

In addition to that, the General Plan Update -- the Espanada Draft EIR that was brought forth and then taken became temporarily -- the impacts -- this refers to a high-rise on H Street and that area. The impacts on the traffic were E and F, unmitigated.

So there was a tremendous impact on the environment for a high-rise of that type -- I won't go into it, but I used more Post-its on that EIR, and we never did go forward. But the point is that the General Plan Update itself is speaking in general about the design of our City for the next 20 years, and that particular -- that the Transit Focus Area will not be impaired by not limiting the growth, but rather enhance the way cars could access a development that's lowered number of unit -- lowered number of floors could be

more mitigating. So I would like to point that out.

I just want -- I really -- I need to comment

3 a piece of information that would be helpful. My
4 colleague Bill had mentioned about a slightly different
5 matter, but it's the only thing I really want to
6 comment, about monitoring air pollution.
7 There are currently two stations for
8 monitoring air pollution. One of them is the J Street
9 station near the school, on J Street, the Hilltop area.
10 And the other one is East Lake. And I forget -- I
11 apologize, but I forgot to mention, because this is the
12 one thing I had been pushing for a number of years,
13 there was a huge need to have at least a third or a
14 fourth monitoring station. And the third one that I
15 was recommending, and I would appreciate it if you
16 would make that as a part of a recommendation, the
17 third one that I was recommending would be the Main
18 Street area, in the area that's around Hilltop and
19 Main Street. Some place in that area, or near the Main
20 Street-Fourth Avenue area.
21 The least -- that is a minimum, for a third
22 monitoring station. But I really do support
23 Mr. Tripp's idea of having more monitoring stations.
24 And you will find that the impacts, especially in
25 certain locations will give good data.

1 So, sorry. Thank you.
2 CHAIR MADRID: Thank you.
3 So Commissioner Tripp, did I understand you
4 to want to revote that last motion?
5 COMMISSIONER TRIPP: Would you like to
6 withdraw that?

7 COMMISSIONER BENSOUSSAN: Actually, I think
8 that -- I don't quite agree with the concept that it
9 would be mitigated on an individual project level
10 because, like Ms. Thomas points out, the General Plan
11 Update, it's a broad document that gives direction and
12 community character. We're not talking about impacts
13 to individual historic sites in terms of their
14 alteration or potential demolition. We're talking
15 about a broad impact to a broad topic, which is
16 community character.
17 And the high-rise...and I'm not talking
18 density because you can have mid-rise density which is
19 the same as high-rise density, so I'm not talking
20 density. I'm talking only high-rise. That the impact
21 to the community character is so severe with the
22 high-rise at Third and H that I think we should
23 recommend limiting it to mid-rise.
24 And I would love to take another vote, if
25 I'm able to change your mind by restating it.

1 COMMISSIONER TRIPP: You could change my
2 mind by withdrawing it.
3 I just don't believe that it allows an
4 Applicant a fair shake from Government if we predispose
5 in a certain area a height limitation. And that is a
6 core belief of mine.
7 You propose a project, you analyze its
8 environmental impact. Either you mitigate them or
9 don't. If we have a statement of overriding

consideration creating social or economic impacts, that goes to the policy maker for deliberation. And I think if they're going to go there, if this is an option that says when we are adjacent to a redevelopment area that has the potential that we all hope it does, I do not think it's appropriate to foreclose high-rise or mid-rise or low-rise at a certain location.

COMMISSIONER BENSOUSSAN: Well, this document does that all throughout the document. All throughout the document it does that. So what you're saying is applicable to the whole document. We could just have one free-for-all and no zoning. That's your logic throughout the document.

There's all these little colors, dark, brown, red, all those variations of colors that address heights. So according to your philosophy, we'd have

none of that, and it would be all dark red or dark brown or whatever color it is for high-rise.

COMMISSIONER TRIPP: If you note in the General Plan Update, the Implementation section, it discusses the individual specific plans and how they would be reviewed in conformance under CEQA, or the impacts would be reviewed under those specific plans.

Fortunately, or unfortunately, we have that document preceding those plans, and we'll be seeing those plans as they're developed.

CHAIR MADRID: I have a comment and I have a response for that, for what it's worth.

We spent one evening in here probably a

14 couple of hours, and then I watched the City Council
15 spend a couple of hours, at least, in a meeting trying
16 to discuss how the word "occasional" affected an entire
17 project. And we had an audience out here. It was just
18 incredible to me the amount of time and effort and
19 energy.
20 COMMISSIONER TRIPP: That was the Christian
21 school?
22 CHAIR MADRID: Yes.
23 COMMISSIONER TRIPP: I know.
24 CHAIR MADRID: So when you have those things
25 in place that you're suggesting for each project to be

1 reviewed, if you look at what the verbiage is in here,
2 it is more general than that particular situation. And
3 I think we'll continue to see the community in an
4 uproar unless we address it in an overall general way,
5 or that will continue to go on forever project.
6 And I think at some point, we'd have to
7 recognize what the community is saying, what the
8 community is screaming, is my comment.
9 COMMISSIONER TRIPP: I understand your
10 perspective. Thank you.
11 COMMISSIONER BENSOUSSAN: I think that's why
12 the Council addressed it last night.
13 CHAIR MADRID: Well, the item on the agenda
14 is close of the Public Comment. And seeing no more
15 comments, and I think we've pretty much talked this to
16 death, I'm going to go ahead and close the Public

17 Comment period.

18 Next item on the agenda is Director's

19 Report.

20 (Remainder of proceedings off the record.)

21 (Proceedings concluded at 8:01 p.m.)

22

23

24 * * *

25

1 STATE OF CALIFORNIA)
2 COUNTY OF SAN DIEGO) :ss)

3

4 I, KERSTEN SONG, a Certified Shorthand Reporter of

5 the State of California, do hereby certify:

6 That the foregoing proceedings were taken before

7 me at the time and place herein set forth; that a verbatim

8 record of the proceedings was made by me using machine

9 shorthand which was thereafter transcribed under my direction;

10 Further, that the foregoing is an accurate

11 transcription thereof.

12 I further certify that I am neither financially

13 interested in the action nor a relative or employee of any of

14 the parties.

15 IN WITNESS WHEREOF, I have this date subscribed my

16 name.

17

18 Dated: _____

19

20

21 _____
22 KERSTEN SONG
CSR No. 12796
23
24
25

November 2, 2005

Mr. Steve Powers
Environmental Projects Manager
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: comments on the DEIR for the Chula Vista General Plan Update

Dear Mr. Powers:

Some of the changes to the EIR do more honestly evaluate the effects of the GPU. More significant and unmitigatable impacts are now acknowledged. This makes a stronger case for not accepting the GPU in its current form.

AC-1 1. The EIR needs to do a more thorough analysis of the effects of displacement upon the people living on Zenith and south of Main Street if the preferred plan or any of its scenarios were to be adopted. Widening the industrial lots along northern Main Street to southern Zenith would displace many long-term residents. The housing to be built in other areas would not necessarily meet the needs of these residents nor would it necessarily be available when they needed it.

AC-2 2. Table 3-2 reflects population densities that seem very low when so many residences now have multiple families living in them. The norms have changed, but these estimates are based upon the once traditional family situation. These under estimates cause similar underestimates of the cumulative impacts of the preferred plan on traffic, schools, energy, and all other areas evaluated in the EIR.

AC-3 3. The draft DEIR says the percentage of people living in poverty in Chula Vista is below the state and regional average. This is only true of eastern Chula Vista. 2000 Census data shows the percentage of the population below the federal poverty level for the 25 census tracts in Chula Vista west of the 805 is 15,712 out of 107,695 people, or 15%. The numbers for eastern Chula Vista are 3,169/72,841 or 4.3%. The percentage for the entire county is 338,399 out of 2,722,408, or 12%. This is a huge difference between the east and the west. The GPU and the DEIR do not adequately address these differences. A citywide average must not be used because it minimizes the cumulative impacts of these changes upon western Chula Vista.

AC-4 4. Figure 5.1-5 shows a section for change near Broderick Acres, South of Main Street, on both sides of the Otay River. This would have serve negative impacts upon the OVRP. The text indicates that this multifamily residential is meant to be a buffer between residential and existing industrial. This cannot be right. There must be an appropriate buffer between industrial and any kind of residential to avoid negative health, noise and other impacts to the young, old and those with existing health problems.

RESPONSE

AC-1 The Preferred Plan or any of the Scenarios do not affect the size of lots in the city of Chula Vista. The Preferred Plan does designate a wider area along Main Street for industrial uses. The issue of displacement requiring development elsewhere is discussed in Chapter 5.17 of the EIR. As stated in Response M-5, the dEIR recognizes that people will be displaced as individual projects are developed in the Northwest and the Southwest planning areas. The increase in the numbers of units within these planning areas; however, will be able to accommodate those displaced because the Preferred Plan projects an increase of 3,913 residential units in the Southwest Planning Area. The extent to which these projects would require construction of housing elsewhere, and, thereby, have a significant housing and population impact as it relates to Thresholds 2 and 3 in the dEIR, will depend upon the nature of each individual project and will require review when details of those projects are known.

AC-2 Table 3-2 of the EIR presents the Proposed General Plan Land Use Categories. The comment may refer to Table 2-1 that provides the number of dwelling units and the projected population for the Preferred Plan and each of the Scenarios. The population estimates assumed a per unit occupancy of 3.25 people per unit for single family homes and 2.52 people per unit for multi family homes. These population estimates were based on the Census and California Department of Finance (DOF) population coefficients. The average per unit rates were applied city-wide. Individual residences may vary from these rates.

AC-3 See Response to Comment X-1 of the Sierra Club letter dated November 2, 2005.

The EIR used the current population and the total number of housing units within each of the planning areas for the baseline comparisons. The EIR does not address socioeconomic effects of the project. Section 15131 (b) of the CEQA Guidelines limits the discussion of environmental impacts to physical changes in the environment. While the CEQA guidelines indicate that socioeconomic effects can be used to determine the significance of an impact, they are not to be considered as an environmental effect. Since the relative poverty levels of Chula Vista communities are socioeconomic issues independent of physical changes, they were not addressed in the EIR.

AC-4 Figure 5.1-5 of the EIR does not show an area of change near Broderick Acres, South of Main Street on both sides of the Otay River. The only areas shown south of Otay River, in whole or in part, are east of Interstate 805. The areas of change south of Main Street west of Interstate 805 are all north of the Otay River. While the comment does not indicate the specific location in the EIR of where ". . . multifamily residential is meant to be a buffer. . .", there is a discussion of the need to buffer residential uses from industrial uses in this area on page 139 of the final EIR. That discussion indicates that industrial use is incompatible with existing residential uses and that suitable buffers or design guidelines are needed to avoid this effect. The EIR concludes that land use impacts are significant and not mitigable until design standards and zoning specifications are established.

AC-5 5. On page 136 where the auto uses are relocated mitigation in the form of adequate buffering of existing residential must be added.

AC-6 6. p.48 shows a community park between Beyer Way and Broadway. This community definitely needs and deserves a community park, but the land indicated appears to be the Strawberry field that the community has asked to be preserved. A better option would be a part of the current batching plant when it moves elsewhere.

AC-7 7. The Palomar focus area residential between Industrial and the freeway is within the 500 foot buffer area needed near a major road. The research is very clear that lung damage, asthma and numerous other ill effects are directly related to living next to a freeway. These sever negative impacts need to be specifically pointed out in the EIR as reasons for not adopting these uses in this place. The trolley station area is far enough from the freeway to have multifamily residential without the severe noise and health impacts.

AC-8 8. It states on p.105 that the Otay Mesa-Nestor Plan portion of West Fairfield is designated open space. If it is annexed to Chula Vista it should stay open space in order to fully protect the Wildlife Refuge. The designation of the West Fairfield area as commercial/business office with some educational is a good job oriented usage and could help rectify the overall imbalance in the plan between quality jobs and residential growth. For 8 years the city has been generating way more homes than jobs. It is time that the city stopped being a bedroom community to the county. The EIR needs to analyze fully the negative impacts of being a bedroom community upon all areas of the plan. For the last 4 years the city has produced 15% more homes, but only 5% more jobs. The EIR needs to analyze how this imbalance might be rectified. It is barely mentioned in passing now. Staff should be directed to come up with another preferred alternative that helps make up the deficit of jobs and downplays residential development until this deficit is greatly reduced.

AC-9 9. The idea of having the Oxford area of Third as a community center with higher density needs to be better analyzed. Oxford Street is already quite narrow. The number of apartment buildings lining the street makes it difficult now to drive down the street from two directions at once, because the street is always lined with cars.

AC-10 10. The parking situation in the southwest is already a great problem, because the city has waived minimal parking requirements when it has allowed the building of multifamily residences where single- family residences once were. This plan will make the situation MUCH worse unless very clear amounts of off-street parking are required by the plan. I did not see this issue mentioned anywhere when mitigation and ordinances was discussed. At every community meeting I attended this was a number one complaint in the Southwest. Every residence must be considered to have two cars and need a visitor's parking space, because this is the reality of life in California today. The people with fewer cars are out numbered by the people with more cars.

RESPONSE

AC-5 The discussion on Page 136 of the EIR addresses the implementation of Policies LUT 42.14 through 42.16 and Policies LUT 11.1 through 11.5. As such, it indicates that guidelines and standards need to be prepared to establish buffering and siting criteria for ". . . industrial uses and automobile shops in areas adjacent to surrounding residential neighborhoods. . ." and that they ". . . can not be developed with available information." Until future plans and specifications are implemented impacts will remain significant.

AC-6 This comment does not apply to the EIR. The comment will be forwarded to the appropriate City Decision making body.

AC-7 See Response X-6. The recirculated dEIR concluded that the potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations was self-mitigated and not significant. Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of highway (Page 406 of the dEIR).

AC-8 This is not a comment on the adequacy of the EIR. See Response X-24 for a discussion of the West Fairfield area and the requirements for adjacency issues relative to the wildlife refuge. Any development adjacent to the San Diego Wildlife Refuge will be required to adhere to the land use adjacency guidelines defined in the Chula Vista Subarea Plan, Section 7.5.2. These include, but are not limited to: sufficient buffers and design features, barriers (rocks/boulders, signage, and appropriate vegetation) where necessary, lighting directed away from the refuge, and berms or walls adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization. The comment will be forwarded to the appropriate City Decision making body.

Response X-15 addresses the jobs/housing balance issue. The analysis conducted in the dEIR was completed for the land use designations in the Preferred Plan and three Scenarios and compared the effect of those scenarios to the adopter General Plan and the existing conditions. To the extent that the proposed plan represents a given jobs housing balance, the analysis evaluated the effect of that jobs housing balance on the issues of transportation, community character, population and housing, and air quality.

AC-9 This comment requests that the EIR analyze the affects of higher density on Oxford Street at Third. The Oxford area is now referred to as the "Town Focus Area" in the South Third Avenue District. Consideration of specific development in this area at this time would be speculative, therefore, any proposed development within the South Third Avenue District would be subject to CEQA and further environmental review.

AC-10 See Response X-13. Objectives LUT 30, 31 and 32 of the General Plan Update address parking in detail. All projects will have to confirm to the City of Chula Vista parking standards in effect at the time of approval. The General Plan Update will not result in land uses being inconsistent with the City's parking requirements.

AC-11 11. The community Character Alternative is still not fully analyzed. It should be analyzed with the addition of a reduction of density citywide.

Theresa Acerro
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Chula Vista, Ca 91911

RESPONSE

AC-11 Section 15126.6 of the State CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the projects, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The extent to which an alternative needs to be analyzed is specified in Section 15126.6 (d) of the State Guidelines, which states that the EIR provide sufficient information to allow meaningful evaluation, analysis and comparison of the alternative with the proposed project. The GPU EIR provided sufficient information to allow for a meaningful evaluation, analysis and comparison of the alternative with the Preferred Project and each of the Scenarios. While discussed in less detail than the Preferred Plan and each of the Scenarios, the significant effects of the Community Character Alternative were evaluated. The Community Character Alternative was evaluated to determine the effects of reducing the overall scale of development with the objective of reducing impacts on neighboring uses. The Reduced Project Alternative and the No Project Alternative, represent alternatives that would have a reduced density.

FINAL
ENVIRONMENTAL IMPACT REPORT
FOR THE
CITY OF CHULA VISTA GENERAL PLAN UPDATE
EIR #05-01
SCH #2004081066

Lead Agency

CITY OF CHULA VISTA
PLANNING & BUILDING DEPARTMENT
276 FOURTH AVENUE
CHULA VISTA, CA 91910

DECEMBER 1, 2005

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Summary of Revisions

Recirculated Draft Environmental Impact Report

In accordance with Section 15088.5 of the CEQA Guidelines, the draft EIR for the General Plan Update for the City of Chula Vista is being recirculated. The purpose of this recirculation is to include additional updated information regarding the proposed plan update and include expanded analyses. The following discussion provides a summary of the revisions made to the previously circulated draft EIR in accordance with Section 15088.5(g). In accordance with Section 15088.5(f)(1) when an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and are not required to respond to those comments received during the earlier circulation period. In conformance with this Section, the City is not responding to those comments received in response to the previous document. New comments are required by the end of the public review period for the recirculated General Plan Update EIR. The City of Chula Vista will respond to these comments submitted for the revised EIR. While the City of Chula Vista will not respond to the earlier comments, those comments will be part of the administrative record. Changes to the Draft GPU EIR include, but are not limited to, the following:

General Changes

- The draft General Plan Update included revised objectives and policies that established more stringent commitments to resolution of environmental issues. The changes in the General Plan Update resulted in changes to objective and policy numbers. This EIR references the new objective and policy numbers. The Objective and Policy Numbers Comparison Table provides the corresponding objective and policy numbers for the December 2004 GPU Draft and the September 2005 GPU Draft.

- Objective and policy wording and numbering has been updated to reflect corresponding changes in the proposed General Plan Update.

- The draft EIR has been updated to reflect revised acreages, population, and dwelling units.

- General rewording and reorganization of sections of the report were made to make the document clearer. The following discussion specifies where there was a change in either the significance of the impact before mitigation, the mitigation measures, or the significance of the impact after mitigation.

Issue Changes

In addition to the general changes noted above, the following changes were made to the discussion of specific issues.

Section 5.1 Land Use

- A new Objective LUT 2 was added which limits the locations for the highest development intensities and densities, and the tallest building forms, to key urban activity centers that are also well served by transit and includes the following six policies:

  LUT 2.1: Locate Mixed Use Transit Focus Areas where major transit stations exist or are planned.

  LUT 2.2: Locate the highest development intensities and residential densities within Mixed Use Transit Focus Areas where strong City gateway elements exist or key urban activity areas occur.

  LUT 2.3: Limit the location of high-rise structures to within these Transit Focus Areas, and the Eastern Urban Center area of Otay Ranch.

  LUT 2.4: High-rise buildings will be subject to discretionary review in order to ensure they are a positive addition to the City in accordance with the following provisions:

    - The building must reflect unique, signature architecture that symbolizes the City, and can be immediately recognized as a positive Chula Vista landmark.

    - The building must be accompanied by clear public benefits in acceptance of the height, such as increased public areas, plazas, fountains, parks or paseos, extensive streetscape improvements, or other public venues or amenities.

    - The overall building height and massing must reflect appropriate transitions to surrounding areas in accordance with the future vision for those areas, or if the building is on the periphery of an area of change, to the adjoining neighborhood. Specific Plans, General Development Plans/Sectional Planning Area Plans, or other zoning regulations will provide the basis for defining such transitions.

  LUT 2.5: Require proposals for any high-rise buildings to conduct shadow studies to assess the effects on light and solar access on adjacent areas and buildings.

LUT 2.6: Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and to also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings, and any appropriate amendments to this Plan.

- A new Objective LUT 3 was added which directs the urban design and form of new development and redevelopment in a manner that blends with and enhances Chula Vista's character and qualities, both physical and social and includes the following two policies:

  LUT 3.1: Adopt urban design guidelines and/or other development regulations for all Districts or Focused Areas of Change, as necessary to ensure that new development or redevelopment recognizes and enhance the character and identity of adjacent areas, consistent with this General Plan's vision.

  LUT 3.2: Any such urban design guidelines and/or other development regulations shall also be consistent with other, related policies and provisions in this General Plan, including Sections LUT 7.3, 7.4, 7.5, and 7.6.

- The discussion of West Fairfield District was expanded to clarify the relationship with the City of San Diego, the role of annexation, and the requirements of the MSCP.

- The conclusion was changed to reflect that the objectives and policies do not completely mitigate the community character impact because implementation of the objectives and policies requires subsequent planning and design standards that are not available at this stage in the planning process. Impacts remain significant and unmitigated.

- Mitigation Measure 5.1-3 which stated that for Scenarios 2 and 3, no residential uses shall be permitted or constructed within 1,000 feet of the Otay Landfill while the landfill is open and operating, was deleted. Policy 79.5 was revised to state “Limit land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks.”

- A significant impact was identified for Scenario 3 as remaining significant and unmitigated because of conflicts resulting from land uses proposed for areas adjacent to the Otay Landfill.

Section 5.2 Landform Alteration/Aesthetics

- The conclusion of significance regarding landform modification in the East Planning Area was changed to reflect a significant and not mitigable impact because the open, rolling hills would be permanently altered by development and no mitigation is available.

- The conclusion of significance regarding visual quality was changed to reflect that impacts are significant due to the lack of specific design standards and that after mitigation the visual quality impacts remain significant in the absence of specific design standards.

Section 5.3 Biology

- The discussion of the Active Recreation Areas in the Otay River valley was expanded.

Section 5.4 Cultural Resources

- Mitigation Measure 5.4-1, numbers 4 and 5 was revised as follows:

    4. Prior to the approval of any projects that proposed to demolish or significantly alter a potentially significant historic resource, as defined pursuant to applicable state and federal laws, shall complete an historic survey report addressing potential historic significance. The determination of resource significance shall be made in accordance with CEQA and the program established as a result of Policies LUT 12.7 and 12.11 and EE 9.1, and shall be completed to the satisfaction of the appropriate decision maker.

    5. In the event that significant resources could be adversely affected by the proposed action, as established in Policy LUT 12.12, a conservation program shall be implemented in accordance with applicable state and federal laws, to the satisfaction of the appropriate decision maker. The conservation program shall be designed to reflect the reason that the identified resource is considered important. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation. For archaeological remains, conservation of a resource for which preservation in place is not feasible would include the execution of a research design directed program of scientific data collection and analysis.

Section 5.8 Energy

- A new Objective PFS 23 was added. The objective addresses the efficient integration of electrical and natural gas facilities into the natural and developed environment.

Section 5.9 Water Resources and Water Quality

- Information was added regarding ground water. Identified for groundwater that the Quaternary alluvium has a storage capacity of 13,000 acre-feet and the San Diego Formation has a storage capacity of 960,000 acre-feet.

Section 5.10 Traffic

- Thresholds for impact significance were revised and impacts were reassessed using those revised standards. The threshold for the Urban Core Roadways was changed from LOS E to LOS D.

- Additional discussion and explanation was added to the text of the document regarding traffic thresholds.

- The document was revised to reflect changes in policies, specifically the elimination of reference to the future evaluation of La Media crossing the Otay Valley. La Media Road across the Otay Valley remains in the General Plan.

- Mitigation Measure 5.10-2 was revised to include a new table summarizing how many improvements will be needed along freeways in order to mitigate impacts.

- Mitigation Measure 5.10-1 was revised to indicate that prior to issuance of building permits, individual projects shall either contribute to the existing Traffic Signal Fee Program for applicable projects in eastern Chula Vista or secure and construct the improvements specified in Table 5.10-5 of the draft EIR that are within the area of benefit to the satisfaction of the City Engineer.

- Identified that non-Urban Core Roadways for Scenario 1, Scenario 2, and Scenario 3 are predicted to result in significant impacts to 18, 18, and 19 segments, respectively.

Section 5.11 Air Quality

- An Urbemis2002 air model for buildout of the General Plan was completed to quantify mobile and area air impacts in the year 2030.

- Additional air quality analysis was added for Scenarios 1, 2, and 3.

- An updated CO hot spot model based on the Transportation Project-Level Carbon Monoxide Protocol established by Caltrans 1997:Appendix B was completed.

- Additional hot spot analysis was performed for Scenarios 1, 2, and 3.

- Calculated potential construction emissions from hypothetical projects that could be permitted under the proposed GPU and compared the results with the South Coast Air Quality Management District’s quarterly construction thresholds.

- The mitigation measure for odor impacts adjacent to the Otay Landfill was revised.
- Updated information concerning current conditions and the status of the region's conformance with $PM_{2.5}$ standards was provided.
- Mitigation measure 5.11-2 was modified to indicate that no residential use shall be permitted within 1,000 feet of the Otay Landfill unless a project specific analysis is completed demonstrating that odor effects fall below odor thresholds for common compounds.

Section 5.12 Noise

- Indicated that a significant unmitigated cumulative impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels.

Section 5.13 Services

- Added additional information regarding Goal 26 of the Strategic Plan for the library, which is to maintain a consistent level of service to the community.

Section 5.14 Utilities

- Indicated that significant water impacts could occur as a result of construction of future projects; which represents a significant adverse impact.
- Revised Threshold 3 of Section 5.14.1, Water, to indicate that a significant unmitigated water impact would result if the proposed GPU is inconsistent with the UWMP prepared by the San Diego County Water Authority.

Section 5.17 Housing and Population

- This section was added to the EIR. It is a new section.

Sections 6, 10, and 11

- The cumulative impact and alternatives discussions were updated to reflect changes in other analyses, e.g., air quality, traffic, noise, and land use.

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE

December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Land Use & Transportation Element	
Objective LUT 1 Policies 1.1 – 1.19	No Changes
	Objective LUT 2 (new) Policies 2.1 – 2.6 (new)
	Objective LUT 3 (new) Policies 3.1 – 3.2 **(new)**
Objective LUT 2 Policies 2.1 – 2.7	**Objective 4** Policies 4.1 – 4.7
Objective LUT 3 Policies 3.1 – 3.13	**Objective 5** Policies 5.1 – 5.13
Objective LUT 4 Policies 4.1 – 4.10	**Objective LUT 6** Policies 6.1 – 6.10
Objective 5 Policies 5.1 – 5.4	**Objective 7** Policies 7.1 – 7.4
Objective 6 Policies 6.1 – 6.8	**Objective 8** Policies 8.1 – 8.8
Objective 7 Policies 7.1 – 7.5	**Objective 9** Policies 9.1 –9.5
Objective 8 Policies 8.1 – 8.7	**Objective 10** Policies 10.1 – 10.7
Objective 9 Policies 9.1 – 9.5	**Objective 11** Policies 11.1 – 11.5

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Objective 10 Policies: 10.1 10.2 10.3 10.4 10.5 10.6 10.7 10.8	**Objective 12** Policies: 12.1 12.2 12.3 **(new)** 12.4 12.5 12.6 12.7 12.8 12.9 12.10 **(new)** 12.11 **(new)** 12.12 **(new)** 12.13 **(new)**
Objective 11 Policies 11.1 – 11.4	**Objective 13** Policies 13.1 – 13.4
Objective 12 Policies 12.1 – 12.11	**Objective 14** Policies 14.1 – 14.11
Objective 13 Policies 13.1 – 13.5	**Objective 15** Policies 15.1 – 15.5
Objective 14 Policies 14.1 – 14.4	**Objective 16** Policies 16.1 – 16.4
Objective 15 (misprinted as 14) Policies 15.1 – 15.4	**Objective 17** Policies 17.1 – 17.4
Objective 16 Policies 16.1 – 16.8	**Objective 18** Policies 18.1 – 18.8
Objective 17 Policies 17.1 – 17.5	**Objective 19** Policies 19.1 – 19.5
Objective 18 Policies 18.1 – 18.2	**Objective 20** Policies 20.1 – 20.2

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective 19 Policies 19.1 – 19.5	**Objective 21** Policies 21.1 – 21.5
Objective 20 Policies 20.1 – 20.2	**Objective 22** Policies 22.1 – 22.2
Objective 21 Policies 21.1 – 21.14	**Objective 23** Policies 23.1 – 23.14
Objective 22 Policies: 22.1 22.2 22.3	**Objective 24** Policies: 24.1 24.2 24.3 24.4 **(new)**
Objective 23 Policies 23.1 – 23.2	**Objective 25** Policies 25.1 – 25.2
Objective 24 Policies 24.1 – 24.3	**Objective 26** Policies 26.1 – 26.3
Objective 25 Policies: 25.1 & 25.5 combined 25.2 25.3 25.4	**Objective 27** Policies: 27.1 27.2 27.3 27.4
Objective 26 Policies 26.1 – 26.2	**Objective 28** Policies 28.1 – 28.2
Objective 27 Policies 27.1 – 27.3	**Objective 29** Policies 29.1 – 29.3
Objective 28 Policies 28.1 – 28.3	**Objective 30** Policies 30.1 – 30.3

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
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December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective 29 Policy 29.4 (misprint—should be 29.1) Policy 29.5 (misprint—should be 29.2) Policy 29.6 (misprint—should be 29.3)	**Objective 31** Policy 31.1 Policy 31.2 Policy 31.3
Objective 30 Policies 30.1 – 30.4	**Objective 32** Policies 32.1 – 32.4
Objective 31 Policies 31.1 – 31.2	**Objective 33** Policies 33.1 – 33.2
	Objective 34 (new) Policies 34.1 – 34. 3 (new)
Objective 32 Policies 32.1 – 32.5	**Objective 35** Policies 35.1 – 35.5
Objective 33 Policy 33.1	**Objective 36** Policy 36.1
Objective 34 Policy 34.1	**Objective 37** Policy 37.1
Objective 35 Policies 35.1 – 35.5	**Objective 38** Policies 38.1 – 38.5
Objective 36 Policies 36.1 – 36.3	**Objective 39** Policies 39.1 – 39.3
Objective 37 Policies 37.1 – 37.4	**Objective 40** Policies 40.1 – 40.4
Objective 38 Policies 38.1 – 38.16	**Objective 41** Policies 41.1 – 41.16
Objective 39 Policies 39.1 – 39.17	**Objective 42** Policies 42.1 – 42.17

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Objective 40 Policies: 40.1 40.2 40.3 40.4 40.5 40.6 40.7 40.8 40.9 40.10 40.11 40.12 40.13 40.14	**Objective 43** Policies: 43.1 43.2 43.3 43.4 43.5 43.6 43.7 43.7A **(new)** 43.8 43.9 43.10 43.11 43.12 43.13 43.14
Objective 41 Policies: 41.1 41.2 41.3 41.4 41.5 41.6 41.7 41.8 41.9 41.10 41.11 41.12	**Objective 44** Policies: 44.1 44.2 44.3 44.4 44.5 44.6 44.7 44.8 44.8A **(new)** 44.9 44.10 44.11 44.12
Objective 42 Policies 42.1 – 42.15	**Objective 45** Policies 45.1 – 45.15
Objective 43 Policies 43.1 – 43.3	**Objective 46** Policies 46.1 – 46.3

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Objective 44 Policies 44.1 – 44.2	**Objective 47** Policies 47.1 – 47.2
Objective 45 Policies 45.1 – 45.6	**Objective 48** Policies 48.1 – 48.6
Objective 46 Policies: 46.1 46.2 46.3 46.4 46.5 46.6 46.7 46.8 46.9 46.10 46.11 46.12 46.13 46.14 46.15 46.16 46.17 46.18 46.19 46.20 46.21 46.22 46.23 46.24 46.25 46.26	**Objective 49** Policies: 49.1 49.2 49.3 49.4 49.5 49.6 49.7 49.8 49.9 49.10 49.11 49.12 49.13 49.14 **(new)** 49.15 49.16 49.17 49.18 49.19 49.20 49.21 49.22 49.23 49.24 49.25 49.26 49.27
Objective 47 Policies 47.1 – 47.18	**Objective 50** Policies 50.1 – 50.18

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
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December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Objective 48 Policies 48.1 – 48.5	**Objective 51** Policies 51.1 – 51.5
Objective 49 Policies: 49.1 49.2 49.3 49.4 49.5 49.6 49.7 49.8	**Objective 52** Policies: 52.1 52.2 52.3 52.4 52.4A **(new)** 52.5 52.6 52.6A **(new)** 52.7 52.8 52.9 **(new)**
Objective 50 Policies: 50.1 50.2 50.3 50.4	**Objective 53** Policies: 53.1 53.2 53.3 53.4 **(new)** 53.5
Objective 51 Policies 51.1 – 51.7	**Objective 54** Policies 54.1 – 54.7
Objective 52 Policies 52.1 – 52.15	**Objective 55** Policies 55.1 – 55.15
Objective 53 Policies 53.1 – 53.8	**Objective 56** Policies 56.1 – 56.8

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
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December 2004 Draft Objective/Policy Numbers	**September 2005 Draft Objective/Policy Numbers**
Objective 54 Policies: 54.1 54.2 54.3 54.4 54.5 54.6 54.7 54.8 54.9 54.10 54.11	**Objective 57** Policies: 57.1 57.2 57.3 57.4 57.5 **(new)** 57.6 57.7 57.8 57.9 57.10 57.11 57.12
Objective 55 Policies 55.1 – 55.12	**Objective 58** Policies 58.1 – 58.12
Objective 56 Policies 56.1 – 56.9	**Objective 59** Policies 59.1 – 59.9
Objective 57 Policies 57.1 – 57.4	**Objective 60** Policies 60.1 – 60.4
Objective 58 Policies 58.1 – 58.3	**Objective 61** Policies 61.1 – 61.3
Objective 59 Policy 59.1	**Objective 62** Policy 62.1
Objective 60 Policy 60.1	**Objective 63** Policy 63.1
Objective 61 Policies 61.1 – 61.6	**Objective 64** Policies 64.1 – 64.6
Objective 62 Policies 62.1 – 62.2	**Objective 65** Policies 65.1 – 65.2
Objective 63 Policies 63.1 – 63.2	**Objective 66** Policies 66.1 – 66.2

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective 64 Policies 64.1 – 64.2	**Objective 67** Policies 67.1 – 67.2
Objective 65 Policies 65.1 – 65.2	**Objective 68** Policies 68.1 – 68.2
Objective 66 Policy 66.1	**Objective 69** Policy 69.1 Policy 69.2 **(new)**
Objective 67 Policies 67.1 – 67.5	**Objective 70** Policies 70.1 – 70.5
Objective 68 Policy 68.1	**Objective 71** Policy 71.1
Objective 69 Policies 69.1 – 69.4	**Objective 72** Policies 72.1 – 72.4
Objective 70 Policies 70.1 – 70.6	**Objective 73** Policies 73.1 – 73.6
Objective 71 Policies 71.1 – 71.3	**Objective 74** Policies 74.1 – 74.3
Objective 72 Policies 72.1 – 72.2	**Objective 75** Policies 75.2
Objective 73 Policy 73.1	**Objective 76** Policy 76.1 Policy 76.1 **(new)**
Objective 74 Policies 74.1 – 74.5	**Objective 77** Policies 77.1 – 77.5
Objective 75 Policies 75.1 – 75.6	**Objective 78** Policies 78.1 – 78.6

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective 76 Policies 76.1 – 76.5	**Objective 79** Policies 79.1 – 79.5
Objective 77 Policy 77	**Objective 80** Policy 80.1 Policy 80.2 (new)
Objective 78 Policies 78.1 – 78.9	**Objective 81** Policies 81.1 – 81.9
Objective 79 Policies: 79.1 79.2 79.3	**Objective 82** Policies: 82.1 82.2 (new) 82.3 82.4
Objective 80 Policies 80.1 – 80.2	**Objective 83** Policies 83.1 – 83.2
Objective 81 Policies 81.1 – 81.3	**Objective 84** Policies 84.1 – 84.3
Objective 82 Policies 82.1 – 82.6	**Objective 85** Policies 85.1 – 85.6
Objective 83 Policy 83.1	**Objective 86** Policy 86.1
Objective 84 Policies 84.1 – 84.3	**Objective 87** Policies 87.1 – 87.3
Objective 85 Policies 85.1 – 85.4	**Objective 88** Policies 88.1 – 88.4
Objective 86 Policies 86.1 – 86.4	**Objective 89** Policies 89.1 – 89.4

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OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective 87 Policies 87.1 – 87.14	**Objective 90** Policies 90.1 – 90.14
Objective 88 Policies 88.1 – 88.3	**Objective 91** Policies 91.1 – 99.3
Objective 89 Policies 89.1 – 89.6	**Objective 92** Policies 92.1 – 92.6
Objective 90 Policies 90.1 – 90.3	**Objective 93** Policies 93.1 – 93.3
Objective 91 Policies: 91.1 91.2 91.3 91.4 91.5 91.6 91.7 91.8 91.9	**Objective 94** Policies: 94.1 94.2 94.3 94.4 94.5 94.6 Deleted 94.7 94.8
Objective 92 Policies 92.1 – 92.6	**Objective 95** Policies 95.1 – 95.6
Objective 93 Policies 93.1 – 93.2	**Objective 96** Policies 96.1 – 96.2
Objective 94 Policies 94.1 – 94.4	**Objective 97** Policies 97.1 – 97.4
Economic Development Element	
Objective ED 1 Policies 1.1 – 1.6	No Changes
Objective ED 2 Policies 2.1 – 2.5	No Changes Policy 2.6 **New**

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objectives ED 3 Policies 3.1 – 3.6	No Changes
Objectives ED 4 Policies 4.1 – 4.4	No Changes
Objective ED 5 Policies 5.1 – 5.6	No Changes Policy 5.7 **New**
Objective ED 6 Policies 6.1 – 6.6	No Changes
Objective ED 7 Policies 7.1 – 7.5	No Changes
Objective ED 8 Policies 8.1 – 8.3	No Changes
Objective ED 9 Policies 9.1 – 9.7	No Changes
Objective ED 10 Policies 10.1 – 10.5	No Changes
Objective ED 11 Policies 11.1 – 11.6	No Changes
Objective ED 12 Policies 12.1 – 12.4	No Changes
Public Facilities & Services Element	
Objective PFS 1 Policies 1.1 – 1.5	No Changes
Objective PFS 2 Policies 2.1 – 2.3	No Changes
Objective PFS 3 Policies 3.1 – 3.4	No Changes

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OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective PFS 4 Policies 4.1 – 4.3	No Changes
Objective PFS 5 Policies 5.1 – 5.8	No Changes
Objective PFS 6 Policies 6.1 – 6.3	No Changes
Objective PFS 7 Policies 7.1 – 7.5	No Changes
Objective PFS 8 Policies 8.1 – 8.4	No Changes
Objective PFS 9 Policies 9.1 – 9.5	No Changes
Objective PFS 10 Policies 10.1 – 10.6	No Changes
Objective PFS 11 Policies 11.1 – 11.5	No Changes
Objective PFS 12 Policies 12.1 – 12.3	No Changes
Objective PFS 13 - 22 & Policies	No Changes
	Objective PFS 23 Policies 23.1 – 23.5 New
Objective PFS 24 Policies 24.1 – 24.3	No Changes
Objective PFS 25 Policies 25.1 – 25.4	No Changes

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Environmental Element	
Objective EE 1 - 5 & Policies	No Changes
Objective EE 6 Policies 6.1 – 6.11	No Changes Policies 6.12 – 6.15 **New**
Objective EE 7 Policies 7.1 – 7.4	No Changes Policy 7.5 **New** Policy 7.6 **New** Policy 7.7 **New**
Objective EE 8 – EE 20 & Policies	No Changes
Objective EE 21 Policies 21.1 –21.4	No Changes
Objective EE 22 Policies 22.1 – 22.5	No Changes
	Objective EE 23 Policies 23.1 – 23.5 **New**
Growth Management Element	
Objective GM 1 Policy 1.1 Policy 1.2 Policy 1.3 Policies 1.4 – 1.10 Policy 1.11 – 1.12 Policy 1.13	 Editorial Changes No Changes Editorial Changes No Changes Editorial Changes No Changes
Implementation Chapter	
Objective GPI 1 Policies GPI 1.1 – 1.4	No Changes

SUMMARY OF REVISIONS
OBJECTIVE AND POLICY NUMBERS COMPARISON TABLE
(continued)

December 2004 Draft Objective/Policy Numbers	September 2005 Draft Objective/Policy Numbers
Objective GPI 2 Policies 2.1 – 2.2	No Changes
Objective GPI 3 Policies 3.1 – 3.5	No Changes
Objective GPI 4 Policies 4.1 – 4.2	No Changes
	Objective GPI 5 New Policies 5.1 – 5.2
Objective GPI 5 Policies 5.1 – 5.5	**Objective GPI 6** Policies 6.1 – 6.5
	TABLES – 11-1 to 11- 5
Objective GPI 6 Policies 6.1 – 6.2	**Objective GPI 7** Policies 7.1 – 7.2

1.0 EXECUTIVE SUMMARY

The purpose of this Environmental Impact Report (EIR) is to evaluate the environmental effects of the proposed City of Chula Vista General Plan Update. The General Plan defines the framework by which the City's physical and economic resources are to be managed and used in the future. The General Plan Update includes newly proposed goals, objectives, policies, and implementation proposals that have been designed to implement the community's vision for the future. The policies and implementation proposals would be used by the City to guide day-to-day decision-making so there is continuing progress towards attainment of goals.

This summary provides a brief synopsis of the project description, project alternatives considered, and results of the environmental analysis contained in this EIR. By necessity, this summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

1.1 Project Location and Setting

The city of Chula Vista is located in southern San Diego County, between National City and the southernmost portion of the city of San Diego which abuts the U.S.-Mexican border. Chula Vista encompasses approximately 52 square miles of land from the San Diego Bay to the Otay Lakes, generally between Sweetwater River and Otay River. In addition to the city of Chula Vista, the General Plan boundary includes lands within the county of San Diego unincorporated area identified within the Sweetwater Community Planning Area and Jamul/Dulzura and Otay Subregional Planning Areas as well as portions of the cities of National City and San Diego.

The city of Chula Vista consists of older residential areas, vibrant urban neighborhoods, and newer, master-planned communities. Chula Vista's west side (west of Interstate 805 [I-805]) is largely developed, while the east side (east of I-805) is experiencing a sustained period of strong growth. Some adjacent areas in neighboring jurisdictions (San Diego, National City, and Coronado) are largely built out; however, some areas (such as Otay Mesa in San Diego to the south) are growing. County land to the east of Chula Vista is generally vacant and undeveloped. Several industrial and office employment centers are located throughout the city in both western and eastern Chula Vista. Recreational opportunities within the city include four golf courses, two harbor marinas, miles of pedestrian, biking, and equestrian trails, and numerous parks and other recreation facilities.

1.2 Project Background

State law (Government Code Section 65300) requires that each city and county adopt a comprehensive General Plan. The proposed project fulfills this requirement by updating the City's adopted General Plan, which was last comprehensively updated on July 11, 1989 and subsequently amended in 1993 to include planning for the Otay Ranch project.

The General Plan team of staff and consultants prepared baseline and areawide studies for the City of Chula Vista. These baselines studies were prepared to present the most recent data available for the City of Chula Vista. The reports included a description of current regulatory requirements that would be relevant to planning and development of the city, as well as a description of current planning activities in the region. The baseline and areawide studies addressed aspects of the community that were considered in the planning process, such as circulation, public services and facilities, biological resources, geology, paleontology, and cultural resources, noise, and air quality. These documents provide much of the technical background data necessary to prepare a General Plan EIR.

The City has maintained a website (http://www.chulavistaca.gov/City_Services/Development_Services/Planning_Building/General_Plan/default.asp) to regularly disseminate General Plan Update information. Workshops, the Internet, and community meetings were part of an extensive outreach program to involve the public in the update of the General Plan. As part of the public outreach and participation program for the General Plan Update, the City Council authorized the formation of citizen committees. The committees helped guide the process and assisted in preparation of the Update by providing a means for ongoing involvement by key community stakeholder interests (e.g., education, business, environment, housing, community services, etc.), select City boards and commissions, and residents.

The committee structure consisted of a Steering Committee, and three Subcommittees related to major topic areas of the General Plan Update: Economic Development; Environment, Open Space & Sustainable Development; and Infrastructure & Services. Each Subcommittee consisted of 13 to 14 people and included representation from City boards and commissions, community organizations, and residents. The Steering Committee has 13 members, which includes one representative from each of the Subcommittees. The Steering Committee has provided oversight to the General Plan Update process, and facilitated communication among key stakeholders by providing a conduit for sharing information, issues, and the perspectives of diverse interests in the community. The three Subcommittees have served as a means to identify and discuss issues and concerns, key goals and objectives related to each of their particular subject areas. They have also reviewed information from related technical studies, and reviewed the draft General Plan elements within their subject areas.

This EIR assesses the environmental impacts of the City of Chula Vista's General Plan Update and associated actions. It proposes an update of the City's General Plan, which was last comprehensively updated in 1989. It constitutes a Program EIR under the provisions of Section 15168 of the State CEQA Guidelines. A Program EIR allows for review of a series of contemplated actions. The City of Chula Vista and other agencies will be able to use information presented in this Program EIR to determine if additional environmental review is required for subsequent actions linked to the project. The document was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 as amended and the guidelines of the City of Chula Vista.

1.3 Project Description

The proposed comprehensive update of the adopted Chula Vista General Plan addresses the state-mandated General Plan elements as well as other issues that are important to the community. The proposed General Plan Update text will contain the following elements, in addition to the current Housing Element: Land Use and Transportation Element; Economic Development Element; Public Facilities and Services Element; Growth Management Element; and Environmental Element. The text will also contain additional chapters, including an implementation chapter. One element of the adopted General Plan, the Housing Element, is not a part of the current update. The Chula Vista Housing Element was last amended on May 28, 2002. State law requires an update of the Housing Element by the state deadline. The current Chula Vista Housing Element covers the five-year period from 1999 to 2004, and was originally self-certified by the City on December 19, 2000, pursuant to a state-approved program for jurisdictions in the San Diego Region. Based on later financial qualifying provisions for particular housing assistance funds, in 2002, the City submitted the Housing Element for additional certification by state HCD, and re-adopted the state-certified document on May 28, 2002. Jurisdictions within the San Diego Association of Government's COG are currently working on Housing Element updates for the 2005 to 2010 planning cycle. Chula Vista currently anticipates adoption of the Housing Element update by early 2006. The updated Housing Element will be structured to include formatting consistent with the overall General Plan, and will be incorporated at such time as it is adopted.

In addition to the formulation of the new General Plan elements, land use and circulation changes in three of the four planning areas of the city, the Northwest, Southwest, and East Planning Areas, are proposed. The Bayfront Planning Area is currently undergoing planning evaluation under a separate process with the Unified Port of San Diego. Therefore, the Bayfront Planning Area is not a part of the General Plan Update and no land use designation or Circulation Element roadway changes are proposed within this area. Three scenarios were initially developed for each of the three planning areas. The effects of each of those scenarios were considered as were their effectiveness in achieving long-term objectives. As a result of that consideration, a preferred plan was developed. Each of these plans—the Preferred Plan and three initial scenarios—have been reviewed for environmental effects at a sufficient level of detail to provide decision-

makers with the flexibility to approve land use and circulation amendments addressed throughout the range of the scenarios, not simply those which are a part of the preferred plan. Table 1-1 provides a comparison of the major land use changes by planning subarea for each of the proposed scenarios (Preferred Plan and Scenarios 1-3). There are limited additional land use changes described in this report. The areas proposed for change are illustrated on Figures 1-1 through 1-3.

For the majority of the city, the proposed General Plan Update would not promote changes to existing land uses. The Preferred Plan and each of the scenarios seeks to provide a framework that integrates the various neighborhoods of the city and preserves existing community character and valued physical attributes, including the city's older, stable residential neighborhoods, while providing for new development. In formulating the Preferred Plan and the three scenarios, emphasis has been placed on land uses that would potentially stimulate revitalization in developed areas and physically enhance the existing and planned neighborhoods in which they occur. Facilitating connections between the various city neighborhoods is another important goal with the desired consequence being to attract residents from throughout the city to each area's unique attributes. Specific policies have been developed to address the needs of targeted areas within the update area boundary. These general policies are intended to protect or improve, through ultimate design and construction, those attributes that contribute to a positive city image and circulation improvements that facilitate mobility throughout the city and between the city and surrounding jurisdictions.

The proposed discretionary actions to be considered by the Chula Vista City Council associated with the General Plan Update consist of the following:

City of Chula Vista General Plan Amendment

A General Plan Amendment is required for the comprehensive update to the City of Chula Vista General Plan. The proposed Chula Vista General Plan Amendment includes provisions to:

(1) Adopt a new General Plan text, comprised of five new elements consisting of revisions to the elements comprising the current General Plan, with the exception of the current Housing Element. The proposed new elements consist of the following: Land Use and Transportation Element; Economic Development Element; Public Facilities and Services Element; Growth Management Element; and Environmental Element. The proposed General Plan text also contains additional chapters, including an implementation chapter.

(2) Adopt a new General Plan Land Use Diagram to provide for land use changes within focused areas as described in the preceding pages and to establish the following new land use designations: Mixed Use Residential, Mixed Use

TABLE 1-1
PROPOSED LAND USES

		Subarea					
		Otay Ranch		Montgomery		Urban Core	
	Type	Acres	Units	Acres	Units	Acres	Units
Preferred Plan	Commercial	388†	4,015	231	0	295	228
	Industrial	501*	0	295	0	0	0
	Open space	86	0	124	71	17	0
	Park	384	0	54	0	20	0
	Public	732	0	46	21	82	23
	Residential	981	10,226	380	8,082	617	16,505
	Total	3,072*	14,241	1,130	8,174	1,031	16,756
Scenario 1	Commercial	424†	2,332*	243	54	299	185
	Industrial	301	0	331	0	0	0
	Open space	86	0	116	71	17	0
	Park	375	0	25	0	9	0
	Public	806	0	46	21	83	23
	Residential	1,080	9,326	369	7,533	623	16,882
	Total	3,072*	11,658	1,130	7,679	1,031	17,090
Scenario 2	Commercial	439†	2,332	162	0	302	228
	Industrial	211*	0	395	0	0	0
	Open space	11	0	113	71	17	0
	Park	382	0	25	0	9	0
	Public	651	0	46	21	89	23
	Residential	1,378	13,253	389	8,308	614	15,413
	Total	3,072*	15,585	1,130	8,400	1,031	15,664
Scenario 3	Commercial	442†	2,332	219	54	321	186
	Industrial	679	0	317	0	0	0
	Open space	75	0	113	71	17	0
	Park	323	0	25	0	9	0
	Public	847	0	46	21	89	23
	Residential	706	6,473	410	8,851	595	15,969
	Total	3,072*	8,805	1,130	8,997	1,031	16,178

NOTE: Totals may vary due to rounding.

*Includes 46 acres west of Village Two West (known as Sunbow) tat are not included in Scenario 1 and Scenario 3.

†EUC is included in commercial acreage, which includes multiple uses on 209 acres, excluding park acreage.

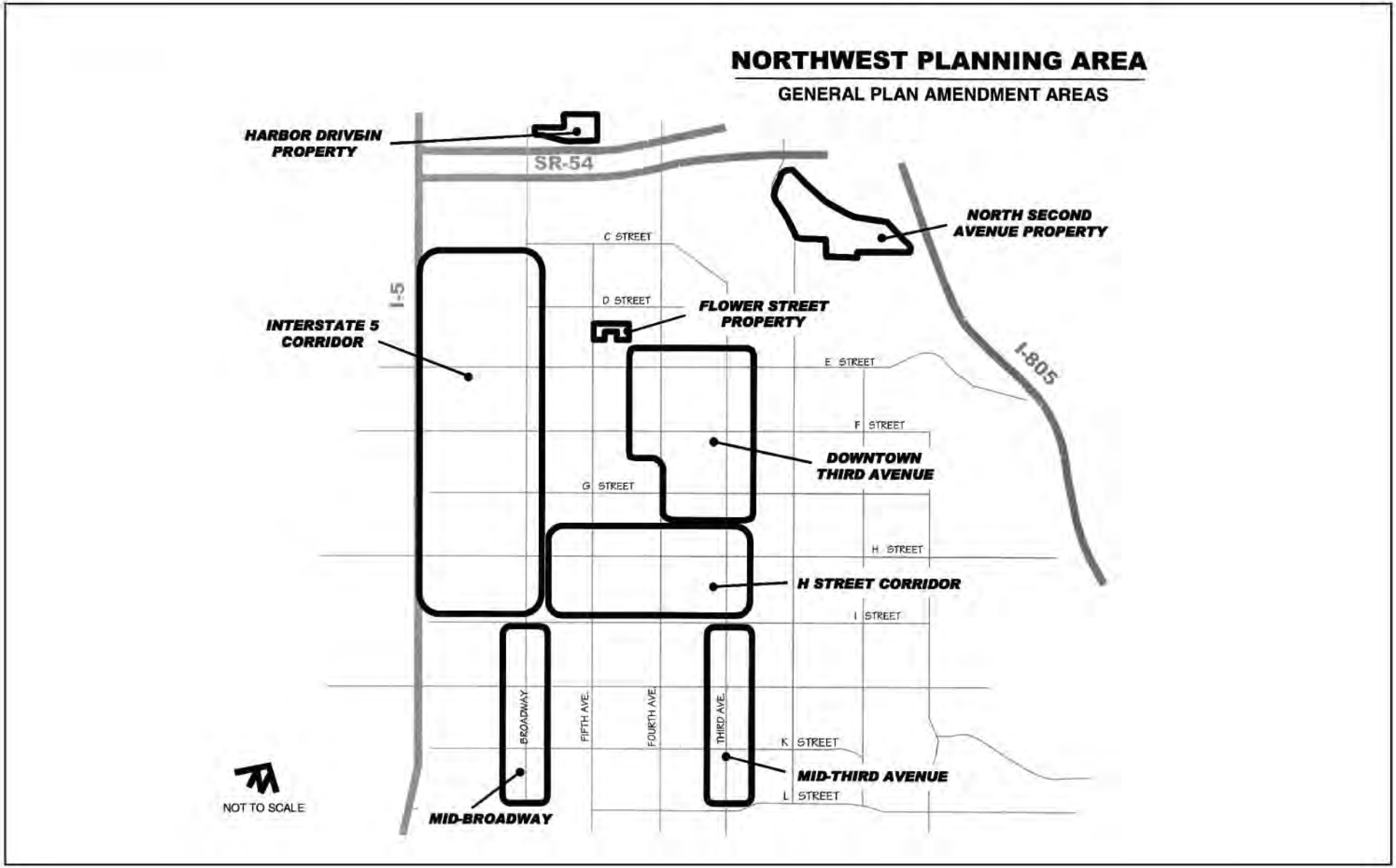

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FIGURE 1-1

General Plan Amendment Areas within the Northwest Planning Area

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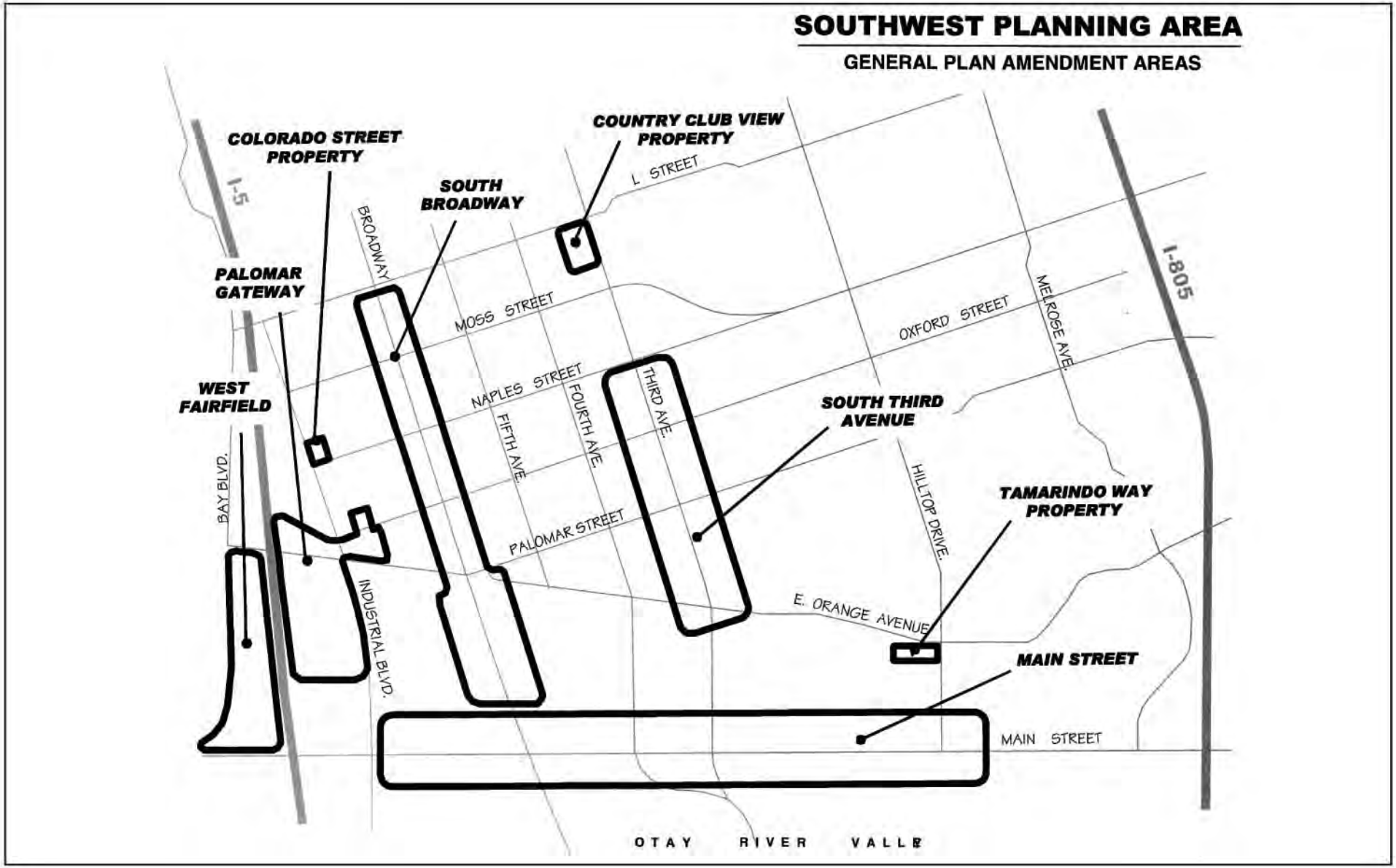

FIGURE 1-2

General Plan Amendment Areas within the Southwest Planning Area

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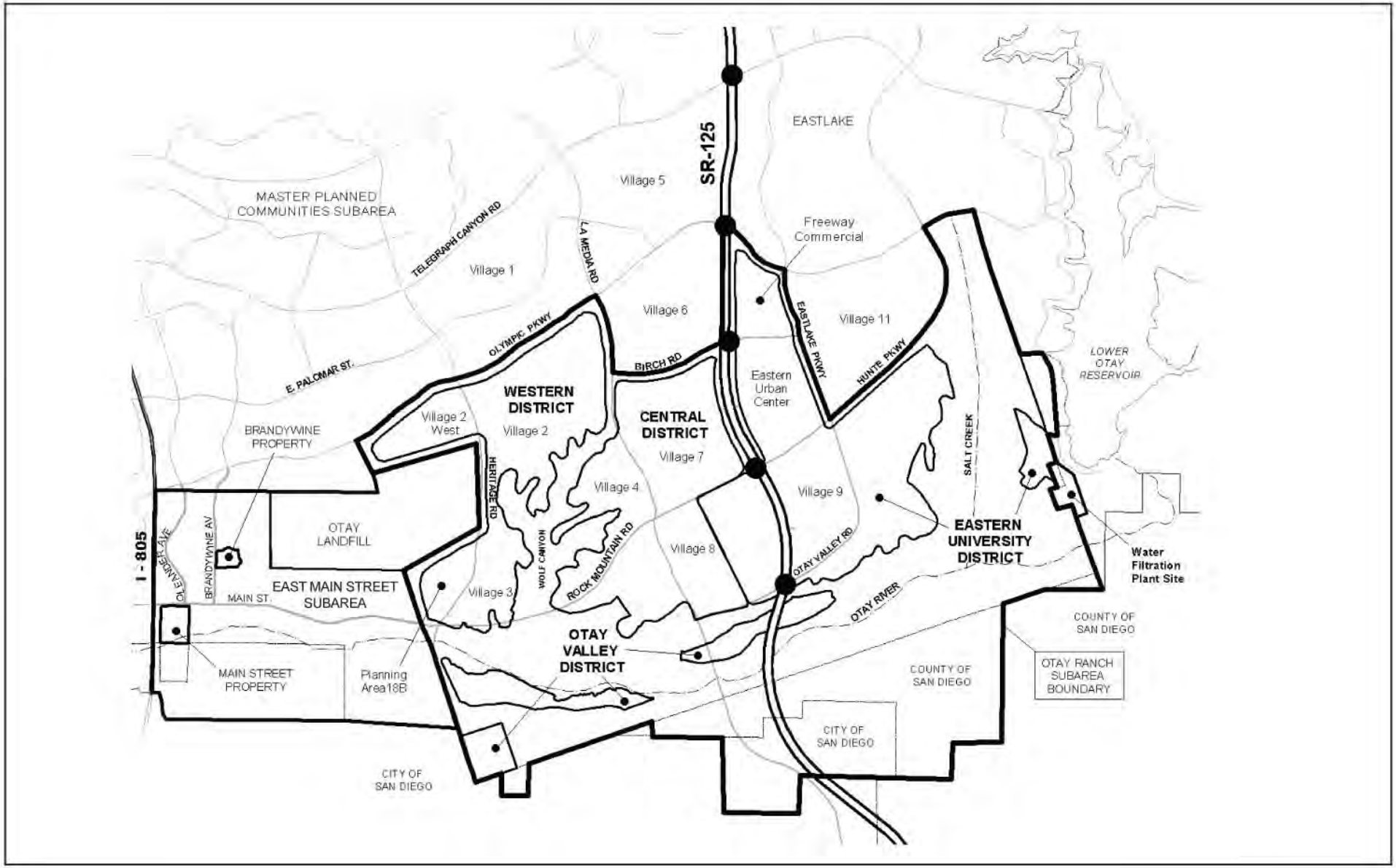

FIGURE 1-3 (Map 1 of 2)

General Plan Amendment Areas within the East Planning Area

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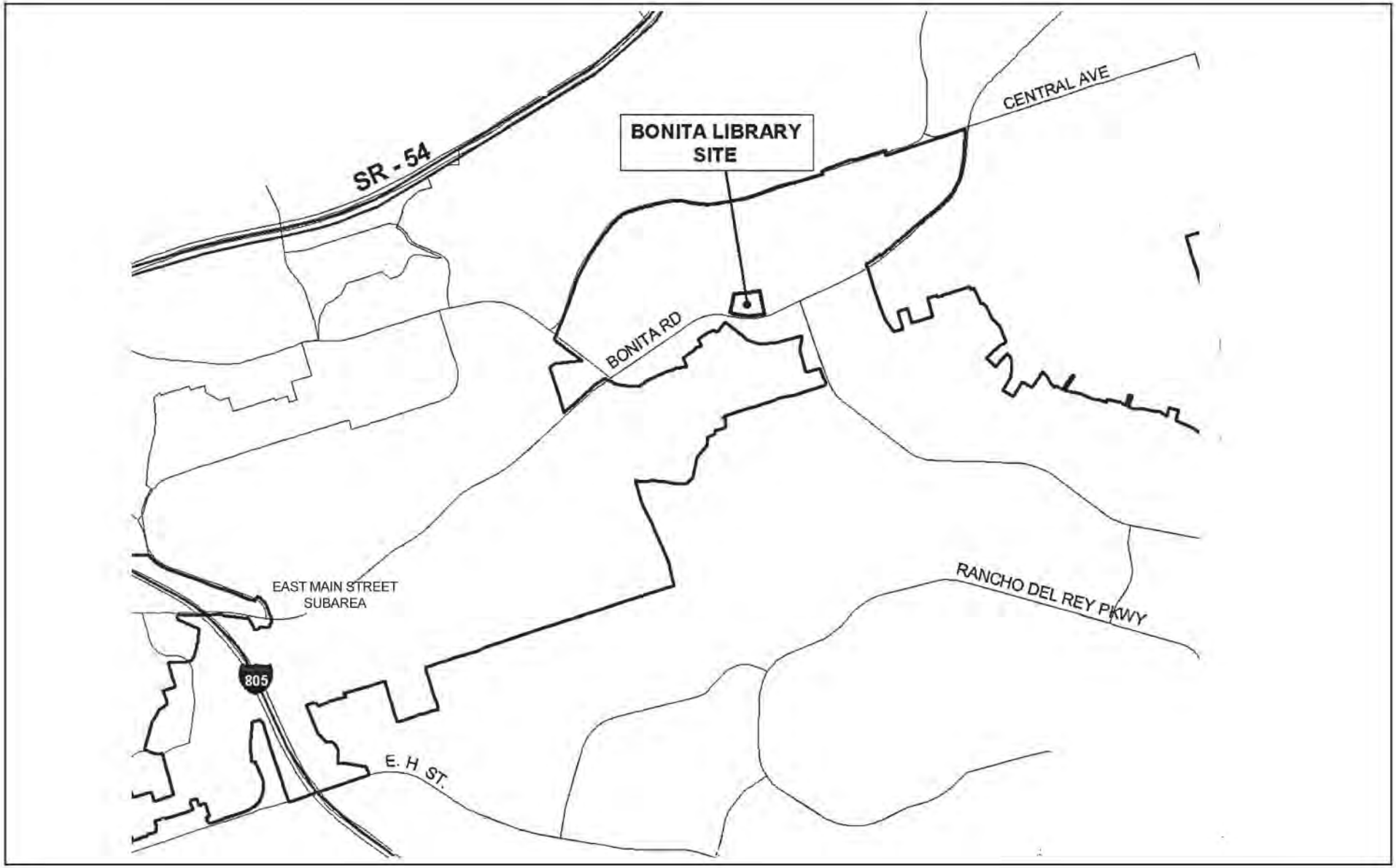

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FIGURE 1-3 (Map 2 of 2)
General Plan Amendment Areas within the East Planning Area

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Commercial, Mixed Use Transit Focus Area, and Urban Core Residential (28-60 dwelling units/acre), Town Center, and a University Study Area. The adoption of the new land use diagram also includes the redesignation of areas currently designated as Open Space throughout the General Plan Area to Open Space, Open Space Preserve, and Open Space-Active Recreation in accordance with the definition of these proposed land use categories in the proposed Land Use and Transportation Element. For example, the land use designation of all areas within the Chula Vista MSCP Preserve are proposed to be changed to Open Space Preserve.

(3) Adopt a new Circulation Diagram and Transit System.

City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan/Otay Ranch General Development Plan/Otay Ranch Resource Management Plan

The proposed General Plan Amendment includes a modification of the General Plan Land Use Diagram to ensure that the general map corresponds to the adopted Chula Vista MSCP Subarea Plan. The Chula Vista MSCP Subarea Plan is part of the General Plan. The proposed Chula Vista General Plan Amendment includes provisions:

(1) Amend the Otay Ranch General Development Plan (GDP) and Resource Management Plan (RMP) to redefine the eastern and southern boundaries of Villages 9, 10, and 11 consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(2) Amend the Otay Ranch GDP and RMP to include approximately 52 acres of developable University land in the southeastern portion of Salt Creek consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(3) Amend the General Plan and Otay Ranch GDP land use maps to add a note of clarification denoting the development areas that have been acquired for open space purposes within Villages 14, 15, and Bella Lago.

(4) Amend the City of Chula Vista MSCP Subarea Plan to implement a mapping correction to change approximately 45 acres of active recreation land uses within the Otay River Valley to Preserve.

(5) The MSCP Subarea Plan is incorporated into the Environmental Element.

Otay Ranch General Development Plan Amendment

Amendments are proposed to the Otay Ranch General Development Plan, consisting of revisions to the GDP text and to the GDP land use maps and tables that are consistent with the proposed General Plan Amendment.

Sunsetting of the Montgomery Specific Plan

The proposed General Plan Update Land Use and Transportation Element contains a Southwest Area Plan, which covers the Montgomery Specific Plan area. Relevant policies and other provisions from the 1988 Montgomery Specific Plan will be included within the Southwest Area Plan, along with current information and new policies and provisions. As a result, the Montgomery Specific Plan is proposed to be sunset with the adoption of the General Plan Update.

1.4 Environmental Analysis

Section 21002 of CEQA requires that an environmental impact report identify the significant effects of a project on the environment and provide measures or alternatives that can mitigate or avoid those effects.

This document incorporates by reference previous environmental documents covering environmental issues relevant to the approval of the General Plan Update. Table 1-2 provides a summary of the previous environmental documents from which this EIR has incorporated by reference. The documents used during the preparation of the EIR are available for review at the City of Chula Vista Planning & Building Department, 276 Fourth Avenue, Chula Vista, California 91910.

The environmental issues identified for assessment in the EIR include land use, landform alteration/aesthetics, biological resources, cultural resources, geology and soils, paleontological resources, energy, water resources and water quality, transportation, air quality, noise, public services, public utilities, hazards/risk of upset, mineral, growth inducement, and cumulative impacts.

Table 1-3 summarizes the potentially significant environmental impacts and proposed mitigation measures by major issue for the Preferred Plan and each of the scenarios as analyzed in Section 5.0 of this EIR. Please refer to this section for detailed information on impacts and specific mitigation measures. The table indicates whether the impact would be reduced to below a level of significance with implementation of proposed mitigation for the Preferred Plan and each of the scenarios.

The General Plan is a broad policy level document. While its policies require design standards and guidelines be prepare for its implementation, those standards and

TABLE 1-2
ENVIRONMENTAL DOCUMENTS INCORPORATED BY REFERENCE

Date	Document
1989	City of Chula Vista General Plan EIR
1989	City of Chula Vista General Plan Update
1992	Final Program EIR for the Otay Ranch General Development Plan/Sub-Regional Plan EIR (90-01)
1992	Otay Ranch General Development and Sub-Regional Plan
1997	MSCP Subregional Plan Final EIR/EIS
2000	San Diego County Water Authority Urban Water Management Plan
2000	Technical Appendices for Final Environmental Impact Report Otay Landfill Development and Expansion Plan, February.
2000	Otay Water District 2000 Urban Water Management Plan
2000	Sweetwater Authority Urban Water Management Plan
2000	Chula Vista MSCP Subarea Plan Final EIR/EIS
2002	Sweetwater Authority Water Distribution System Master Plan
2002	Otay Water District Water Resources Master Plan
2002	Revised Chula Vista MSCP Subarea Plan Supplemental EIR/EA
2003	Metropolitan Water District of Southern California Water Supply Report
2003	Metropolitan Water District of Southern California Integrated Water Resources Plan
2004	San Diego County Water Authority Annual Supply Report
2005	Health Risk and Nuisance Analyses Two Land Parcels Adjacent to Otay Landfill, Chula Vista, California
2005	City of Chula Vista General Plan Update
2005	City of Chula Vista Sewer Master Plan

guidelines typically follow adoption of the General Plan. As such, they are not available at this time. Certain impacts as called out in Table 1-3, therefore, cannot be mitigated until future specific plans are developed. This circumstance occurs for the Preferred Plan, and all scenarios and alternatives.

1.5 Project Alternatives

Alternatives to the proposed project are evaluated in Section 10.0 and 11.0 of this EIR in terms of their ability to meet the primary objectives of the proposed project and eliminate or further reduce its significant environmental effects. The alternatives considered are the No Project Alternative, the Reduced Project Alternative, the Community Character Alternative, and the Reduced Traffic Alternative. A comparative analysis matrix of each of these alternatives is provided in Table 1-4.

The No Project Alternative would continue to implement the adopted General Plan, which was adopted in 1989. The Reduced Project Alternative would reduce development throughout the General Plan area compared to the Preferred Plan and each of the scenarios. It was developed by taking a combination of the least developed, highest park and open space components from the Preferred Plan and each of the scenarios.

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community													
Physically Divide a Community. Changes to land use designations and implementation of policies included in the General Plan Update would not physically divide an established community. As compared to existing uses, the proposed update generally modifies designated land uses to allow for an increase of mixed use development.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
Community Character. Policies addressing community character are included throughout the GPU. <u>Northwest Planning Area</u> The proposed land use changes in the Urban Core subarea result in increased density. This increases will, necessarily be accompanied by increases in massing, height and intensity. The following policies would limit the community character impacts of the Preferred Plan and all three Scenarios within the five districts of the Urban Core Subarea. • Downtown Third Avenue District–Policies LUT50.12, 50.13, and 50.16 • H Street Corridor District–Policies LUT 2.4, 3.1, and 52.7 and 52.9. • Interstate 5 Corridor District–Policies LUT 54.6, 55.11, 55.12, 56.7, 57.7, 57.8, 58.8, 58.9, and 58.11 • Mid-Broadway District –Policy LUT 59.8 • Mid-Third Avenue District –Policy LUT 60.3 These policies would reduce impacts to community character within the five districts of the Urban Core Subarea from the implementation of the Preferred Plan and all three Scenarios, but not to below a level of significance.	The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process, impacts remain significant and unmitigable. At such time that specific development standards are developed through subsequent planning and zoning actions, these effects will be avoided.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
Southwest Planning Area Within the southwest, with the exception of the West Fairfield District, the proposed General Plan policies would reduce community character impacts by ensuring that design guidelines and zoning standards be prepared for future development, improving circulation between this and other areas of the city, upgrading commercial activity centers and providing for the protection and enhancement of existing residential neighborhoods by increasing residential, retail, commercial and professional services through mixed-use development. The following policies would reduce impacts to adjacent land uses within the 5 districts of the Montgomery Subarea from the proposed General Plan. • South Third Avenue District--Policies LUT 41.13, 41.14, 41.15 • South Broadway District–Policies LUT 42.14, 42.15, 42.16 • Palomar Gateway District–Policies LUT 43.1, 43.10, 43.11 • West Fairfield District–Policy LUT 44.1 • Main Street District–Policies LUT 45.5, 45.13, and 45.14 These policies would reduce impacts to community character within the five districts of the Montgomery Subarea from the implementation of the Preferred Plan and all three Scenarios, but not to below a level of significance.	The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process, impacts remain significant and unmitigable. At such time that specific development standards are developed through subsequent planning and zoning actions, these effects will be avoided.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

			Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation		SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)														
For Scenarios 1, 2, and 3 in the Southwest Planning Area, there is the change in land use designation from open space to industrial use along the Otay River Valley represents a significant impact.	5.1-1	To mitigate the impacts of establishing planned industrial uses along the Otay River Valley, future projects for this area shall be evaluated and required to incorporate sufficient buffers, setbacks, and design features to avoid edge effects to sensitive biological resources to the satisfaction of the appropriate decision maker.	Significant.	5.1-1	Not Significant	Significant	5.1-1	Not Significant	Significant	5.1-1	Not Significant	Significant	5.1-1	Not Significant
Within the Southwest Planning Area, proposed changes to designate the West Fairfield district for Limited Industrial could cause significant impacts to nearby wildlife in the San Diego Wildlife Refuge unless adequate buffering is provided. Potential impacts from the redesignation of existing land uses for more intensive development adjacent to the Wildlife Refuge could affect sensitive species and would require implementation of design measures to ensure that impacts are reduced to below a level of significance or avoided.	5.1-2	At the time projects are proposed within the West Fairfield District, a detailed land use assessment shall be performed showing, to the satisfaction of the Environmental Review Coordinator, that the proposed project is compatible with adjacent land uses. Any development adjacent to the San Diego Wildlife Refuge shall adhere to the land use adjacency guidelines defined in the Chula Vista Subarea Plan, Section 7.5.2. These include, but are not limited to: sufficient buffers and design features, barriers (rocks/boulders, signage, and appropriate vegetation) where necessary, lighting directed away from the refuge, and berms or walls adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization	Significant	5.1-2	Not Significant	Significant	5.1-2	Not Significant	Significant	5.1-2	Not Significant	Significant	5.1-2	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
East Planning Area In the East Planning Area, Scenarios 2 and 3 place residential uses adjacent to the landfill. Impacts from Scenarios 2 and 3 would remain significant because they retain residential uses adjacent to the Otay Landfill in conflict with Objective LUT 79. The Preferred Plan and the three Scenarios have the potential to cause an adverse effect on the community character of the surrounding villages within the East Planning Area. Specific objectives and policies are proposed to facilitate compatible land uses within and between each of the districts as well as preserve the character and retain the quality of the surrounding areas. The following policies would reduce community character impacts from implementation of the Preferred Plan within the East Planning Area: • Unincorporated Sweetwater Subarea –Policy LUT 66.1 • Western District –Policies LUT 79.1, 79.4, 79.5 • Central District –Policy LUT 81.3 • Otay Valley District –Policies LUT 82.1, 82.2, 82.3, 83.1 • Eastern University District –Policies LUT 85.4, 85.6 • East Main Street Subarea –Policies LUT 70.1, 70.3, and 70.4 The objectives and policies do not completely mitigate the impact because development standards have not been developed. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.	The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process, impacts remain significant and unmitigable. At such time that specific development standards are developed through subsequent planning and zoning actions, these effects will be avoided.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
Scenarios 2 and 3 propose residential uses within the 1,000-foot buffer within Village Two around the Otay landfill. Residential land uses within the landfill buffer is a significant land use adjacency impact and would require mitigation. The General Plan Update includes Policies LUT 79.1, 79.4 and 79.5 that would limit the placement of residential use in the landfill buffer. Scenarios 2 and 3 place residential uses adjacent to the landfill and are, therefore, in conflict with this policy. This is a significant impact.													

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. The scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. Therefore, impacts resulting from development associated with Scenario 2 would be significant.	The following mitigation measure would be required for Scenario 2: 5.1-3 Prior to approval of a discretionary action allowing a portion of Wolf Canyon to be filled to accommodate development, the City shall complete a boundary adjustment in accordance with the adopted procedures of the Subarea Plan. These procedures are provided in Section 5.4.2 of the MSCP Subarea Plan and are summarized below. • A preliminary determination of the biological value of a proposed boundary adjustment shall be made by the Director of Planning and Building in accordance with Section 5.4.2 of the MSCP Subarea Plan. • The City shall notify the Wildlife Agencies in writing of the boundary adjustment including written findings of equivalency made by the Director of Planning and Building.	Significant	5.1-3	Significant	Significant	5.1-3	Significant	Significant	5.1-3	Significant	Significant	5.1-3	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
	• The adjusted boundary shall become the adjusted boundary upon project approval unless the Wildlife Agencies object to the adjusted boundary within 30 days of receipt of City's written notice to the Wildlife Agencies. Objections by the Wildlife Agencies to boundary adjustments shall be made in writing and shall state the rationale in support of objection. • If the City receives written objection to a determination of a boundary adjustment by the Wildlife Agencies within 30 days of receipt of City's written notice to the Wildlife Agencies, the City and Wildlife Agencies shall have 60 days to meet, confer, and reach agreement upon final Preserve boundaries. The boundary adjustment as proposed shall not be approved if an agreement is not reached. • If the Wildlife Agencies fail to respond to the City's notice within 30 days of receipt of the City's determination, the decision by the Director of Planning and Building shall be deemed accepted.												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LAND USE: Physically divide or adversely affect the community character of an established community (cont.)													
	A significant land use impact would occur from application of residential land use designation to this portion of Wolf Canyon as proposed by Scenario 2 because a boundary adjustment is required prior to the adoption of the designation of residential use in this area, and since that determination has not yet been made, specific mitigation is unavailable at this time. The impacts to land use as a result of Scenario 2 remain significant and unmitigated.												
Zoning. The proposed General Plan policies identify the need to update the adopted zoning code to conform to the General Plan Update. Potentially significant impacts would result until the zoning code is amended to conform to future approved land use designations.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
Regional Plans. The proposed General Plan Update objectives and policies generally conform to the various plans and policies developed to coordinate growth within the region. This includes the joint planning efforts of the City of Chula Vista , the City of San Diego, and the County of San Diego for the Otay Valley Regional Park and Otay River Watershed and SANDAG's RCP, and RTP which promote smart growth principles; Regional Housing Program; Employment Lands Inventory; MTDB trolley extension, including the Otay Ranch Transitway Alignment and alternatives; and MTDB's Transit First studies. Therefore, the proposed General Plan would not result in a significant impact to regional plans.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
The proposed discretionary actions include modifications to the General Plan, the Otay Ranch GDP, and the Otay Ranch RMP to ensure consistency with the adopted subarea plan of the MSCP. The action covered by this EIR addresses the modification of the plan boundary as it reflects the approved and adopted Subarea Plan. This action will bring the adopted General Plan map into consistency with the Subarea Plan, thereby eliminating conflict between these components of the General Plan.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LANDFORM ALTERATION/VISUAL QUALITY: Have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings.													
There are several scenic vistas located throughout the city. The intensification of urban land uses, or activities that impact components of the physical environment, can result in significant impacts on scenic resources throughout the city. Compliance with Objectives LUT 8 and 13 and their associated policies would ensure that development completed in conformance with the proposed General Plan Update does not result in significant impacts to scenic resources and vistas because they would maintain the city's open space network, create enhanced gateway features for city entry points and important other entries, such as to special districts, and promote beautification of the city. Policy LUT 13.4 requires development adjacent to designated scenic routes to be designed to create substantial open areas, create pleasing streetscapes and coordinate sign standards. It further requires that this condition be met through the design review process for all development adjacent to scenic roadways. Therefore, impacts to scenic vistas or resources would not be significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LANDFORM ALTERATION/VISUAL QUALITY: Substantially degrade the existing visual character or quality of Chula Vista													
Future growth has the potential to impact the visual environment through fundamental changes in land use and/or impacts to components of the landscape that contribute to visual quality. Adoption of the Preferred Plan and all three Scenarios would result in substantial changes to landforms and visual quality within focused areas and vacant lands in the East. Objectives LUT 8, 9, 10, and 11 promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista. The design review process would occur for multi-family, commercial and industrial developments and redevelopment within redevelopment project area boundaries to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans. <u>Northwest Planning Area</u> The proposed General Plan Update allows for greater land use intensity within the Urban Core. Adding more density and increasing the number of multi-family units within the Urban Core has the potential to cause an adverse effect on the visual character of the Urban Core. In addition, all four Scenarios propose high-rise buildings between Third and Fourth Avenues in the Mixed Use Transit Focus Area. High-rise buildings do not inherently represent an adverse visual impact. The extent to which a high-rise building results in a significant impact depends upon its design setting. Visually, it has to do with architectural design and with pedestrian orientation and scale. Compliance with Policies LUT 49.11 through 49.23, as well as compliance with the policies associated with Objectives LUT 2, 3, and 11, reduce visual quality impacts from the development of high-rise buildings within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time.	The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LANDFORM ALTERATION/VISUAL QUALITY: Substantially degrade the existing visual character or quality of Chula Vista (cont.)													
Southwest Planning Area Development completed in conformance with the proposed General Plan within the Montgomery Subarea would result in greater land use intensity which would, necessarily, result in increased building heights and mass. This would have the potential to impact the existing visual quality of the area. Compliance with Policies LUT 41.13 through 41.15, LUT 42.13 through 42.15, and LUT 43.7A, 43.10 and 43.11 as well as compliance with the policies associated with Objectives LUT 8, 9, 10 and 11 establish a design code that reinforces the safety and serenity of the area, and seeks to establish a coherent, aesthetic, international character to the Southwest Planning Area. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 8, 9, 10 and 11 reduce visual quality impacts within the Southwest Planning Area resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time.	The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LANDFORM ALTERATION/VISUAL QUALITY: Substantially degrade the existing visual character or quality of Chula Vista (cont.)													
East Planning Area In the east, the existing character of undeveloped areas designated for development would change from undeveloped to urban, which would affect the aesthetic character and consequently the views of the project site from surrounding areas. This would have the potential to impact the existing visual quality of the area. Compliance with policies established in Objectives LUT 75, 80, 81, 83, and 89 as well as Objectives LUT 8, 9, 10 and 11 would reduce visual quality impacts within the East Planning Area because they establish a common system of elements that interconnect and unify streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character. These policies would also connect the area's uses to surrounding open spaces with pedestrian paths and greenbelts. Impacts remain significant, however, because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant. Additionally, the existing open, rolling hills would be permanently altered by development and the change from open areas to developed areas in the east is a significant adverse visual quality impact of the Preferred Plan, as it is under all three Scenarios. Implementation of mitigation measure 5.2-1 reduces the significant landform alteration and aesthetics impacts however, the open, rolling hills and surrounding watershed would be permanently altered by development and the impact due to the change from open areas to developed areas remains significant and unmitigated.	5.2-1 Within the East Planning Area, prior to approval of grading plans, the applicant shall prepare grading and building plans that conform to the landform grading guidelines contained in the grading ordinance, Otay Ranch GDP, and General Plan. The plans shall be prepared to the satisfaction of the Director of Planning and Building and the City Engineer. These plans and guidelines shall provide the following that serve to reduce the aesthetic impacts: • A Landscape Design that addresses streetscapes, provides landscape intensity zones, greenbelt edge treatments, and slope treatment for erosion control. • Landscaping Concepts that provide for a transition from the manicured appearance of developed areas to the natural landscape in open space areas. • Landscaping Concepts that include plantings selected to frame and maintain views. Landscaping should not block views created through grading and/or site design.	Significant	5.2-1	Significant	Significant	5.2-1	Significant	Significant	5.2-1	Significant	Significant	5.2-1	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
LANDFORM ALTERATION/VISUAL QUALITY: Substantially degrade the existing visual character or quality of Chula Vista (cont.)													
	Implementation of mitigation measure 5.2-1 reduces the significant landform alteration and aesthetics impacts; however, not to a level below significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan amendment and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented, impacts remain significant.												
BIOLOGICAL RESOURCES: Have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species or any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service													
Development under the proposed General Plan Update would result in the loss of existing sensitive habitat within the city. These impacts would be minimized through implementation of existing regulations such as FESA, CESA, the State Fish and Game Code, Section 404 of the Clean Water Act, and implementation of the Subarea Plan and Otay Ranch RMP.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Significant	5.3-1	Not Significant	Not Significant	None Required	Not Significant
All future development projects within the city of Chula Vista will comply with Objective EE 1 and Policy EE1.1 of the General Plan Update. Objective EE 1 and Policy EE1.1 implement the City of Chula Vista MSCP Subarea Plan. Implementation of the Subarea Plan will ensure conservation of core biological resource areas and associated habitat linkages identified in the MSCP Subregional Plan located within the boundaries of the Chula Vista Subarea, comprised of the land area within the incorporated boundary of the city. This ensures that development completed in compliance with the proposed General Plan would not result in a significant impact.													

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
BIOLOGICAL RESOURCES: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means													
Unavoidable significant impact would occur to wetland resources due to future development, however federal, state and local agencies would require mitigation measures to ensure there is no net loss of wetland habitat. The proposed General Plan contains Policy EE1.1, which is to implement the Chula Vista MSCP Subarea Plan. The Subarea Plan contains a Wetlands Protection Program (Section 5.2.4). This program would provide an evaluation of wetlands avoidance and minimization and would ensure compensatory mitigation with the Chula Vista Subarea for unavoidable impacts to wetlands, thereby achieving no overall net loss of wetlands. Implementation of Policy EE 1.1 ensures that development completed in compliance with the proposed General Plan Update would not result in a significant impact to wetland resources because implementation of this policy provides for wetland protection.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
BIOLOGICAL RESOURCES: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites													
Further growth has the potential to impede wildlife movement between significant habitat areas, to the detriment of wildlife populations. The movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors would be protected through the implementation of the Subarea Plan. All future development projects within the city of Chula Vista shall comply with Objective EE 1 and Policy EE1.1 of the General Plan Update. Objective EE 1 and Policy EE1.1 implement the City of Chula Vista MSCP Subarea Plan.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

			Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation		SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
BIOLOGICAL RESOURCES: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (cont.)														
Implementation of the Subarea Plan will ensure conservation of core biological resource areas and associated habitat linkages identified in the MSCP Subregional Plan located within the boundaries of the Chula Vista Subarea, comprised of the land area within the incorporated boundary of the city. The movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors would be protected through the implementation of the Subarea Plan.														
BIOLOGICAL RESOURCES: Conflict with any local policies or ordinances protecting biological resources or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan														
Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a Boundary Adjustment to the City of Chula Vista MSCP Subarea Plan. This scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. This is a significant impact in two areas. It does not conform to the Subarea Plan, requiring a boundary adjustment and equivalency analysis, and it potentially represents an impact to biological resources. This determination requires approval by the City and concurrence by the resource agencies. While it may be possible to demonstrate functional equivalency for a boundary adjustment, that process has not been completed at this time. Without that determination, availability and adequacy of measures to lessen the effect cannot be determined. Scenario 2 proposes to designate portions of the Otay Valley District for commercial and residential use in an area specified for active recreation. These uses are not compatible with the MSCP and the RMP. As such, impacts for Threshold 4 are significant for Scenario 2.	5.3-1	Mitigation of the land use impact for the MSCP boundary adjustment in Village 2 requires completion of a Boundary Adjustment in accordance with the adopted procedures of Subarea Plan. The procedures required for a Boundary Adjustment are provided in Section 5.4.2 of the MSCP Subarea .	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Significant	5.3-1	Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
CULTURAL RESOURCES: Substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5													
Implementation of the proposed land uses identified in the General Plan has the potential to result in impacts to historic resources. In areas of the built environment, direct impacts could occur if, as a result of plan implementation, buildings determined to be historic were demolished or significantly altered. In open areas, there is the potential that future development, as permitted by the plan, could impact historic and prehistoric archaeological sites.	5.4-1 Implementation of Policies LUT 12.3, 12.4 12.7, 12.10, 12.11, and 12.12, and EE 9.1 shall include the following measures: 1. Any future development project that has not been previously examined shall be subject to a cultural resource survey, to identify any specific resources that could be potentially affected by the proposed project. 2. In western Chula Vista, an archaeological survey shall be completed for any development project that includes previously undisturbed acreage and has not been previously examined, to identify any specific resources that could be potentially affected by the proposed project. 3. The City will promote maintenance, repair, stabilization, rehabilitation, restoration, and preservation of historical resources. Where these will be undertaken, they will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
CULTURAL RESOURCES: Substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 (cont.)													
	4. Prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource, as defined pursuant to applicable state and federal laws, shall complete an historic survey report to determine potential historic significance. The determination of resource significance shall be made in accordance with CEQA Section 15064.5 and the program established as a result of Policies LUT 12.3, 12.4, 12.7, 12.10, and 12.11 and EE 9.1, and shall be completed to the satisfaction of the appropriate decision maker.	Significant	5.4-1	Not Significant	Significant	5.4-1	Not Significant	Significant	5.4-1	Not Significant	Significant	5.4-1	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
CULTURAL RESOURCES: Substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5 (cont.)													
	5. In the event that significant resources could be adversely affected by the proposed action, as established in Policy LUT 12.12, a conservation program shall be implemented in accordance with applicable state and federal laws, to the satisfaction of the appropriate decision maker. The conservation program shall be designed to reflect the reason that the identified resource is considered important. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation. For archaeological remains, conservation of a resource for which preservation in place is not feasible would include the execution of a research design directed program of scientific data collection and analysis.												
CULTURAL RESOURCES: Disturb any human remains, including those interred outside of formal cemeteries													
The proposed General Plan objectives and policies will not affect any formal cemeteries or known burials outside of formal cemeteries. To the extent that currently undeveloped areas are developed there is the potential that currently unknown human remains may exist that would be disturbed through development.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
GEOLOGY/SOILS: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning or based on other substantial evidence of a known fault; or**													
Implementation of the proposed land uses identified in the General Plan Update has the potential to result in significant impacts from potential geologic hazards. There are no known active faults underlying the city of Chula Vista. The closest known active fault is the Rose Canyon fault, located approximately 14 miles northwest of the plan area. The north-south trending La Nacion fault traverses the East Planning Area and is potentially active. A comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential geologic/soils hazards. The analysis shall include, but not be limited to, a delineation of specific locations where liquefiable, compressive, and expansive soils would affect structural stability and where graded slopes would expose bedrock susceptible to instability. Such report would be subject to the review and approval of City staff. Additionally, proper engineering design of grading areas and all new structures, to be verified at the grading and building permit stage, would ensure that the potential for geologic impacts from regional hazards is minimal.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
GEOLOGY/SOILS: Place sensitive uses in situations that have the potential to be adversely affected by soil conditions													
Construction on liquefiable soils could result in injuries or loss of property during ground shaking of sufficient magnitude and duration. Expansive soils within pavement, foundation, or slab subgrade could heave when wetted, resulting in cracking or failure of these development improvements. Development on compressible soils could potentially settle under increased load and damage structures, roads, and property. Conformance with Policies EE 14.1 through 14.5 would minimize potential effects. Conformance to these policies shall be reviewed and assured through the CEQA process at such time as specific development projects are proposed with the potential to affect geological resources.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
GEOLOGY/SOILS: Result in substantial soil erosion or the loss of topsoil													
Development associated with the General Plan Update would include grading activities which remove the existing vegetative cover, thereby exposing soils to runoff and erosion. The soils within the General Plan area have severe erosion susceptibility, resulting in a significant erosion impact. Conformance with Policies EE 14.1 through 14.5 would minimize potential effects. Conformance to these policies shall be reviewed and assured through the CEQA process at such time as specific development projects are proposed with the potential to affect geological resources.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature													
The City of Chula Vista is located in a highly sensitive area for paleontological resources. Development completed in conformance with the proposed General Plan has the potential to result in significant adverse impacts to paleontological resources.	5.6-1 On a case-by-case basis, the following grading thresholds shall be used by the appropriate decision maker to determine whether or not a proposed project may potentially result in significant impacts to sensitive paleontological resources: Sensitivity Rating — Excavation Volume & Depth Thresholds High — >1000 cu. yds. & 5 ft. deep Moderate — >2000 cu. yds. & 5 ft. deep Zero-Low — Mitigation not required 5.6-2 It may be determined that a project may result in potentially significant impacts to sensitive paleontological resources if a known paleontological resource exists within the impact area of a project regardless of the volume and depth of excavation. If it is determined that potentially significant impacts to sensitive paleontological resources may result, then such impacts shall be mitigated by a pre-construction mitigation program or construct-ion mitigation program, or both, to be determined prior to project approval by the appropriate decision maker. All mitigation programs shall be performed by a qualified professional paleon-tologist, defined here as an individual with a M.S. or Ph.D. in paleontology or geology who has proven experience in San Diego County paleontology and who is knowledgeable in	Significant	5.6-1 and 5.6-2	Not Significant	Significant	5.6-1 and 5.6-2	Not Significant	Significant	5.6-1 and 5.6-2	Not Significant	Significant	5.6-1 and 5.6-2	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (cont.)													
	professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined here as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist. **Pre-construction mitigation.** This method of mitigation is only applicable to instances where well-preserved and significant fossil remains, discovered in the assessment phase, would be destroyed during initial brush clearing and equipment move-on. The individual tasks of this program include: 1. Surface prospecting for exposed fossil remains, generally involving inspection of existing bedrock outcrops but possibly also excavation of test trenches; 2. Surface collection of discovered fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (cont.)													
	3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting; 4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens; 5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database; 6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections (including the fossil specimens, copies of all field notes, maps, stratigraphic sections, and photographs); and												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (cont.)													
	7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection. **Construction mitigation.** Under this program, mitigation occurs while excavation operations are underway. The scope and pace of excavation generally dictate the scope and pace of mitigation. The individual tasks of a construction mitigation program typically include: 1. Monitoring of excavation operations to discover unearthed fossil remains, generally involving inspection of ongoing excavation exposures (e.g., sheet graded pads, cut slopes, roadcuts, basement excavations, and trench sidewalls); 2. Salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (cont.)													
	3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting; 4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens; 5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PALEONTOLOGICAL RESOURCES: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (cont.)													
	6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections, including the fossil specimens, copies of all field notes, maps, stratigraphic sections and photographs; and 7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.												
AGRICULTURE: Convert prime farmland, unique farmland, or farmland of statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use and/or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use													
The loss of agricultural land and land suitable for the production of crops would not result in a significant impact due to the limited amount of potential agricultural land within the General Plan area. There are no Prime Farmlands or Farmlands of Statewide Importance in the city that would be converted as a result of the proposed land use changes. This land is currently designated, and would remain as open space, and is zoned for agriculture. Therefore, impacts to agriculture are not significant.	No mitigation is required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
ENERGY: Reduce the available supply of energy resources below a level considered sufficient to meet the City's needs or cause a need for new and expanded facilities													
Implementation of the proposed land uses identified in the General Plan Update has the potential to result in impacts to energy resources as a result of anticipated growth. Direct impacts could occur if, as a result of plan implementation, a substantial energy resource is reduced or eliminated, or if growth or future energy consumption rates are substantially higher than anticipated. Changes to planned land uses in the city would continue to implement the Energy Strategy Action Plan, San Diego Regional Energy Plan And Transit First Plan. Because there is no long-term assurance that energy supplies will be available in 2030, regardless of land use designation or population size, avoidance of energy impacts cannot be assured and impacts remain significant and unmitigated.	5.8-1 The City shall continue to implement the Energy Strategy and Action Plan, that addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions, and continue to implement the CO_2 Reduction Plan to lessen the impacts on energy.	Significant	5.8-1	Significant	Significant	5.8-1	Significant	Significant	5.8-1	Significant	Significant	5.8-1	Significant
WATER QUALITY: Violate any water quality standards or waste discharge requirements													
The proposed General Plan would result in the development of additional residential, commercial, and industrial uses. Direct runoff to drainage basins would be increased and would contain pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients, and trash. In addition, grading and construction activities could also generate sediments as well as oil and grease which could enter surface waters. The addition of these urban pollutants to the drainages within the city would contribute to the water quality degradation of sensitive water bodies; thus, resulting in an increase in the cumulative amounts of urban pollutants over existing conditions. Compliance with policies associated with Objective EE 2 will minimize the potential for adverse impacts to water quality resulting from development completed in compliance with the proposed General Plan. Specifically, Policies EE 2.2 through 2.7 and conformance to all federal, state, and regional water quality objectives will ensure that water quality impacts from specific developments would not be significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
WATER QUALITY: Substantially deplete groundwater resources or aquifer recharge areas or divert existing groundwater flows													
Although the increased exposure to urban pollutants could affect the quality of water recharging groundwater, filtering would occur during percolation. In any event, urban runoff has not been identified as a source of significant groundwater recharge. Therefore, no significant impacts to groundwater resources would result from buildout of the Preferred Plan or any of the three scenarios													
WATER QUALITY: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or flooding													
Future growth under the General Plan would result in an increase in impermeable surfaces, alteration of the hydrology of local streams and drainage, and grading and clearing of vegetation. All of these actions have the potential to cause erosion and sedimentation that would degrade the quality of local and regional surface waters. Irrigation and cultivation on steep slopes and/or on erosive soils would potentially have erosion and sedimentation impacts. The creation of roads, especially dirt roads that are not properly engineered to accommodate surface run-off, and the abandonment of roads, would potentially cause erosion and sedimentation impacts. Compliance with policies associated with Objectives PFS 1 and 2 will minimize the potential for adverse impacts to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding resulting from development completed in compliance with the proposed General Plan.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
WATER QUALITY: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam or place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.													
Portions of the General Plan area are located in dam inundation areas and areas potentially subject to inundation associated with the 100-year flood. The drainage system would need improvements to meet the predicted 100-year flood conditions and General Plan build-out. Needed drainage improvement projects are addressed through the City's Capital Improvement Program and Development Impact Fees (DIF). Some improvements are constructed by various developers who then receive DIF credits. Developers in areas not covered by DIFs may be required to construct drainage improvements as a condition of approval. Developers in floodplains will need to construct in accordance with FEMA and obtain LOMAs/LOMR-Fs with the City's approval. Compliance with policies associated with Objective EE 15 will reduce the potential for adverse impacts of the risk of injury and property damage associated with flood hazards to below a level of significance.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
TRANSPORTATION													
Urban Core Roadways The adoption of the Urban Core Roadway system is not a significant adverse impact. While capacities for these roadways are higher than for their suburban counterparts, the nature of the land uses that they serve, and the planning goals for the area make those capacities appropriate The adoption of the urban roadway system is self-mitigating because the policies in the proposed General Plan Update provide for the establishment of an Urban Core Improvement Program (policies associated with Objective LUT 26), provide for adequate mobility (policies associated with Objectives LUT 47 and 48), and ensure redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea would provide a balance of land uses. Mobility is assured through compliance with the policies associated with Objective LUT 48 with the development and implementation of the Urban Core Specific Plan. Policy LUT 48.2 would require the provision of adequate sidewalk space on heavily traveled pedestrian corridors within the Urban Core Subarea. Policy LUT 48.3 would provide for mid-block pedestrian crossings and sidewalk curb extensions, where feasible, to shorten pedestrian walking distances, and Policy LUT 48.4 would require the location of secure bicycle parking facilities near transit centers and major public and private buildings. Finally, Objective LUT 26 stresses the intent of the City to "Establish an Urban Core Improvements Program for the Urban Core Subarea." These policies, that are to be implemented with the establishment and development of the Urban Core Specific Plan, would provide an adequate urban amenities program, and would facilitate multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
TRANSPORTATION (cont.)													
Circulation Impacts *Non-Urban Core Roadways.* The Preferred Plan and each of the Scenarios represent a significant impact to non-Urban Core Circulation Element roadways because several roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse, and other segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more with the proposed changes. For the Preferred Plan, 15 non-Urban Core roadway segments were determined to have a significant impact with respect to Threshold 2. Scenario 1, Scenario 2, and Scenario 3 are predicted to result in significant impacts to the 18, 18, and 19 segments, respectively. *Urban Core Roadways.* Scenario 1 will have a significant impact on E Street from Woodlawn Avenue to Broadway. Scenario 2 will have a significant impact on Broadway from C Street to E Street. *Freeways.* Adoption of the proposed General Plan would significantly impact all but five freeway segments. These include segments of Interstates 5 and 805 and State Routes 125 and 54. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways.	The adoption of the following measures provides a means to ensure that roadway improvements are provided in accordance with need. Because the measures specified in Table 5.10-4 are operational and would not increase roadway capacity, they are insufficient to avoid the impacts identified above. 5.10-1 Prior to issuance of building permits, individual projects shall either contribute to the existing Traffic Signal Fee Program for applicable projects in Chula Vista or secure and construct the improvements specified in Table 5.10-5 that are within the area of benefit to the satisfaction of the City Engineer. For projects in eastern Chula Vista, the existing Transportation Development Impact Fee (TDIF) program and the Traffic Signal Fee Program collects fees from proposed developments on an Equivalent Dwelling Unit (EDU) basis and allocates the funds to construct needed transportation	Significant	5.10-1	Significant	Significant	5.10-1	Significant	Significant	5.10-1	Significant	Significant	5.10-1	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

			Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation		SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
TRANSPORTATION (cont.)														
		infrastructure in eastern Chula Vista. The Growth Management Program monitors traffic flow on key arterial streets, and provides a means to "meter" the rate of development in order to limit traffic congestion. All three of these existing programs are in place to ensure that the direct traffic impacts of individual projects or the cumulative impacts associated with planned growth are disclosed and mitigated or avoided in accordance with CEQA.												
Four freeways were considered in the traffic analysis. These include Interstates 8 and 895 and State Routes 125 and 54. These roadways were divided into 24 segments and levels of service were calculated for each segment. Table 5.10-2 presents the levels of service by scenario for these segments. Under the Preferred Plan, all but five segments represent a significant traffic impact. Of course, since freeways are travel corridors serving the region, traffic effects are not due solely to the adoption of the General Plan Update for the City. As such, these are all cumulative impacts. Similarly, since the freeway system is development and managed by the California Department of Transportation, the City has only limited ability to affect the level of congestion on these roadways.	5.10.2	For impacts to the freeway segments listed in Table 5.10-4, in order to mitigate impacts of the General Plan Update, the freeways will need to be widened to provide between one and three additional general purpose lanes (or the equivalent capacity in HOV and/or managed lanes), depending on the segment. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways, as such, mitigation is not within the authority of the City of Chula Vista sufficient to avoid the cumulative contribution to traffic on these roadways and the impact remains significant.	Significant	5.10-3	Significant	Significant	5.10-3	Significant	Significant	5.10-3	Significant	Significant	5.10-3	Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Conflict with or obstruct implementation of the applicable air quality plan													
By changing land use designations in certain areas, the new General Plan will no longer be in conformance with the growth projections used by SANDAG in their generation of the air quality management plan. Measures have been incorporated into the plan that will lessen air quality impacts. These measures include pedestrian trails, on-street bicycle paths, and an emphasis on public transit. Nevertheless, because the project is not consistent with the goals and objectives of the RAQS, this is a significant adverse impact. Because the significant air impact stems from an inconsistency between the proposed plan and the plan upon which the RAQS were based, the only measure that can lessen this effect is the review and revision of the RAQS based on the new General Plan. This effort is the responsibility of SANDAG and APCD and is outside the jurisdiction of the City. The City will cooperate with SANDAG and APCD in developing updated RAQS to insure their conformance with the proposed General Plan. Since the updating of the air plan is outside of the authority of the city, no mitigation is available to the City to avoid this impact.	Since the updating of the air plan is outside of the authority of the city, no mitigation is available to the City to avoid this impact.	Significant	None Available.	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant
AIR QUALITY: Violate any air quality standard or contribute substantially to an existing or projected air quality violation													
The land uses identified in the proposed General Plan permits industrial development in the Montgomery Subarea and the Otay Ranch Subarea. It is possible that the ultimate use of these areas will include industries that generate air pollutants. Without appropriate controls, air emissions associated with planned industrial uses could represent a significant adverse air quality impact. Compliance with proposed Policy EE 6.4 ensures that re-powered energy generation facilities and other major toxic air emitters are not sited within 1,000 feet of a sensitive receivers. The potential for development under the proposed General Plan that would result in a land use that would violate an air quality standard or contribute to an existing violation is avoided by compliance with EE 6.4.	No mitigation is required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).													
Because ozone impacts are a regional issue, they are not specifically associated with the land use changes associated with the proposed General Plan Update. Development under the proposed General Plan will result in the emission of ozone precursors. Since the region is not in compliance with the PM_{10} standard and because the average daily emission is anticipated to increase, impacts are significant. PM_{10} emissions result from construction of projects and from daily operations in the City. The latter is primarily a result of vehicle traffic on area roads. Mitigation is achievable for fugitive dust from construction activities, but the only measures that would reduce those emissions from daily operations are those that reduce miles traveled on area roads. The General Plan Update includes measures aimed at promoting pedestrian activity and reducing trip lengths. As shown on Table 5.11-10 of this EIR, the proportional increase in multi-family units to single-family units--and resulting decrease in number of vehicle trips per unit--and the anticipated improvement in motor vehicle emissions result in an expected decrease in pollutants over existing conditions for all pollutants except SO_2 and PM_{10}. Since the region is not in compliance with the PM_{10} standard, and because the average daily emission is anticipated to increase, impacts are significant, until the region is in compliance.	5.11-1 Mitigation of PM_{10} impacts requires active dust control during construction. As a matter of standard practice, the City shall require the following standard construction measures during construction to the extent applicable: 1. All unpaved construction areas shall be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible. 2. Trucks hauling dirt and debris shall be properly covered to reduce windblown dust and spills.	Significant	5.11-1	Significant	Significant	5.11-1	Significant	Significant	5.11-1	Significant	Significant	5.11-1	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (cont.)													
	3. A 20-mile-per-hour speed limit on unpaved surfaces shall be enforced. 4. On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather. 5. On-site stockpiles of excavated material shall be covered or watered. 6. Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City and/or APCD to reduce dust generation. 7. To the maximum extent feasible: Heavy-duty construction equipment with modified combustion/fuel injection systems for emissions control shall be utilized during grading and construction activities. Catalytic reduction for gasoline-powered equipment shall be used.												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (cont.)													
	8. Equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible. 9. Electrical construction equipment shall be used to the extent feasible. 10. The simultaneous operations of multiple construction equipment units shall be minimized (i.e., phase construction to minimize impacts). With the application of these measures, significant impacts resulting from projected PM_{10} impacts from construction would be mitigated. Impacts resulting from daily operation would remain significant until the region is determined to be in compliance with the standard.												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Expose sensitive receptors to substantial pollutant concentrations													
Five facilities in the City of Chula Vista prepared health risk assessments in conformance with the SDAPCD 2003 Air Toxics "Hot Spots" Program Report for San Diego County. None of the Chula Vista facilities addressed in the Program Report are required to perform Public Notification or Risk Reduction. All are below the Public Notification and Risk Mitigation levels. In addition to the facilities addressed in the Program Report, a health risk assessment was conducted for the Otay Landfill as part of the environmental review process for the proposed expansion of the landfill. This health risk assessment indicated that the incremental excess cancer risk of 10 in 1,000,000 was limited to an area within 1,000 feet of the landfill. Subsequent to that analysis a site-specific analysis was conducted for a property to the north west of the landfill, which indicated that for these limited properties no adverse health risk would occur. The potential for development under the proposed General Plan to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because of Policy EE 6.4 of the proposed General Plan avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters, and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of highways. In addition, pollutant concentrations resulting from CO hotspots is self-mitigated and not significant because the adoption of Policy LUT 15.2 requires the optimization and maintenance the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels.	No mitigation is required.	Not Significant	None Required.	Not Significant	Not Significant	None Required.	Not Significant	Not Significant	None Required.	Not Significant	Not Significant	None Required.	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
AIR QUALITY: Create objectionable odors affecting a substantial number of people													
The proposed land uses identified in the General Plan Update will not create objectionable odors. The Otay Landfill is an odor generator in the East Planning Area. No odor impacts are anticipated as a result of the Preferred Plan or Scenario 1. Significant impacts would occur with the approval of Scenario 2 or 3 as a result of the placement of residential uses within the 1,000-foot buffer of the Otay Landfill. The proposed land uses will increase in density in this area, thus exposing more people to objectionable odors.	5.11-2 No residential use shall be permitted or constructed within 1,000 feet of the Otay Landfill while the landfill is open and operating, unless a project specific analysis is completed demonstrating to the satisfaction of the Environmental Review Coordinator that odor effects are below the odor thresholds for common compounds emitted by the landfill for less than two percent of the time. One such compound would be hydrogen sulfide with an odor threshold of .0045 ppm.	Significant	5.11-2	Not Significant	Significant	5.11-2	Not Significant	Significant	5.11-2	Not Significant	Significant	5.11-2	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
NOISE: Result in exposure of people to excessive noise													
The proposed General Plan will permit development that could expose residents to excessive noise. Noise impacts resulting from future development in accordance with the proposed General Plan can result from development of a sensitive use in a noisy condition or placement of a noise generator near a sensitive receiver. Compliance with policies associated with Objectives EE 21 and EE 22 will reduce the potential for adverse noise impacts resulting from development completed in compliance with the proposed General Plan to below a level of significance. Specifically, Policies EE 21.1, 21.3, and 21.4 and EE 22.1 through 22.5 will ensure that noise impacts from specific developments are avoided. In considering the potential for a project specific, adverse noise impact resulting from transportation noise, those projects proposed within the 65-decibel contour as provided on Figure 5.12-7 shall be reviewed, and the standards specified in Table 5.12-7 shall be applied. Therefore, excessive noise impacts from the implementation of the Preferred Plan or any of the Scenarios would not be significant for new developments. As illustrated in Table 5.12-6, traffic increases on area roads will result in noise increases of between 3 and 9 decibels for receivers adjacent to these roadways. This increase is a significant adverse impact.	No significant noise impacts would result from new development completed in accordance with the proposed General Plan Update and no mitigation is necessary. A significant impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage impacts remain significant and not mitigated.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant
NOISE: Result in the generation of excessive noise													
The potential for future uses to result in the generation of excess noise is primarily associated with industrial and commercial uses. The possibility that these uses would result in a significant adverse impact to sensitive receivers depends upon the placement of the noise generator relative to the receiver. The extent to which this threshold represents a significant impact, therefore, relates to the possible placement of noise generating industrial/commercial land uses near residential or other sensitive land uses. Compliance with the Policies contained in Objectives EE 21 would avoid adverse noise impacts resulting from development of noise generating activities and impacts are not significant.	No mitigation required.	Not Significant	None Required	Not significant	Not significant	None Required	Not significant	Not significant	None Required	Not significant	Not significant	None Required	Not significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
NOISE: Expose people to excessive noise levels from airport operations													
The proposed General Plan sets 65-decibel CNEL (see Table 5.12-7) as the noise threshold for residential development. As seen in Figure 5.12-5, the 60-decibel CNEL noise contour from Brown field does not impact areas of the city; therefore, impacts are not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
PUBLIC FACILITIES AND SERVICES: Result in the inability for the City to provide an adequate level of fire service in accordance with the adopted standards and thresholds.													
The Chula Vista Fire Department does not currently meet the threshold standard for response time for the city. All of the proposed scenarios would increase demand of fire protection services by accommodating additional development and population growth in the city, which in turn affects response times. In accordance with the Fire Station Master Plan, as additional development and population growth warrants, additional fire stations will be constructed within the city. These stations would help ensure adequate service within the requirements of the City's threshold standards. Impacts to fire protection services would be significant if construction of these facilities does not coincide with the General Plan's anticipated increased demand for services. Conformance with the policies associated with Objectives PFS 5, PFS 6, and GM 1 would ensure that the Fire Department is adequately equipped and staffed in order to meet established service standards for emergency services. Therefore, potential impacts to the provision of fire services are self-mitigating.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC FACILITIES AND SERVICES: Result in the inability for the City to provide an adequate level of police service in accordance with the adopted standards and thresholds.													
The proposed GPU would not result in a significant impact resulting from the provision of new or expanded police facilities. It is not anticipated that future proposed growth would necessitate the construction of new or expanded police facilities. The City of Chula Vista police station on Fourth Avenue is sufficient to meet the law enforcement needs created by increased demand resulting from development associated with the proposed General Plan. However, in order to maintain response times, more police officers will be needed. Potential impacts to the provision of law enforcement services would be avoided by implementation of the proposed Policy PFS 5.4 which requires that the City provide adequate law enforcement staff and equipment equivalent to meet established service standards, Policy GM 1.1 which calls for the city to maintain a set of quantitative level of service measures (growth management threshold standards)as a tool to assess the relative impact of new facility and service demands created by growth and apply those standards as appropriate to approval of discretionary projects. Policy GM 1.11 also establishes the authority to withhold discretionary approval for projects out of compliance with those standards. As such, there would not be a significant impact resulting from the provision of law enforcement services. As such, impacts to the level of service for police are considered self-mitigating because of the requirements of the City to withhold discretionary approval for projects that do not comply with threshold standards.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC FACILITIES AND SERVICES: Result in the inability for the City to provide an adequate schools in accordance with the adopted standards and thresholds.													
The proposed General Plan Update will result in increased population in each of the Update areas of the city. Demand for schools will continue to increase as the population of the city increase. Increasing the number of elementary, middle school, and high school students will result in the need for additional schools. Provision of school facilities is the responsibility of the school district when additional demand warrants. The legislation provides that the statutory fees are the exclusive means of considering as well as mitigating for school impacts. It does not just limit the mitigation that may be required, but also limits the scope of review and the findings to be adopted for school impacts. Once the statutory fee is imposed, the impact will be mitigated because of the provision that statutory fees constitute full and complete mitigation [Government Code 65995(b)]. The proposed GPU does not result in the inability of the public school system to provide adequate schools because Policies PFS 9.1, 9.3, 10.1, and 10.3 and Objective GM 1 facilitate the provision of adequate schools.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
PUBLIC FACILITIES AND SERVICES: Result in the inability for the City to provide libraries in accordance with the adopted standards and thresholds.													
Currently, there are insufficient existing libraries in the city to meet the 500 square feet per 1,000 population standard. Adoption of the General Plan would generate increased demand for library facilities. Objective GM 1 would ensure that libraries are provided concurrent with need. The application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if these facilities are inadequate. The requirement for provision of 500 square feet of library space per 1,000 people for new development will be ensured through the application of Objective GM 1. As such, there is no significant impact to libraries from the adoption of the Preferred Plan or any of the Scenarios, in essence, it is self mitigating.	No mitigation required.												

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC FACILITIES AND SERVICES: Result in the inability for the City to provide park and recreation facilities in accordance with the adopted standards and thresholds.													
The Chula Vista Municipal Code, Section 17.10 (the Park Development Ordinance – PDO) applies a standard of 3 acres of park land for every 1,000 people to all new development. Since the park demand forecast as resulting from the adoption of the Plan or any of the Scenarios results from population associated with new development, compliance with the PDO assures provision of 3 acres of dedicated park land for every 1,000 people for all new development. As a result, there is no significant impact to parks as a result of the adoption of the proposed General Plan Update.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
PUBLIC UTILITIES: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects													
All four scenarios propose to increase development potential in each update area of the city. This increased demand for water would require corresponding improvements to treatment and distribution facilities. Significant impacts could occur as a result of the construction of these projects. At this level of planning, the extent of those effects is speculative because the nature and location of those improvements have not been determined. This is a significant adverse impact.	Because the extent of the effects of improving infrastructure and because the nature and location of those improvements have not been determined, no mitigation measures can be identified.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant
PUBLIC UTILITIES: Require new or expanded facilities to meet projected needs.													
Adoption of the proposed General Plan will increase demand for water services. Table 5.14-2 of this EIR provides a comparison of the increase in demands for water relative to the adopted General Plan in the year 2030 for each of the scenarios. Although, for larger projects, future review would require conformance to SB 610 and SB221, at this time it is not possible to state conclusively that sufficient water supplies would be available for individual projects facilitated by adoption of the proposed General Plan. Because contracts for water do not currently exist for the buildout condition of the City, the potential lack of an adequate water supply is a significant adverse impact.	5.14-1 For any residential subdivision with 500 or more units or any commercial project of over 500,000 square feet, any CEQA compliance review shall include demonstration of compliance with the requirements of SB 610. 5.14-2 For any residential subdivision with 500 or more units, any CEQA compliance review shall include demonstration of compliance with the requirements of SB 221.	Significant	5.14-1 and 5.14-2	Significant	Significant	5.14-1 and 5.14-2	Significant	Significant	5.14-1 and 5.14-2	Significant	Significant	5.14-1 and 5.14-2	Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC UTILITIES: Result in the proposed General Plan Update being inconsistent UWMP prepared by the San Diego County Water Authority.													
The SDCWA has developed the UWMP and updates it every five years using SANDAG's regional growth forecasts. The UWMP does not ensure adequate supply. Because mitigation is outside jurisdiction of the city, the impacts remain significant and unmitigated. Because the water supply forecasts are based on the regional growth forecasts conducted by SANDAG and because the regional growth forecasts rely on the adopted general plans, amending the General Plan to increase population densities will, necessarily, result in the water supply forecast to be inconsistent with the adopted plan. This is a significant water supply impact.	Mitigation is outside the jurisdiction of the city, therefore, impacts remain significant and unmitigated.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available to the city.	Significant	Significant	None Available to the city.	Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC UTILITIES: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve projected demand in addition to the provider's existing commitments													
Chula Vista owns capacity in the METRO, which provides conveyance of City wastewater flows. Projected future flows generated by buildout of the current General Plan will exceed the City's current capacity. The General Plan Update would result in an incremental increase in population throughout the city. Increasing population will place additional demand on sewer services. Each of the Scenarios and the Preferred Plan will require improvements to the collection system. As detailed in Appendix I, the Main Street Sewer, Industrial Avenue Sewer, and the G Street Sewer each have reaches with depth to diameter ratios of greater than 0.85 under the Preferred Plan and each of the Scenarios. While it is the intent of the City to ensure that services are provided concurrent with need, the provision of sewer services is not solely within their authority. While the City is in the process of acquiring additional capacity from Metro, that acquisition has not yet been finalized. Adoption of the Preferred Plan or Scenarios 1, 2, or 3 would not result in a significant impact because Policies PFS 1.1, PFS 1.5, GM 1.9, and GM 1.11 of the proposed General Plan Update require that major development projects prepare a public facilities financing plan that provides facilities and identifies funding mechanisms at the time of need. These policies also provide the authority to withhold discretionary approvals and subsequent building permits from projects that are out of compliance with threshold standards established by the City. Implementation of Policies GM 1.1, 1.5, 1.9 and GM 1.11, avoid impacts resulting from completion of infrastructure. As such impacts to wastewater are in essence self-mitigated and not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
PUBLIC UTILITIES: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs													
The General Plan area would be served by the Otay Landfill. Using the average rate of daily disposal and assuming the additional population at buildout of the proposed General Plan and no additional recycling programs are implemented, the Otay Landfill has sufficient capacity for approximately 25 years. Since there is sufficient capacity to accommodate projected population at buildout of any of the alternatives, there is no significant impact to integrated waste management services.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
HAZARDS: Create a significant hazard to the public or the environment through the routine transport, use, disposal or accidental release of hazardous materials													
The City of Chula Vista contains several known and listed hazardous sites of potential environmental concern. Future development consistent with the proposed General Plan Update may result in significant impacts if such development allows greater contact between humans and hazards. Development in accordance with the proposed plan will be completed in compliance with policies in Objectives EE 19 and 20, which assure that new development will not be approved if there is the potential for hazardous materials use and transport to affect residents. Implementation of these policies is assured through accordance with CEQA as indicated in Policy EE 20.2. Therefore, impacts are not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
HAZARDS: Place potential emitters of hazardous or acutely hazardous materials or substances													
Approximately 492 potential emitters of hazardous materials were identified within the city. Land uses such as schools are particularly sensitive. Any new designation associated with the proposed General Plan which would bring additional people into contact with hazardous waste would be a significant impact. Proposed Policy EE 19.1 provides that development proposals for hazardous waste storage, collection, treatment, disposal, and transfer facilities will only be considered if they are located within a designated "General Area" and meet specific siting, design, and operating criteria established by the Chula Vista Zoning Code and pursuant to the established City siting criteria guidelines. The proposed General Plan Update would revise the "General Areas" map to coincide with the proposed industrial land use designations of the Preferred Plan and reflect non-industrial uses that have been developed on industrially designated lands subsequent to the adoption of the General Plan in 1989. By limiting the location for potential emitters to general areas and by designing those areas in accordance with Policy 19.1, the adoption of the proposed General Plan would avoid placement of potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers. Therefore, impacts are not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
HAZARDS: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan													
The proposed General Plan would increase population throughout the city. There are no objectives and policies contained in the proposed General Plan that would interfere with or impair implementation of an adopted emergency response or evaluation plan. Implementation of Policy EE 19.1 avoids potential impacts by requiring special design features and/or on-site emergency services where deemed necessary to facilitate the adequate handling of hazardous materials accidents. Therefore, impacts to adopted emergency response or evacuation plans are self-mitigating and not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
HAZARDS: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands													
Since Chula Vista receives limited precipitation, the potential for wildland fires represent a significant hazard within areas of the city in close proximity to wildland fuels, particularly in eastern Chula Vista. However, in accordance with Policy EE 16.1, implementing appropriate techniques, consistent with the Chula Vista MSCP Subarea Plan and the City's Urban-Wildland Interface Code, would reduce hazards to an acceptable level. Therefore, impacts are not significant.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
MINERAL RESOURCES: Loss of availability of a valuable mineral resource													
There are no "regionally significant" MRZ-2 aggregate resource areas in western Chula Vista and no mining activities are currently occurring Significant MRZ-2 zones occur along the Otay River valley and mining operations could conflict with nearby existing or proposed uses. Significant mineral resources occur in eastern Chula Vista, along the Otay River Valley (see Figure 5.16-1). Because of the limited area affected by the land use recommendation, it is not anticipated that development of this portion of the MRZ-2 in accordance with the Open Space Active Recreation designation would prevent the extraction of a valuable mineral resource. Potential impacts to important mineral resources resulting from mineral extraction in areas adjacent to MSCP preserve lands that are completed in conformance with the proposed General Plan Update are self-mitigating because the plan contains Policies EE 5.1 and 5.3, that require permit applications for proposed mineral resource extraction are consistent with the Chula Vista MSCP Subarea Plan (Policy EE 5.1) and that approved reclamation plans fully comply with requirements of the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, Otay Valley Regional Park Concept Plan, and all other applicable plans regarding the restoration of biological habitats and the creation of trails and parkland (Policy EE 5.3). Therefore, implementation of Policies EE 5.1 and EE 5.3 will avoid significant impacts to the availability of valuable mineral resources.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

TABLE 1-3
SUMMARY OF ENVIRONMENTAL ANALYSIS RESULTS
(continued)

		Preferred Plan			Scenario 1			Scenario 2			Scenario 3		
Impact	Mitigation	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM	SBM	MM	SAM
Housing and Population: Substantial population growth													
The Preferred Plan and all three Scenarios would result in a substantial increase in the population of Chula Vista because it would accommodate growth that may occur locally. It is, therefore, considered growth inducing. This is considered a significant impact. West of I-805, the proposed General Plan Update would direct that growth to developed areas of the City. East of I-805 the potential increase in population would occur in areas not currently developed. The environmental impacts associated with this increased population are discussed in the individual topical sections of this report. Impact to issues, such as traffic, air quality, noise, community character, land use, utilities and services, cultural and biological resources, geology and soils, and energy due to population and housing increases from the adoption of the Preferred Plan and all three Scenarios are discussed in the Sections 5.1 through 5.16 and Chapter 7 of this document.	No mitigation is available to avoid substantial population growth because adoption of the Preferred Plan or any of the Scenarios will result in that potential increase.	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant	Significant	None Available	Significant
Housing and Population: Displaces substantial numbers of existing houses necessitating the construction or replacement of housing elsewhere													
The displacement of housing as evaluated relative to Threshold 2 is not a significant impact because the housing will not need to be constructed elsewhere. Housing that may be removed by individual projects completed in compliance with the Preferred Plan or any of the Scenarios does not necessitate the construction of housing elsewhere because the proposed plan increases the number of housing units accommodated within the General Plan area. The number of units planned for all scenarios increases relative to the existing condition.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant
Housing and Population: Displaces substantial numbers of people necessitating the construction or replacement of housing elsewhere													
The displacement of people as evaluated relative to Threshold 3 is not a significant impact because the housing will not need to be constructed elsewhere. The displacement is not considered a significant impact because the numbers of units planned in the update areas are sufficient to accommodate the affected population.	No mitigation required.	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant	Not Significant	None Required	Not Significant

SBM = Significance before Mitigation MM = Mitigation Measures SAM = Significance after Mitigation

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Land Use	The No Project Alternative would result in a lower far than the Preferred Plan and each of the scenarios for the Urban Core and therefore, have a reduction in the community character impacts. Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative and would reduce the impacts to below a level of significance. The mass and heights of buildings in the area would decrease which would be more likely to maintain the current community character over the Preferred Plan or any of the Scenarios.	The Reduced Project Alternative reduces the intensity of housing, commercial, and industrial uses as well as increases open space and park uses over that of the Preferred Plan. This reduction decreases the intensity of land uses allowing for design features, integration of uses, and height/intensity objectives and policies to be met easier. However, the Reduced Project Alternative is similar to the Preferred Plan in the types and location of land uses, therefore, as with the proposed General Plan Update, the potential for incompatibilities between land uses would exist.	This alternative would reduce the impacts to community character compared to the Preferred Plan or any of the Scenarios. The mass and heights of buildings in the area would decrease which would be more likely to maintain the current community character over the Preferred Plan or any of the Scenarios. The reduction from High-rise to Mid-rise buildings would occur in the H Street Focus Area, the Eastern Urban Center, the E Street Visitor Focus Area, and the H Street Gateway Focus Area. Reductions from Mid-rise to Low-rise would occur in other areas of change throughout the Northwest and Southwest Planning Areas and the also the Eastern Urban Center of Otay Ranch. This reduction would reduce any adjacency impacts due to the placement of High-rise buildings next to existing single family, one-story residences. Reducing these building heights has the potential to retain the traditional character of the Downtown area and increase the compatibility with surrounding properties compared to the Preferred Plan and each of the Scenarios.	The Reduced Traffic Impact Alternative results in the same land use impacts as the Preferred Alternative and Scenario 1. It has fewer impacts than Scenarios 2 and 3 in that it avoids the effects resulting from placement of residential units adjacent to the Otay Landfill. The widening of the roads listed in Table 11.5 could significantly affect community character, particularly in the developed areas in western Chula Vista. The eastern roadways, including Otay Lakes Road, Olympic Parkway, and Eastlake Parkway, are large roadways and their widening would have less an effect on community character. Homes and businesses are at a greater distance from these streets than roads in older neighborhoods. As with the Preferred Plan and each of the Scenarios, land use impacts associated with community character would be significant and unmitigated as a result of the adoption of the Reduced Traffic Impact Alternative.
Landform Alteration/ Aesthetics	As with the proposed General Plan Update, implementation of the adopted General Plan would result in significant impacts related to Landform Alteration/Aesthetics. Landform alteration/aesthetics is addressed in the Land Use and Conservation and Open Space Elements, as well as the Community Area Plans, of the adopted General Plan. These elements provide objectives and policies that would be implemented as part of future development to minimize aesthetic impacts. The No Project Alternative does not limit the building footprint and therefore, an equivalent amount of landform alteration and aesthetic impacts are anticipated. Implementation of this alternative would have a significant impact to landform alteration/aesthetics. Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative and would reduce the impacts, but not to below a level of significance.	The Reduced Project Alternative does not reduce the footprint or location of development or change the nature of the projects that could be permitted within in the General Plan Area, however, the alternative would lessen the aesthetic effects relative to the Preferred Plan or any of the Scenarios because there are lower densities proposed with the Reduced Project Alternative. As with the Preferred Plan and each of the Scenarios, the objectives and policies do not completely mitigate the impact because development standards have not been developed. Specific development standards are developed through subsequent planning actions. Without those standards, mitigation of impacts for the Reduced Project Alternative remains significant. A significant landform impact was identified for the East Planning Area and mitigation was identified. Because the Reduced Project Alternative reduces density and not the footprint of potential development, this impact remains the same and the specified mitigation is still required (see Section 5.2.5.2). Implementation of mitigation measure 5.2-1 would reduce significant landform alteration and aesthetics impacts associated with the Reduced Project Alternative; however, the open, rolling hills would be permanently altered by development and the impact would remain significant and unmitigated.	Implementation of the Community Character Alternative would reduce the impacts related to Landform Alteration/Aesthetics compared to the Preferred Plan and each of the Scenarios. This alternative would reduce the heights and bulk of development throughout the General Plan area. This alternative would comply with the objectives and policies of the General Plan Update, which would be implemented as part of future development to reduce aesthetic impacts, however not to below a level of significance. The ultimate effect on these issues would be based largely on the design of the development ultimately approved for the area, therefore, impacts would remain significant because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. At such time that specific development standards are developed through subsequent planning and zoning actions, these effects may be avoided.	Implementation of the Reduced Traffic Impact Alternative would increase the significant impacts related to Landform Alteration/Aesthetics compared to the Preferred Plan because this alternative increases the roadway widths throughout the General Plan area. This would have an effect on the character in areas of the built environment and could substantially alter existing scenic resources. In open areas, there is the potential that future development of these increased road segments to impact important scenic resources. While this alternative would reduce traffic-related impacts it would increase impacts upon landform and aesthetics compared to the Preferred Plan and each of the Scenarios.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Biological Resources	The MSCP Subarea Plan was adopted as a part of the General Plan. As with the General Plan Update, Regulations would be imposed to all future projects by state and federal resource agencies to provide additional assurances that impacts would not be significant. Therefore, implementation of the adopted General Plan would not result in significant impacts to biological resources.	The Reduced Project Alternative's direct impacts to sensitive biological resources would be less than the proposed General Plan Update. This alternative would not allow development within Wolf Canyon and would provide more parks and open space lands throughout the General Plan area. As with the proposed project, the Reduced Project Alternative would be required to comply with the Chula Vista MSCP Subarea Plan. Regulations would be imposed to all future projects by state and federal resource agencies to provide additional assurances that impacts would not be significant. Therefore, implementation of the Reduced Project Alternative would not result in significant impacts to biological resources.	The Community Character Alternative's direct impacts to sensitive biological resources would be similar to the proposed General Plan Update. As with the proposed project, this alternative would be required to comply with the Chula Vista MSCP Subarea Plan, which provides comprehensive long-term habitat conservation to address the needs of multiple species and the preservation of natural vegetation communities for lands within the city and sphere of influence boundaries. Regulations would be imposed to all future projects by state and federal resource agencies to provide additional assurances that impacts would not be significant. Similar to the Preferred Plan and Scenarios 1 and 3, implementation of the Community Character Alternative would not result in significant impacts to biological resources. Scenario 2 proposed to place residential development within Wolf Canyon, and to designate portions of the Otay Valley District in an area specified as Active Recreation for commercial and residential use. These uses are not compatible with the MSCP and the RMP. The Community Character Alternative is consistent with the MSCP and the RMP.	The Reduced Traffic Impact Alternative's direct impacts to sensitive biological resources has the potential to be greater compared to the Preferred Plan and each of the Scenarios. The increase widths to roadway segments in the undeveloped portions in the East Planning area particularly along Main Street and Olympic Parkway could increase the impact to biological resources compared to the Preferred Plan. Additional lanes on roadways have increases in width. An average lane width is 12 feet, with corresponding additional improvements. By increasing a roadway by 12 to 24 feet, the potential for additional impacts is similarly increased.
Cultural Resources	As with the proposed General Plan update, implementation of the adopted General Plan has the potential to result in significant impacts related to cultural resources. Cultural resource studies and review would be required as part of the environmental review of all future projects to reduce the potential impacts to cultural resources to below a level of significance.	As with the proposed General Plan Update, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to cultural resources. Cultural resource studies review would be required as part of the environmental review of all future projects to reduce the potential impacts to cultural resources to below a level of significance.	Implementation of the Community Character alternative would reduce the impacts to historic character of Downtown on Third Avenue compared to the Preferred Plan or any of the Scenarios. The reduction in bulk and scale of buildings near historic resources would lessen the potential for an adverse effect on the historic context. All other cultural resource impacts associated with the Community Character Alternative would be similar to impacts associated with the preferred project. Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative. Compliance with the policies associated with Objectives LUT 12 and EE 9 and the Mitigation Measures 5.4-1 would reduce the impact to cultural resources resulting from the adoption of the Community Character alternative to below a level of significance.	Implementation of the Reduced Traffic Impact Alternative would increase the impacts to Cultural Resources compared to the Preferred Plan and each of the Scenarios. Mitigation measures identified for the Preferred Plan would also be applicable to this alternative. Compliance with the policies associated with Objectives LUT 12 and EE 9 and the Mitigation Measures 5.4-1 would reduce the impact to cultural resources resulting from the adoption of the Community Character alternative to below a level of significance.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Paleontological Resources	As with the proposed General Plan update, implementation of the adopted General Plan has the potential to result in significant impacts related to paleontological resources. Cultural resource studies and paleontological review would be required as part of the environmental review of all future projects to reduce the potential impacts to cultural resources to below a level of significance.	As with the proposed General Plan Update, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to paleontological resources. Cultural resource studies and paleontological review would be required as part of the environmental review of all future projects to reduce the potential impacts to cultural resources to below a level of significance.	Impacts associated with the Community Character Alternative would be similar to impacts associated with the proposed project. Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative and would reduce the impacts to below a level of significance.	Implementation of the Reduced Traffic Impact Alternative would increase the impacts to Paleontological Resources compared to the Preferred Plan and each of the Scenarios. Mitigation measures identified for the Preferred Plan would also be applicable to this alternative and would reduce the impacts to below a level of significance.
Geology and Soils	Implementation of the adopted General Plan has the potential to result in significant impacts related to geology and soils. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with the requirements of the governing jurisdictions, building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential hazards and site conditions.	As with the proposed General Plan Update, implementation of the Reduced Project Alternative is self-mitigating as it relates to geology and soils. Under this alternative, development would still occur throughout the General Plan area, but the density would be less intense. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with the requirements of the governing jurisdictions, building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential hazards and site conditions.	Implementation of this alternative would result in a similar level of impact to geological and soils resources as the Preferred Plan and each of the scenarios. Under this alternative, development would still occur throughout the General Plan area, but the density would be less intense. The goals, objectives, and policies associated with geology and soils would also be applicable to this alternative, and would reduce the impact to below a level of significance.	Implementation of this alternative has the potential to result in an increase to geological and soils resources as the Preferred Plan and each of the Scenarios. Under this alternative, more impacts from the development of new roadways and improvements of existing roadways would occur throughout the General Plan area. Development would still occur under this alternative and geological resources would still be impacted. The goals, objectives, and policies associated with geology and soils would also be applicable to this alternative, and would reduce the impact to below a level of significance.
Water Resources/ Water Quality	As with the proposed General Plan Update, implementation of the adopted General Plan has the potential to result in significant impacts related to water resources and quality. Future development would increase runoff by increasing the impermeable surface area in the city. Adherence to water quality control measures required by the Regional Water Quality Control Board and the City's SUSMP and JURMP would reduce the potential impacts to below a level of significance.	The impacts to water quality would be reduced over that of the Preferred Plan and each of the scenarios with the Reduced Project Alternative due to an increase of open space and park uses and less impermeable surface area. However, as with the Preferred Plan, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to water resources and quality. Future development would increase runoff by increasing the impermeable surface area in the city. As with the Preferred Plan, and each of the Scenarios, implementation of the Reduced Project Alternative would avoid significant impacts by complying with Policies EE 2.2 through EE 2.7 and Objectives PFS 1 and 2.	The impacts to water quality would be similar to that of the Preferred Plan and each of the Scenarios with implementation of the Community Character Alternative. This alternative would reduce the height and bulk of the building; however, the footprint of impermeable surfaces would be similar to that of the Preferred Plan and each of the Scenarios. As with the Preferred Plan and each of the scenarios, adherence to water quality control measures required by the Regional Water Quality Control Board and the City's SUSMP and JURMP would reduce the potential impacts to below a level of significance.	The impacts to water quality would be increased over that of the Preferred Plan and each of the Scenarios with implementation of the Reduced Traffic Alternative. This alternative would increase the development footprint of the roadways which would increase impermeable surfaces over that of the Preferred Plan. As with the Preferred Plan and each of the scenarios, adherence to water quality control measures required by the Regional Water Quality Control Board and the City's SUSMP and JURMP would reduce the potential impacts to below a level of significance.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Transportation	The General Plan Update would allow additional traffic on area roadways over that of the Adopted Plan. The Preferred Plan for the proposed General Plan Update would impact 15 street segments compared to the adopted General Plan: 5 segments of which would create a new impact, and 7 of which would add to an existing impact. Under the Preferred Plan, 11 street segments would have a reduction in impact when compared to the adopted General Plan. Scenario 1 for the proposed General Plan Update would impact 18 street segments compared to the adopted General Plan. Under the Preferred Plan, 8 street segments would have a reduction in impact when compared to the adopted General Plan. Scenario 2 for the proposed General Plan Update would impact 18 street segments compared to the adopted General Plan. Under the Preferred Plan, 8 street segments would have a reduction in impact when compared to the adopted General Plan. Scenario 3 for the proposed General Plan Update would impact 19 street segments compared to the adopted General Plan. Under the Preferred Plan, 9 street segments would have a reduction in impact when compared to the adopted General Plan. The No Project Alternative has as great a traffic impact as the proposed General Plan Update because it does not represent an appreciable difference in overall impacts from the adopted General Plan.	The Reduced Project Alternative would result in a decrease in the amount of trips generated by the project. The significant traffic impacts associated with the General Plan Update would be reduced but would not be avoided. Because the significant traffic impacts are cumulative, as with the Preferred Project and the Scenarios, implementation of the mitigation measures called for in Section 5.10.6 would lessen these impacts, but not to below a level of significance.	The decrease in height as specified in this alternative does not necessarily result in a decrease in density. As such it cannot be definitively stated that the Community Character Alterative would reduce traffic impacts as compared to the Preferred Plan or Scenarios 1,2, or 3. Therefore, it is assumed for the purposes of this analysis, the traffic impacts would not be reduced. Therefore, impacts from the Preferred Plan and all three Scenarios, and the Community Character Alternative would be significant. The required traffic mitigation measures would be the same for both the Reduced Project Alternative and the proposed General Plan Update. As with the Preferred Project and the Scenarios, implementation of the mitigation measures called for in Section 5.10.6 would lessen these impacts, but not to below a level of significance.	The Reduced Traffic Impact Alternative would reduce the significant traffic impacts compared to the Preferred Plan and each of the Scenarios/ Fifteen non-urban roadway segments were determined to have a significant impact after mitigation with the adoption of the Preferred Plan. Scenario 1 would impact 18 segments, Scenario 2 would impact 18 segments, and Scenario 3 would impact 19 segments. The Reduced Traffic Impact Alternative would upsize the classification of all roadways segments identified as being significantly impacted under the Preferred Plan and the three Scenarios to reduce these impacts. Increasing a four-lane major to a six-lane major results in an increase capacity of 10,000 ADT. It is anticipated that those roadways operating at LOS D under the Preferred Plan would operate at C or better under this alternative.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Air Quality	Because the adopted General Plan is consistent with the goals and objectives of the RAQS, implementation of the adopted plan would comply with the SANDAG TCM Plan and, therefore, would not result in significant air quality impacts. To the contrary, the proposed General Plan Update is not consistent with the goals and objectives of the RAQS, this is considered a significant adverse impact until the SANDAG TCM Plan is revised to reflect the General Plan update. Because the air basin is in federal non-attainment for Ozone and state non-attainment for PM 10, Ozone and PM 2.5, the potential increase in residential units for the No Project Alternative and the activities associated with population growth represents a significant air quality impact.	As with the proposed General Plan Update, the Reduced Project Alternative is not consistent with the goals and objectives of the RAQS, this is considered a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are considered significant and unavoidable. Because the air basin is in federal non-attainment for Ozone and state non-attainment for PM 10, Ozone and PM 2.5, the potential increase in residential units and the activities associated with population growth represents a significant air quality impact.	Impacts to air quality are closely associated with the number and length of vehicle trips on area roadways, as well as the flow of traffic on those roads. As with transportation. the descrease in height as specified in this alternative does not necessarily result in a decrease in density, and, as such it cannot be assumed that the it would reduce air quality impacts as compared to the Preferred Plan or Scenarios 1,2, or 3. Therefore, it is assumed for the purposes of this analysis that because traffic impacts are not reduced, air quality impacts would also not be reduced. In addition, This alternative is not consistent with the goals and objectives of the RAQS. Similar to the proposed project, this is considered a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are considered significant and unmitigated.	Development of the Reduced Traffic Impact Alternative has the potential to result in a reduction of significant air quality impacts compared to the Preferred Plan and each of the Scenarios. The Reduced Traffic Impact Alternative would increase the roadway widths of 20 street segments throughout the General Plan area. This would improve traffic flow and increase the speed. This improved flow would increase turbulence around the roadway and could result in fewer hot spots than the Preferred Plan and each of the Scenarios. All other air quality impacts associated with this alternative would be similar to impacts associated with the Preferred Plan and each of the Scenarios. This alternative is not consistent with the goals and objectives of the RAQS. Similar to the proposed project, this is considered a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are considered significant and unavoidable. Because the air basin is in federal non-attainment for Ozone and state non-attainment for PM 10, Ozone and PM 2.5, the potential increase in residential units and the activities associated with population growth represents a significant air quality impact.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Noise	As with the proposed General Plan Update, development of the adopted General Plan has the potential to result in significant noise impacts. Development under the adopted General Plan would equate to the increase in allowable density along highways and major arterials, adjacent to rail, and within the airport influence area of Brown Field. As with the proposed General Plan Update, all future projects with the potential to generate noise in excess of the specified limits shall be required to complete a noise analysis to the satisfaction of the Environmental Review Coordinator to reduce any noise impacts to below a level of significance.	As with the proposed General Plan Update, development of the Reduced Project Alternative has the potential to expose sensitive receivers to undesirable noise levels. Development would equate to the increase in allowable density along highways and major arterials, adjacent to rail, and within the airport influence area of Brown Field. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage, direct impacts remain significant and not mitigated under the Reduced Project Alternative.	Without a reduction in traffic volumes, there would not be a reduction in noise resulting from traffic on area roadways. As such, the Community Character Alternative would does not result in a reduced noise impact relative to the Preferred Plan or any of the Scenarios. As with the proposed General Plan Update, a significant impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage, direct impacts remain significant and not mitigated under the Community Character Alternative.	Development of the Reduced Traffic Impact Alternative has the potential to result in an increase in significant noise impacts compared to the Preferred Plan. This alternative would increase the roadway widths of 29 street segments throughout the General Plan area, increasing the speed on those roadways. The increase in speed would have a corresponding increase in noise. Widening the roadway could, potentially, bring the noise source closer to a sensitive receiver as well. The Reduced Traffic Impact Alternative will have a greater impact on noise than the Preferred Plan and all three Scenarios, therefore, impacts remain significant and not mitigated under this alternative.

TABLE 1-4
COMPARISON OF PROJECT ALTERNATIVES
(continued)

Environmental Issue	No Project Alternative	Reduced Project Alternative	Community Character Alternative	Reduced Traffic Impact Alternative
Public Services and Utilities	As with the proposed General Plan Update, development of the adopted General Plan has the potential to result in significant impacts to Public Services and Utilities. The adopted General Plan provides policies and guidelines for the provision of public services and utilities in Chula Vista. While the No Project Alternative would comply with the policies and guidelines for the provision of public services and utilities in Chula Vista, and would avoid significant adverse service and utility impacts, the absence of long term supply contracts for water and energy represent a significant and unmitigable impact.	The Reduced Project Alternative would be required to comply with the policies and guidelines for the provision of public services and utilities in Chula Vista, and would, thereby, avoid significant adverse service and utility impacts to water facilities, wastewater, school service, libraries, police and fire protection, and park and recreation. While the Reduced Project Alternative would reduce demand for Public Services and Utilities resources, as with the proposed Preferred Plan and each of the Scenarios, development of the Reduced Project Alternative has the potential to result in significant impacts to water supply and energy supply because of the absence of long term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative, however, because of the absence of long-term supply contracts for water and energy, the impact remains significant and unmitigated.	Development of the Community Character Alternative would reduce the impacts to Public Services and Utilities compared to the Preferred Plan and each of the scenarios. .The decrease in height as specified in this alternative does not necessarily result in a decrease in density. As such it cannot be definitively stated that the Community Character Alterative would reduce impacts to public services or utilities as compared to the Preferred Plan or Scenarios 1,2, or 3. Therefore, it is assumed for the purposes of this analysis, the service and utilities impacts would not be reduced. As with the proposed Preferred Plan and each of the Scenarios, development of the Community Character Alternative has the potential to result in significant impacts to water supply and energy supply because of the absence of long-term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative; however, because of the absence of long-term supply contracts for water and energy the impact remains significant and unmitigated.	Development of the Reduced Traffic Impact Alternative would result in similar impacts to Public Services and Utilities compared to the Preferred Plan. Thus, the significant water facilities and supply, sewer, wastewater, school service, police and fire protection, and park and recreation impacts identified for the proposed project would remain the same under this alternative. The mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative. As with the proposed Preferred Plan and each of the Scenarios, development of this alternative has the potential to result in significant impacts to water supply and energy supply because of the absence of long-term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative, however, because of the absence of long-term supply contracts for water and energy the impact remains significant and unmitigated.
Parks and Recreation	As with the proposed General Plan Update, the adopted General Plan provides policies and guidelines for the development of parks in Chula Vista. Also included are polices regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance by implementation of the adopted General Plan.	The Reduced Project Alternative reduce impacts to parks and recreation because the alternative would allow for an increase of open space and park uses when compared to the Preferred Plan and each of the scenarios. As with the proposed General Plan Update, the Reduced Project Alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.	The Community Character Alternative would have the same impacts to open space and park uses when compared to the Preferred Plan or any of the Scenarios. As with the proposed General Plan Update, this alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.	The Reduced Traffic Alternative would have the same impacts to open space and park uses when compared to the Preferred Plan and each of the Scenarios. As with the proposed General Plan Update, this alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.

2.0 INTRODUCTION

This document is a draft environmental impact report (EIR) that evaluates the potential physical environmental effects that could result from growth and development in accordance with the proposed City of Chula Vista General Plan Update and associated actions. The EIR analysis focuses on two primary components of the proposed General Plan Update: (1) physical development potential and (2) the goals/objectives/policies and subsequent action items/implementation measures.

2.1 Overview of the General Plan

State law (Government Code Section 65300) requires that each city and county adopt a comprehensive general plan. The proposed project fulfills this requirement by updating the City's adopted General Plan, which was last comprehensively updated on July 11, 1989 and subsequently amended in 1993 to include planning for the Otay Ranch project. The General Plan defines the framework by which the City's physical and economic resources are to be managed and used in the future. The General Plan Update's planning horizon is the year 2030. The General Plan not only guides future development within the existing City limits, but also addresses areas within the City's Sphere of Influence and other portions of the General Plan area beyond the City limits.

The General Plan clarifies and articulates the City's intentions with respect to the rights and expectation of the community, including residents, property owners, and businesses. Through the General Plan, the City informs these groups of its goals, policies, and standards, thereby communicating its expectations of the public and private sectors for meeting community objectives. Since the General Plan is the constitution for all future development, any decision by a City affecting land use and development must be consistent with its General Plan. This includes proposed development projects and subdivisions. An action, program, or project would be considered consistent with the General Plan if, considering all of its aspects, it would further the goals, objectives, and policies of the General Plan and not obstruct their attainment.

The elements of the adopted General Plan are grouped into three main categories: Community Development; Environmental Resources Management; and Hazard Management. Each category reflects specific aspects of development policies. The Issues, Goals, and Objectives section of each element outlines those adopted by the City. The Policies and Guidelines section identifies actions that the City should follow to attain the stated goals. These are then implemented through appropriate subsequently adopted regulatory controls.

The General Plan Update is arranged around 11 chapters. The first four of those chapters are background and guiding information about the city and the vision and themes that

guide the update. The following six chapters (Chapters 5 – 10) provide the objectives and policies of the plan. These include:

- Land Use and Transportation
- Economics
- Housing Element
- Public Facilities and Services
- Environment
- Growth Management

The General Plan Update also adds Chapter 11 that guides implementation of the plans, policies, and proposals.

The General Plan Update includes newly proposed goals, objectives, and policies to implement the community's vision for the future. The policies would be used by the City to guide day-to-day decision making so there is continuing progress towards attainment of goals and objectives. The proposed project that is analyzed in this EIR, including associated actions beyond the General Plan Update, is described in more detail in Chapter 3.

2.2 General Plan Proposed Land Uses and Scenarios

Under the proposed Chula Vista General Plan Update, the City would be organized into four planning areas (Northwest, Southwest, Bayfront, and East) and a number of subareas (Figures 2-1 and 2-2). Much of the city is made up of stable single-family neighborhoods and other areas where few, if any, changes are anticipated. The proposed amendments apply to certain subareas and districts within the Northwest, Southwest, and East Planning Areas. Several districts within these planning areas contain focus areas for which policies have been formulated to address issues which are unique to these areas.

For the purpose of this EIR, geographic terminology is important. Consistent reference is made to “planning areas” and to “update areas.” The planning areas refer to the Northwest, Southwest, East and Bayfront Planning Areas of the General Plan area. The update areas refer to the specific areas within those three planning areas wherein land use and circulation changes are proposed. The Northwest Planning Area lies north of L Street between I-5 and I-805; the Southwest Planning Area lies south of L Street between I-5 and I-805; the East Planning Area lies east of I-805, and the Bayfront Planning Area lies west of I-5 overlooking the San Diego Bay. The city is organized into a hierarchy of geographic areas for discussion and policy purposes. This hierarchy within the Chula Vista General Plan area is listed below and shown on Figures 3-3 through 3-5 and Chart 3.5-1 in the Project Description section of this report.

Important Farmland Data Source: U.S. Department of Agriculture, Natural Resources Conservation Service (downloaded from ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/ December 2002)

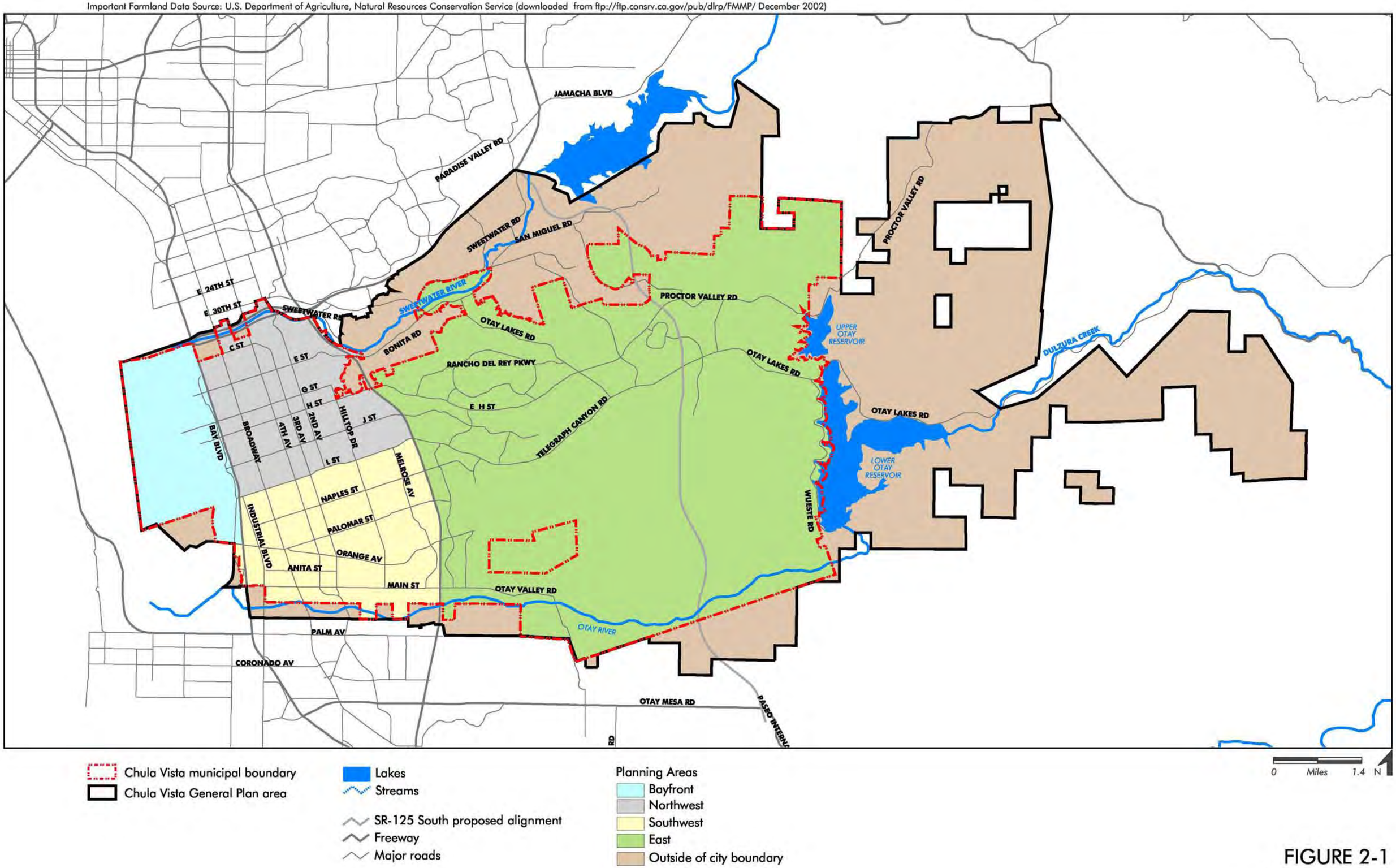

FIGURE 2-1
Planning Areas

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fig2-1 (region) 09/14/05

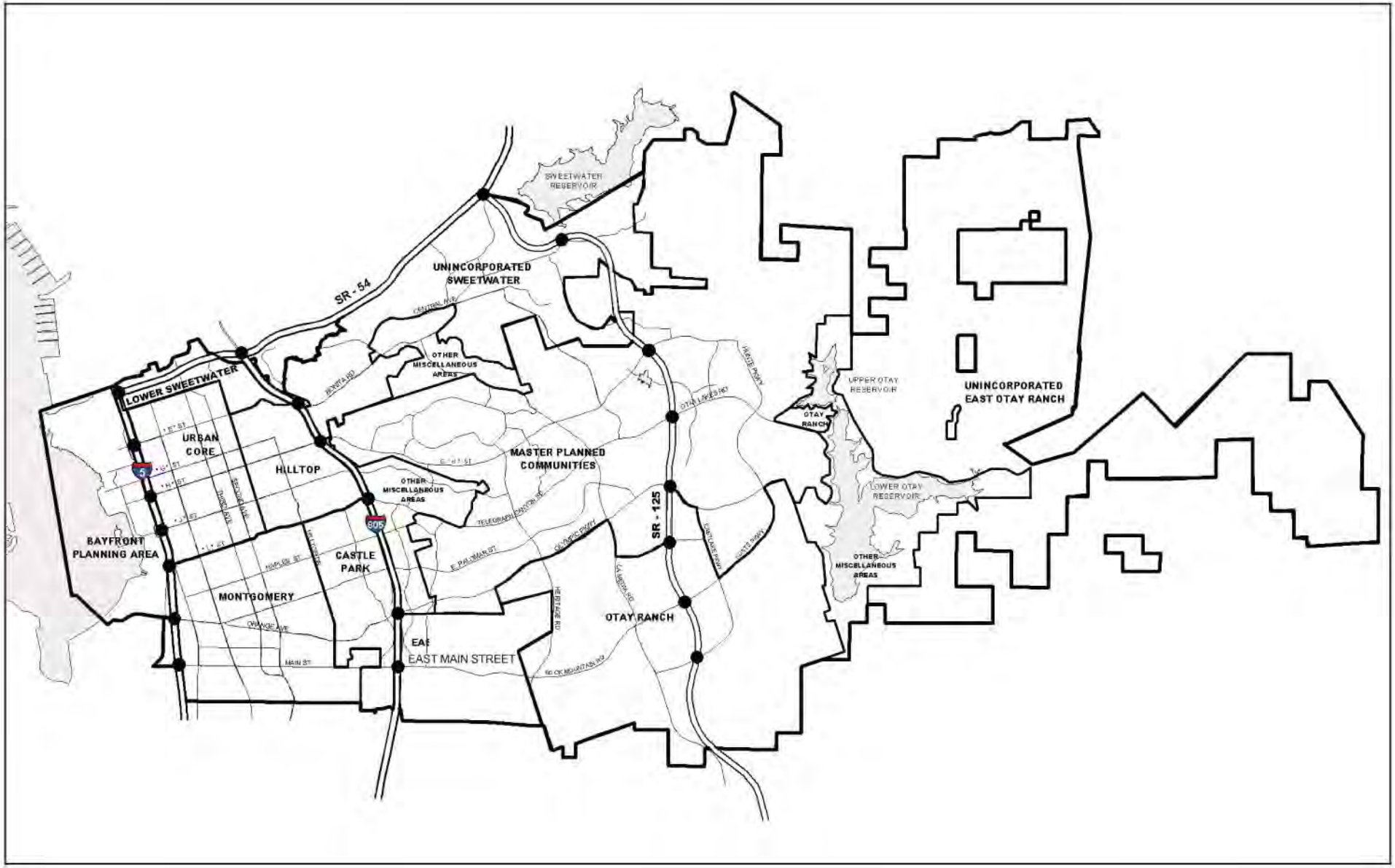

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Figure 2-2
Proposed Subareas within Planning Areas

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1. Planning Area
    2. Subarea
        3. District
            4. Focus Area

This terminology is employed to distinguish these areas from the following planning areas designated in the adopted General Plan:

1. The Sweetwater Planning Area
2. The Bayfront Planning Area
3. The Montgomery Planning Area
4. The Central Planning Area
5. The Eastern Territories Planning Area

Each of the five planning areas listed above have their own area plan in the adopted General Plan. The Bayfront area is not amended as part of this update, and the Sweetwater Area Plan has been incorporated into the new East Planning Area Plan. The former Sweetwater and Eastern Territories planning areas have been integrated into the proposed East Planning Area. The former Montgomery Planning Area is now included within the proposed Southwest Planning Area, which includes other areas south of L Street and west of I-805 (the Castle Park Subarea). There are also two small proposed additions, the southernmost portion of the Bayfront Planning Area, south of Palomar Street, and the portion of the West Fairfield area within the city of San Diego that is not within the adopted General Plan area. The Montgomery label is proposed to be applied to the Montgomery Subarea of the Southwest Planning Area. The General Plan Update does not propose any changes in the land use designations for the Bayfront Planning Area located in the westernmost portion of Chula Vista, although as stated above, the southernmost portion of the Bayfront Planning Area, south of Palomar Street, is proposed to become part of the Southwest Planning Area.

Three preliminary land use and circulation scenarios were developed as part of the outreach program for the General Plan Update. Each scenario identified possible land use and circulation changes within portions of the Northwest, Southwest, and East Planning Areas. After intensive analysis and extensive community input, a Preferred Plan was developed with input from the General Plan Update Steering Committee.

The existing and proposed population and number of dwelling units are presented in Table 2-1. The Preferred Plan and the three preliminary scenarios are described in detail in Chapter 3 and are analyzed in this EIR.

TABLE 2-1

PROJECT STATISTICS BY SCENARIO

		Planning Area					
		Northwest	Southwest	East	Bayfront	Total GPU Area	Incorporated Area
Existing Conditions	Dwelling Units	19,711	18,368	36,152	–	74,231	70,067
	Population	56,931	53,562	111,807	–	222,300	209,200
Adopted Plan	Dwelling Units	21,140	18,851	57,046	1,000	98,037	89,124
	Population	59,011	53,372	169,411	2,519	284,300*	257,376
Preferred Plan	Dwelling Units	27,497	22,281	64,315	1,000	115,093	105,762
	Population	74,861	61,790	187,655	2,519	326,900*	298,529
Scenario 1	Dwelling Units	27,749	21,806	61,581	1,000	112,136	102,805
	Population	75,624	60,687	181,013	2,519	319,843	291,546
Scenario 2	Dwelling Units	26,323	22,527	65,508	1,000	115,358	106,027
	Population	71,850	62,442	191,323	2,519	328,134	299,837
Scenario 3	Dwelling Units	26,837	23,124	59,203	1,000	110,164	100,833
	Population	73,327	63,920	174,187	2,519	313,953	285,656

*Totals vary due to rounding.

2.3 General Plan Update Process

The General Plan team of staff and consultants prepared baseline and areawide studies for the City of Chula Vista. These baselines studies were prepared to present the most recent data available for the City of Chula Vista. The reports included a description of current regulatory requirements that would be relevant to planning and development of the city, as well as a description of current planning activities in the region. The baseline and areawide studies addressed aspects of the community that were considered in the planning process, such as circulation, public services and facilities, biological resources, geology, paleontology, cultural resources, noise, and air quality. These documents provided much of the technical background data necessary to prepare this EIR.

The City has maintained a website (http://www.chulavistaca.gov/City_Services/Development_Services/Planning_Building/General_Plan/default.asp) to regularly disseminate General Plan Update information. Workshops, the Internet, and community meetings were part of an extensive outreach program to involve the public in the update of the General Plan. As part of the public outreach and participation program for the General Plan Update, the City Council authorized the formation of citizen committees. The committees helped guide the process and assisted in preparation of the Update by providing a means for ongoing involvement by key community stakeholder interests (e.g., education, business, environment, housing, community services, etc.), select City boards and commissions, and residents.

The committee structure consisted of a Steering Committee and three Subcommittees related to major topic areas of the General Plan Update: Economic Development; Environment, Open Space & Sustainable Development; and Infrastructure & Services. Each Subcommittee consisted of 13 to 14 people and included representation from City boards and commissions, community organizations and residents. The Steering Committee consisted of 13 members, including one representative from each of the Subcommittees.

The Steering Committee provided oversight to the General Plan Update process, and facilitated communication among key stakeholders by providing a conduit for sharing information, issues, and the perspectives of diverse interests in the community. Its principal tasks were to synthesize information coming from various technical studies and the Subcommittees in the preparation of an overall vision for Chula Vista, in the development of land use and transportation scenarios, and reviewing the draft Land Use and Transportation Element.

The three Subcommittees served as a means to identify and discuss issues and concerns, key goals, and objectives related to their respective focus areas. They also reviewed information from related technical studies, and reviewed those draft General Plan elements pertinent to the focus of their respective committees.

Several key workshops conducted to solicit public input and to provide a forum for the City Council to provide policy direction are discussed below:

- Chula Vista Vision 2020 – A Community Festival was held on Saturday, April 27, 2002, which was a kick-off event for public participation in the General Plan Update. The event was an opportunity for members of the community to identify important issues needed to be addressed through the General Plan Update process. This event consisted of three Town Hall-type discussion sessions, an ideas comment area where participants could provide additional input, and an information area for participants to gather information and have questions answered.

- Summer/Fall 2002 – A "visioneering" program for citizens volunteering to identify the public's desires for Chula Vista, with over 4,000 comments received.

- Winter/Spring 2003 – Work by four Citizens Advisory Committees to help prepare the draft vision and goals and preliminary planning concepts. These committees included an overall Steering Committee and three subcommittees tied to major topic areas of the update: economic development; environment, open space, and sustainable development; and infrastructure and services. The committees continued to provide guidance as the updated plan was prepared.

- June 21, 2003 – A Town Hall II public meeting was held to present and get community feedback on the draft vision and goals; preliminary land use and transportation concepts for select areas of the city; and other citywide plans.

- November 15, 17, and 19, 2003 – Three Town Hall III workshops were held in the Northwest, Southwest, and East Planning Areas to show the public the land use concepts prepared based on community input and other sources. The purpose of these meetings was to get community input on more detailed land use concepts. There were three General Plan Scenarios presented at these meetings.

- January 14, 2004 – A joint City Council and Planning Commission workshop was held to get feedback on the three General Plan Land Use Scenarios.

- June 21, 2004 – A meeting was held to show the public the Land Use Scenarios recommended by the Steering Committee. The purpose of this Steering Committee meeting was to get community input on their recommended Land Use Scenario.

- January 27, 2005 – General Plan Update Public Information Meeting and Open House.

- February 15, 2005 – City Council/Planning Commission General Plan Update Joint Workshop providing General Plan Update Overview.

- February 24, 2005 – City Council/Planning Commission General Plan Update Joint Workshop providing focusing on East Area Land Use.

- August 18, 2005 – City Council/Planning Commission Joint Meeting focusing on Western Chula Vista Land Use.

A Notice of Preparation (NOP) of a Draft EIR was prepared and circulated for the proposed project in August 2004. The NOP and comments received in response are included in Appendix A. A public scoping meeting was held by the City on August 30, 2004, to solicit public input on the scope of issues to be addressed in the Draft EIR. A Draft EIR was prepared and circulated for the proposed project on December 31, 2004. In compliance with CEQA, the public review period for the Draft EIR was 45 days. A Planning Commission hearing was held to take oral comments and close the public review period on February 14, 2005. Based on the comments received during the public review period, the City has identified policy changes that would lessen the environmental effects and strengthen mitigation measures. Because of the interest of the public in the issues involved with this document, the Draft EIR has been revised and recirculated in accordance with Section 15088.5 of the CEQA Guidelines. The purpose of this recirculation is to include additional updated information regarding the proposed plan update and include expanded analyses. In accordance with Section 15088.5(f)(1), when an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and are not required to respond to those comments received during the earlier circulation period. In conformance with this section, the City is not responding to those comments received in response to the previous document. New comments are required by the end of the public review period for the recirculated General Plan Update EIR. The City of Chula Vista will respond to these comments submitted for the revised EIR. While the City of Chula Vista will not respond to the earlier comments, those comments will be part of the administrative record.

2.4 Environmental Review Procedure

In accordance with CEQA, the City of Chula Vista is the lead agency for the preparation and adoption of this EIR. This document will provide environmental information to other agencies affected by the project, or which are likely to have an interest in the project. Various agencies exercise control over certain aspects of the study area, including but not limited to the following:

- California Air Resources Board (CARB)
- California Department of Conservation

- California Department of Fish and Game
- California Department of Toxic Substances Control
- California Department of Transportation (Caltrans)
- California Environmental Protection Agency (CalEPA)
- California Office of Emergency Services
- California Regional Water Quality Control Board
- Chula Vista Elementary School District
- City of National City
- City of San Diego
- County of San Diego
- Otay Water District
- San Diego Association of Governments (SANDAG)
- Sweetwater Authority
- Sweetwater Union High School District
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

This EIR will be subject to review and comment by the general public as well as by interested jurisdictions, agencies, and organizations. A public hearing will be held following the end of the 45-day public review period by the Planning Commission to solicit oral comments on the adequacy of the Draft EIR.

Following the public review period, a final EIR will be prepared which will address the written and oral comments received during the public review period. The Chula Vista Planning Commission and City Council will review and consider the public comments and responses to comments incorporated into the final EIR in making their recommendations and decisions with respect to the proposed General Plan Update and associated actions.

2.5 Purpose and Scope of the Environmental Impact Report

This EIR assesses the environmental impacts of the City of Chula Vista's General Plan Update and associated actions. It constitutes a Program EIR under the provisions of Section 15168 of the State CEQA Guidelines. A Program EIR allows for review of a series of contemplated actions. The City of Chula Vista and other agencies will be able to use information presented in this Program EIR to determine if additional environmental review is required for subsequent actions linked to the project. All subsequent discretionary actions requiring environmental review will be prepared in accordance with the requirements of CEQA. Under Section 15168, if an agency determines that a program or action will result in impacts within the scope of the impacts reported in the EIR and that no further mitigation is required, the agency may deem the subsequent project to be within the scope of the EIR, and no further environmental review will be required. This

EIR has been prepared in accordance with the requirements of CEQA. The major purposes of this EIR are:

- To identify current and projected environmental conditions which may affect or be affected by growth planned for through the proposed General Plan Update;
- To disclose potential environmental impacts of the proposed General Plan Update to the public and to the decision makers;
- To inform the public and to foster public participation in the City's planning process;
- To identify mitigation measures which could eliminate or reduce potentially significant environmental impacts; and
- To evaluate alternatives that might be environmentally superior to the proposed General Plan Update.

The intent of the analysis in this EIR is the determination of whether the proposed project will have a significant effect on the environment. A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. When a significant effect is identified, the EIR identifies measures or alternatives that would substantially reduce that effect. For the General Plan Update, measures to lessen significant effects fall into three categories: (1) policies included in the General Plan that avoid significant effect are identified as "self-mitigated"; (2) measures that when implemented reduce significant effects to a level less than significant; and (3) alternatives to the Preferred Plan or other Scenarios that would lessen or avoid significant effects. Ultimately, significant effects have been identified for which sufficient mitigation is not available to lessen such effects to below a level of significance.

It has been determined that the proposed project may cause significant, adverse environmental effects and potentially significant indirect, direct, and cumulative environmental effects. In accordance with CEQA requirements, the environmental impact analysis outlines the environmental setting of the project, and identifies potential environmental impacts, significance of the potential impacts, and mitigation measures to avoid or reduce potentially significant adverse environmental impacts. In accordance with CEQA, this EIR also addresses cumulative impacts, growth-inducing impacts, effects found not to be significant, and irreversible environmental effects, and also contains an alternatives analysis.

3.0 PROJECT DESCRIPTION

3.1 Regional Location and Planning Boundaries

The city of Chula Vista is located in southern San Diego County, between National City and the southernmost portion of the city of San Diego which abuts the U.S.-Mexican border (Figure 3-1). Chula Vista encompasses approximately 52 square miles of land from the San Diego Bay to the Otay Lakes, generally between Sweetwater River and Otay River.

In addition to the city of Chula Vista, the General Plan boundary includes lands within the county of San Diego unincorporated area identified within the Sweetwater Community Planning Area and Jamul/Dulzura and Otay Subregional Planning Areas as well as portions of the cities of National City and San Diego. Consistent with provisions in State Government Code Section 65300, it is fairly typical of General Plans to include lands beyond those within the current city boundary where existing or future development proposed for those lands has an affect upon, and/or is affected by, development within the city. Affects generally consider such matters as physical planning, public safety, traffic and transportation, and other infrastructure and services. For the Chula Vista General Plan Area this includes lands with the unincorporated Sweetwater Valley, which are already part of the City's Sphere of Influence, and where significant ties in transportation infrastructure, commercial services, and wastewater transport exist. Also included are lands generally located east and north of the Otay Reservoirs where the City and the County of San Diego adopted a joint land use plan for the Otay Ranch project area in 1993. Portions of this area, namely the Resort parcel (Village 13) immediately north and east of Lower Otay Reservoir, contain a level of development which would warrant urban services, and are candidate for amendment into Chula Vista's Sphere of Influence, and future annexation to the City. And an approximate 38-acre area west of I-5 and south of Palomar Street, comprising the southwest portion of the West Fairfield area. Figure 3-2 provides an aerial view of the General Plan area and immediately surrounding area.

3.2 Role of the General Plan

A General Plan presents a long-term strategy to address planning issues for the growth and development of a community and outlines the community's shared vision for the future. The proposed General Plan Update was developed over the course of approximately three years and involved extensive public outreach. The planning process included the review of the existing General Plan, identification of a vision and related themes for the future of Chula Vista, formulation of goals and objectives, and the identification of potential changes to land use designations and the circulation network in certain areas.

FIGURE 3-1
Regional Location

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fig3-1 (regl) 09/14/05

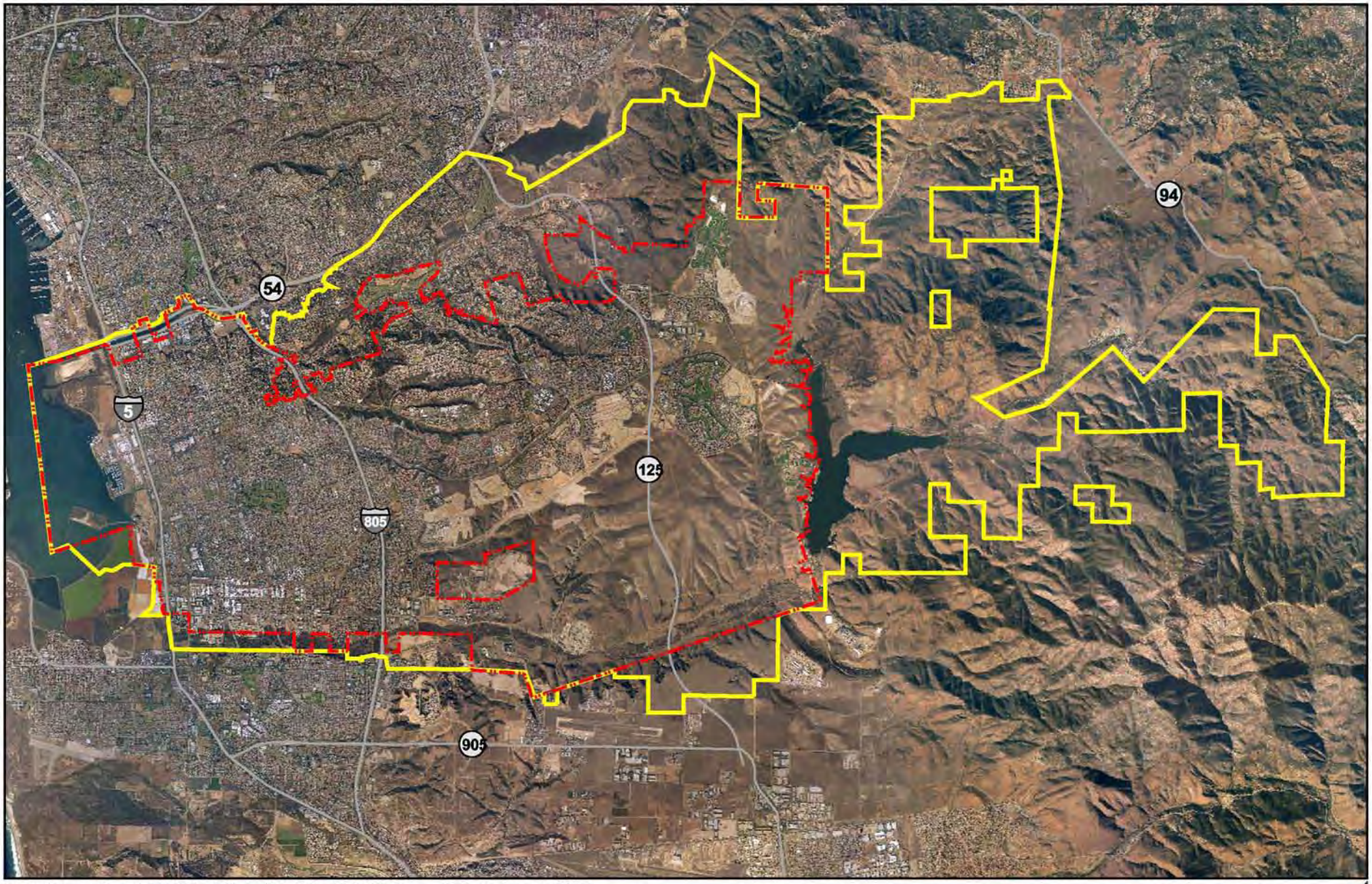

Image Source: Copyright 2001 AirPhotoUSA, LLC, All Rights Reserved (flown January 2001)

0 Miles 2 N

Chula Vista municipal boundary

Chula Vista General Plan area

FIGURE 3-2
Aerial Photograph of Project

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fig3-2 (aerial) 09/14/05

As a result of the public outreach process, the following eight themes were developed:

1. Strong community character and image
2. Healthy and sustainable economy
3. Strong and safe neighborhoods
4. Improved mobility
5. Healthy and sustainable environment
6. High-quality community services
7. Effective growth management and plan implementation
8. Shaping the future through the present and past

These themes served as the organizational basis for the preparation of five General Plan elements. These five new elements plus the existing Housing Element represent a reorganization of the elements comprising the existing General Plan text. The proposed new elements consist of:

1. Land Use and Transportation Element
2. Economic Development Element
3. Public Facilities and Services Element
4. Growth Management Element
5. Environmental Element

Within this new structure, the General Plan Update addresses the seven state-mandated General Plan elements of land use, housing, circulation, safety, open space, conservation, and noise as well as optional elements addressing economic development and public facilities and services as well as other issues that are important to the community.

One element of the adopted General Plan, the Housing Element, is not a part of the current update. Local Housing Element updates are subject to a regional council-of-governments (COG) process and are performed on a five-year cyclic basis as prescribed through the State Housing Element Law. The current Chula Vista Housing Element covers the five-year period from 1999 to 2004, and was originally self-certified by the City on December 19, 2000, pursuant to a State-approved program for jurisdictions in the San Diego Region. Based on later financial qualifying provisions for particular housing assistance funds, in 2002, the City submitted the Housing Element for additional certification by State Housing and Community Development (HCD), and re-adopted the State-certified document on May 28, 2002.

Jurisdictions within the San Diego Association of Government's COG are currently working on Housing Element updates for the 2005 to 2010 planning cycle. Chula Vista currently anticipates adoption of the Housing Element update by early 2006. The updated Housing Element will be structured to include formatting consistent with the overall General Plan, and will be incorporated at such time as it is adopted.

In addition to the formulation of the new General Plan elements, land use and circulation changes in three of the four planning areas of the city, the Northwest, Southwest, and East Planning Areas, are proposed. The General Plan Update does not propose any changes in the land use designations for the Bayfront Planning Area located in the westernmost portion of Chula Vista. Three scenarios were initially developed for each of the three planning areas. The effects of each of those scenarios were considered as were their effectiveness in achieving long-term objectives. As a result of that consideration, a preferred plan was developed. Each of these plans—the preferred plan and three initial scenarios—have been reviewed for environmental effects at a sufficient level of detail to provide decision-makers with the flexibility to approve land use and circulation amendments addressed throughout the range of the scenarios, not simply those which are a part of the preferred plan.

3.3 Project Objectives

The current population of the city is estimated to be 209,200. Based on the adopted General Plan, SANDAG forecasts the population of the city to reach approximately 280,000 by 2030, an increase of approximately 70,000 from the current level. (It should be noted that this forecast was based upon existing plans when the forecast was adopted in 2003. As part of the forecast and the Regional Comprehensive Plan, SANDAG acknowledged that approximately 93,000 households would be "exported" to outside the region because of a shortfall in the capacity of existing plans to accommodate needed new housing production.) The increased population will be accompanied by an increased demand for housing and support services. The role of the General Plan is to serve as a guide for rational decision-making regarding the city's long-term physical development. It serves as a bridge between the City's vision and goals and decisions with respect to development and associated resource allocation. The primary goals and objectives of the General Plan Update project are as follows:

- Continue to expand the local economy by providing a broad range of business, employment and housing opportunities that support an excellent standard of living, and improve the ability for residents to live and work locally.

- Maintain and enhance a high quality-of-life for the City's residents by developing and sustaining a healthy, strong and diverse economic base.

- Protect and increase the industrial land use base to provide for higher-value added jobs, and to support the retention and expansion of local businesses and industries.

- Provide for sufficient land use capacity and density to support revitalization and redevelopment of western Chula Vista.

- Provide a mix of land uses that meets community needs and generates sufficient revenue to sustain exemplary community services, facilities and amenities.

- Ensure that services and infrastructure expand to match needs created by growth and redevelopment, and to support economic prosperity.

- Foster a sustainable circulation/mobility system that provides mode of transportation choices, is well-integrated with the city's land uses, and connects the city both internally and to the region.

- Target higher density and higher intensity development into specific focus areas in order to protect stable residential neighborhoods and to create mixed-use urban environments that are oriented to, and adequately support, transit and pedestrian activity. This targeted development will be well-designed, compatible with adjacent areas, and contribute to the continued vitality of Chula Vista's economy.

- Continue to develop Chula Vista as a city with a distinct identity.

- Ensure sufficient housing capacity, density, and variety to meet existing and future needs, and to support the provision of affordable housing.

- Re-emphasize and revitalize the older, downtown Chula Vista core area as the heart of the city through a combination of public, civic, shopping, employment, entertainment, and residential uses.

- Provide and maintain sufficient land for siting a major, four-year college or university, and ensure surrounding land use types, mixes, and residential densities necessary to support its viability and realization.

- Support and encourage sustainable development patterns and practices, such as resource conservation, environmental management, transportation management, and compact development in both public and private projects.

- Provide ample access to, and connections between, Chula Vista's open space and trails network and the regional network, in accordance with the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, and Otay Valley Regional Park Concept Plan.

- Conserve Chula Vista's sensitive biological and other valuable natural resources.

- Protect Chula Vista's important historic resources.

3.4 Proposed General Plan Elements

3.4.1 Land Use and Transportation Element

The proposed Land Use and Transportation Element addresses the relationship between the element and state planning requirements, the General Plan Vision and Themes, and related plans and programs. It also sets forth the Chula Vista General Plan Land Use Classifications and Diagram and the Circulation Road Classifications and Plan. Specific subject areas are identified, discussed, and illustrated. Focused objectives and policies are presented. An objective represents the desired end point, while a policy signifies a general rule or course of action to achieve the objective. The objectives and policies are extensions of the Vision and Themes established in the proposed General Plan Update.

The overall goal of the proposed Land Use and Transportation Element is the development of a strong image and community character; safe neighborhoods; a healthy economy; protection of natural resources; and provision of community services. It is also to provide a wide range of mobility options.

The proposed element would establish six broad land use categories, encompassing a wide range of residential, business and public uses, each of which has a series of defined land uses. Table 3-1 presents the six categories and their specific designations. The element would also provide criteria for use in determining the appropriate gross density for project implementation within any given range.

Table 3-2 lists the proposed General Plan Update land use categories. New categories include urban core residential, mixed use, and open space preserve. The urban core residential category more clearly defines higher density development than the adopted plan does for the high residential category; the high residential category of the adopted General Plan has no upper end limit, whereas the proposed residential categories contain upper end limits. The mixed use category provides greater planning flexibility within a given area. Development of mixed uses in accordance with "smart growth principles" would contribute to a more vibrant and varied community by allowing increased residential development proximate to services, transit corridors, and other amenities, and by providing a greater range of uses to meet neighborhood needs.

With respect to the Land Use Categories, the General Plan Update is also deleting the following two current General Plan "special planning areas" designations related to Otay Ranch; Specialty Conference Center, and Village Core. Lands under these designations are being redesignated under proposed General Plan Update categories as "Public/Quasi-

TABLE 3-1
LAND USE CATEGORIES

Residential
Low Residential (0 to 3 Dwelling Units per Gross Acre)
Low-Medium Residential (3 to 6 Dwelling Units per Gross Acre)
Medium Residential (6 to 11 Dwelling Units per Gross Acre)
Medium-High Residential (11 to 18 Dwelling Units per Gross Acre)
High Residential (18 to 27 Dwelling Units per Gross Acre)
Urban Core Residential (28 to 60 Dwelling Units per Gross Acre)
Commercial
Retail Commercial
Visitor Commercial
Professional and Office
Mixed Use
Mixed Use Commercial
Mixed Use Residential
Mixed Use Transit Focus Area
Industrial
Limited Industrial
Regional Technology Park
General Industrial
Public and Quasi-Public, Parks, and Open Space
Public and Quasi-Public
Parks and Recreation
Open Space Preserve
Open Space - Active Recreation
Open Space
Water
Special Designations
Resort
Eastern Urban Center
Town Center
University Study Area

TABLE 3-2
PROPOSED GENERAL PLAN LAND USE CATEGORIES

Symbol	Category	Description
Residential: This use includes the following six categories:		
L	Low Residential (0-3 DUs/gross ac.)	The Low Residential designation is intended for single-family detached dwellings on large rural, estate-type lots, with densities ranging from 0 to 3 dwelling units per gross acre. This character predominates in existing residential neighborhoods within and adjacent to Sweetwater Valley. This is also the appropriate residential land use for areas with relatively steep slopes. At an average of 3.25 persons per unit, population density in this designation would be up to 9.8 persons per acre.
LM	Low Medium Residential (3-6 DU/gross ac.)	The Low-Medium Residential designation includes single-family detached dwelling units on medium-sized lots, as typically found in Chula Vista's existing single-family areas west of Interstate 805. Density for this designation ranges from 3.1 to 6 dwellings per gross acre. Using a cluster development concept, other housing types could also be consistent with this designation, such as single-family attached units (townhouses, row homes, and patio homes) or smaller lot and zero-lot-line detached single-family dwellings. At an average of 3.3 persons per unit, population density in this designation would range from 10.2 to 19.8 persons per acre.
M	Medium Residential (6-11 DUs/gross acre)	The Medium Residential designation is intended for single-family detached homes on smaller lots, zero-lot-line homes, patio homes, and attached units such as duplexes and townhouses, with densities ranging from 6.1 to 11 dwelling units per gross acre. This category also includes mobile home parks. At an average of 2.5 persons per unit, population density in this designation would range from 15 to 27.5 persons per acre.
MH	Medium-High Residential (11-18 du/gross acre)	The Medium-High Residential designation is intended for multi-family units such as townhouses and garden apartments, with densities ranging from 11.1 to 18 dwelling units per gross acre. This category also includes mobile home parks. At an average of 2.52 persons per unit, population density in this designation would range from 27.5 to 45 persons per acre.
H	High Residential (18-27 Dwelling Units per Gross Acre)	The High Residential designation is intended for multi-family units such as apartment and condominium-type dwellings in multiple-story buildings, with densities ranging from 18.1 to 27 dwelling units per gross acre. At an average of 2.52 persons per unit, population density in this designation would range from 45.3 to 67.5 persons per acre.
UC	Urban Core Residential (28-60 DUs/Gross Acre)	The Urban Core Residential designation is intended for the highest density, multi-family dwellings in an urban environment, with densities ranging from 27.1 to 60 dwelling units per gross acre. Development at the higher end of this designation is intended to expand the potential for residential development near to public transit, particularly along existing and planned transit corridors. Developments in this category should reflect high quality design, with integrated transit access, and urban amenities such as

TABLE 3-2
PROPOSED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
		recreational or cultural features. Structured parking may be necessary. At an average of 2.5 persons per unit, population density in this designation would range from 67.8 to 150 persons per acre. The intended densities within this designation are found in the Area Plans (Sections 8.0 to 11.0). The allowable density of Urban Core Residential development is linked to the provision of the desired amenities in order to establish the community's vision for a well-balanced urban environment.

Commercial: The commercial category allows for a variety of retail and professional uses under the subcategories of: Retail Commercial, Visitor Commercial and Professional and Office Commercial.

The intensity of development is measured using floor area ratio (FAR). The FAR is the ratio between the total gross floor area of all buildings on a lot and the total area of that lot. For example, a building with 5,000 square feet of floor area on a 10,000 square foot lot would have a FAR of 0.5, while a building with 20,000 square feet of floor area on the same lot would have a FAR of 2.0. The greater the FAR, the larger the building and the greater number of stories.

Retail Commercial	The Retail Commercial designation is intended to allow a range of retail shopping and services, including neighborhood, community and regional shopping areas. This category may include limited thoroughfare retail and automobile-oriented services. The FAR for this category ranges from 0.25 to 0.75.
Visitor Commercial:	The Visitor Commercial designation includes transient lodging, such as hotels and motels, restaurants, commercial recreation, and retail establishments. The FAR for this category ranges from 0.25 to 1.5.
Professional and Office Commercial:	The Professional and Office Commercial designation is intended for business, professional and public office uses. Limited retail uses that support the nearby office employees are also permitted. Retail uses that predominantly serve residential neighborhoods or shoppers from outside the immediate area are excluded from this category. The FAR for this category ranges from 0.35 to 1.5.

Mixed Use Categories: The Mixed Use designation is intended to expand the potential for residential development with convenient access to major activity centers and to create new consumer markets in appropriate areas of the City. Areas designated as Mixed Use are intended to function differently from typical patterns of single-zone land uses, such as an area of only office buildings. In Mixed Use areas, a variety of compatible land uses and activities are integrated to create a dynamic urban environment that serves as the activity center for the surrounding area.

The three Mixed Use designations allow for a mix of multi-family residential, retail shops, financial, business and personal services, restaurants, entertainment and office opportunities in a pedestrian-friendly environment. Ground floor uses are predominantly non-residential in order to promote pedestrian activity. Plan policies or the City's Zoning Ordinance may require certain uses, such as ground floor retail, on areas with this designation. Due to the more intense, compact nature of Mixed Use development, these areas are typically served by transit service and other forms of transportation, including enhanced pedestrian and bicycle travel

TABLE 3-2
PROPOSED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
	Mixed Use Commercial	The Mixed Use Commercial designation allows for a mix of retail, business services, and office uses, but excludes residential. Ground floor uses are predominantly retail in order to promote pedestrian activity.
	Mixed Use Residential	The Mixed Use Residential designation allows a mix of multi-family residential, retail shops, financial, business and personal services, restaurants, entertainment and office opportunities in a pedestrian-friendly environment. Ground floor uses are predominantly non-residential in order to promote pedestrian activity. Plan policies or the City's Zoning Ordinance may require certain uses, such as ground floor retail, in areas with this designation. Due to the more intense, compact nature of Mixed Use Residential development, these areas are typically served by transit service and other forms of transportation, including enhanced pedestrian and bicycle travel. The Mixed Use Residential designation is intended to be less intense than development in the Mixed Use TFA.
	Mixed Use Transit Focus Area	The Mixed Use Transit Focus Area designation is intended within approximately ¼ mile of existing and planned transit stations, and is intended for the highest intensity mixed use residential environment. This designation allows a mix of residential, office, and retail uses in an area that is pedestrian-friendly and has a strong linkage to provision of transit.

There is variation in the intensity and density of mixed use designations for specific parts of the City, with residential densities ranging from 28 to 60 dwelling units per acre, and Floor Area Ratios ranging from FAR 1.0 to 4.0.

Industrial: Three industrial land use categories allow research and development, manufacturing, warehousing and limited automotive related endeavors.

	Limited Industrial	The Limited Industrial designation is intended for light manufacturing, warehousing, auto repair, auto salvage yards, and flexible-use projects that combine these uses with associated office space. The FAR for this category ranges from 0.25 to 0.5.
	Regional Technology Park	The Regional Technology Park designation is intended for research and development, along with the administrative and office space associated with such activity. The FAR for this category ranges from 0.25 to 0.75. The Regional Technology Park is a large master-planned business park oriented to and providing research and high-tech manufacturing activities. It has capitalized on the university research activities and skilled labor force resulting from the presence of the university.
	General Industrial	The General Industrial designation is intended to allow all uses identified for the "Research" and "Limited Industrial" categories, plus heavier manufacturing, large-scale warehousing, transportation centers and public utilities. This category also includes auto salvage yards. The FAR for this category ranges from 0.25 to 0.5.

TABLE 3-2
PROPOSED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
Public and Quasi-Public, Parks/Open Space. This classification includes three categories consisting of Public and Quasi-Public, Parks/Open Space, and Water.		
P/PQ	Public and Quasi-Public	Applies to existing areas used by schools, churches, hospitals, civic centers, fire stations and libraries. When only P or PQ symbols are used on the Land Use Diagram, without the PQ land use, it indicates possible location of a future facility, rather than an existing use.
	Parks and Recreation	The Parks and Recreation designation is intended for parks, sports fields, playgrounds, golf courses, and other passive and active recreation uses. The designation may also include community centers and urban parks.
	Open Space	The Open Space designation is intended for lands to be protected from urban development, including floodplains, canyon, mountain, and agricultural uses. These lands may include unique natural conditions; provide scenic vistas, or areas to be set aside that have potential exposure to hazards such as earthquakes, landslides, fires, floods, erosion, or even high levels of roadway noise. Passive recreation uses, such as trails, staging areas, scenic overlooks, and picnic areas, may occur within these areas.
	Open Space Preserve	The Open Space Preserve designation is intended for areas designated within the Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan for the permanent conservation of biological resources. The various Preserve categories and locations of these lands are provided in the Chula Vista MSCP Subarea Plan.
	Open Space–Active Recreation	The Open Space Active Recreation designation is intended for areas that are largely undeveloped and adjacent to or near other open space areas; do not contain significant sensitive plant or animal species or habitat; and due to locational characteristics, provide opportunities for public or private recreational activities, including but not limited to ball fields, tennis courts, outdoor campgrounds, golf driving ranges and limited commercially-related active recreation uses. Lands designated in the Chula Vista MSCP Subarea Plan for active and passive recreation uses area also included in this designation; however, at the time that specific recreational uses are planned and developed, final hard-line active recreation areas will be determined based on updated biological data and application of the siting, criteria found in the Otay Ranch Resource Management Plan (RMP), the Otay Valley Regional Park (OVRP) Concept Plan, and the Chula Vista MSCP Subarea Plan.
	Water	This category is applied to bodies of water within the General Plan area, including San Diego Bay area and the Otay Lakes.
Special Designations: Four land use categories are established to identify areas of special planning focus. These include the resort, eastern urban center, town centers, and the University Study Area. .		
	Resort	The Resort designation identifies existing and potential locations for large-scale, destination-oriented resort facilities with a full range of resort related services. Uses may include, but are not limited to,

TABLE 3-2
PROPOSED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
		hotels and motels, resort oriented commercial services, restaurants and retail shops, cultural arts centers, recreational uses, time-share residences, conference centers and permanent residences. The specific density of use for resorts within this category shall be determined at the Sectional Planning Area level, with consideration given to General Plan consistency, environmental impacts and other relevant factors.
	Town Center	The Town Center designation is intended to provide a pedestrian-oriented environment that includes a mix of multi-family residential, retail shops, restaurants, professional office, or other commercial use opportunities. Higher residential densities and commercial services are provided within approximately one-quarter mile of transit facilities. A residential density range of 18 to 30 dwelling units per acre is permitted, although the higher densities may be approved only where necessary to support special housing needs, such as student and faculty housing for the University. Town Centers should typically provide a more extensive grid street system and may include specially designed arterial roadway(s) that encourage increased pedestrian-activity while providing for efficient traffic circulation.
	University Study Area	This study area is applied to four focus areas that are located on the site of the future university and surrounding properties in the East Area Plan and includes the University Campus, University Village, the Regional Technology Park, and the Eastern Urban Center. The purpose of the University Study Area is to develop a coordinated strategy to address the important relationships between the Focus Areas and the need for coordinated development to enhance the economic and community success and vitality of the District. This Study Area is further described in LUT Section 10.5.4.
EUC	Eastern Urban Center	This designation is applied to an area generally bounded by SR-125, Birch Road, EastLake Parkway and the extension of Rock Mountain Road from SR-125 to Eastlake Parkway, within the East Area Plan. The EUC is a high-intensity, mixed use urban center that will serve eastern Chula Vista and the broader south county area, and will also function as the urban core for the Otay Ranch. It will contain residential densities that range from Medium-High to Urban Core residential, and a variety of integrated mixed use, commercial, cultural, public and office uses. Standards unique to the EUC, for both public and private uses, will be developed to create its distinct urban character.

Public" and "Mixed Use Residential" respectively. This is a change in nomenclature only, and does not affect proposed uses as already governed by the Otay Ranch General Development Plan.

The circulation component of the element identifies six distinct facility classifications: (1) Freeways, (2) Expressways, (3) Six-lane Prime Arterials, (4) Six- and Four-lane Major Streets, (5) Class 1 Collector Streets, and (6) Town Center Arterials. The functionality and general design characteristics of each functional class facility are described. In addition, the element would create a new classification for Urban Arterials that facilitates higher densities and greater pedestrian orientation in the Urban Core. These include: (1) Gateway Streets; (2) Urban Arterials; (3) Commercial Boulevards; and (4) Downtown Promenades. Use of these new roadway classifications in the Urban Core Subarea is intended to integrate with land use plans and ensure mobility in the Urban Core.

3.4.2 Economic Development Element

The overall goal of the proposed Economic Development Element is to maintain and enhance a high quality of life for the city's residents by developing and sustaining a healthy, strong and diverse economic base.

The proposed Economic Development Element would establish policies to ensure the long-term vitality of the local economy. The purpose of the proposed element is to help develop and guide employment and business ownership opportunities for Chula Vista residents and encourage appropriate economic and business development in the city.

3.4.3 Public Facilities and Services Element

The proposed Public Facilities and Services Element would establish the City's plan to provide and maintain infrastructure and public services for future growth without diminishing services to existing development. Public facilities refer to utilities such as water, sewer, drainage, power and telecommunications services. Public services refer to schools, libraries, law enforcement, and fire protection. Parks, recreation centers, art and cultural facilities and programs, childcare opportunities, and health and human services are also addressed in this proposed element.

The goal of the proposed Public Facilities and Services Element is to provide and maintain public facilities and services within Chula Vista through exemplary public infrastructure and community services that support and enhance the well being of the city and its residents.

3.4.4 Environmental Element

The proposed Environmental Element would establish Chula Vista's policy framework for improving sustainability through the responsible stewardship of Chula Vista's natural and cultural resources, promotion of environmental health, and protection of persons and properties from environmental hazards and noise. It contains policies that reconcile conflicting demands created when population growth and development consumes natural resources—both renewable and non-renewable finite resources.

The goal of the proposed Environmental Element is to improve sustainability through the responsible stewardship of Chula Vista's natural and cultural resources, promotion of environmental health, and protection of persons and property from environmental hazards and the undesirable consequences of noise.

The conservation component of the element includes the Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan, water resources, agriculture, mineral resources, air quality, energy, solid waste, cultural resources, and paleontological resources.

The open space component encompasses Chula Vista's open space and trails network, connections to the regional open space and trails network, and ecotourism.

The natural hazards component encompasses geologic hazards, flooding, and wildland fire hazards.

The hazardous materials and waste component encompasses contaminated sites, household hazardous waste, hazardous waste facilities, and facilities that use, store, and handle hazardous materials and waste.

The element also addresses noise, including the establishment of exterior land use noise compatibility guidelines.

3.4.5 Growth Management Element

The purpose of the proposed Growth Management Element is to provide the appropriate policy foundation so as to allow the creation the various components that together create the overall growth management program that guides future development in the city. "Growth management" refers to the conscious decision to direct the pattern and rate of development through a set of comprehensive goals, objectives, and planning policies. Implicit in the concept of growth management are two complementary beliefs: (1) that population growth and development have the potential to cause a variety of problems that seriously impact the well being of a city and its residents; and (2) that through adoption of comprehensive objectives and policies, those impacts can be mitigated to an extent that

balances competing demands for growth and development, revitalization and environmental protection. Achieving this balance gives the city an enviable quality of life. The General Plan establishes the vision of the type of community Chula Vista will become. The proposed Growth Management Element would serve to assure that the vision is achieved without sacrificing the quality of life enjoyed in the community.

The proposed Growth Management Element contains the tools to guide the timing of the development planned for through the proposed Land Use and Transportation Element. It establishes the policy context so that capacities and generation rates described in the proposed Public Facilities and Services Element and supporting documents can be applied to development, redevelopment and revitalization. It recognizes the importance of resources described in the proposed Environmental Element and the contribution they make to the overall quality of life enjoyed by existing and future residents.

3.5 Land Use Plans

Three preliminary land use and circulation scenarios were developed as part of the outreach program for the General Plan Update. Each scenario identified possible land use and circulation changes within portions of the Northwest, Southwest, and East Planning Areas. After intensive analysis and extensive community input, a Preferred Plan was developed with input from the General Plan Update Steering Committee.

Land use and circulation changes were considered for portions of the Northwest, Southwest, and East Planning Areas (see Figure 2-1). As shown in Figures 2-1 and 2-2, the city is organized into a hierarchy of geographic areas for discussion and policy purposes. Land uses within 16 districts are proposed to change as a result of the General Plan Update. In addition, land use amendments were considered and/or are proposed within smaller amendment areas outside of these 16 districts, as depicted on Figures 3-3 through 3-5. These update areas are presented in Chart 3.5-1.

The General Plan Update contains certain goals, objectives, and policies that apply to specific areas within the city while others apply to the city at large. A discussion of the specific land uses that are affected by the proposed General Plan Update are described in the following discussion of the individual planning areas. In the remainder of the city, the broad policies of the proposed General Plan do not change the planned land use, or affect the current potential for, or nature of, development.

3.5.1 Planning Areas

3.5.1.1 Northwest Planning Area

The Northwest Planning Area is currently characterized by a broad range and balance of land uses, including: automobile-related uses, primarily on Broadway, neighborhood

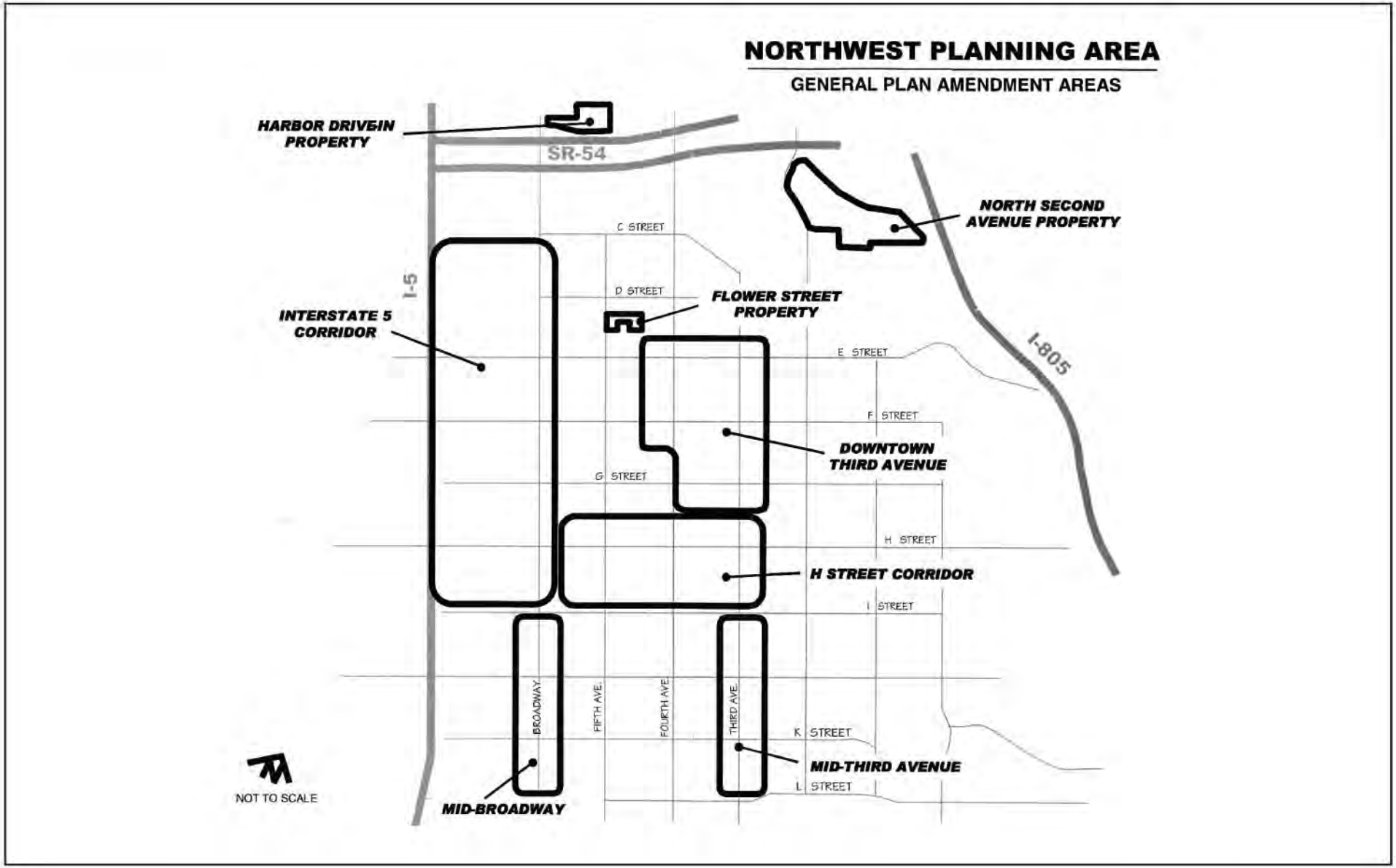

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FIGURE 3-3

General Plan Amendment Areas within the Northwest Planning Area

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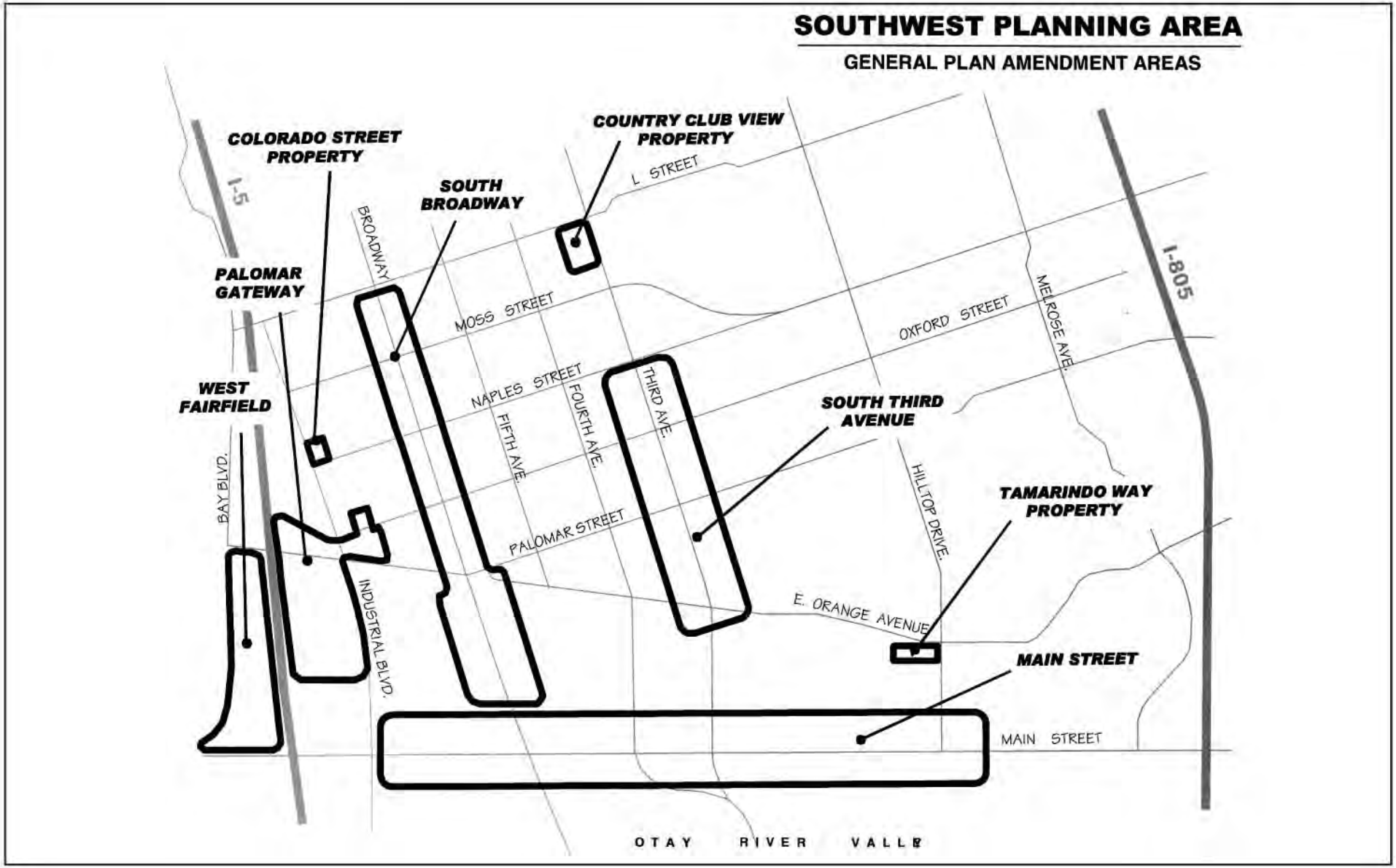

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FIGURE 3-4

General Plan Amendment Areas within the Southwest Planning Area

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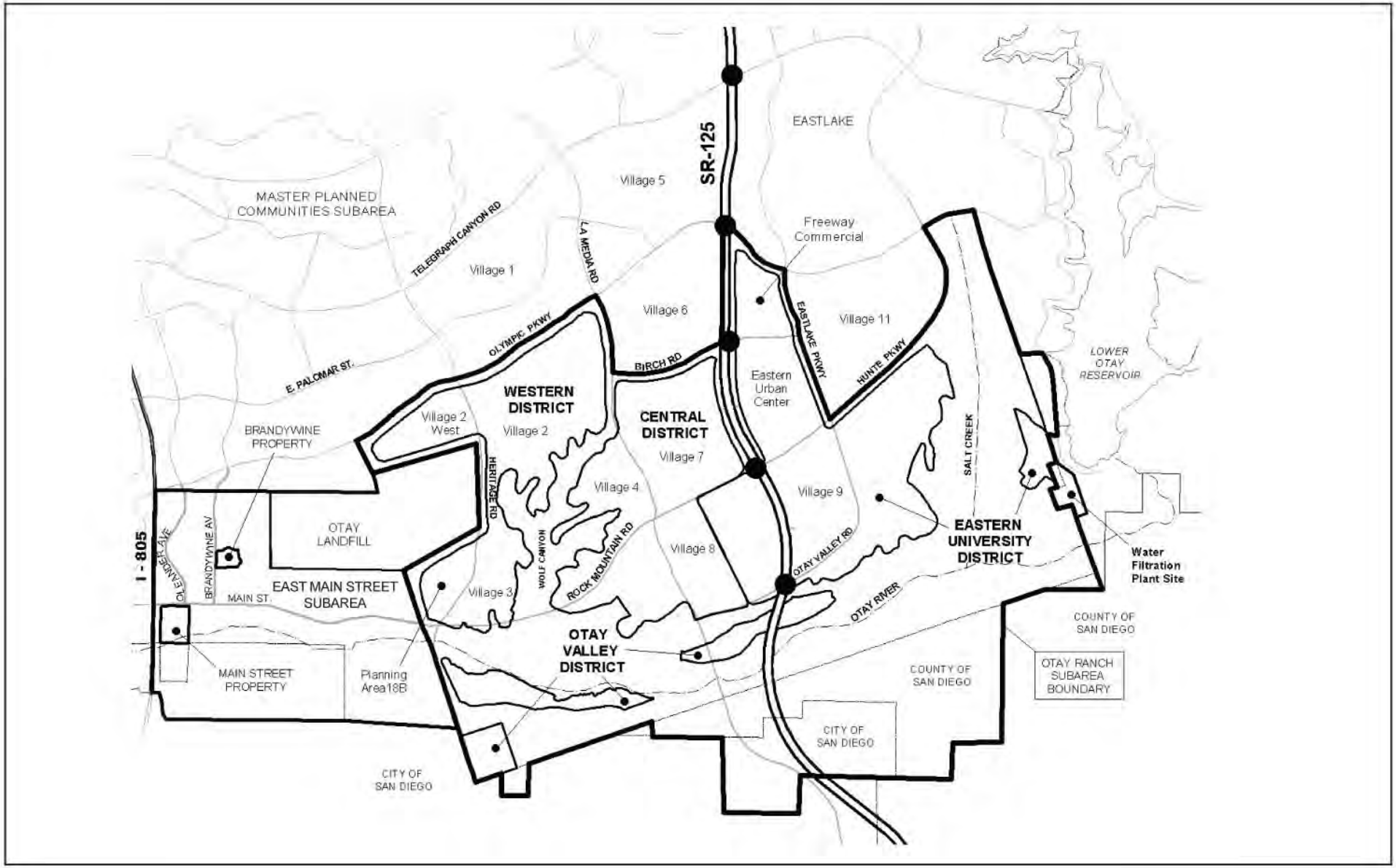

FIGURE 3-5 (Map 1 of 2)

General Plan Amendment Areas within the East Planning Area

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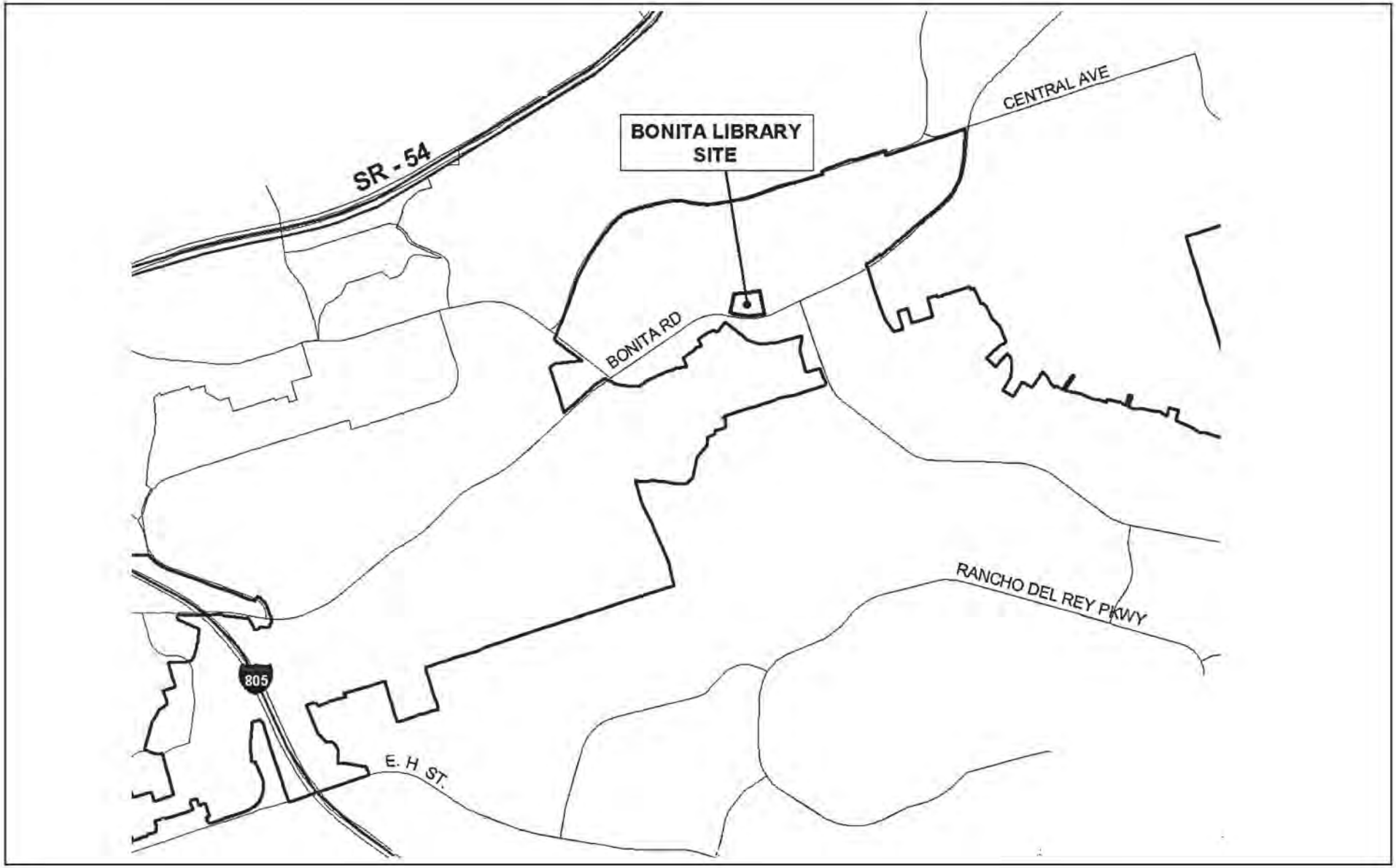

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FIGURE 3-5 (Map 2 of 2)
General Plan Amendment Areas within the East Planning Area

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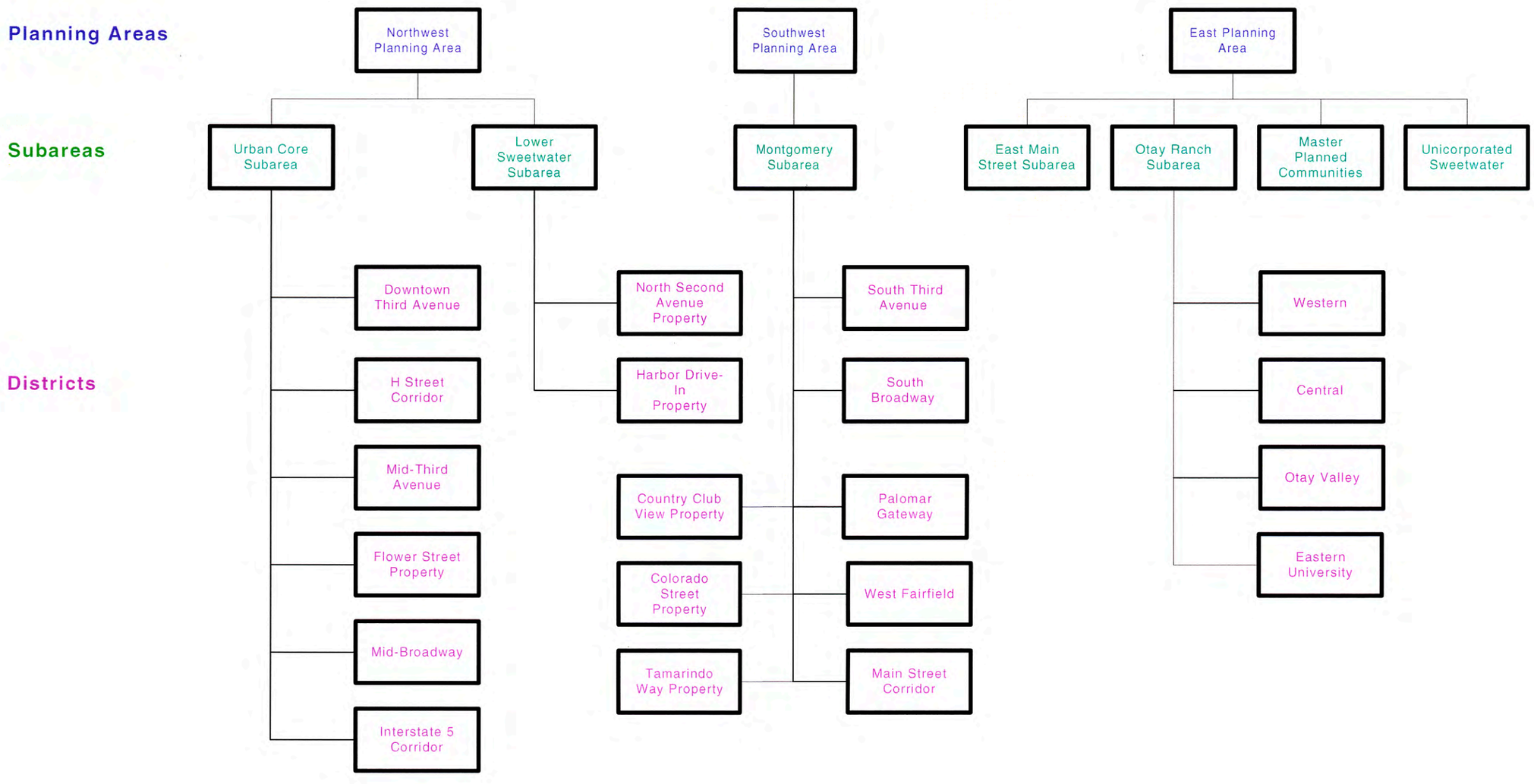


Chart 3.5-1
Update Areas

services, civic uses, and offices near downtown Third Avenue, regional retail shopping, two high schools, two middle schools, five elementary schools, several neighborhood and mini parks, and a mix of housing types including apartments, condominiums, townhomes, mobile homes, and single-family neighborhoods. The proposed General Plan Update establishes three subareas in the Northwest Planning Area: the Urban Core Subarea; the Hilltop Subarea, and the Lower Sweetwater Subarea (see Figure 2-2). The General Plan Update proposes changes to the land uses within the Urban Core and Lower Sweetwater Subareas of the Northwest Planning Area (see Figure 3-3).

Urban Core

The Urban Core Subarea functions as the business, shopping, and government center of Chula Vista. There are five districts and one property within the Urban Core Subarea that may be subject to change over time as the city continues to mature. There are five districts within the Urban Core Subarea. These districts encompass focus areas mapped and described in detail in the Land Use and Transportation Element (Section 9). The proposed land use designations within these districts and property for each scenario are presented in Section 3.5.2. The following is a description of these districts and property.

DOWNTOWN THIRD AVENUE DISTRICT

The Downtown Third Avenue District consists of the core area of the city where the northern portion of Third Avenue served as the primary focus for retail, office, and civic activities from the city's inception.

INTERSTATE 5 CORRIDOR DISTRICT

The Interstate 5 Corridor District is characterized by existing low-rise multiple family residential units extending from the northerly city boundary to I Street; existing mobile home parks between F Street and G Street; three roadway connections to the Bayfront (E Street, F Street, and H Street); and the lack of good pedestrian connectivity to Broadway or to the Bayfront across Interstate 5.

H STREET CORRIDOR DISTRICT

The H Street Corridor District consists of retail and office uses along the north and south sides of H Street, anchored on the west by the Chula Vista Center and Broadway, and on the east by the South County Regional Government Center and Third Avenue with its connection to the Downtown Third Avenue District.

MID-BROADWAY DISTRICT

The Mid-Broadway District, located between I Street and L Street, consists of a mix of land uses primarily retail in character. Several thrift stores, automobile-serving uses, motels, and parcels of minimal depth exist within this planning area.

MID-THIRD AVENUE DISTRICT

The Mid-Third Avenue District, located between I Street and L Street, consists primarily of a professional office uses north of J Street and a mix of retail and professional office uses south of J Street.

FLOWER STREET PROPERTY

The Flower Street Property is located on Fifth Avenue between D and E Streets.

Lower Sweetwater Subarea

There are two properties within the Lower Sweetwater Subarea for which General Plan land use designation changes are proposed. The following is a description of these properties.

NORTH SECOND AVENUE PROPERTY

The North Second Avenue Property is located south of State Route 54 between Second Avenue and Interstate 805.

HARBOR DRIVE-IN PROPERTY

The Harbor Drive–In Properties is located north of State Route 54 between National City Boulevard and D Avenue.

3.5.1.2 Southwest Planning Area

The Southwest Planning Area has a grid street pattern and a diversity of land uses, including a mix of residential, commercial, and industrial businesses that in some cases, have evolved over time without adequate planning, and have resulted in land use conflicts. The Southwest Planning Area is divided into two subareas, the Montgomery Subarea and the Castle Park Subarea. The General Plan Update proposes changes to the land uses within the Montgomery Subarea (see Figure 3-4).

Montgomery Subarea

There are five districts and three properties within the Montgomery Subarea that may be subject to change over time. These districts encompass focus area mapped and described in detail in the Land Use and Transportation Element (Section 8). The proposed land use designations within these districts and properties for each scenario are presented in Section 3.5.2. The following is a description of these districts and properties.

SOUTH THIRD AVENUE DISTRICT

The South Third Avenue District is a significant north/south commercial street that links several neighborhoods. Retail and services support adjacent residential areas. Civic uses, including a post office and Lauderbach Park, are located near the intersection with Oxford Street.

MAIN STREET DISTRICT

The Main Street District functions as a commercial-industrial service area and interfaces with the Otay Town residential neighborhoods north of Main Street and with the Otay River valley open space to the south.

WEST FAIRFIELD DISTRICT

West Fairfield, originally part of the Fairfield neighborhood that was divided by the construction of Interstate 5, is located on the west side of the freeway between Palomar Street and Main Street, adjacent to the San Diego Bay. It has a mix of light industrial/office-type uses interspersed with older single-family homes and vacant lots. A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA. Any development proposed in this area would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update.

SOUTH BROADWAY DISTRICT

The South Broadway District extends from L Street to the city boundary at the Otay Valley. This portion of Broadway includes automobile services, major retail stores, and local-serving services for adjacent residential neighborhoods.

PALOMAR GATEWAY DISTRICT

The Palomar Gateway District, located at the interchange of Palomar Street and Interstate 5 is characterized by the Palomar Trolley Station located at the southeast quadrant of Palomar Street and Industrial Boulevard. Land uses north of Palomar Street

include light industrial businesses and multiple family residential. South of Palomar Street exists a mix of residential units extending south to Anita Street.

COUNTRY CLUB VIEW PROPERTY

The Country Club View Property is located on Third Avenue south of L Street.

COLORADO STREET PROPERTY

The Colorado Street Property is located at the corner of Industrial Boulevard and Naples Street.

TAMARINDO WAY PROPERTY

The Tamarindo Way Property is located at the corner of Hilltop Drive and East Orange Avenue.

3.5.1.3 East Planning Area

The East Planning Area is divided into six subareas. The land within each subarea reflects common or shared characteristics such as ownership, historical land use, location, topography, natural resources, and other factors. Each provides a unique function and has a distinctive relationship to each other as well as the other area plans in the city and to the larger south San Diego County region. The six East Planning Area subareas include:

1. Unincorporated Sweetwater
2. Unincorporated East Otay Ranch
3. Master Planned Communities
4. East Main Street
5. Otay Ranch
6. Other Miscellaneous Areas

Figure 3-5 shows the areas of change within the Otay Ranch, East Main Street, Master Planned Communities, and Unincorporated Sweetwater Subareas of the East Planning Area that are subject to change with the General Plan Update.

Otay Ranch Subarea

Otay Ranch is the largest of the Eastern Territories master planned communities. Development of this 23,000-acre master planned community was jointly planned by the City of Chula Vista and County of San Diego and is guided by a General Development Plan (GDP) in the city and a Subregional Plan (SRP) in the county. The Chula Vista City Council and the San Diego County Board of Supervisors approved the GDP/SRP in October of 1993. Otay Ranch contains a series of existing and planned future villages, blending neighborhoods, shops, and employment opportunities with parks, schools, and other civic facilities to fashion a community with a shared sense of pride and place. Neighborhoods, built in small increments with front yards, porches, and friendly streetscapes, are intended to encourage community interaction.

Land use and circulation changes are proposed within the following four districts within the Otay Ranch Subarea: Western; Central; Otay Valley; and Eastern University. These districts encompass focus areas mapped and described in detail in the Land Use and Transportation Element (Section 10). The proposed land use designations within these districts for each scenario are presented in Section 3.5.2. The following is a description of these districts.

WESTERN DISTRICT

The Western District is located at the western end of the Otay Ranch Subarea. It centers on Village Two and its core area as the major feature. The areas known as Village Two West and Village Three (including Planning Area 18B) make up the balance of the District and are intended to compliment the core area of Village Two. The Western District surrounds the Otay Landfill on three sides. This characteristic makes it important that appropriate land uses be established in adjacent areas that buffer the landfill.

CENTRAL DISTRICT

The Central District is comprised of Villages Four and Seven, and the western portion of Village Eight. The district includes the park previously designated in Village Four. The park area has been enlarged to function as the large, community park for all of Otay Ranch. The remaining balance of residential units is to be included in Village Eight since the remaining area was designated for large lot single-family homes.

OTAY VALLEY DISTRICT

The Otay Valley District is located along the Otay River adjacent to the westerly boundary of the Otay Ranch. The district has been identified in the Otay Ranch General Development Plan and the City's MSCP Subarea Plan as a potential location for active recreational uses within the Otay River Valley.

EASTERN UNIVERSITY DISTRICT

The Eastern University District is intended to be the urban center for eastern Chula Vista area and will provide services to the broader South County subregion. This district will provide business, cultural, entertainment, and education services and residential development at a scale and density that are not appropriate for the surrounding villages and town centers located throughout Otay Ranch. It is composed of four focus areas, aligned north-south along a major transportation corridor, State Route 125, and additionally supported by a rapid transit system.

East Main Street Subarea

The East Main Street Subarea consists of approximately 1,800 acres located in the southwest corner of the East Planning Area. It is located east of Interstate 805 and south and west of the planned villages in the Otay Ranch Subarea. It includes the Otay Landfill and the Otay River Valley. A portion of the area is outside Chula Vista's city limits in the city of San Diego. The East Main Street Subarea is named for the eastern portion of Main Street, which is a major east-west circulation road that originates at the Interstate 5 freeway, passes through the Southwest Planning Area, crosses Interstate 805 into the East Planning Area, eventually connecting to Heritage Road in the vicinity of the Coors Amphitheatre.

The East Main Street Subarea consists of separate areas along and adjacent to the Otay River Valley. Land uses are varied and include single-family neighborhoods along Brandywine Avenue; entertainment sites such as the Amphitheater and Waterpark; the Otay Landfill; and several auto-wrecking yards.

MAIN STREET PROPERTY

The Main Street Property is located on the south side of Main Street at Oleander Avenue.

BRANDYWINE PROPERTY

The Brandywine Property is located on the east side of Brandywine Avenue between Olympic Parkway and Main Street.

Master Planned Communities Subarea

The Master Planned Communities are listed below.

- Rancho del Rey
- EastLake
- Sunbow

- San Miguel Ranch
- Rolling Hills Ranch
- Bonita Long Canyon
- Otay Ranch Villages 1West and 11
- Bella Lago

Although the Otay Ranch is its own Subarea, the Otay Ranch Villages 1, 1 West, 5, 6 and 11 are included in the Master Planned Communities Subarea for the proposed General Plan Update because these villages are either substantially built out and/or planning efforts are nearly completed. The Master Planned Communities Subarea is located north of the Otay Ranch and East Main Street Subareas and south of Unincorporated Sweetwater Subarea.

Unincorporated Sweetwater Subarea

The Unincorporated Sweetwater Subarea is located generally between SR-54 and the Sweetwater Reservoir on the north and Bonita Road on the south, within an unincorporated area of the County of San Diego. The neighborhoods of Bonita and Sunnyside are located within this Subarea.

The Unincorporated Sweetwater Area is composed of primarily stable, well- maintained single-family neighborhoods. Because it is within the unincorporated County and not the city, guiding land use and other general plan policies are contained within San Diego County's General Plan and the County's Sweetwater Community Plan.

Other Miscellaneous Subarea

There are several other areas located in the East Planning Area that are addressed within the proposed General Plan Update. These are predominately residential neighborhoods with a diverse housing stock. Due to their age, geographic location, or built-out characteristics, they are not included in any of the other Subareas.

3.5.2 Scenarios

Three scenarios were initially developed for each of the three planning areas that will have land use changes as a result of the proposed update. The effects of each of those scenarios were evaluated as to their ability to achieve the long-term objectives of the city. As a result of that consideration, a preferred plan was developed. Each of these plans, the preferred plan and three initial scenarios, have been reviewed for environmental effects at a sufficient level of detail to provide decision makers with the flexibility to adopt either the Preferred Plan or any of the Scenarios. The acreages and residential unit counts contained in the tables within this section are based on traffic analysis zones (TAZ) and reflect the areas of change as precisely as possible.

3.5.2.1 Preferred Plan

The proposed land use plan for the Preferred Plan is shown in Figure 3-6. Table 3-3 lists the Preferred Plan's land use distribution for the entire General Plan area. The land use maps for each district for the Preferred Plan can be found in Appendix B to this EIR. Table 3-4 provides the breakdown of land uses within the update areas that would result from the adoption of the Preferred Plan. Within the update areas, this plan includes 914 acres of commercial, 860 acres of public use, 796 acres of industrial use, 458 acres of parks, 227 acres of open space, and 1,978 acres of residential, which would accommodate a maximum of 34,964 single- and multi-family dwelling units. The following is a description of the proposed land uses for the Preferred Plan.

Northwest Planning Area

DOWNTOWN THIRD AVENUE DISTRICT

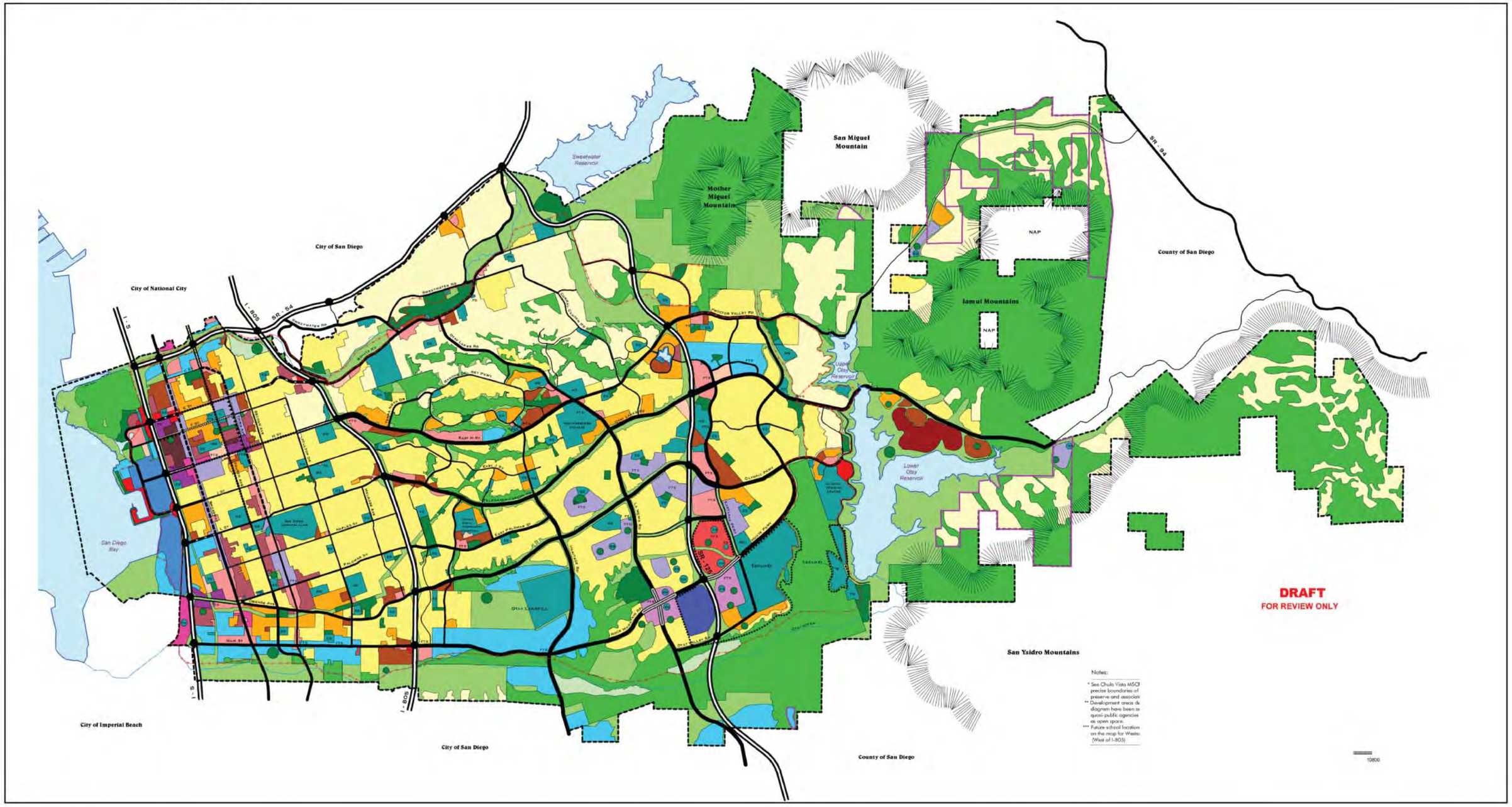
The Preferred Plan proposes the following land uses in the Downtown Third Avenue District:

- Increases the number of residential units along Third Avenue and E Street in a mixed land use arrangement along with retail and office uses, as well as east and west of Third Avenue, while maintaining a pedestrian scale of development.

- Expands Civic Center/Public Quasi-public uses south of F Street, in addition to a potential neighborhood park that would link with other parks in the area and provide for added residential units in the district.

- Provides for the establishment of the F Street Promenade, an enhanced pedestrian corridor linking downtown with the I-5 Corridor and Bayfront.

Map Source: City of Chula Vista, 2005



LAND USE

RESIDENTIAL	du/ac
Low	0-3
Low - Medium	3-6
Medium	6-11
Medium - High	11-18
High	18-27
Urban Core	28-60

COMMERCIAL
- Professional & Office
- Commercial Retail
- Commercial Visitor

MIXED USE
- Mixed Use Residential
- Mixed Use Commercial
- Transit Focus Area

INDUSTRIAL
- Limited Industrial
- General Industrial
- Regional Technology Park

OPEN SPACE, PARKS, & PUBLIC / QUASI-PUBLIC
- Open Space-Active Recreation
- Open Space
- Open Space Preserve*
- Parks & Recreation
- Public & Quasi-Public
- Water
- Areas Acquired for Open Space**

SPECIAL PLAN AREAS
- Eastern Urban Center
- Resort
- Town Center
- University Study Area

PUBLIC FACILITIES

- HS High School
- MS Middle School
- ES Elementary School
- CC Civic Center
- FS Fire Station
- L Library
- TS Transit Station/Stop
- FTS Future Transit Station/Stop

- Future - Community Park
- Future - Neighborhood Park
- Future - Schools***
- Greenbelt Trail System
- General Plan Boundary
- River or Stream

CIRCULATION SYSTEM

- Freeway or Tollway
- Expressway (7 or 8 Lane)
- Prime Arterial (6 Lane)
- Major Street (6 Lane)
- Gateway Street (6 Lane)
- Gateway Street (4 Lane)
- Urban Arterial (4 Lane)
- Commercial Boulevard (4 Lane)
- Downtown Promenade (4 Lane)
- Downtown Promenade (2 Lane)
- Major Street (4 Lane)
- Town Center Arterial
- Class I Collector
- Other Roads

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FIGURE 3-6
Preferred Plan Land Uses

TABLE 3-3
GENERAL PLAN LAND USE DISTRIBUTION IN 2030
(acreages)

General Plan Land Use Designation	Total General Plan Area	Bayfront	Northwest	Southwest	East	Unincorporated Sweetwater	Unincorporated Otay Ranch
Residential							
Low	6,972		64		1,555	2,453	2,900
Low Medium	8,200		1,354	1,401	4,927	307	211
Medium	1,201		187	288	622	32	72
Medium High	734		143	113	381		97
High	417	17	124	253	23		
Urban Core	84		84				
Commercial							
Retail	941	121	115	206	467	32	
Visitor	75	44	11	2	18		
Professional & Admin.	160	21	61	7	59	12	
Mixed Use							
Mixed Use Residential	743		174	80	439		50
Mixed Use Commercial	109		37	72			
Mixed Use Transit Focus Area	122		83	39			
Industrial							
Limited Industrial	1,790	86	116	384	1,204		
Regional Technology Park	200				200		
General Industrial	218	218					
Public, Quasi Public and Open Space							
Public/Quasi-Public	3,021	27	225	321	2,028	381	39
Parks and Recreation	931	60	73	106	573	88	31
Open Space	6,303	23	215	617	3,886	1099	463
Open Space Preserve	17,910	362	18	97	5,200	2,008	10,225
Open Space–Active Recreation	382		44		338		
Water	2,672	1,498				9	1,165
Special Planning Area							
Eastern Urban Center	240				240		
Resort	275	45					230
Town Center	169				169		
Other*	4,553	98	866	829	2,291	408	61
TOTAL ACRES	58,422	2,620	3,994	4,815	24,620	6,829	15,544

*Streets, freeways, utility right-of-ways.

TABLE 3-4
PREFERRED PLAN

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Urban Core Subarea							
Downtown							
Number of Units	0	–	–	0	23	3,158	3,181
Number of Acres	25	–	–	16	31	142	214
I-5 Corridor							
E Street Visitor							
Number of Units	0	–	0	–	0	3,842	3,842
Number of Acres	52	–	6	–	5	120	183
H Street Gateway							
Number of Units	0	–	0	–	0	4,683	4,683
Number of Acres	60	–	11	4	7	130	212
H Street Corridor							
H Street Office							
Number of Units	38	–	–	–	0	3,108	3,146
Number of Acres	85	–	–	–	39	89	213
Mid Broadway Corridor							
Number of Units	42	–	–	–	–	1,131	1,173
Number of Acres	20	–	–	–	–	88	108
Mid Third Avenue Corridor							
Number of Units	148	–	–	–	–	583	731
Number of Acres	53	–	–	–	–	48	101
Total Number of Units	228	–	0	0	23	16,505	16,756
Total Number of Acres	295	–	17	20	82	617	1031
Montgomery Subarea							
Main Street							
Number of Units	0	0	0	0	0	1,380	1,380
Number of Acres	10	245	102	35	16	144	553

TABLE 3-4
PREFERRED PLAN
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Palomar Gateway							
Number of Units	0	0	0	0	0	2,423	2,423
Number of Acres	58	36	5	9	10	73	192
South Broadway							
Number of Units	0	0	0	–	–	1,783	1,783
Number of Acres	54	14	8	–	–	77	152
South Third Avenue							
Number of Units	0	0	71	0	21	2,496	2,588
Number of Acres	50	0	9	10	20	86	175
West Fairfield							
Number of Units	0	–	–	–	–	–	0
Number of Acres	58	–	–	–	–	–	58
Total Number of Units	0	0	71	0	21	8,082	8,174
Total Number of Acres	231	295	124	54	46	380	1,130
Otay Ranch Subarea							
Central District							
Number of Units	–	–	–	–	–	3,402	3,402
Number of Acres	18	–	11	101	103	472	705
Eastern University District (except Freeway Commercial and EUC)							
Number of Units	–	–	–	–	0	3,839	3,839
Number of Acres	51	200	–	24	540	178	993†
Eastern University District (Freeway Commercial, & EUC)							
Number of Units	4,015	–	–	–	–	475	4,490
Number of Acres	273	–	–	35	35	32	375
Otay Valley District							
Number of Units	–	–	–	–	–	–	0
Number of Acres	–	40	36	209	–	–	285

TABLE 3-4
PREFERRED PLAN
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Western District							
Number of Units	–	0	–	0	0	2,510	2,510
Number of Acres	46	261‡	39	15	54	299	714
Total Number of Units	4,015	0	0	0	0	10,226	14,241
Total Number of Acres	388	501	86	384	732	981	3072†
East Main Street Subarea							
Number of Units	0	0	–	–	–	151	151
Number of Acres	24	0	–	–	–	11	35
Total Number of Units	0	0	–	–	–	151	151
Total Number of Acres	24	0	–	–	–	11	35

NOTE: These numbers represent the maximum case scenario for the worst-case environmental analysis purposes. Totals may vary due to rounding.

*Active Recreation land use classification is included in the "Park" column.

†Includes 46 acres of industrial in Sunbow, west of Village Two West.

‡In the Preferred Plan, 2.12.1 acres immediately west of SR-125 is included in the Eastern University District. In Scenarios 1, 2, and 3, these 2.12.1 acres are included in the Central District. Consequently, in the Preferred Plan, the Eastern University District's area total is 212.1 acres larger than in Scenarios 1, 2, and 3. Correspondingly, in the Preferred Plan, the Central District's area total is 2.12.1 acres less than in Scenarios 1, 2, 3.

INTERSTATE 5 CORRIDOR DISTRICT

The Preferred Plan proposes the following land uses in the Interstate 5 Corridor District:

- Establish Mixed Use with Residential along Broadway, including multi-family residential, retail and office uses.

- Establish high-density multi-family residential units along Interstate 5, north of the visitor-serving uses on the north side of E Street.

- Establish a mix of land uses south of E Street surrounding the existing trolley station. These uses include multi-family residential, retail and office uses, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Establish visitor-serving uses on the north and south sides of E Street, east and west of Broadway.

- Establish a mix of land uses at H Street surrounding the existing trolley station. These uses include multi-family residential, retail and office uses, much of which would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide Urban Core Residential in buildings ranging from low to mid-rise heights (1-7 stories) between Broadway and Interstate 5 freeway.

- Provide a neighborhood park within this focus area to provide for new residents within the area.

H STREET CORRIDOR DISTRICT

The Preferred Plan proposes the following land uses in the H Street Corridor District:

- Establish a H Street Transit Corridor Special Study Area which covers properties along both sides of H Street, extending from Interstate 5 to Third Avenue. The purpose of the H Street Transit Corridor Special Study Area is to evaluate potential modifications to land uses, densities, intensities, building mass, and the potential for high-rise buildings. While the special study is to be focused on the H Street corridor, the precise boundaries will be established at the time of the study, which will occur subsequent to actions on the GPU.

- Designate three future transit stops along H Street at Broadway, Third Avenue, and Fifth Avenue.

- Establish the Chula Vista Center as Mixed Use with Residential.

- Establish Mixed Use Commercial, Professional Office, and Residential High immediately north of the Chula Vista Center.

- Establish a Mixed Use Transit Focus Area along H Street between Third Avenue and Fourth Avenue.

MID-BROADWAY DISTRICT

The Preferred Plan proposes the following land uses in the Mid-Broadway District:

- Establish multi-family residential units mixed with retail and office uses along both sides of Broadway, between I Street and L Street.

MID-THIRD AVENUE DISTRICT

The Preferred Plan proposes the following land uses in the Mid-Third Avenue District:

- Establish additional professional office uses at the northwest quadrant of J Street and Third Avenue.

- Provide for additional professional office uses on the east side of Third Avenue, between Kearney Street and L Street.

FLOWER STREET PROPERTY

The Preferred Plan proposes multi-family residential uses on the south side of Flower Street east of Fifth Avenue, at similar densities to adjacent comparably designated properties.

NORTH SECOND AVENUE PROPERTY

The Preferred Plan proposes the following land uses for the North Second Avenue Property:

- Provide for single-family residential development east of Second Avenue, above the existing KOA facility.

- Provide for the continuation of the existing KOA campground, and the expansion of recreational uses by designating this property Open Space Active Recreation.

- Provide for public park opportunities by designating approximately twenty acres east of the existing KOA campground as Parks and Recreation.

HARBOR DRIVE-IN PROPERTY

The Preferred Plan proposes the following land uses for the Harbor Drive-In Property:

- Provide for a mix of commercial land uses, including retail and offices with primary access from National City Boulevard.

Southwest Planning Area

SOUTH THIRD AVENUE DISTRICT

The Preferred Plan proposes the following land uses in the South Third Avenue District:

- Establish a town focus area along both sides of Third Avenue, between Naples Street and Palomar Street, through the introduction of mixed land uses, including multi-family residential, retail and office uses.

MAIN STREET DISTRICT

The Preferred Plan proposes the following land uses in the Main Street District:

- Establish Limited Industrial along Faivre Street and Zenith Street.

- Provide for multi-family residential units between existing industrial uses and the residential neighborhood of Broderick Acres, on the south side of Main Street.

- Provide for a community park south of Main Street, between Beyer Way and Broadway.

- Designate two future transit stops along Main Street between Third Avenue and Hilltop Drive.

WEST FAIRFIELD DISTRICT

The Preferred Plan proposes the following land uses in the West Fairfield District:

- Provide for a mix of commercial uses west of Interstate 5, between Palomar Street and Main Street, predominantly consisting of business offices with some retail uses near Palomar Street.

- The potential to provide an education facility within the West Fairfield area is recognized through proposed policies.

SOUTH BROADWAY DISTRICT

The Preferred Plan proposes the following land uses in the South Broadway District:

- Provide a mix of land uses on both sides of Broadway, between L Street and Naples Street, including multi-family residential, retail and office uses.

- Provide for multi-family residential units east of the commercial center located at the southeast corner of Palomar Street and Broadway.

- Provide for a mix of commercial land uses on both sides of Broadway, between the existing S.D.G.&E. utility transmission corridor and Anita Street.

PALOMAR GATEWAY DISTRICT

The Preferred Plan proposes the following land uses in the Palomar Gateway District:

- Establish Residential High, Retail, and Mixed Use Transit Focus Area.

- Designate a Neighborhood Park within the area designated Residential High.

- Provide for the redesignation of a five-acre City-owned property on the north side of Oxford Street to Parks and Recreation to provide consistency with the Harborside Park to be constructed on this site by the City in the near future.

COUNTRY CLUB VIEW PROPERTY

The Preferred Plan proposes the following land uses in the Country Club View Property:

- Provide for increased depth of mixed land uses on the west side of Third Avenue, south of L Street, including multi-family residential, retail and offices uses.

COLORADO STREET PROPERTY

The Preferred Plan proposes the following land uses in the Colorado Street Property:

- Provide for Limited Industrial uses at the northwest corner of Naples Street and Colorado Street, similar to that existing along the entire length of Colorado Street, between Moss Street and Naples Street.

East Planning Area

WESTERN DISTRICT

The Preferred Plan proposes the following land uses in the Western District:

- Relocates the Community Park designation to the Central District of the Otay Ranch Subarea.
- Increases the number of residential units by providing for an enlarged, more intense village core.
- Designates a Transit Station along or near La Media Road.
- Incorporates the planned alignment of the Bus Rapid Transit system, making Village Two a transit-oriented village within the district.
- Eliminates from the Otay Ranch GDP the County alternative for residential uses within Village Three.

CENTRAL DISTRICT

The Preferred Plan proposes the following land uses in the Central District:

- Establishes and applies a new Town Center designation centered at the La Media Road/Rock Mountain Road intersection and eliminates current village core designations for Villages 4 and 8.
- Increases residential density accommodating a new Town Center designation with intensified mixed use residential and commercial activities within a quarter-mile of the future transit station.
- Provides for increased density (1 dwelling unit/acre to 3-5 dwelling units/acre) in the western portion of Village 4 currently designated Residential Low Density.
- Provides for a transit station in the Town Center and incorporates transit oriented village policies.
- Designates approximately 80 gross acres (70 acres net usable) for a community park.
- Changes 11 acres of Residential Low Density west of the planned community park to Open Space.

- Establishes the Town Center Arterial at the intersection of La Media and Rock Mountain Road within the Town Center.

OTAY VALLEY DISTRICT

The Preferred Plan proposes the following land use changes within the Otay Valley District:

- Redesignates approximately 23 acres from Public & Quasi Public to Open Space-Active Recreation.

- Redesignates approximately 209 acres from Open Space to Open Space-Active Recreation in accordance with the adopted Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan (RMP). An alternate proposal is to designate a 15-acre site within the active recreation area for Commercial Mixed Use in accordance with the provisions of the Chula Vista MSCP Subarea Plan and the RMP. Only limited commercial uses/activities related to active recreation would be permitted within this Mixed Use area, consistent with the MSCP Subarea Plan and the RMP.

- Redesignates 40 acres from Open Space to Limited Industrial.

EASTERN UNIVERSITY DISTRICT

The Preferred Plan proposes the following land uses in the Eastern University District:

- Identifies the district as a corridor of high intensity urban uses, office and business parks, retail centers, and high-density residential uses. Maintains the mixed use area identified as the Eastern Urban Center. Changes to the mix of land uses within the Eastern Urban Center identified in the Otay Ranch GDP are under consideration, consisting of increases in the number of residential units and in the amount of retail commercial uses and decreases in the amount of low-rise office uses and visitor commercial uses.

- Increases the residential density of the district.

- Designates approximately 530 acres as Public & Quasi Public for a university campus and deletes secondary residential village land uses underlying the current university designation that could otherwise potentially be developed under current plans.

- Applies a new Town Center designation in the area southeast of the State Route 125/Rock Mountain Road interchange, which would establish a university-

oriented town center of transit serving mixed use and medium-high residential densities.

- Establishes and designates a Regional Technology Park on approximately 200 acres west of State Route 125 and south of Rock Mountain Road.

- Establishes a Special Study Area including land areas adjacent to the university campus to ensure that housing, economic, cultural and academic factors are adequately addressed through future planning efforts and to take advantage of opportunities associated with a university campus.

- Adds a Mixed Use designation with a residential component within the northern portion of the Freeway Commercial site.

- Deletes Alta Road and establishes the alignment of Rock Mountain Road east of SR-125.

- Establishes a development envelope consistent with current adopted MSCP Subarea Plan.

- Adds a high school as a floating symbol on the General Plan map.

EAST MAIN STREET SUBAREA

The Preferred Plan proposes the following land uses in the East Main Street Subarea:

- Changes approximately 11 acres of Residential Low Medium (3-6 du/ac) to Residential Medium (6–11 du/ac) on Brandywine Avenue. (Brandywine Property)

- Adds policies to encourage preservation and protection of significant environmental resources and open space lands within the subarea.

- Adds policies to encourage removal of automobile wrecking yards and to encourage the expansion of existing entertainment facilities within the subarea.

OTHER MISCELLANEOUS AREAS SUBAREA – BONITA LIBRARY SITE

The Preferred Plan proposes to change the land use designation of the Bonita Library Site from Visitor Commercial to Public & Quasi Public, to reflect the County branch library that is currently under construction on this property.

OTHER MISCELLANEOUS AREAS SUBAREA – WATER FILTRATION PLANT SITE

The Preferred Plan proposed to change the land use designation of the Water Filtration Plant Site from Park and Recreation and Open Space to Public and Quasi Public, to reflect the City of San Diego Water Filtration Plant existing on this property.

3.5.2.2 Scenario 1

The land use maps for each district for Scenario 1 can be found in Appendix B to this EIR. Table 3-5 provides the breakdown of land uses that would result from the adoption of Scenario 1 within the Northwest, Southwest, and East Planning Areas. Within the update areas, this scenario includes 967 acres of commercial, 409 acres of Public use, 592 acres of industrial use, 259 acres of Open Space, 409 acres of park use, and 2,082 acres of residential, which for worst case environmental analysis purposes was assumed to accommodate a maximum of 36,427 single- and multi-family dwelling units. The following is a description of the proposed land uses for Scenario 1.

Northwest Planning Area

DOWNTOWN THIRD AVENUE DISTRICT

- Increases the number of residential units east and west of the Third Avenue corridor in a mixed land use arrangement along with retail and office uses.

- Provides for a mix of commercial land uses, including retail and offices, from the intersection of E Street and Third Avenue along both sides of the Third Avenue frontage to just south of G Street.

- Provides for a predominance of mid-rise structures east and west of Third Avenue, while still maintaining a pedestrian-scale along Third Avenue.

- Expands Civic Center uses south of F Street, in addition to a potential neighborhood park that would link with other parks in the area and provide for added residential units in the district.

- Provides for the F Street Promenade, the establishment of an enhanced pedestrian corridor linking downtown with the I-5 Corridor and Bayfront.

INTERSTATE 5 CORRIDOR DISTRICT

- Provide for the introduction of multi-family residential units mixed with retail and offices along each side of Broadway, from C Street to E Street.

TABLE 3-5
SCENARIO 1

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Urban Core Subarea							
Downtown Third Avenue							
Number of Units	0	–	–	0	23	2,338	2,361
Number of Acres	45	–	–	9	31	127	212
I-5 Corridor							
E Street Visitor							
Number of Units	0	–	0	–	0	4,299	4,299
Number of Acres	54	–	6	–	6	118	184
H Street Gateway							
Number of Units	0	–	0	–	0	5,363	5,363
Number of Acres	50	–	11	–	7	144	212
H Street Corridor							
H Street Office							
Number of Units	38	–	–	–	0	2,451	2,489
Number of Acres	93	–	–	–	39	82	214
Mid Broadway Corridor							
Number of Units	0	–	–	–	–	630	630
Number of Acres	30	–	–	–	–	78	108
Mid Third Avenue Corridor							
Number of Units	147	–	–	–	–	1,801	1,948
Number of Acres	27	–	–	–	–	74	101
Total Number of Units	185	–	0	0	23	16,882	17,090
Total Number of Acres	299	–	17	9	83	623	1,031
Montgomery Subarea							
Main Street							
Number of Units	0	0	0	0	0	1,354	1,354
Number of Acres	7	279	91	10	16	150	553
Palomar Gateway							
Number of Units	0	0	0	0	0	2,488	2,488
Number of Acres	62	38	5	5	10	72	192
South Broadway							
Number of Units	16	0	0	–	–	1,406	1,422

TABLE 3-5
SCENARIO 1
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Number of Acres	64	14	8	–	–	66	152
South Third Avenue							
Number of Units	38	0	71	0	21	2,285	2,415
Number of Acres	52	0	12	10	20	81	175
West Fairfield							
Number of Units	0	–	–	–	–	0	0
Number of Acres	58	–	–	–	–	0	58
Total Number of Units	54	0	71	0	21	7,533	7,679
Total Number of Acres	243	331	116	25	46	369	1,130
Otay Ranch Subarea							
Central District							
Number of Units	0	–	–	0	0	4,355	4,355
Number of Acres	32	–	11	110	95	670	918†
Eastern University District (except Freeway Commercial and EUC)							
Number of Units	0	–	–	–	0	2,578	2,578
Number of Acres	34	–	–	22	648	77	781
Eastern University District (Freeway Commercial & EUC)							
Number of Units	2,332	–	–	–	–		2,332
Number of Acres	345	–	–	20	10	0	375
Otay Valley District							
Number of Units	–	0	–	0	–	–	0
Number of Acres	–	40	36	209	–	–	285
Western District							
Number of Units	–	0	–	0	–	2,393	2,393
Number of Acres	14	261	39	14	54	332	714
Total Number of Units	2,332	0	0	0	0	9,326	11,658
Total Number of Acres	425	301	86	375	806	1079	3072

TABLE 3-5
SCENARIO 1
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
East Main Street Subarea							
Number of Units	0	0	–	–	–	151	151
Number of Acres	24	0	–	–	–	11	35
Total Number of Units	0	0	–	–	–	151	151
Total Number of Acres	24	0	–	–	–	11	35

NOTE: These numbers represent the maximum case scenario for worst-case environmental analysis purposes. Totals may vary due to rounding.

*Active Recreation land use classification is included in the "Park" column.

†In the Preferred Alternative, 212.1 acres immediately west of SR-125 is included in the Eastern University District. In Scenarios 1, 2, and 3, these 212.1 acres are included in the Central District. Consequently, in the Preferred Alternative, the Eastern University District's area total is 212.1 acres larger than in Scenarios 1, 2, and 3. Correspondingly, in the Preferred Alternative, the Central District's area total is 212.1 acres less than in Scenarios 1, 2, and 3.

- Provide for a mix of land uses, including multi-family residential, retail and offices, on the north side of E Street adjacent to Interstate 5 freeway. This area would constitute a Transit Focus Area nearby the E Street trolley station.

- Provide for a mix of land uses south of E Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for visitor-serving uses at the northwest corner of E Street and Broadway.

- Provide for mixed land uses along both sides of Broadway, including multi-family residential, retail and offices.

- Between Broadway and Woodlawn Avenue, north of F Street, provide higher density multi-family residential, at predominantly mid-rise building heights.

- Provide for a mix of land uses north of H Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for mixed land uses along both sides of Broadway, including multi-family residential, retail and offices, and visitor-serving commercial uses at the northwest and southwest quadrants of Broadway. Visitor-serving commercial uses will extend to I Street on the west side of Broadway.

- Provide for a mix of land uses south of H Street, including multi-family residential units, retail and office uses within a Transit Focus Area near the H Street trolley station. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

H STREET CORRIDOR DISTRICT

- Provides for a mix of land uses within the Chula Vista Center, including multi-family residential units and offices.

- Provides for professional office uses within the northeast quadrant of Fifth Avenue and H Street.

- Provides for a mix of land uses on the north side of H Street, extending to Vista Square Elementary School. These uses include multi-family residential, retail and offices.

- Provides for some additional professional offices along the west side of Fourth Avenue mid-way between G Street and H Street.

- Provides for a BRT transit station near the intersection of Fifth Avenue and H Street.

- Provide for a mix of land uses along the frontage of H Street, between Third Avenue and Fourth Avenue. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area near a future transit (BRT) station. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide a similar mix of uses as stated above within this same Transit Focus Area; however, within the northeast and southeast quadrants of Third Avenue and H Street.

- Provides for a BRT transit station near the intersection of Third Avenue and H Street.

MID-BROADWAY DISTRICT

- Provide for retail commercial uses on both sides of Broadway, between I Street and J Street.

MID-THIRD AVENUE DISTRICT

- Provide for a mix of uses along both sides of Third Avenue from just north of J Street to L Street, including multi-family residential, retail and offices.

FLOWER STREET PROPERTY

- Provide for multi-family residential uses on the south side Flower Street east of Fifth Avenue, at similar densities to adjacent similarly designated properties.

NORTH SECOND AVENUE DISTRICT

- Provide for multi-family residential land use east of Second Avenue, above the existing KOA facility.

- Provide for public park opportunities by designating the entire KOA campground and approximately twenty acres east of the existing KOA for Parks and Recreation uses.

HARBOR DRIVE-IN DISTRICT

- Provide for a mix of commercial land uses with primary access from National City Boulevard, including retail and offices.

Southwest Planning Area

SOUTH THIRD AVENUE DISTRICT

- Establish a town focus area along both sides of south Third Avenue, between Naples Street and Palomar Street through the introduction of mixed land uses only on the east side of Third Avenue, including multi-family residential, retail and offices.

MAIN STREET DISTRICT

- Provide for industrial uses along the south side of Faivre Street, west of Broadway.

- Provide for industrial uses at the southwest corner of Main Street and Broadway.

- Provide for additional industrial uses, within areas currently subject to resource extraction, between Byer Way and Broadway.

- Provide for a community park south of Main Street, between Byer Way and Broadway.

WEST FAIRFIELD DISTRICT

- Provide for a mix of commercial uses west of Interstate 5 freeway, between Palomar Street and Main Street. These uses include predominantly business offices with some retail near Palomar Street.

- The potential to provide a higher education facility within the West Fairfield area is recognized through proposed policies.

SOUTH BROADWAY DISTRICT

- Provide for a mix of land uses, including multi-family residential, retail and offices east of the commercial center located at the southeast corner of Palomar Street and Broadway.

- Provide for a mix of commercial land uses on both sides of Broadway, between the existing S.D.G.&E. utility transmission corridor and Anita Street.

PALOMAR GATEWAY DISTRICT

- Provide for the redesignation of five acres of property on the north side of Oxford Street as Park and Recreation to provide consistency with the Harborside Park to be constructed on the site in the near future.

- Provide for a mix of land uses in a Transit Focus Area on the north side of Palomar Street, between Interstate 5 freeway and approximately ¼-mile east of Industrial Boulevard, including multi-family residential, retail and offices uses near the Palomar trolley station. Building heights may range from low to mid-rise (1-7 stories).

- Provide for a mix of land uses in a Transit Focus Area from Palomar Street to Anita Street, between Interstate 5 freeway and Industrial Boulevard, including multi-family residential, retail and offices uses. Building heights may range from low to mid-rise (1-7 stories).

- Provide for the location of a neighborhood park within the Palomar Gateway District.

COUNTRY CLUB VIEW PROPERTY

- Maintain the existing residential on the west side of Third Avenue south of L Street.

COLORADO STREET PROPERTY

- Provide for Limited Industrial uses at the northwest corner of Naples Street and Colorado Street, similar to that existing along the entire length of Colorado Street, between Moss Street and Naples Street.

TAMARINDO WAY PROPERTY

- Provide for duplex residential units at the southwest quadrant of Hilltop Drive and Tamarindo Way, similar to the density that exists westerly on Tamarindo Way.

East Planning Area

WESTERN DISTRICT

- Relocate Community Park Designation to the Central District of the Otay Ranch Subarea.

- Increase the number of residential dwelling units by increasing residential densities in an intensified village core

- Maintain industrial land use adjacent to landfill as buffer to nearby residential uses

- The adopted alignment for Heritage Road is moved easterly, intersecting Main Street east of the current adopted location.

CENTRAL DISTRICT

- Applies mixed use designation centered at the intersection of La Media Road with Rock Mountain Road and eliminates prior village core designations for Villages 4 and 8.

- Increases residential units and density accommodated within the new mixed use designation with additional retail and commercial land uses. Residential units are increased over the adopted plan and that proposed in the Preferred Plan.

- Provides for increased residential units with an enlarged area designated residential medium-high surrounding the mixed use center.

- Provides for a transit station in the mixed use center and incorporates transit oriented village policies.

- Designates approximately 80 gross acres for a community park, accommodating acreage from Village 2 (Western District) and the EUC (Eastern University District).

- Designates a town center arterial over a portion of Rock Mountain Road centered at the mixed use center at the intersection with La Media.

- Designates the peak of Rock Mountain as open space in order to preserve this important visual resource.

- Establishes development envelope consistent with current adopted MSCP Subarea Plan.

- Changes 11 acres of Residential Low Density west of planned community park to open space.

- Establishes the Town Center Arterial at the intersection of La Media and Rock Mountain Road within the Town Center.

OTAY VALLEY DISTRICT

- Designates approximately 23 acres currently designated as Public-Quasi Public as Open Space-Active Recreation.

- Designates approximately 186 acres previously designated as Open Space as Open Space-Active Recreation.

- Redesignates 40 acres from Open Space to Limited Industrial.

EASTERN UNIVERSITY DISTRICT

- Retains the EUC and the Freeway Commercial areas north of Rock Mountain Road, east of SR-125 as designated under the current general plan.

- Overall number of residential units is maintained, although the units are redistributed by eliminating the acreage designated low, low medium, and medium residential and increasing acreage designated for medium high residential and mixed use.

- Designates approximately 570 acres designated as Public-Quasi Public for a university campus, a reduction from 1,270 acres under the adopted plan. Note that 610 acres of land designated for the university under the adopted plan would be included in open space.

- Applies a mixed use designation to approximately 34 acres southeast of the intersection of SR-125 and Rock Mountain Road which would establish a university-oriented town center of transit serving mixed use and medium-high residential densities.

- Deletes secondary uses underlying the existing designation allowed (residential alternative) by a General Plan policy.

- Locates the transit station to the mixed use center.

- Deletes Alta Road and establishes the alignment of Rock Mountain Road east of SR-125.

- Establishes a development envelope consistent with current adopted MSCP Subarea Plan.

- Adds a high school as a floating symbol on the General Plan map.

EAST MAIN STREET SUBAREA

- Changes approximately 11.5 acres designated Residential Low Medium (3-6 du/ac) to Residential Medium (6 – 11 du/ac).

3.5.2.3 Scenario 2

The land use maps for each district for Scenario 2 can be found in Appendix B to this EIR. Table 3-6 provides the breakdown of land uses that would result from the adoption of Scenario 2 within the Northwest, Southwest, and Eastern Planning Areas. Within the update areas, this scenario includes 903 acres of commercial, 786 acres of public use, 606 acres of industrial use, 141 acres of open space, 416 acres of park use, and 2,392 acres of residential, which for worst case environmental analysis purposes was assumed to accommodate a maximum of 39,649 single- and multi-family dwelling units. The following is a description of the proposed land uses for Scenario 2.

Northwest Planning Area

DOWNTOWN THIRD AVENUE DISTRICT

- Increases the number of residential units along Third Avenue and E Street in a mixed land use arrangement along with retail and office uses, as well as west of Third Avenue.

- Provides for additional multi-family residential along the north side of F Street, east of the Third Avenue corridor.

- Provides for a predominance of mid-rise structures east and west of Third Avenue, while still maintaining a pedestrian-scale along Third Avenue.

- Expands Civic Center uses south of F Street, in addition to a potential neighborhood park that would link with other parks in the area and provide for added residential units in the district.

TABLE 3-6
SCENARIO 2

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Urban Core Subarea							
Downtown Third Avenue							
Number of Units	0	–	–	0	23	3,044	3,067
Number of Acres	21	–	–	9	37	145	212
I-5 Corridor							
E Street Visitor							
Number of Units	0	–	0	–	0	3,841	3,841
Number of Acres	50	–	6	–	6	122	184
H Street Gateway							
Number of Units	0	–	0	–	0	3,474	3,474
Number of Acres	77	–	11	–	7	117	212
H Street Corridor							
H Street Office							
Number of Units	38	–	–	–	0	3,026	3,064
Number of Acres	87	–	–	–	39	88	214
Mid Broadway Corridor							
Number of Units	42	–	–	–	–	1,447	1,489
Number of Acres	14	–	–	–	–	94	108
Mid Third Avenue Corridor							
Number of Units	148	–	–	–	–	581	729
Number of Acres	53	–	–	–	–	48	101
Total Number of Units	228	–	0	0	23	15,413	15,664
Total Number of Acres	302	–	17	9	89	614	1,031
Montgomery Subarea							
Main Street							
Number of Units	0		0	0	0	1,269	1,269
Number of Acres	5	287	91	10	16	144	553
Palomar Gateway							
Number of Units	0	0	0	0	0	2,700	2,700
Number of Acres	54	36	5	5	10	81	191

TABLE 3-6
SCENARIO 2
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
South Broadway							
Number of Units	0	0	0	–	–	2,019	2,019
Number of Acres	48	14	8	–	–	83	153
South Third Avenue							
Number of Units	0	0	71	0	21	2,320	2,412
Number of Acres	55	0	9	10	20	81	175
West Fairfield							
Number of Units	–	0	–	–	–	–	0
Number of Acres	–	58	–	–	–	–	58
Total Number of Units	0	0	71	0	21	8,308	8,400
Total Number of Acres	162	395	113	25	46	389	1,130
Otay Ranch Subarea							
Central District							
Number of Units	0	–	–	0	0	5,268	5,268
Number of Acres	44	–	11	115	95	652	918
Eastern University District (except Freeway Commercial and EUC)							
Number of Units	0	–	–	–	0	2,908	2,908
Number of Acres	34	–	–	25	493	229	781
Eastern University District (Freeway Commercial, & EUC)							
Number of Units	2332	–	–	–	–	475	2,807
Number of Acres	311	–	–	24	10	30	375
Otay Valley District							
Number of Units	0	0	–	0	–	650	650
Number of Acres	29	40	–	194	–	22	285

TABLE 3-6
SCENARIO 2
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Western District							
Number of Units	0	0	–	0	–	3,952	3,952
Number of Acres	21	171	0	24	53	445	714
Total Number of Units	2,332	0	0	0		13,253	15,585
Total Number of Acres	439	211	11	382	651	1,378	3,072
East Main Street Subarea							
Number of Units	0	0	–	–	–	82	82
Number of Acres	24	0	–	–	–	11	35
Total Number of Units	0	0	–	–	–	82	82
Total Number of Acres	24	0	–	–	–	11	35

NOTE: These numbers represent the maximum case scenario for worst-case environmental analysis purposes.
Totals may vary due to rounding.
In the Preferred Alternative, 212.1 acres immediately west of SR-125 is included in the Eastern University District. In Scenarios 1, 2, and 3, these 212.1 acres are included in the Central District. Consequently, in the Preferred Alternative, the Eastern University District's are total is 212.1 acres larger than in Scenarios 1, 2, and 3. Correspondingly, in the Preferred Alternative, the Central District's area total is 212.1 acres less than in Scenarios 1, 2, and 3.
*Active Recreation land use classification is included in the "Park" column.

- Provides for the F Street Promenade, the establishment of an enhanced pedestrian corridor linking downtown with the I-5 Corridor and Bayfront.

INTERSTATE 5 CORRIDOR DISTRICT

- Provide for retail commercial uses along each side of Broadway, from C Street to E Street

- Provide for high density multi-family residential units along Interstate 5 freeway, north of existing visitor-serving uses on the north side of E Street.

- Provide for visitor-serving uses at the northwest corner of E Street and Broadway and retail commercial at the northeast corner.

- Provide for a mix of land uses south of E Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for visitor-serving uses along both sides of Broadway, between E Street and F Street.

- Provide for visitor-serving uses along both sides of Broadway, between F Street and G Street.

- Provide for visitor-serving uses along Interstate 5 freeway, between F Street and G Street.

- Provide a neighborhood park within this focus area to provide for new residents within the area

- Provide for a mix of land uses north of H Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for visitor-serving uses on both sides of Broadway, north of H Street, and on the west side of Broadway, south of H Street.

- Provide for a mix of land uses south of H Street, including multi-family residential units, retail and office uses within a Transit Focus Area extending about mid-block between H Street and I Street. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for multi-family residential units on the north side of I Street.

H STREET CORRIDOR DISTRICT

- Provides for a mix of land uses within the Chula Vista Center, including retail and offices. Additionally, multi-family residential units are proposed along the center's frontage on I Street.

- Provides for professional office uses within the northeast quadrant of Fifth Avenue and H Street.

- Provides for a mix of commercial land uses, including retail and office uses, north of H Street, between Broadway and Fifth Avenue. Multi-family residential will extend north of the H Street frontage to G Street.

- Provides for some additional professional offices along the west side of Fourth Avenue mid-way between G Street and H Street.

- Provides for a BRT transit station near the intersection of Fifth Avenue and H Street.

- Provide for a mix of land uses from H Street to the north side of Roosevelt Street, between Third Avenue and Fourth Avenue. These uses include multi-family residential, retail and offices. Building heights within this area would range from low to mid-rise (1-7 stories).

- Provide a similar mix of uses as stated above; however, within the northeast and southeast quadrants of Third Avenue and H Street.

- Provide for an increased depth of professional office uses south of H Street, between Fourth Avenue and Garrett Street.

MID-BROADWAY DISTRICT

- Provide for the introduction of multi-family residential units mixed with retail and offices along each side of Broadway, between I Street and L Street.

MID-THIRD AVENUE DISTRICT

- Provide for additional professional office uses at the northwest quadrant of J Street and Third Avenue.

- Provide for additional professional office uses on the east side of Third Avenue, between Kearney Street and L Street.

FLOWER STREET PROPERTY

- Provide for multi-family residential uses on the south side Flower Street east of Fifth Avenue, at similar densities to adjacent similarly designated properties.

NORTH SECOND AVENUE DISTRICT

- Provide for existing KOA campground uses and potential future commercial recreation uses through designating this property as Open Space-Active Recreation.

- Provide some visitor-serving uses (i.e., lodging, restaurant, etc.).

- Provide for multi-family residential land use east of Second Avenue, above the existing KOA facility.

HARBOR DRIVE-IN DISTRICT

- Provide for retail commercial land uses with primary access from National City Boulevard.

Southwest Planning Area

SOUTH THIRD AVENUE DISTRICT

- Establish a town focus area along both sides of south Third Avenue, between Naples Street and Palomar Street through the introduction of mixed land uses, including multi-family residential, retail and offices.

MAIN STREET DISTRICT

- Provide for increased depth of the industrial land uses on the north side of Main Street by expanding the depth of industrial to Zenith Street.

- Provide for industrial uses along the south side of Faivre Street, west of Broadway.

- Provide for industrial uses at the southwest corner of Main Street and Broadway.

- Provide for a community park south of Main Street, between Byer Way and Broadway.

- Provide for additional industrial uses, within areas currently subject to resource extraction, between Byer Way and Broadway.

- Provide for existing residential units on Jacqua Street by designating both sides of this street for single-family houses.

WEST FAIRFIELD DISTRICT

- Provide for limited industrial uses west of Interstate 5 freeway, between Palomar Street and Main Street.

- The potential to provide a higher education facility within the West Fairfield area is recognized through proposed policies

SOUTH BROADWAY DISTRICT

- Provide a mix of land uses on each side of Broadway, between L Street and Naples Street, and on the east side of Broadway from Naples Street to just south of Oxford Street. These uses include multi-family residential, retail and office uses.

- Provide for a mix of land uses, including multi-family residential, retail and offices at the southeast quadrant of Palomar Street and Broadway.

- Provide for a mix of land uses, including multi-family residential, retail and offices land uses on both sides of Broadway, between the existing SDG&E utility transmission corridor and Anita Street

PALOMAR GATEWAY DISTRICT

- Provide for the redesignation of five acres of property on the north side of Oxford Street as Park and Recreation to provide consistency with the Harborside Park to be constructed on the site in the near future.

- Provide for a mix of land uses in a Transit Focus Area on the north side of Palomar Street, between Interstate 5 freeway and approximately a quarter-mile east of Industrial Boulevard, including multi-family residential, retail and offices uses near the Palomar trolley station. Building heights may range from low to mid-rise (1-7 stories).

- Provide for a mix of land uses in a Transit Focus Area on the south side of Palomar Street, between Interstate 5 freeway and Industrial Boulevard, including multi-family residential, retail and offices uses near the Palomar trolley station. Building heights may range from low to mid-rise (1-7 stories).

- Provide for neighborhood retail on Industrial Boulevard, just north of Anita Street.

- Provide for the location of a neighborhood park within the Palomar Gateway District.

COUNTRY CLUB VIEW PROPERTY

- Provide for increased depth of mix land uses on the west side of Third Avenue, south of L Street, including, retail and offices uses.

COLORADO STREET PROPERTY

- Provide for single family residential uses at the northwest corner of Naples Street and Colorado Avenue, similar to that on the east side of Colorado Avenue.

TAMARINDO WAY PROPERTY

- Provide for duplex residential units at the southwest quadrant of Hilltop Drive and Tamarindo Way, similar to the density that exists westerly on Tamarindo Way.

East Planning Area

WESTERN DISTRICT

- Relocates Community Park Designation to the Central District of the Otay Ranch Subarea.

- Increases residential dwelling units the most of all the scenarios by proposing a town center designation with higher residential density and proposing residential land use adjacent to the landfill.

- Proposes residential land use on a portion of the existing MSCP preserve.

- Proposes an enlarged village core with transit station.

CENTRAL DISTRICT

- Provides the highest intensity and residential density of all the scenarios.
- Applies the Town Center designation centered at the intersection of La Media Road with Rock Mountain Road and eliminates prior village core designations for Villages 4 and 8.
- Increases residential units and density accommodated within the Town Center with additional retail and commercial land uses. Acreage devoted to low density residential is reduced and overall, residential units are increased over the adopted plan and over all other proposed scenarios.
- Provides for increased residential units within an enlarged area designated residential medium-high surrounding the mixed use center.
- Provides for a transit station in the mixed use center and incorporates transit oriented village policies.
- Designates approximately 80 gross acres for a community park, accommodating acreage from Village 2 (Western District) and the EUC (Eastern University District).
- Designates a town center arterial over a portion of Rock Mountain Road centered at the mixed use center at the intersection with La Media.
- Preserves Rock Mountain as open space.
- Establishes development envelope consistent with current adopted MSCP Subarea Plan.
- Changes 11 acres of Residential Low Density west of planned community park to open space.
- Establishes the Town Center Arterial at the intersection of La Media and Rock Mountain Road within the Town Center.

OTAY VALLEY DISTRICT

- Redesignates 23 acres from Public-Quasi Public to Open Space-Active Recreation.
- Adds medium high and high density residential of approximately 23 acres.

- Adds approximately 29 acres of mixed use commercial in support of existing entertainment related land uses and planned residential uses.

- Designates approximately 160 acres currently designated as Open Space to Open Space-Active Recreation.

- Designates a neighborhood park.

- Designates from Open Space to Limited Industrial, approximately 40 acres that is currently utilized as industrial use.

EASTERN UNIVERSITY DISTRICT

- Changes the designation on approximately 34 acres in the northerly portion of the Freeway Commercial Focus Area from Retail Commercial to Mixed Use with a residential component. All other designations in the EUC and Freeway Commercial remain unchanged.

- Residential units are increased, with a reduction in lower density residential designations and an increase in higher density residential within the mixed use designation.

- Designates a mixed use center on the south side of Rock Mountain Road, adjacent to the EUC which would establish a university-oriented town center of transit serving mixed use and medium-high residential densities.

- Residential density is gradually reduced away from the mixed use center.

- Designates approximately 430 acres designated as Public – Quasi Public for a university campus, a reduction from 1,270 acres under the adopted plan, and slightly less acreage than that proposed under the Preferred Plan and Scenario 1. Note that an undetermined amount of the 1,270 acres of land designated for the university under the adopted plan would be included in open space.

- Deletes secondary uses underlying the existing designation allowed (residential alternative) by a General Plan policy.

- Locates the transit station in the mixed use center.

- Deletes Alta Road and establishes alignment of Rock Mountain Road East of SR-125.

- Establishes a development envelope consistent with current adopted MSCP Subarea Plan.

- Adds a high school as a floating symbol on the General Plan map.

EAST MAIN STREET SUBAREA

- Retains approximately 11.5 acres as currently designated Residential Low Medium (3-6 du/ac).

- Changes approximately 23.6 acres designated Light Industrial to Retail commercial.

3.5.2.4 Scenario 3

The land use maps for each district for Scenario 3 can be found in Appendix B to this EIR Table 3-7 provides the breakdown of land uses within the districts that would result from the adoption of Scenario 3 for the Northwest, Southwest, and East Planning Areas. Within the update area, this scenario includes 982 acres of commercial, 982 acres of Public use, 996 acres of industrial use, 205 acres of Open Space, 357 acres of park use, and 1,722 acres of residential, which for worst case environmental analysis purposes was assumed to accommodate a maximum of 33,980 single- and multi-family dwelling units. The following is a description of the proposed land uses for Scenario 3.

Northwest Planning Area

DOWNTOWN THIRD AVENUE DISTRICT

- Increases the number of residential units at the Third Avenue and E Street intersection and along Third Avenue in a mixed land use arrangement along with retail and office uses.

- Provides for additional multi-family residential both east and west of the Third Avenue corridor.

- Provides for a mix of commercial uses, retail and offices, at the intersection of Fourth Avenue and E Street and easterly along E Street.

- Expands Civic Center uses south of F Street, in addition to a potential neighborhood park that would link with other parks in the area and provide for added residential units in the district.

TABLE 3-7
SCENARIO 3

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Urban Core Subarea							
Downtown Third Avenue							
Number of Units	0	–	–	0	23	3,726	3,749
Number of Acres	21	–	–	9	37	146	213
I-5 Corridor							
E Street Visitor							
Number of Units	0	–	0	–	0	3,841	3,841
Number of Acres	63	–	6	–	6	108	183
H Street Gateway							
Number of Units	0	–	0	–	0	5,317	5,317
Number of Acres	59	–	11	–	7	135	212
H Street Corridor							
H Street Office							
Number of Units	38	–	–	–	0	1,872	1,910
Number of Acres	95	–	–	–	39	80	214
Mid Broadway Corridor							
Number of Units	0	–	–	–	–	630	630
Number of Acres	30	–	–	–	–	78	108
Mid Third Avenue Corridor							
Number of Units	148	–	–	–	–	583	731
Number of Acres	53	–	–	–	–	48	101
Total Number of Units	186	–	0	0	23	15,969	16,178
Total Number of Acres	321	–	17	9	89	595	1,031
Montgomery Subarea							
Main Street							
Number of Units	0	0	0	0	0	1,395	1,395
Number of Acres	32	257	91	10	16	147	553
Palomar Gateway							
Number of Units	0	0	–	0	0	2,082	2,082
Number of Acres	52	46	5	5	10	73	191
South Broadway							
Number of Units	0	0	0	–	–	2,019	2,019

TABLE 3-7
SCENARIO 3
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
Number of Acres	48	14	8	–	–	83	153
South Third Avenue							
Number of Units	54	–	71	0	21	1,779	1,925
Number of Acres	72	–	9	10	20	64	175
West Fairfield							
Number of Units	–	–	–	–	–	1,576	1,576
Number of Acres	15	–	–	–	–	43	58
Total Number of Units	54	0	71	0	21	8,851	8,997
Total Number of Acres	219	317	113	25	46	410	1,130
Otay Ranch Subarea							
Central District							
Number of Units	–	–	–	0	0	1,877	1,877
Number of Acres	14	337	–	94	85	388	918
Eastern University District (except Freeway Commercial and EUC)							
Number of Units	0	–	–	–	0	1,901	1,901
Number of Acres	34	0	–	15	698	34	781
Eastern University District (Freeway Commercial, & EUC)							
Number of Units	2,332	–	–	–	–	0	2,332
Number of Acres	344	–	–	20	10	0	374
Otay Valley District							
Number of Units	0	0	–	0	–	–	–
Number of Acres	29	40	36	180	–	–	285
Western District							
Number of Units	–	0	–	0	–	2,695	2,695
Number of Acres	21	302	39	14	54	284	714
Total Number of Units	2,332	0	–	0	0	6,473	8,805
Total Number of Acres	442	679	75	323	847	706	3,072

TABLE 3-7
SCENARIO 3
(continued)

District	Commercial	Industrial	Open Space	Park*	Public	Residential	Total
East Main Street Subarea							
Number of Units	0	0	–	–	–	247	247
Number of Acres	24	0	–	–	–	11	35
Total Number of Units	0	0	–	–	–	247	247
Total Number of Acres	24	0	–	–	–	11	35

NOTES: These numbers represent the maximum case scenario for worst-case environmental analysis purposes.
Totals may vary due to rounding.
In the Preferred Alternative, 212.1 acres immediately west of SR-125 is included in the Eastern University District. In Scenarios 1, 2, and 3, these 212.1 acres are included in the Central District. Consequently, in the Preferred Alternative, the Eastern University District's are total is 212.1 acres larger than in Scenarios 1, 2, and 3. Correspondingly, in the Preferred Alternative, the Central District's area total is 212.1 acres less than in Scenarios 1, 2, and 3.
*Active Recreation land use classification is included in the "Park" column.

- Provides for the F Street Promenade, the establishment of an enhanced pedestrian corridor linking downtown with the I-5 Corridor and Bayfront.

INTERSTATE 5 CORRIDOR DISTRICT

- Provide for retail commercial uses along each side of Broadway, from C Street to E Street

- Provide for additional visitor-serving uses along Interstate 5 freeway, north of existing visitor-serving uses on the north side of E Street.

- Provide for visitor-serving uses at the northwest corner of E Street and Broadway and retail commercial at the northeast corner.

- Provide for a mix of land uses south of E Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices.

- Provide for retail commercial uses along both sides of Broadway, between E Street and F Street.

- Between Broadway and Woodlawn Avenue, bordered by E Street and F Street, provide higher density multi-family residential, at predominantly mid-rise building heights.

- Provide for retail commercial uses along both sides of Broadway, between F Street and G Street.

- Provide a mix of land uses along adjacent to Interstate 5 freeway, between F Street and G Street, including multi-family residential, retail, offices.

- Provide high density multi-family residential units in buildings ranging from low to mid-rise heights (1-7 stories) between Broadway and Interstate 5 freeway.

- Provide a neighborhood park within this focus area to provide for new residents within the area.

- Provide for a mix of land uses north of H Street surrounding the existing trolley station. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area. Building heights within this area would range from mid-rise (4-7 stories) to high-rise (8+ stories).

- Provide for retail commercial uses along both sides of Broadway, between G Street and H Street.

- Provide for visitor-serving uses on both sides of Broadway, north of H Street, and on the west side of Broadway, south of H Street.

- Provide for multi-family residential units between Broadway and Interstate 5 freeway, south of G Street.

- Provide for visitor-serving uses on both sides of H Street, between Broadway and Interstate 5 freeway.

H STREET CORRIDOR DISTRICT

- Provides for a mix of land uses within the Chula Vista Center, including retail and offices.

- Provides for a mix of retail and office uses on the north side of H Street, between Broadway and Fifth Avenue.

- Provides for professional office uses within the northeast quadrant of Fifth Avenue and H Street.

- Provides for some additional professional offices along the west side of Fourth Avenue mid-way between G Street and H Street.

- Provide for a mix of land uses along the frontage of H Street, between Third Avenue and Fourth Avenue. These uses include multi-family residential, retail and offices, and would be located within a Transit Focus Area near a future transit (BRT) station. Building heights within this area would range from low to mid-rise (1-7 stories).

- Provide a similar mix of uses as stated above within this same Transit Focus Area; however, within the northeast and southeast quadrants of Third Avenue and H Street.

- Provides for a BRT transit station near the intersection of Third Avenue and H Street and Fifth Avenue and H Street.

MID-BROADWAY DISTRICT

- Provide for retail commercial uses on both sides of Broadway, between I Street and J Street.

MID-THIRD AVENUE DISTRICT

No modifications proposed.

FLOWER STREET PROPERTY

- Provide for multi-family residential uses on the south side Flower Street east of Fifth Avenue, at similar densities to adjacent similarly designated properties.

NORTH SECOND AVENUE DISTRICT

No modifications proposed.

HARBOR DRIVE-IN DISTRICT

- Provide for limited industrial land uses with primary access from National City Boulevard.

Southwest Planning Area

SOUTH THIRD AVENUE DISTRICT

- Recognize the potential for a town focus area along both sides of south Third Avenue, between Naples Street and just south of Oxford Street; however, only add multi-family residential units between Church Avenue and Del Mar Avenue in support of this.

MAIN STREET DISTRICT

- Provide for retail commercial uses on the north side of Main Street, between Albany Avenue and just west of Fourth Avenue. This commercial is proposed to extend to Zenith Street.

- Provide for retail commercial at the southwest and southeast corners of Main Street and Third Avenue.

- Provide for a community park south of Main Street, between Byer Way and Broadway.

- Provide for additional industrial uses, within areas currently subject to resource extraction, between Byer Way and Broadway.

- Provide for existing residential units on Jacqua Street by designating both sides of this street for single-family houses.

- Provide for multi-family residential units between existing industrial and the residential neighborhood of Broderick Acres, on the south side of Main Street.

WEST FAIRFIELD DISTRICT

- Provide for a mix of uses west of Interstate 5 freeway, between Palomar Street and Main Street, including multi-family residential, industrial and retail uses.

- The potential to provide a higher education facility within the West Fairfield area is recognized through proposed policies.

SOUTH BROADWAY DISTRICT

- Provide a mix of land uses on each side of Broadway, between L Street and Naples Street, and on the east side of Broadway from Naples Street to just south of Oxford Street. These uses include multi-family residential, retail and office uses.

- Provide for a mix of land uses, including multi-family residential, retail and offices at the southeast quadrant of Palomar Street and Broadway.

- Provide for a mix of land uses, including multi-family residential, retail and offices land uses on both sides of Broadway, between the existing SDG&E utility transmission corridor and Anita Street.

PALOMAR GATEWAY DISTRICT

- Provide for the redesignation of five acres of property on the north side of Oxford Street as Park and Recreation to provide consistency with the Harborside Park to be constructed on the site in the near future.

- Provide for industrial uses north of Palomar Street, between Interstate 5 freeway and Industrial Boulevard.

- Provide for a mix of land uses on the north side of Palomar Street, east of Industrial Boulevard, including multi-family residential, retail and offices uses near the Palomar trolley station.

- Provide for a mix of land uses on the south side of Palomar Street, between Interstate 5 freeway and Industrial Boulevard, including multi-family residential,

retail and offices uses near the Palomar trolley station. However, this only affects lots on Anita Street closer to Industrial Boulevard.

- Provide for multi-family residential units, south of Dorothy Street to Anita Street, and between Frontage Road and Industrial Boulevard. Access to the nearby transit station is a major consideration.

COUNTRY CLUB VIEW PROPERTY

- Provide for increased depth of mix land uses on the west side of Third Avenue, south of L Street, including multi-family residential, retail and offices uses.

COLORADO STREET PROPERTY

- Provide for single family residential uses at the northwest corner of Naples Street and Colorado Avenue, similar to that on the east side of Colorado Avenue.

TAMARINDO WAY PROPERTY

- Provide for duplex residential units at the southwest quadrant of Hilltop Drive and Tamarindo Way, similar to the density that exists westerly on Tamarindo Way.

East Planning Area

WESTERN DISTRICT

- Relocates the Community Park Designation to the Central District of the Otay Ranch Subarea.

- Increases the number of residential dwelling units, less than that of the Scenario 2, but more than Scenario 1. Residential densities are increased in the village core.

- Industrial acreage is increased by expanding the industrial buffer adjacent to the land fill into areas formerly designated for residential use.

CENTRAL DISTRICT

- Designates 336 acres as medium low residential within the Eastern University District.

- Designates approximately 94 gross acres for a community park, accommodating acreage from Village 2 (Western District) and the EUC (Eastern University

District) over the area formerly designated for the village core in Village 4. Eliminates prior village core designation for Village 4.

- Preserves Rock Mountain as open space.

- Establishes development envelope consistent with current adopted MSCP Subarea Plan.

- Establishes the Town Center Arterial at the intersection of La Media and Rock Mountain Road within the Town Center.

OTAY VALLEY DISTRICT

- Redesignates 23 acres from Public-Quasi Public to Open Space-Active Recreation.

- Adds approximately 29 acres of mixed use commercial (no residential) in support of existing, entertainment-related land uses and nearby existing residential uses.

- Designates approximately 157 acres previously designated as Open Space to Open Space-Active Recreation.

- Designates approximately 40 acres that are currently utilized as industrial use from Open Space to Limited Industrial.

EASTERN UNIVERSITY DISTRICT

- Retains the EUC and the Freeway Commercial areas north of Rock Mountain Road, east of SR-125 as designated under the current General Plan.

- Overall number of residential units is reduced, with the acreage designated for low, low medium, and medium residential eliminated. Medium high residential and mixed use residential units are increased.

- Designates approximately 545 acres designated as Public–Quasi Public for a university campus, a reduction from 1,270 acres under the adopted plan, and larger than that proposed under Scenarios 1 and 2 and slightly more than under the Preferred Plan. Note that 610acres of land designated for the university under the adopted plan would be included in open space.

- Designates the mixed use center on the south side of Rock Mountain Road, adjacent to the EUC which would establish a university-oriented town center of transit serving mixed use and medium-high residential densities.

- Deletes secondary uses underlying the existing designation allowed (residential alternative) by a General Plan policy.

- Designates the Regional Technology Park on approximately 336 acres west of Future SR-125, south of Rock Mountain Road in the area formerly associated with the Central District.

- Locates the transit station to the mixed use center.

- Deletes Alta Road and establishes alignment of Rock Mountain Road East of SR 125

- Establishes a development envelope consistent with current adopted MSCP Subarea Plan.

- Adds a high school as a floating symbol on the General Plan map.

EAST MAIN STREET SUBAREA

- Changes approximately 11.5 acres designated Residential Low Medium (3-6 du/ac) to Residential Medium High (11-18 du/ac)

3.6 Discretionary Actions

The proposed discretionary actions to be considered by the Chula Vista City Council associated with the General Plan Update consist of the following:

3.6.1 City of Chula Vista General Plan Amendment

A General Plan Amendment is required for the comprehensive update to the City of Chula Vista General Plan. The proposed Chula Vista General Plan Amendment includes provisions to:

(1) Adopt a new General Plan text, comprised of five new elements consisting of revisions to the elements comprising the current General Plan, with the exception of the current Housing Element. The proposed new elements consist of the following: Land Use and Transportation Element; Economic Development Element; Public Facilities and Services Element; Growth Management Element; and Environmental Element. The proposed General Plan text also contains additional chapters, including an implementation chapter.

(2) Adopt a new General Plan Land Use Diagram to provide for land use changes within focused areas as described in the preceding pages and to establish the

following new land use designations: Mixed Use Residential, Mixed Use Commercial, Mixed Use Transit Focus Area, and Urban Core Residential (28-60 dwelling units/acre). This component of the General Plan Amendment includes the redesignation of areas currently designated as Open Space throughout the General Plan Area to Open Space, Open Space Preserve, Open Space-Active Recreation in accordance with the definition of these proposed land use categories in the proposed Land Use and Transportation Element. For example, the land use designation of all areas within the Chula Vista MSCP Preserve are proposed to be changed to Open Space Preserve. It also adds a Town Center and University Study Area to the Special Plan Area category.

(3) Adopt a new Circulation Diagram and Transit System

3.6.2 City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan/Otay Ranch General Development Plan/ Otay Ranch Resource Management Plan

The proposed General Plan amendment includes a modification of the General Plan Land Use Diagram to ensure that the general map corresponds to the adopted Chula Vista MSCP Subarea Plan. The Chula Vista MSCP Subarea Plan is part of the General Plan. The proposed Chula Vista General Plan Amendment includes provisions to:

(1) Amend the Otay Ranch GDP and RMP to redefine the eastern and southern boundaries of Villages 9, 10 and 11 consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(2) Amend the Otay Ranch GDP and RMP to include approximately 52 acres of developable University land in the southeastern portion of Salt Creek consistent with the adopted City of Chula Vista MSCP Subarea Plan.

(3) Amend the General Plan GP and Otay Ranch GDP land use maps to add a note of clarification denoting the development which areas that have been acquired for open space purposes within Villages 14, 15 and Bella Lago.

(4) Amend the City of Chula Vista MSCP Subarea Plan to implement a mapping correction to change approximately 45 acres of active recreation land uses within the Otay River Valley to Preserve.

3.6.3 Otay Ranch General Development Plan Amendment

Amendments are proposed to the Otay Ranch General Development Plan, consisting of revisions to the GDP text and to the GDP land use maps and tables that are consistent with the proposed General Plan Amendment. These amendments correspond to the

changes in the General Plan described above and are discussed in detail in Section 5.1.3.2 of this report.

3.6.4 Sunsetting of the Montgomery Specific Plan

The proposed General Plan Update Land Use and Transportation Element contains a Southwest Area Plan, which covers the Montgomery Specific Plan area. Relevant policies and other provisions from the 1988 Montgomery Specific Plan are included within the Southwest Area Plan, along with current information and new policies and provisions. As a result, the Montgomery Specific Plan is proposed to be sunset with the adoption of the General Plan Update. It should also be noted that the Southwest Area Plan does call for preparation of other, more focused specific plans for several districts including Palomar/Gateway, West Fairfield, Main Street, and South Third Avenue.

4.0 ENVIRONMENTAL SETTING

This section briefly describes the regional setting of the city of Chula Vista. A more detailed description of existing conditions is provided at the beginning of each impact issue area addressed in Section 5.0, Environmental Impact Analysis.

4.1 Location

The city of Chula Vista is located in southern San Diego County, between National City and the southernmost portion of the city of San Diego which abuts the U.S.-Mexican border. Chula Vista encompasses approximately 52 square miles of land from the San Diego Bay to the Otay Lakes, generally between Sweetwater River and Otay River.

In addition to the city of Chula Vista, the General Plan boundary includes lands within the county of San Diego unincorporated area identified within the Sweetwater Community Planning Area and Jamul/Dulzura and Otay Subregional Planning Areas as well as portions of the cities of National City and San Diego.

4.2 Climate

The climate of the region encompassing the Chula Vista General Plan area is characterized by warm, dry summers and mild, wet winters. Clear skies predominate for much of the year due to a semi-permanent high-pressure cell located over the Pacific Ocean. This high-pressure cell also drives the dominant onshore circulation and helps to create subsidence and radiation temperature inversions. Subsidence inversions occur during the warmer months when descending air associated with the high-pressure cell comes in contact with cool marine air. Radiation inversions typically occur on winter nights when air near the ground cools by radiation and the air aloft remains warm.

4.3 Setting

The city of Chula Vista consists of older residential areas, vibrant urban neighborhoods, and newer, master-planned communities. Chula Vista's west side (west of I-805) is largely developed, while the east side (east of I-805) is experiencing a sustained period of strong growth. Some adjacent areas in neighboring jurisdictions (San Diego, National City, and Coronado) are largely built out; however, some areas (such as Otay Mesa in San Diego to the south) are growing. County land to the east of Chula Vista is generally vacant and undeveloped. Several industrial and office employment centers are located throughout the city in both western and eastern Chula Vista. Recreational opportunities within the city include four golf courses, two harbor marinas, miles of pedestrian, biking, and equestrian trails, and numerous parks and other recreation facilities.

Chula Vista's overall site topography varies from generally level mesas, river valleys, and coastal plains to steeply sloping canyons, arroyos, drainages, and mountains. Elevations across the area range from sea level to roughly 2,000 feet above mean sea level (MSL). The land uses vary from previously developed land zoned for residential, commercial, industrial, and recreational uses to open former agricultural land and undisturbed native habitat.

4.4 Demographics

Chula Vista's population is approximately 209,200, accounting for approximately seven percent of the San Diego region's population. Based on the City's current, adopted General Plan, the San Diego Association of Governments forecasts that population in Chula Vista will continue to grow, approaching 280,000 by 2030. Of cities with populations greater than 100,000, Chula Vista has the eighth fastest percentage growth rate nationally since the 2000 Census and the seventh fastest rate for the most recent one-year period measured (U.S. Census Bureau 2003).

The estimated average age in Chula Vista is 33.3 years. A major shift in the age structure of the region's population is expected over the next 20 years. The forecasted average age is projected to be over 40 by the year 2030. This will alter workforce dynamics, as the percentage of the population of 18- to 54-year-olds declines and the population of those 55 and over increases.

The 2000 Census shows that Chula Vista now has a lower percentage of below poverty level families than either the region or the state. In 2003, the estimated median household income in Chula Vista was $49,065 (1999 figure adjusted for inflation), approximately the same as the region but over 16 percent higher than the national median. It is forecast that median income will increase in both Chula Vista and the region over the next 20 years, with the rate of income growth in Chula Vista expected to greatly exceed that of the region (SANDAG 2003).

5.0 ENVIRONMENTAL IMPACT ANALYSIS

The following impact analyses are based on a plan-to-ground analysis. A plan-to-ground analysis compares the proposed General Plan Update with existing baseline conditions. The comparison of the adopted General Plan and the proposed General Plan Update is discussed as part of the No Project alternative, in Chapter 10 of this report.

5.1 Land Use

5.1.1 Existing Conditions

5.1.1.1 Planning Areas

The Chula Vista General Plan area is divided into four planning areas; land use and circulation changes are proposed within three of the four planning areas as part of the General Plan Update. Changes are proposed within the Northwest, Southwest, and East Planning Areas; no changes are proposed with the Bayfront Planning Area. The update areas refer to the specific areas within those three planning areas wherein land use and circulation changes are proposed. The Northwest Planning Area lies north of L Street and west of I-805; the Southwest Planning Area lies south of L Street and west of I-805; the East Planning Area lies east of I-805, and the Bayfront Planning Area lies west of I-5 overlooking the San Diego Bay. Figure 5.1-1 shows the planning areas within the General Plan area and incorporated boundaries.

Northwest Planning Area

The Northwest Planning Area is bordered by SR-54 on the north, I-805 on the east, L Street on the south, and I-5 on the west. Established early in Chula Vista's growth, the Northwest Planning Area has several well-established residential neighborhoods and a central commercial area referred to as the "Urban Core." The San Diego trolley line runs along the Urban Core's west edge and has two stations at E Street and H Street immediately east of I-5. The Northwest Planning Area serves as the historic focus of the city and is the central connecting area between the Bayfront and newer master planned communities to the east.

Retail uses are located primarily along Broadway from E to L Streets and along Third Avenue from E to H Streets. Important public buildings including the Civic Center, Chula Vista Public Library, and new Police Station are located at the intersection of F Street and Fourth Avenue. The South County Regional Center, providing courtroom, records, and other administrative functions, is located at the intersection of Third Avenue and H Street. Scattered industrial uses occur along I-5 and also adjacent to National City.

Within the Northwest Planning Area, areas east of Second Avenue and south of H Street are generally residential with well-maintained, traditional single-family homes. Residential areas

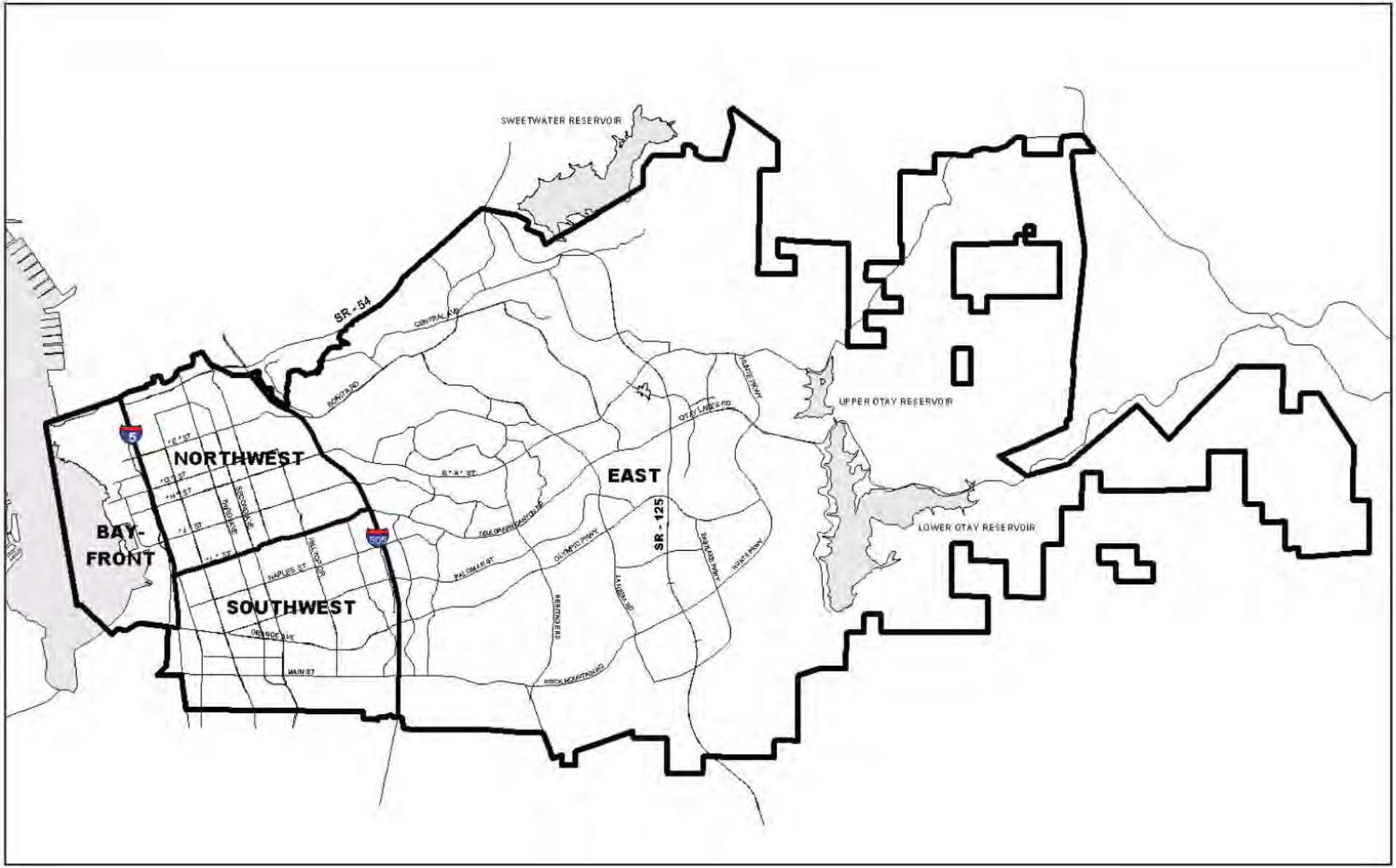

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FIGURE 5.1-1
Proposed Planning Areas

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west of Second Avenue and north of I Street along with areas west of Broadway and south of I Street are considered to be in transition with portions of these areas zoned and developed with large- and small-scale multi-family residential. Large-size (greater than 0.25 acre) and larger estate lots establish the character of an island of unincorporated area of the county located northeast of Hilltop Drive and H Street. Areas of commercial, industrial, and institutional lands (including parks) comprise the remaining areas. Streets and freeways account for an estimated 30 percent of the area.

Currently, the Downtown Third Avenue and Mid-Third Avenue Districts are designated primarily for retail, professional/office, and public/quasi-public uses. The Mid-Broadway District is designated almost exclusively with retail and visitor-serving uses except for limited medium to medium-high density residential in the northern portion. Special attention is also provided along the east/west Gateway streets (E and H Streets) and existing and proposed transit stations. Redevelopment efforts have been focused on the city's gateways, including I-5, SR-54, I-805, E and H Streets, Broadway and Fourth Avenue, and the existing downtown area. Redevelopment Planning is discussed below in Section 5.1.1.2.

Southwest Planning Area

The Southwest Planning Area is bounded on the north by L Street, on the south by the Otay River, on the east by I-805, and on the west by the San Diego Bay. The Southwest Planning Area contains several established neighborhoods, including Harborside, Castle Park, Otay Town, Woodlawn Park, Broderick Acres, Whittington Subdivision, and West Fairfield. Also included is the approximately 3.5-square-mile Montgomery community, which in 1985 was annexed from the County of San Diego into the City of Chula Vista. This annexation was the largest inhabited annexation in the state of California up to that time, with approximately 26,000 residents.

The Southwest Planning Area has a grid street pattern and a diversity of land uses, including a mix of residential, commercial, and industrial businesses that in some cases have evolved over time without adequate planning, and have resulted in land use conflicts. The Montgomery Subarea of the Southwest Planning Area is the focus of proposed land use changes and includes the South Broadway Corridor, South Third Avenue, Main Street, Palomar Gateway, and West Fairfield Districts.

Lands within the update area consist primarily of areas designated industrial, retail, and open space/park and recreation. Target areas also include some medium-high and high-density residential and a limited amount of older, traditional single-family neighborhoods, primarily in the Palomar Gateway District and the northern perimeter of the Main Street District.

Notable features within this planning area include the San Diego Country Club, which occupies a large area south of, and fronting L Street, east of Third Avenue; Chula Vista's new animal shelter in the vicinity of Fourth Avenue and Beyer Way; and the Otay Valley

Regional Park. The City is coordinating with adjacent jurisdictions for preservation and enhancements within the park, which occupies the southern boundary of the planning area. Adjacent lands to the south of the planning area are within the City of San Diego's Otay Mesa Community Planning Area.

East Planning Area

The East Planning Area encompasses areas of open space and developed and developing, largely master planned communities, including all of the Otay Ranch. The area is bounded by I-805 on the west; on the north by the city's corporate and sphere of influence boundaries along SR-54 and the Sweetwater River valley; on the northeast and east in the San Miguel Mountain/Proctor Valley area extending to Highway 94, near the communities of Jamul and Dulzura in unincorporated San Diego County; and on the south within and adjacent to the Otay Ranch General Development Plan (GDP) boundaries, including areas within the city of San Diego and the unincorporated county of San Diego.

The Otay Ranch is the largest of the city's master planned communities. This 23,000-acre master planned community was jointly planned by the City of Chula Vista and County of San Diego. As such, the East Planning Area includes areas within unincorporated county of San Diego that, for the most part, are expected to remain within County jurisdiction. The Chula Vista City Council and the San Diego County Board of Supervisors approved the Otay Ranch GDP in October of 1993.

The easterly lands are largely under public control; specifically, the City of San Diego, who owns and manages the Otay Reservoir (upper and lower), is required by state and federal laws to protect water quality for potable drinking purposes. As such the use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled. Additional water quality monitoring of the reservoir would be required if herbicides or pesticides are used.

There are significant open space lands within the East Planning Area that are designated for preservation under the Otay Ranch Resource Management Plan (RMP). These open space areas are outside designated villages, planning areas, or other areas intended for development. The majority of development in this area has occurred over the last several years and is progressing pursuant to the adopted Otay Ranch GDP. Existing and approved uses within the areas targeted for update include low-medium village (LMV), a subcategory of residential low-medium located elsewhere within the city; public, quasi-public, and open space; retail; mixed-use (office, retail, and multi-family); and limited industrial.

Bayfront Planning Area

The Bayfront Planning Area occupies the area generally west of I-5 and overlooks the San Diego Bay. Water-related recreational and retail/commercial and industrial uses occupy the western Bayfront area. Industrial, visitor-serving commercial, limited residential, and the I-5

corridor comprise the remaining portions. Major features on the Bayfront include the Sweetwater Marsh National Wildlife Refuge and Chula Vista Nature Center, Chula Vista Harbor and Marina, the South Bay Power Plant, the Salt Works, and the Goodyear industrial complex.

The Bayfront Planning Area encompasses approximately 1,013 acres, of which 748 acres are uplands or filled areas above mean high tide and 265 acres are wetlands. The majority of the upland area within the planning area is currently developed with urban uses. The remainder of the planning area is either vacant or used for smaller industrial, storage, and commercial purposes. The intensity of development is essentially suburban with low-rise buildings and open parking areas.

The General Plan Update does not propose any changes in the land use designations for the Bayfront Planning Area, although as discussed in Section 2.2 of this EIR, the southernmost portion of the Bayfront Planning Area, south of Palomar Street, is proposed to become part of the Southwest Planning Area. A joint planning effort of the Port of San Diego and City of Chula Vista to develop a Bayfront Master Plan was initiated in 2002. The Port of San Diego will serve as the lead agency for CEQA review of this planning effort. The master plan process is estimated for completion in late 2005 and is an implementing document for the California Coastal Act Local Coastal Program described below.

5.1.1.2 Redevelopment Planning

The City of Chula Vista has established a number of redevelopment areas. The following discussion provides a brief description of these redevelopment areas. Figure 5.1-2 shows the location of major projects and redevelopment areas within the planning area.

Chula Vista Bayfront/Mid-Bayfront Redevelopment Area

City redevelopment plans address the need to enhance the Bayfront's appearance and access. E and J Streets, Marina Parkway, and I-5 generally form the boundary for the Bayfront area, which is a designated candidate area for a limited amount of mid- and high-rise development. The City is actively involved in attracting new development to the area and is working cooperatively with the San Diego Unified Port District, which shares jurisdiction for some portions of the Bayfront. Approximately 400+ acres of property is within the redevelopment area.

As discussed above, the General Plan Update does not propose any changes in the land use designations for the Bayfront Planning Area, although the southernmost portion of the Bayfront Planning Area, south of Palomar Street, is proposed to become part of the Southwest Planning Area.

Town Centre I

The relationship of the Town Centre I redevelopment area to other redevelopment areas of the city is shown in Figure 5.1-2.

Efforts to revitalize downtown Chula Vista began with establishment of the 138-acre Town Centre I Redevelopment Area in 1976. The goal is to establish a business, entertainment, civic, and cultural focal point of the city. The area is urbanized and developed with a mixture of public and private land uses, including the South San Diego County Superior Court complex, Norman Park Senior Center and Memorial Park, the 60,000-square-foot Park Plaza commercial center, and a variety of other commercial office, retail, and residential uses. The most recent significant redevelopment project is Gateway Chula Vista at the northwest corner of Third Avenue and H Street. When completed, the Gateway project will provide an estimated 347,000 square feet of Class A office space with ground floor retail and restaurant uses and employ up to 1,200 people. Phase I of Gateway was completed in 2003 and Phase II is currently underway. Another important recent project is the city's new Police Station at the southeast corner of Fourth Avenue and F Street, which was completed in early 2004.

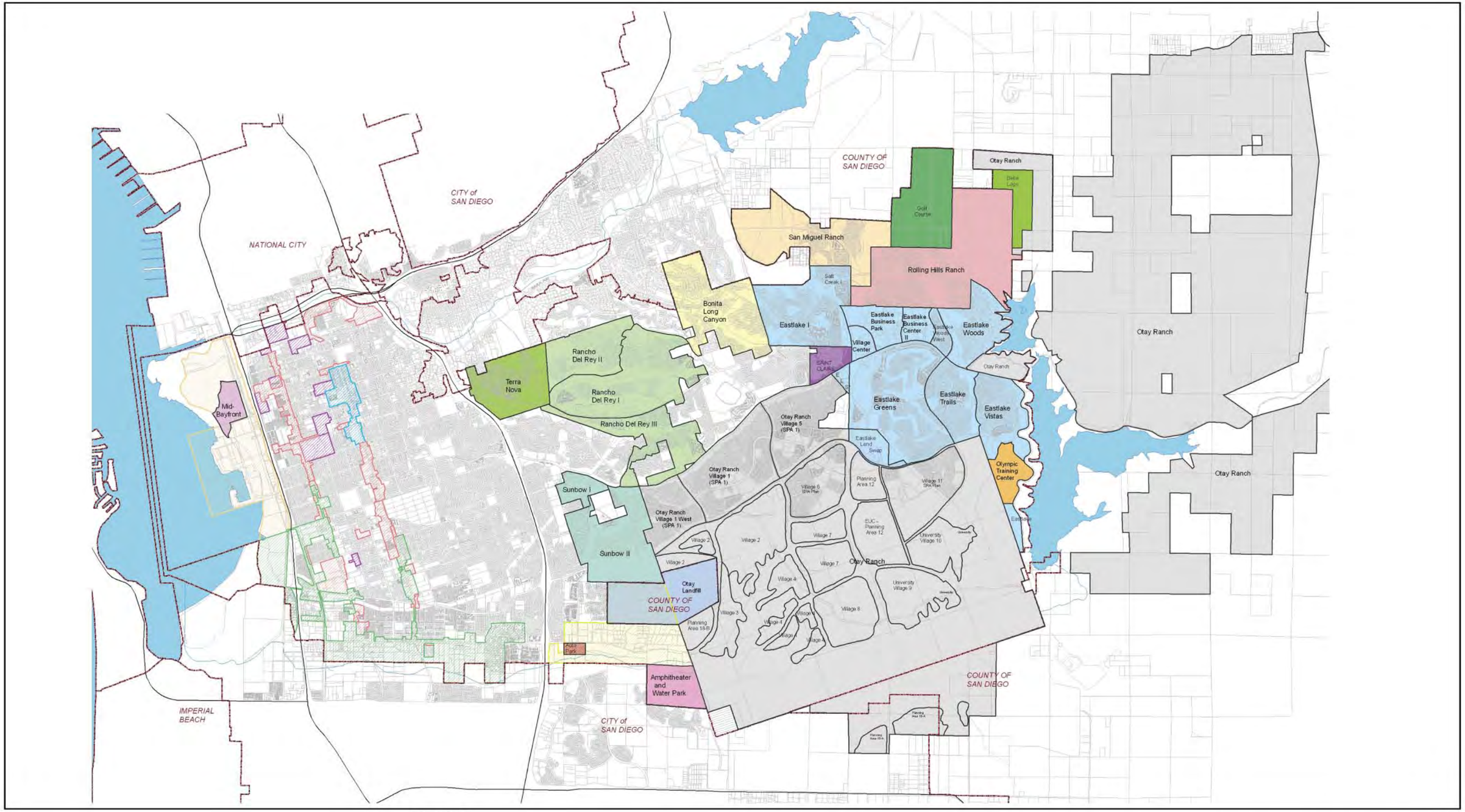
Town Centre II

Figure 5.1-2 shows the Town Centre II location in relation to other redevelopment areas. First established in 1978, the Town Centre II Redevelopment Area includes the Chula Vista Center, a 65-acre regional shopping mall located in central Chula Vista. Subsequent amendments adopted in the late 1980s added a total of 11 additional acres. The amendment areas are comprised of various school district projects and are intended to promote redevelopment of blighted land uses. In total, Town Centre II comprises 10 non-contiguous sites totaling 76 acres, and includes properties such as the Civic Center, the Chula Vista Main Branch Library, the Old Public Works Yard, Eucalyptus Park, Scripps Memorial Hospital, the Best Buy/WalMart Shopping Center, and various other commercial, public, and residential properties in the city's central core.

Recent revitalization projects in the area include renovation of Chula Vista Center, and improvements that led to the development of the 200,000-square-foot South Bay Marketplace, anchored by Wal-Mart and Best Buy. Plans are currently under consideration for updating and reconfiguring the Chula Vista Center to remain competitive with other regional shopping centers.

Southwest Redevelopment Area

The Southwest Redevelopment Area encompasses areas along the bay south of the Bayfront Redevelopment Area and areas generally south of J Street along segments of Broadway, Industrial Boulevard, Third Avenue, and Main Street. This redevelopment area is shown on Figure 5.1-2 and encompasses approximately 1,100 acres. The area, which includes a mix of



Legend

Major Projects

- San Miguel Ranch
- Bonita Long Canyon
- Otay Ranch
- EastLake
- Rancho Del Rey
- Saint Claire
- Mid-Bayfront
- Olympic Training Center
- Sunbow
- Auto Park
- Water Park & Amphitheater
- Bella Lago
- Otay Landfill (County)
- Rolling Hills Ranch
- Terra Nova
- Golf Course

Redevelopment Area Name

- Added Area
- Bayfront (not part of project)
- Otay Valley Road
- Southwest
- Town Centre I
- Town Centre II

- Rivers
- Bay, Lakes & Reservoirs
- Parcels
- City Boundary
- Freeways

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FIGURE 5.1-2
Major Project and Redevelopment Areas

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industrial, commercial, thoroughfare, and residential uses approved prior to annexation from the City of San Diego, in general lacks conformance to minimum design standards. Areas lacking unified, integrated development include the Montgomery area (annexed from the County of San Diego in the 1980s) and nearby areas. Consequently, the Chula Vista City Council has identified code enforcement as a top priority for this area and redevelopment efforts are beginning to be more evident. The Otay Valley Regional Park and river forms the southern boundary of the area. The area is experiencing some recent development, most notably, the city's animal shelter north of the Otay Valley Regional Park in the vicinity of Main Street from near Banner Avenue and industrial complexes along Main Street.

Otay Valley Road Redevelopment Area

Located in the southeastern portion of the city, the Otay Valley Road Redevelopment Area includes some 770 acres. The area supports light industrial businesses and some large retail businesses as well. Projects range from the Chula Vista Auto Park Phase I, to landscaping and environmental clean up. The City recently developed the new Public Works Center at 1800 Maxwell Road on a 25-acre site which houses all of Public Works/Operations Division's equipment, vehicles, buses, and personnel. Future projects include development of a retail center, and expansion of the Chula Vista Auto Park.

5.1.1.3 Regulatory Plans and Policies

The following section describes the planning framework and additional regulatory documents, plans, and policies relevant to land use for the proposed General Plan Update. These include regional planning documents prepared by SANDAG, which address regional growth, transportation and land use in the county of San Diego, LCP, the zoning ordinance, community planning documents, and the Multiple Species Conservation Program (MSCP), among others.

San Diego Association of Governments (SANDAG)

The San Diego Association of Governments (SANDAG) functions as a forum for decision-making on regional issues such as growth, transportation, and land use in San Diego County. The agency membership is comprised of representatives from each of the county's local jurisdictions, including the City of Chula Vista. SANDAG programs pertinent to the Chula Vista General Plan and land use decision-making include the Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), Congestion Management Program (CMP), Regional Housing Program, Employment Lands Inventory, Bus Rapid Transit, including the Otay Ranch Transitway Alignment and alternatives, and Transit First studies. These programs are summarized below.

Regional Comprehensive Plan – The RCP is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-

of-life needs. Goals of the RCP are to establish a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." Other programs provide more focused assessment and recommendations addressing regional transportation planning, employment, and housing. Basic "smart growth" principles designed to strengthen land use and transportation integration are summarized as follows:

- Mix compatible land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost-effective
- Encourage community and stakeholder collaboration in development decisions

Regional Transportation Plan – The current Regional Transportation Plan, called MOBILITY 2030, will implement a long-range vision for highways, major bus routes, Bus Rapid Transit (BRT) the Trolley, rail lines, streets, bicycle travel, pedestrian traffic, and goods movement. MOBILITY 2030 contains an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system in the San Diego region.

Congestion Management Program – SANDAG is the designated congestion management agency for the San Diego region. The Congestion Management Program is a state-mandated program that helps cities and communities monitor transportation system performance, develop programs to address near- and long-term congestion, and better integrate land use and transportation planning decisions. In the short-term, the CMP serves as an element of the RTP, focusing on congestion management strategies that can be implemented in advance of the long- range transportation solutions contained within the RTP.

Regional Housing Program – The Regional Housing Program promotes strategies to increase housing supply and ensure access for all income groups, and provide a variety of housing choices for region residents.

Employment Lands Inventory – SANDAG analyzes the region's supply of non-retail land and compares it to market demand over the past five years. In 2003, there were nearly 15,000 acres of designated employment land in the region, but only 1,420 acres, located mostly in the growing commercial and residential areas of South County, were immediately available. The Employment Lands Inventory in Chula Vista includes acreage along the Bayfront, along Main Street, in the Eastern Urban Center, and surrounding the Otay Landfill.

Transit First – SANDAG's adopted *Transit First!* Strategy seeks to develop a network of transit services; integrate transit with land use planning; enhance operating speed; and improve the rider's experience. *Transit First!* projects will provide high-quality, rubber-tired vehicles offering the speed, comfort and amenities of a trolley, with the flexibility of non-fixed modes of transportation. BRT vehicles will travel in their own lanes, as well as in mixed flow lanes where they may receive priority at signalized intersections. Upgraded stations will have shelters, next bus passenger information, and other features.

City of Chula Vista Municipal Code (Title 19, Zoning and Specific Plans)

Title 19 of the City of Chula Vista Municipal Code includes descriptions and allowed uses for each of the city's zone classifications. Zone classifications provide for residential, commercial, industrial, and open space uses in conformance to the General Plan land use designations as required by law. Zoning regulations establish the minimum lot size, floor area ratio, building heights, setbacks, parking requirements, and permitted and conditional uses that may be developed within the zone. Jurisdictions are required by law to bring their zoning ordinance and subdivision procedures into conformance with their General Plan.

City of Chula Vista MSCP Subarea Plan

The City of Chula Vista MSCP Subarea Plan (Subarea Plan) is a subregional plan under the California Natural Communities Conservation Planning Act (NCCP) Act (1991) and as part of the adopted General Plan. The City adopted the Subarea Plan on May 13, 2003, as part of the General Plan. The MSCP is a comprehensive, long-term habitat conservation plan intended to protect species against the potential impacts of habitat loss associated with development of both public and private lands. The Subarea Plan is an implementation mechanism for the broader MSCP Subregional Framework Plan, which ultimately executes and enforces California natural communities conservation planning. As part of the General Plan, any projects subject to City approval must be in conformance with the Subarea Plan.

The Subarea Plan provides comprehensive long-term habitat conservation to address the needs of multiple species and the preservation of natural vegetation communities for lands within the city and sphere of influence boundaries. The Chula Vista Subarea is comprised of lands within the incorporated city limits for which Take Authorization will be granted. The larger Chula Vista MSCP Planning Area totals 57,849 acres and includes lands within both the City's General Plan boundary and unincorporated County of San Diego. The city's Preserve will eventually encompass approximately 5,000 acres of the city's most sensitive open space areas. In addition, another approximately 4,200 acres outside the city's jurisdiction will be preserved as a result of development occurring within the city's urban boundaries. Lands set aside within the Preserve will be appropriately managed while continuing to provide passive recreational opportunities consistent with the City's MSCP Subarea Plan for the public.

The goals of the Chula Vista MSCP Subarea Plan include:

- To conserve Covered Species and their habitats through the conservation of interconnected significant habitat cores and linkages.
- To delineate and assemble a Preserve using a variety of techniques including public acquisition, on- and off-site mitigation, and land use regulations.
- To provide a Preserve Management Program that, together with the federal and state management activities, will be carried out over the long term, further ensuring the conservation of Covered Species.
- To provide necessary funding for a Preserve management program and biological monitoring of the Preserve.
- To reduce or eliminate redundant Federal, State, and local natural resource regulatory and environmental review of individual projects by obtaining federal and state Authorizations for 86 species.

Additional discussion of the MSCP Subarea Plan is presented in Chapter 5.3, Biological Resources, of this EIR.

Habitat Loss and Incidental Take Ordinance (Municipal Code, Chapter 17.30)

The Habitat Loss and Incidental Take (HLIT) Ordinance is intended to implement a process that would allow the City of Chula Vista to issue permits for the limited taking (direct or indirect loss) of covered species identified under City of Chula Vista's MSCP Subarea Plan, as an alternative to the existing mandatory process prescribed under Section 10(a) of the Endangered Species Act. The HLIT Ordinance assures that development occurs in a manner that protects the overall quality of the habitat resources and preserve connectivity. Additional discussion regarding the application of this ordinance is presented in Chapter 5.3, Biological Resources, of this EIR.

Local Coastal Plan

The Chula Vista Local Coastal Program (LCP) guides continuing development within the Bayfront coastal zone area by providing a detailed plan for the orderly growth, development, redevelopment, and conservation of resources. The Bayfront Specific Plan or Local Coastal Program Implementation Program is the implementing program of the LCP and is incorporated into the Chula Vista Municipal Code Title 19, Zoning. The LCP boundary is depicted in Figure 5.1-3. The intent of the LCP is to create a water-oriented focal point for the entire city in conformance with the goals and policies of the Coastal Act. Emphasis is on public recreation activities, tourism, and conservation but preservation and enhancement of visual resources are also key components. Implementation provides for the removal of visual blight and public access improvements to allow the public to experience views from the perimeter of the Bayfront outward. More specifically, plan objectives are to preserve

Image Source: Copyright 2001 AirPhotoUSA, LLC, All Rights Reserved (flown January 2001)

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Chula Vista municipal boundary

Chula Vista General Plan area

Freeway

Circulation element roads

San Diego coastal zone boundary

FIGURE 5.1-3
Local Coastal Plan Boundary

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fig5.1-3 (coastal bnd) 09/14/05

wetlands, upgrade the area's existing substandard industrial image, improve the quality of the shoreline, public parkland and open space, remove (or mitigate through the use of landscaping) structures or conditions that have a blighting influence on the area and develop an improved relationship between the Bayfront and freeway, and arterial approaches. The California Coastal Commission certified the LCP and zoning in 1985 and a subsequent amendment was approved in 1993 for expansion of the Sweetwater Marsh National Wildlife Refuge.

Greenbelt Master Plan

The Greenbelt Master Plan provides guidance and continuity for planning development of a continuous 28-mile open space and park system and trails that encircle the city. The Greenbelt Master Plan was adopted by the City Council on September 16, 2003. The Plan's primary purpose is to provide goals and policies, trail design standards, and implementation tools that guide the creation of a Greenbelt system of multi-use trails through open space corridors. Implementation of the Greenbelt system creates a unique identity for the city while unifying the western and eastern areas of the city. The Greenbelt Master Plan concept for open space is contained within the Preserve areas depicted in Figure 5.1-4.

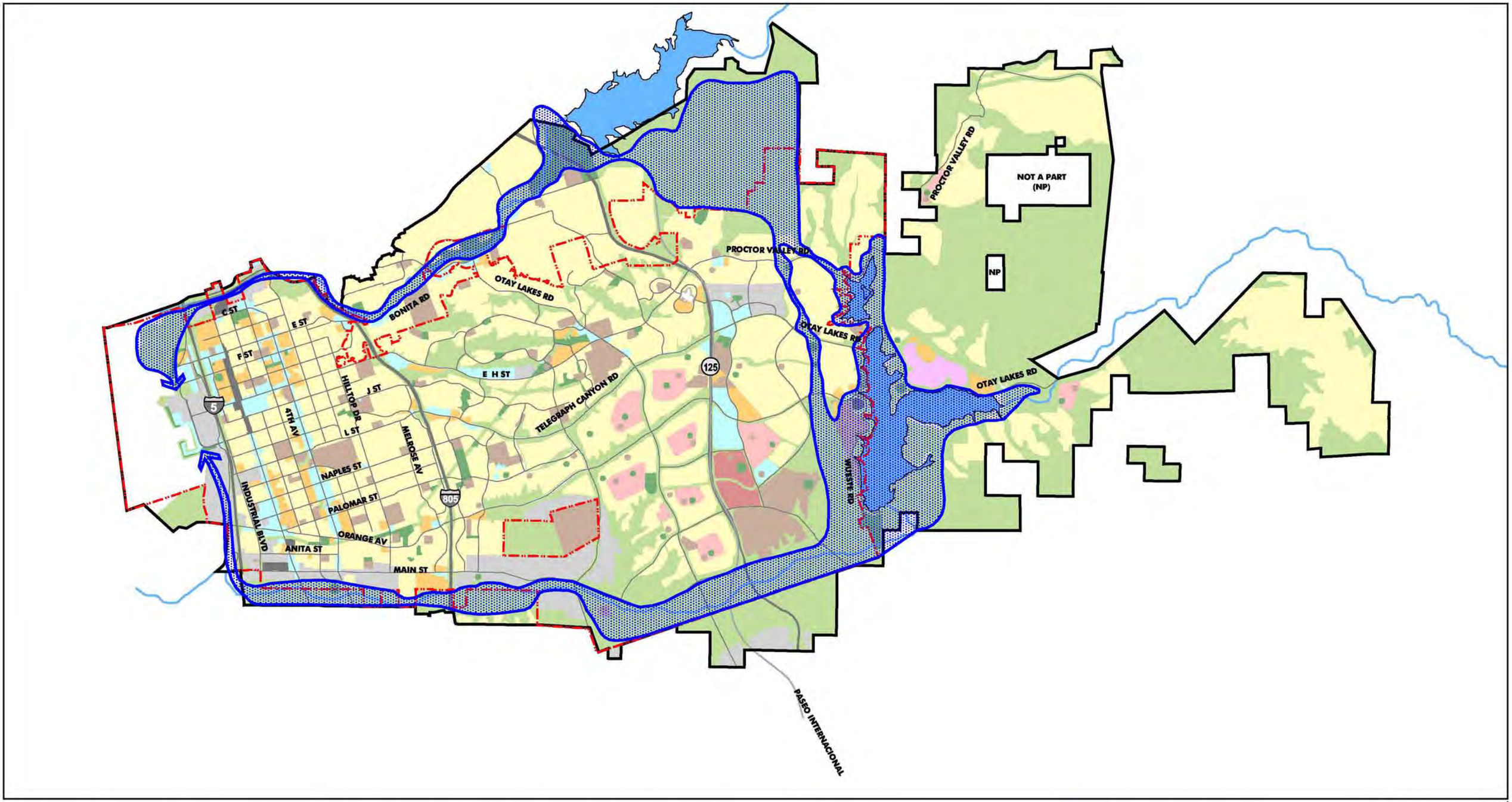
The system is intended to be compatible with future proposed uses such as a university campus in the Salt Creek area. Major components of the Chula Vista Greenbelt include Chula Vista Bayfront Park and lands extending to the Otay River; lands within the Otay River Valley including concept planning areas within the proposed Otay Valley Regional Park (OVRP); lands northerly to Mother Miguel Mountain and the Sweetwater Reservoir; and lands from the Sweetwater Reservoir and Sweetwater valley and Sweetwater Regional Park west to I-805 and Bayfront Park.

Design Review

Multifamily, commercial and industrial development and redevelopment within redevelopment project area boundaries are subject to design review. The City's Design Manual provides specific site planning, architectural, and landscaping requirements for single-lot single-family and multi-family residential and commercial and industrial development.

Otay Ranch General Development Plan (GDP)/Subregional Plan

The Otay Ranch GDP/Subregional Plan was approved jointly by the City of Chula Vista and County of San Diego for the future development of Otay Ranch and establishes general land use goals, objectives, policies, and implementation measures that apply to all portions of the overall planned community of Otay Ranch. The plan addresses future uses on a total of 22,899 acres and provides a balance of housing, shops, workplaces, schools, parks, civic



Chula Vista municipal boundary
Chula Vista General Plan area

Existing and proposed freeway
Circulation Roads
Reservoir
Streams

General plan land use designations
Commercial
Thoroughfare and right of way
Eastern urban center
Industrial
Residential - low to medium density

Open space
Park
Public/Quasi public
Residential - medium to high density
Resort
Village center

Chula Vista greenbelt

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FIGURE 5.1-4
Chula Vista Greenbelt/
Open Space Network

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fig5.1-4 (greenbelt/os) 09/14/05

facilities, and open spaces. The majority of development is intended to be clustered in villages, with conveniently located features and well-defined edges such as the Chula Vista Greenbelt, open spaces, and wildlife corridors.

Otay Ranch Resource Management Plan (RMP)

The Otay Ranch Resource Management Plan, certified by the City of Chula Vista in October 1993, provides guidance for resource protection within Otay Ranch. An important part of the RMP is the creation of the Otay Ranch Preserve. The Otay Ranch Preserve includes approximately 11,375 acres to be set-aside as mitigation for impacts to sensitive resources resulting from Otay Ranch development that would occur both within the city and in the county of San Diego. The Otay Ranch Preserve has been designed and would be managed specifically for protection and enhancement of natural resources present within Otay Ranch, including sensitive biological resources.

The single unifying goal of the Resource Management Plan is the establishment of an open space system that would become a permanent preserve dedicated to the protection and enhancement of the biological, paleontological, cultural (archaeological and historical), floodplain, scenic resources, and visual quality of Otay Ranch, the maintenance of long-term biological diversity, and the assurance of the survival and recovery of native species and habitats within the Preserve.

Otay Valley Regional Park (OVRP) Concept Plan

The OVRP Concept Plan is a multi-jurisdictional planning effort for the Otay River valley by the County of San Diego, City of Chula Vista, and City of San Diego and represents the efforts of elected officials and a Citizen Advisory Committee for future protection and development of the planning area. The concept plan provides for the protection of environmentally sensitive areas and important cultural resources; identifies areas for active and passive recreational development; provides for a trail system with staging areas, view points, and overlooks; and envisions two interpretive centers for environmental and educational programs.

Otay River Watershed Management Plan

The Otay River Watershed Management Plan has recently been initiated by the Cities of Chula Vista, San Diego, Imperial Beach, the County of San Diego, and the Unified Port District. The purpose of this management plan is to provide a framework for guidance to improve water quality, groundwater protection, management and conservation of biological and cultural resources.

Sweetwater Regional Park/Chula Vista Municipal Golf Course

Portions of the Sweetwater Valley and Sweetwater Regional Park are incorporated into the Chula Vista Greenbelt and extend through the northern portion of the planning area from the Sweetwater River westerly to the bay.

The Chula Vista Municipal Golf Course is a public course located along the north side of Bonita Road, south of SR-54, Sweetwater Road, and Rohr Park, and between portions of the Sweetwater Regional Park, which border the course to the east and west in the Sweetwater River valley. The Sweetwater Regional Park provides natural open space along the Sweetwater River and includes a system of trails for horseback riding, hiking, scenic enjoyment, and wildlife observation. The regional park provides facilities serving the entire region, but also offers local park facilities.

Designated Historic Sites/Local Register of Historic Resources

Currently, 61 properties are included in the Chula Vista List of Designated Historic Sites. A number of properties have been designated since passage of a tax incentive program in 2001 (Mills Act Program) for owners of historic properties. The proposed General Plan policies call for protection of Chula Vista's important resources through amendments to the zoning code, updates to the inventory of historic properties, ongoing participation in the Mills Act Program, and whenever practical, providing support for rehabilitation of sound historic buildings.

Brown Field Airport Land Use Compatibility Plan

The Airport Land Use Commission is an agency that is required by state law to exist in counties in which there is a commercial and/or a general aviation airport. The purpose of the ALUC is to protect public health, safety, and welfare by ensuring the orderly development of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses. The San Diego County Regional Airport Authority serves as the Airport Land Use Commission for the Brown Field Airport. The adopted Brown Field Airport Land Use Compatibility Plan (ALUCP) established the Airport Influence Area for this airport, which encompasses a limited area of the East Planning Area. A small portion of the General Plan area is within the Brown Field Airport Influence Area.

Sweetwater Community Plan

The Sweetwater Community Plan emphasizes the need to maintain the character of those portions of the Sweetwater Community Planning Area within the City's jurisdiction as a semi-rural community. The community plan document is a component of the City of Chula

Vista's General Plan and consideration is given for actions affecting the community's unique topographic, ecologic, historic, recreational, and cultural characteristics. Piecemeal annexation of portions of the community planning area is to be resisted and it is anticipated that new development will be consistent with County Design Review guidelines for signage, color, landscape, natural features (including street trees over 20 feet in height), scenic corridors, and sensitive to preservation of historic features. The City of Chula Vista has designated Bonita Road as a Scenic Highway consistent with County goals, which list Bonita Road, San Miguel, and Sweetwater Roads as first priority roadways in the Scenic Highway Element of the County General Plan. In addition, San Miguel Road, Quarry Road, and Proctor Valley Road are also recommended for design review, including scenic value, unique vegetation, and preservation of the rural, rustic style of structures that have long characterized the valley.

Otay Mesa-Nestor Community Plan

A portion of the City's West Fairfield District is within the Otay Mesa-Nestor Community Plan within the jurisdiction of the City of San Diego. This portion of the West Fairfield District is designated open space. River valleys, steep slopes, mesas, and hydrologic features including Nestor Creek and the salt evaporation ponds of southern San Diego Bay characterize the community. However, due to its conventional residential character, and the absence of a distinct business center, residents of the Otay Mesa-Nestor community feel the community lacks identity as a unique part of San Diego. The Otay Mesa-Nestor Community Plan's focus is to improve the community for its residents through the creation of various programs and strategies. Through a combination of revitalization and redevelopment efforts the community's older business areas will be rejuvenated into attractive, functional, and thriving centers. The San Diego Bay National Wildlife refuge is a valuable open space amenity adjacent to the West Fairfield District.

5.1.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to land use if it would:

- Threshold 1: Physically divide or adversely affect the community character of an established community.

- Threshold 2: Conflict with any applicable land use plan, policy, or regulation or an agency with jurisdiction over the project (including but not limited to the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

- Threshold 3: Conflict with any applicable habitat conservation plan or Natural Communities Conservation Plan.

5.1.3 Impacts

5.1.3.1 Threshold 1: Community Character

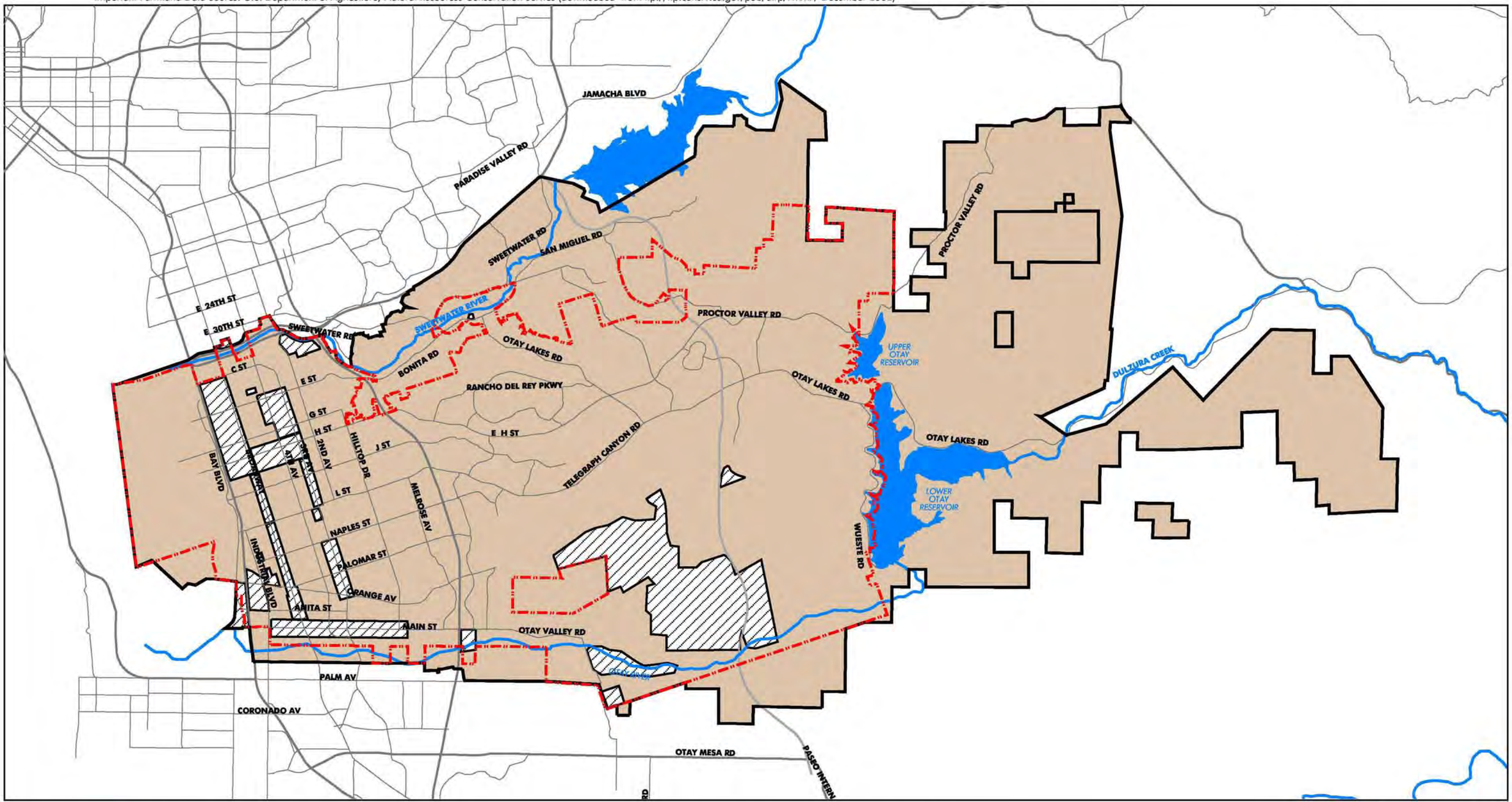
Threshold 1 states that the proposed General Plan Update would result in a significant land use impact if it would physically divide or adversely affect the community character of an established community. Community character addresses two main points: (1) the degree to which proposed project objectives and policies or land use changes have the potential to divide an established neighborhood or community; and (2) whether the project would introduce changes that substantially change the community character by placing incompatible land uses together. The impact section below examines the objectives and policies that apply citywide and areas where the proposed land use designations could result in an incompatibility between existing and planned land uses.

Chula Vista has a diversity of built environments—urban, suburban, and rural areas—in addition to large natural areas that are intended to remain undeveloped. Each type of built environment has its own set of particular characteristics, such as views, landscaping, type of street and housing, commercial activity, parks, and civic buildings that combine together to create a unique community character.

For the majority of the city, the proposed General Plan Update does not propose changes to existing land uses. Figure 5.1-5 illustrates the general areas of change relative to the city and the General Plan area at large. The City's General Plan encompasses 58,422 acres. The General Plan Update leaves the land use designations for 53,096 acres of this area unaffected, and proposes land use changes on only 5,268 acres or less than 10 percent of the planning area. It is the purpose of the General Plan Update to focus land use changes on a limited area, in response to the need to retain existing designated uses in the majority of the city. Furthermore, objectives and policies were crafted for the limited areas of the City that would change in order to protect the majority of the City where land uses changes are not proposed.

The Preferred Plan and each of the scenarios seek to provide a framework that integrates the various neighborhoods of the city and preserves existing community character and valued physical attributes, including the city's older residential neighborhoods, while providing for new development. The proposed Land Use and Transportation Element (LUT) contains 97 objectives that address actions affecting land use and community character. Of these, 34 general objectives apply throughout the General Plan area. There are 11 objectives which apply specifically to the Southwest Planning Area, 15 to the Northwest Planning Area, and 37 to the East Planning Area. The 11 objectives that apply to the Southwest Planning Area are LUT 35 through LUT 45. The 15 objectives that apply to the Northwest Planning Area are LUT 46 through LUT 60. Objectives LUT 61 through LUT 97 apply to the East Planning Area.

Important Farmland Data Source: U.S. Department of Agriculture, Natural Resources Conservation Service (downloaded from ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/ December 2002)



Chula Vista municipal boundary
Chula Vista General Plan area
Lakes
Streams
SR-125 South proposed alignment
Freeway
Major roads
Areas where no land use changes are proposed
Areas of change within the General Plan Area

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FIGURE 5.1-5
Areas of Change within the General Plan Area

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fig5.1-5 (change) 09/14/05

Updated land use objectives and policies have been developed through ongoing coordination with stakeholders, including community groups and agencies, and have been formulated to, among other things: provide a better balance of residential and non-residential development throughout the city, especially with regard to the jobs/housing mix; facilitate connectivity of the older established neighborhoods of the city (generally located west of I-805) with the newer communities developing to the east; promote revitalization; and implement "smart growth" policies promulgated in regional planning documents. In promoting the objectives, the LUT element establishes policies to better balance the mix of land use types throughout the city, preserve and protect existing stable neighborhoods, improve the image of the city, and promote improved compatibility between uses. Additional policies provide for the identification and protection of important scenic and natural resources and provide for the future protection of important historic resources within the community.

The proposed citywide General Plan objectives addressing physical development patterns and character of the city are included in Table 5.1-1. Policies addressing community character are proposed throughout the General Plan Update and provide for improved connectivity between neighborhoods and open space; protection for important natural landform features and historic resources; installation of special treatments along gateways, including themed signage and landscape material; and other measures that preserve or protect community character and cohesion. Furthermore, policies regarding the proposed integration of the city's circulation, transit, and trail plans would facilitate movement between Chula Vista's employment, residential, commercial, and recreational areas, contributing to its livability and enhancing residents' and visitors' overall experience.

General Plan Area

While the land use changes proposed by the General Plan Update are restricted to limited areas within the three planning areas, several of the objectives and policies presented by the General Plan Update apply broadly to the General Plan area. It is the vision of the General Plan Update to preserve and enhance the unique features that shape the City's identity. To this end, several LUT Objectives directly address the compatibility of development within those portions of the City for which changes in land use are not proposed. Objective 3 directs the design of new development to blend with the City's character. Objective LUT 4 addresses the establishment of policies, standards, and procedures to maintain the integrity of stable residential neighborhoods. Objective LUT 6 assures that adjacent land uses are compatible with one another, Objective 7 addresses making appropriate transitions between land uses, and Objective LUT 11 ensures that buildings and site improvements are designed to be compatible with surrounding properties and districts. In addition, the following citywide objectives establish policies that would minimize impacts to adjacent neighborhoods and maintain the integrity of stable residential neighborhoods.

TABLE 5.1-1
LAND USE AND TRANSPORTATION ELEMENT CITYWIDE OBJECTIVES

Objectives
Balance of Land Uses
Objective LUT 1
Provide a balance of residential and non-residential development throughout the City that achieves a vibrant development pattern, enhances the character of the City, and meets the present and future needs of all residents and businesses.
Urban Design and Form
Objective LUT 2
Limit locations for the highest development intensities and densities, and the tallest building forms, to key urban activity centers that are also well served by transit.
Objective LUT 3
Direct the urban design and form of new development and redevelopment in a manner that blends with and enhances Chula Vista's character and qualities, both physical and social.
Preserving and Enhancing Stable Residential Neighborhoods
Objective LUT 4
Establish policies, standards and procedures to minimize blighting influences and maintain the integrity of stable residential neighborhoods.
Implementing Mixed Use Areas
Objective LUT 5
Designate opportunities for mixed-use areas with higher density housing that is near shopping, jobs, and transit in appropriate locations throughout the City.
Compatible Land Use and Edge Transitions
Objective LUT 6
Ensure adjacent land uses are compatible with one another.
Objective LUT 7
Appropriate transitions should be provided between land uses.
Enhancing Community Image
Objective LUT 8
Strengthen and sustain Chula Vista's image as a unique place by maintaining, enhancing and creating physical features that distinguish Chula Vista's neighborhoods, communities, and public spaces and enhance its image as a pedestrian-oriented and livable community.
Objective LUT 9
Create enhanced gateway features for City entry points and other important areas, such as special districts.
Objective LUT 10
Create attractive street environments that complement private and public properties, create attractive public rights-of-way, and provide visual interest for residents and visitors.
Objective LUT 11
Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.
Objective LUT 12
Protect Chula Vista's important historic resources.
Objective LUT 13
Preserve scenic resources in Chula Vista, maintain the City's open space network, and promote beautification of the city.
Linking Chula Vista Internally and to the Region
Objective LUT 14
Coordinate with appropriate regional and local agencies to create an effective regional transportation network that links Chula Vista to the surrounding region and Mexico.

TABLE 5.1-1
LAND USE AND TRANSPORTATION ELEMENT CITYWIDE OBJECTIVES
(continued)

Objectives
Objective LUT 15
Improve transportation connections within Chula Vista and between eastern and western Chula Vista, particularly transit connections between major activity centers.
Land Use and Transportation Integration
Objective LUT 16
Integrate land use and transportation planning and related facilities.
Objective LUT 17
Plan and coordinate development to be compatible and supportive of planned transit.
Improving Vehicular and Transit Mobility
Objective LUT 18
Reduce traffic demand through Transportation Demand Management (TDM) strategies, increased use of transit, bicycles, walking, and other trip reduction measures.
Objective LUT 19
Coordinate with the regional transportation planning agency, SANDAG, and transit service providers such as the Metropolitan Transit System (MTS) to develop a state-of-the-art transit system that provides excellent service to residents, workers, students and the disabled, both within the city, and with inter-regional destinations.
Objective LUT 20
Make transit-friendly roads a top consideration in land use and development design.
Objective LUT 21
Continue efforts to develop and maintain a safe and efficient transportation system with adequate roadway capacity to serve future residents, while preserving the unique character and integrity of recognized communities within the city.
Grade Separated Transit Crossings at E Street and H Street
Objective LUT 22
Encourage regional and local efforts to continue planning for enhancements to Light Rail Trolley service along the west side of the city.
Increasing Mobility Through Use of Bicycles and Walking
Objective LUT 23
Promote the use of non-polluting and renewable alternatives for mobility through a system of bicycle and pedestrian paths and trails that are safe, attractive and convenient forms of transportation.
Regional Cooperation and Coordination
Objective LUT 24
Work cooperatively with other agencies and jurisdictions to address regional issues that affect the quality of life for Chula Vista's residents, such as land use, jobs/housing balance, transportation, mobility, and economic prosperity, and advocate proactively with appropriate agencies regarding key issues.
Objective LUT 25
Address issues of concern or specific problems in areas immediately adjacent to the City's boundaries or within nearby surrounding areas and proactively work with the appropriate jurisdiction to develop solutions.
Relationship of Density/Intensity to Amenities
Objective LUT 26
Establish an Urban Core Improvements Program for the Urban Core Subarea.
Objective LUT 27
Establish a program for development to provide public amenities, and/or community services necessary to support urban development and implement the following policies.

TABLE 5.1-1
LAND USE AND TRANSPORTATION ELEMENT CITYWIDE OBJECTIVES
(continued)

Objectives
Objective LUT 28
Consider use of lot consolidation where appropriate so that projects meeting the objectives of this General Plan can be achieved, and a high level of community amenities can be provided.
Objective LUT 29
Allow for the clustering of residential development to respond to site constraints, and improve amenities for project residents.
Objective LUT 30
Use parking management to better utilize parking facilities and implement policies to reduce parking demand before considering public expenditures for additional parking facilities.
Objective LUT 31
Provide parking facilities that are appropriately integrated with land uses, maximize efficiency, accommodate alternative vehicles, and reduce parking impacts.
Objective LUT 32
Evaluate the use and applicability of various strategies to provide parking.
Objective LUT 33
Ensure that parking facilities are appropriately sited and well-designed in order to minimize adverse effects on the pedestrian-oriented environment, and to enhance aesthetic qualities.
Planning for Healthy Communities
Objective LUT 34
Support healthy lifestyles among residents through increasing opportunities for regular physical activity.

Objective LUT 3

Direct the urban design and form of new development and redevelopment in a manner that blends with and enhances Chula Vista's character and qualities, both physical and social.

Policies

LUT 3.1: Adopt urban design guidelines and/or other development regulations for all Districts or Focused Areas of Change (as presented in the Area Plans (Section LUT 8-10)), as necessary to ensure that new development or redevelopment recognizes and enhances the character and identity of adjacent areas, consistent with this General Plan's vision.

LUT 3.2: Any such urban design guidelines and/or other development regulations shall also be consistent with other, related policies and provisions in this General Plan, including Sections LUT 7.3, 7.4, 7.5 and 7.6.

Objective LUT 4

Establish policies, standards, and procedures to minimize blighting influences and maintain the integrity of stable residential neighborhoods.

Policies

LUT 4.1: Preserve and reinforce the community character of existing older, well-maintained, stable residential neighborhoods located outside of the districts or Focus Areas identified for change in this document.

LUT 4.2: Protect existing stable single-family neighborhoods through zoning or other regulations that discourage the introduction of higher density residential or other incompatible or potentially disruptive land uses and/or activities.

LUT 4.3: Require that new development or redevelopment, through consideration of site and building design, and appropriate transition and edge treatments, does not negatively affect the nature and character of nearby established neighborhoods or development.

LUT 4.4: Ensure that proposals for new construction, remodels and additions within existing stable neighborhoods are appropriately sized and

designed to be compatible with the neighborhood's character, and to minimize impacts on adjacent parcels.

LUT 4.5: Establish zoning or other regulations to ensure that non-residential uses or activities in stable residential neighborhoods occur only when the character and the quality of the neighborhood can be maintained.

LUT 4.6: Minimize to the maximum extent practicable, the use of neighborhood streets in stable residential neighborhoods for regional or cut-through traffic through circulation design and/or traffic calming features to protect those neighborhoods from adverse traffic effects.

LUT 4.7: Recognize established communities and neighborhoods within the City through signage, landscaping or other identifying features.

Objective LUT 11

Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

Policies

LUT 11.1: Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and bay sight lines, and important gateways into the city.

LUT 11.2: Promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista, and create a vital and attractive environment for businesses, residents, and visitors.

LUT 11.3: The City shall, through the development of regulations and guidelines, ensure that good project landscape and site design creates places that are well-planned, attractive, efficient, safe and pedestrian friendly.

LUT 11.4: Actively promote architectural and design excellence in buildings, open space, and urban design.

LUT 11.5: Require a design review process for all public and private discretionary projects (which includes architectural, site plan,

landscape and signage design) to review and evaluate projects, prior to issuance of building permits, to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.

Objective LUT 27

Establish a program for development to provide public amenities and/or community services necessary to support urban development and implement the following policies.

Policies

LUT 27.1: Establish a program that relates the allowable floor area ratios (FARs) and residential densities of projects to the provision of the following potential public benefits or amenities and community services, as well as others not listed:

- Public plazas and pocket parks
- Water features in public open spaces
- Public art
- Streetscape improvements
- Pedestrian path improvements
- Enhanced pedestrian connections between parks, public spaces, and neighborhoods by means of paths and open space areas
- Jogging, walking, and fitness trails
- Outdoor through-block connections
- Sidewalk widening
- Arcades
- Upper-level setbacks for buildings more than 30 feet above grade
- Lower-level planting terraces or landscaping
- Underground parking and loading
- Parking concealed by occupiable space
- Additional on-site structured parking for adjacent commercial or residential uses
- Off-site park and open space contributions

- Transit station access and improvements
- Bike lockers
- Locate secure bicycle parking facilities near transit centers and major public and private buildings
- Human services programs, such as child day care or senior day care
- School or educational amenities
- Acquisition and maintenance of significant architecture or historical buildings or features
- Larger lot sizes created through lot consolidations
- Streetfront facades/windows
- Affordable housing

LUT 27.2: Require that all uses and buildings enhance pedestrian activity in accordance with the land use and community image policies in Section 7.6 of this Element, and the policies, guidelines, and standards created by existing and future Specific Plans or other master plan documents.

LUT 27.3: In accordance with the Otay Ranch GDP and any SPA Plan, Prior to, or concurrent with, approval of the first discretionary project for the Eastern Urban Center, complete necessary studies to identify appropriate urban facility and service standards, and amenities, and adopt programs to ensure provision of those facilities, services and amenities consistent with identified standards, any applicable site and design guidelines.

LUT 27.4: In the Northwest Planning Area, use the Urban Core Specific Plan to create a program in compliance with LUT 27.1.

These citywide objectives and their associated policies would stimulate revitalization in developed areas and physically enhance the existing and planned neighborhoods in which they occur. Facilitating connections between the various city neighborhoods is another important goal with the desired consequence being to attract residents from throughout the city to each area's unique attributes. These general policies are intended to protect or improve, through ultimate design and construction, those attributes that contribute to a positive city image and circulation improvements that facilitate mobility throughout the city and between the city and surrounding jurisdictions (see Policies LUT 1.1 through 34.3). Implementation of these policies would reduce the community character impact resulting from the adoption of the Preferred Plan, but do not reduce the impact to below a level of

significance. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Specific objectives and policies have been developed to address the needs of targeted areas within the update area boundary for the Preferred Plan and all three Scenarios and are discussed below.

Preferred Plan

Table 5.1-2 provides a comparison of the various land uses by planning subarea for each of the proposed scenarios (Preferred Plan and Scenarios 1-3).

NORTHWEST PLANNING AREA

As discussed in Section 5.1.1.1 above, the existing character of the community within the Northwest Planning Area consists of predominantly single-story, single-family homes with limited, and predominantly low-rise multi-family units along major roadways. The multi-family units consist of condominiums, townhouses, and apartments that are generally two to three stories in height. Retail uses are located primarily along Broadway from E to L Streets and along Third Avenue from E to H Streets. Designated scenic roadways, well-manicured neighborhoods, and urban amenities such as pedestrian and bicycle facilities, local parks, and open space all contribute to the character of the Northwest Planning Area. Despite having many unique and attractive characteristics, some neighborhoods have experienced decline over the years and blighted commercial and residential areas have been targeted for revitalization. The City has implemented a number of programs with specific goals addressing the needs of particular areas. Redevelopment programs are intended to revitalize older commercial, industrial, and residential areas.

The Preferred Plan generally modifies designated land uses within the Northwest Planning Area to allow for an increase of mixed-use development. Specifically, this scenario would introduce increased residential in areas currently restricted to retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and increased residential and transit-oriented uses in the vicinity of major transit corridors. The acreage of land uses by District for the Urban Core Subarea is provided in Table 5.1-3 and illustrated in Chart 5.1-1. As is illustrated on this chart, the acreage of land designated for residential use would increase for the Preferred Plan compared to existing conditions. A comparison of the residential units for the Urban Core Subarea is shown in Chart 5.1-2. This chart illustrates the residential units is increased with the proposed amendments over existing conditions.

The Preferred Plan would increase the amount of dwelling units within the Urban Core at buildout from 9,499 to 16,756. This represents an increase in multi-family units within the

TABLE 5.1-2
PROPOSED LAND USES

		Subarea					
		Otay Ranch		Montgomery		Urban Core	
	Type	Acres	Units	Acres	Units	Acres	Units
Preferred Plan	Commercial	388†	4,015	231	0	295	228
	Industrial	501*	0	295	0	0	0
	Open space	86	0	124	71	17	0
	Park	384	0	54	0	20	0
	Public	732	0	46	21	82	23
	Residential	981	10,226	380	8,082	617	16,505
	Total	3,072*	14,241	1,130	8,174	1,031	16,756
Scenario 1	Commercial	424†	2,332*	243	54	299	185
	Industrial	301	0	331	0	0	0
	Open space	86	0	116	71	17	0
	Park	375	0	25	0	9	0
	Public	806	0	46	21	83	23
	Residential	1,080	9,326	369	7,533	623	16,882
	Total	3,072*	11,658	1,130	7,679	1,031	17,090
Scenario 2	Commercial	439†	2,332	162	0	302	228
	Industrial	211*	0	395	0	0	0
	Open space	11	0	113	71	17	0
	Park	382	0	25	0	9	0
	Public	651	0	46	21	89	23
	Residential	1,378	13,253	389	8,308	614	15,413
	Total	3,072*	15,585	1,130	8,400	1,031	15,664
Scenario 3	Commercial	442†	2,332	219	54	321	186
	Industrial	679	0	317	0	0	0
	Open space	75	0	113	71	17	0
	Park	323	0	25	0	9	0
	Public	847	0	46	21	89	23
	Residential	706	6,473	410	8,851	595	15,969
	Total	3,072*	8,805	1,130	8,997	1,031	16,178

NOTE: Totals may vary due to rounding.

*Includes 46 acres west of Village Two West (known as Sunbow) tat are not included in Scenario 1 and Scenario 3.

†EUC is included in commercial acreage, which includes multiple uses on 209 acres, excluding park acreage.

TABLE 5.1-3
LAND USE BY DISTRICT FOR THE URBAN CORE SUBAREA[1,2,3,4,5]
(acres)

District/Type	Scenario 1	Scenario 2	Scenario 3	Preferred	Existing
Downtown Third Avenue					
Commercial	45	22	21	25	35
Other					12
Park	9	9	9	16	9
Public	31	37	37	31	26
Residential	127	145	146	142	130
Downtown Third Avenue Total	213	213	213	213	213
I-5 Corridor					
E Street Visitor					
Commercial	54	50	63	52	41
Open space	6	6	6	6	
Other					27
Park					
Public	6	6	6	6	6
Residential	118	121	108	120	110
E Street Visitor Total	183	183	183	183	183
H Street Gateway					
Commercial	50	77	59	60	40
Open space	11	11	11	11	
Other					18
Park				4	
Public	7	7	7	7	7
Residential	144	117	135	130	147
H Street Gateway Total	212	212	212	212	212
H Street Corridor					
Commercial	93	87	95	85	89
Other					11
Public	39	39	39	39	39
Residential	82	88	80	89	75
H Street Corridor Total	214	214	214	214	214
Mid-Broadway Corridor					
Commercial	30	14	30	20	27
Other					6
Residential	78	94	78	88	76
Mid-Broadway Corridor Total	108	108	108	108	108
Mid-Third Avenue Corridor					
Commercial	27	53	53	53	39
Other					10
Residential	74	48	48	48	52
Mid-Third Avenue Corridor Total	101	101	101	101	101
TOTAL	1,031	1,031	1,031	1,031	1,031

[1]Includes existing parks that are designated public and quasi-public under the adopted General Plan and would remain designated as public and quasi-public.
[2]Mixed use designations are comprised of commercial and residential transit focus areas in some areas.
[3]Park acreage for Scenarios 1, 2, and 3 does not reflect the ultimate park acreage.
[4]Totals may vary due to rounding.
[5]Other includes vacant, easements, and right-of-way

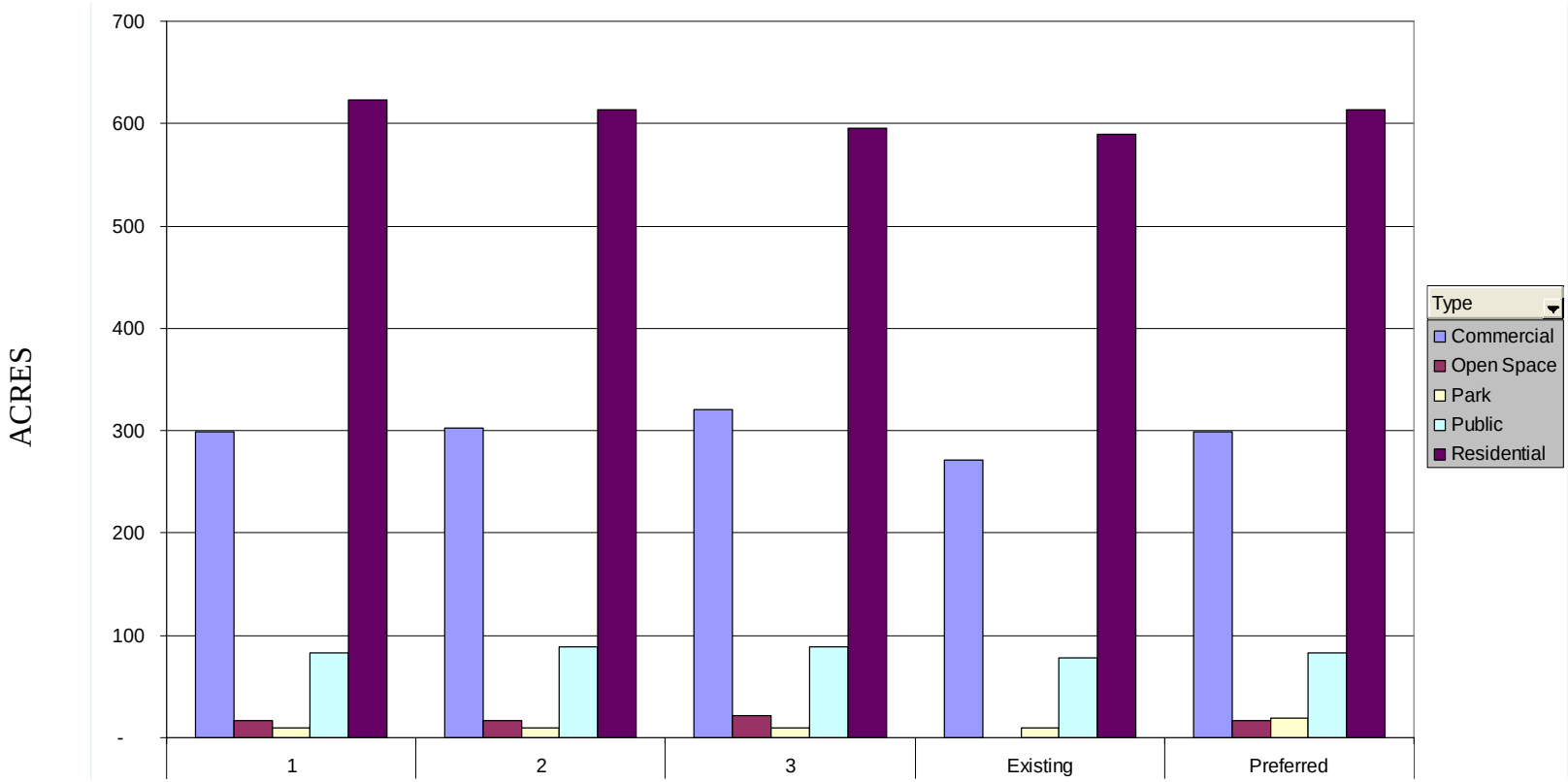

Chart 5.1-1
Land Use Comparison
Urban Core Subarea

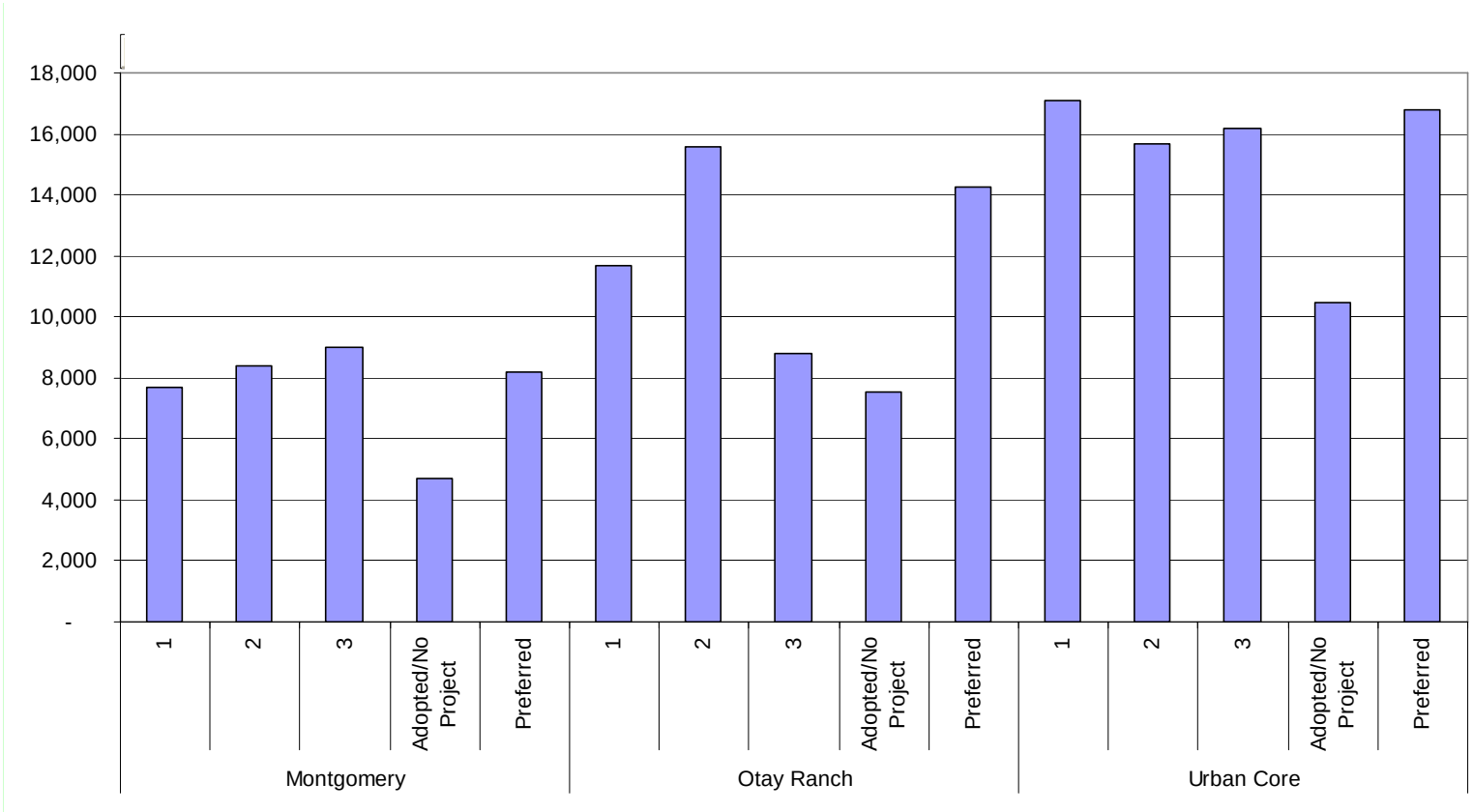

Chart 5.1-2
Residential Units by Scenario and Subarea

Urban Core and a reduction in the amount of single-family homes at buildout. The multi-family residential units are proposed in several Districts of the Urban Core in locations where new growth or redevelopment can be accommodated to create mixed-use urban environments that are oriented to transit and pedestrian activity.

Adding more density and increasing the number of multi-family units within the Urban Core has the potential to cause an adverse effect on the community character of the existing residential neighborhoods adjacent to the areas of change. The General Plan Update would reduce impacts to adjacent parcels by requiring that the quality of existing, stable residential neighborhoods be maintained (Policy LUT 4.2), ensuring that development adheres to quality design standards (Policy LUT 4.4), and ensure good street design to minimize and control traffic in residential neighborhoods (Policy LUT 4.6). Additionally, Policy LUT 11.5 would lessen impacts from any private and public development by requiring multi-family, commercial, and industrial uses to go through a design review process. The design review process would promote quality architecture, landscape, and site design to enhance the character of the area. These measures would reduce the community character impact resulting from the adoption of the Preferred Plan, but do not reduce the impact to below a level of significance. The current project is a General Plan Update and the development of design standards is a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

As discussed in Section 3.5.1.1, the Urban Core Subarea contains five districts that have proposed changes in their designated land uses. These districts include the Downtown Third Avenue District; H Street Corridor District; Interstate 5 Corridor District; Mid-Broadway District; and the Mid-Third Avenue District. Proposed land use changes would provide a more diverse mix of uses and generally increase residential density in the Urban Core to facilitate revitalization. Specific objectives and policies are proposed to preserve the character and retain the quality of the adjacent existing, residential neighborhoods within each of these districts. The following discussion analyzes the effects to community character from the adoption of the Preferred Plan within the five districts of the Urban Core Subarea.

Downtown Third Avenue District. The Downtown Third Avenue District is characterized by the traditional Third Avenue business district consisting of shops and offices and wide sidewalks along Third Avenue, as well as smaller residential housing units in surrounding streets. The Preferred Plan proposes to add mixed-use with residential units along Third Avenue between E Street and H Street within the Downtown Third Avenue District. Buildings along Third Avenue's immediate street frontage would be predominantly low-rise to maintain the traditional character, while the mid-rise apartments and condominiums behind them would be stepped back from the façade. East of Third Avenue, building heights would be stepped down to visually blend with the adjacent existing residential neighborhood. Objective LUT 50 establishes policies for the redevelopment and enhancement of the Downtown Third Avenue District as a higher density, mixed-use area,

while preserving the important elements that contribute to the charm and character of traditional Third Avenue. One of the primary policies that reflects this objective is Policy LUT 50.1 that indicates the desire to maintain the Downtown as a focal point for the city so that it continues to express the city's history, provides a venue for cultural vitality, and retains its role as a center for social, political, and other civic functions. There are 18 policies associated with Objective 50 that address allowable uses, design standards, and general development requirements. Policies LUT 50.12, 50.13, and 50.16 provide for design standards and guidelines be prepared for future development within the Downtown Third Avenue District and are described below.

LUT 50.12: Along the immediate street frontage of the Third Avenue corridor primarily between E and G Streets, buildings shall be predominantly low-rise, with mid-rise allowed, provided that upper stories are stepped back from the façade and are architecturally compatible with surrounding development.

LUT 50.13: On the east side of the Third Avenue corridor primarily between E and G Streets, building heights shall step down to create a transition to the adjacent low-rise development east of Del Mar Avenue.

LUT 50.16: As part of the Urban Core Specific Plan, development standards and guidelines in the Downtown Third Avenue District shall support the intended village character along Third Avenue and ensure compatibility with residential neighborhoods immediately adjacent to redevelopment sites.

Implementation of Policies LUT 50.12, 13, and 16 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact within and adjacent to the Downtown Third Avenue District resulting from the adoption of the Preferred Plan, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

H Street Corridor District. The H Street Corridor District includes the Chula Vista Center shopping mall, medical facilities, South County Regional Complex, offices, commercial businesses, and some residential. Proposed land use changes within the H Street Corridor District would affect existing land uses designated for retail, professional office, and high density residential. The existing South County Regional Government Center, an existing public/quasi-public use, would not be affected. The Preferred Plan provides for mixed-use development with offices, shopping, and multi-family housing in a high-intensity, transit-oriented development near the Third Avenue transit station. Policies associated with Objective LUT 52 address the redevelopment of the H Street Corridor District. Objective

LUT 52 encourages redevelopment of the Chula Vista Center, as well as properties north of H Street, with a mix of land uses that will reinforce H Street as a future planned transit boulevard and gateway corridor, and establishes the area as a public gathering space and vibrant mixed-use area.

Policies associated with Objectives LUT 52 and 53 establish that mixed-uses within the H Street Corridor District shall be generally distributed between retail, offices, and residential (Policies LUT 52.1, 52.3, and 53.1), and a maximum residential density of 40 to 60 dwelling units per acre (du/ac) (Policies LUT 52.5 and 53.2). Building heights on both sides of H Street would range from one to three stories, with some buildings between four and seven stories on the west, with an FAR of 1.0; and primarily mid-rise with some high-rise buildings with an average FAR of 2.0. Policy LUT 52.7 would require design standards and guidelines for future development within the H Street Corridor District on H Street between Fourth and Broadway to be prepared:

> LUT 52.7: The Urban Core Specific Plan shall include comprehensive development standards and guidelines, including provisions for building setbacks, massing, architecture and streetscape, that will establish H Street as a grand boulevard, and create an inviting and safe pedestrian experience.

Policy LUT 53.5 requires design standards to be prepared for the area between Third and Fourth Avenue.

> LUT 53.5: The Urban Core Specific Plan or other zoning regulations shall establish design standards for the H Street Office Focus Area consistent with the above vision and policies.

Implementation of Policy LUT 52.7 and 53.5 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact resulting from the adoption of the Preferred Plan, but not to below a level of significance. While the policies require design standards and guidelines be prepared that include design, streetscape, and step back guidelines to visually blend with the area and establishes a pedestrian friendly environment, they cannot be developed until additional information is available. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

LUT 52.9 addresses issues associated with mixed use commercial development. It states:

> The Urban Core Specific Plan, or other equivalent regulations, shall address design issues associated with the expanded depth of the Mixed Use Commercial designated area on the north side of H Street. Design and

landscape standards shall ensure compatibility with residential uses on the north side of Otis Street.

The General Plan Update establishes two Transit Focus Areas and an H Street Transit Corridor Special Study Area within the H Street Corridor District (Figure 5.1-6). The Mixed-Use Transit Focus Area designation is proposed at the Third Avenue/H Street transit station and includes a mix of office, retail, and residential densities planned for a gross density of up to 60 dwelling units per acre. Building heights for this Transit Focus Area will be primarily mid-rise, with some high-rise between Third and Fourth Avenues.

The purpose of the special study for the H Street Transit Corridor Special Study Area is to analyze and evaluate the appropriateness of plan changes that could result in mixed land uses, increased intensities, and potential high-rise buildings along H Street between Interstate 5 and Third Avenue. An important consideration of the study is that the area is a major activity corridor, and functions as the primary entry into the urban core. It is a major link between Broadway and the downtown area, is targeted as a major transit connection between the eastern portion of the City and the west, and currently consists primarily of community or sub-regional-serving non-residential land uses. These uses include the South County Regional Center and Superior Court, medical offices, several bank facilities, a major hospital and medical facility at Scripps, major commercial uses at the Chula Vista Center, numerous restaurants, retail businesses and professional offices. In view of these existing land uses along H Street, the future intensification planned with the two Transit Focus Areas at either end of the corridor, and the potential for future market forces to focus on H Street as a key corridor, a special study is needed that examines further potential changes in land use and intensity, building mass, the potential for taller buildings, and the relationship and appropriate transitions to adjacent stable neighborhoods. This study would be conducted subsequent to the adoption of any potential high-rise buildings along H Street between Interstate 5 and Third Avenue within the study area.

As discussed above, the Preferred Plan proposes high-rise buildings between Third and Fourth Avenue in the Mixed-Use Transit Focus Areas within the H Street Corridor District. The community character of an area has to do with the predominant use as well as its orientation and scale. While allowance for higher intensities and taller buildings, or “high-rise” structures, provides more housing, employment, and other opportunities on a smaller amount of land, the principle reason for high-rise structures is to provide landmarks and skyline recognition for key areas of the city, and punctuate them as vibrant, active, and successful community centers. The identification of these areas in the City’s Urban Core are intended to establish places where people are attracted to active pedestrian-oriented experiences, including shopping, restaurants, entertainment, and employment, and which are located along major thoroughfares and transit routes where they can be most readily accessed.

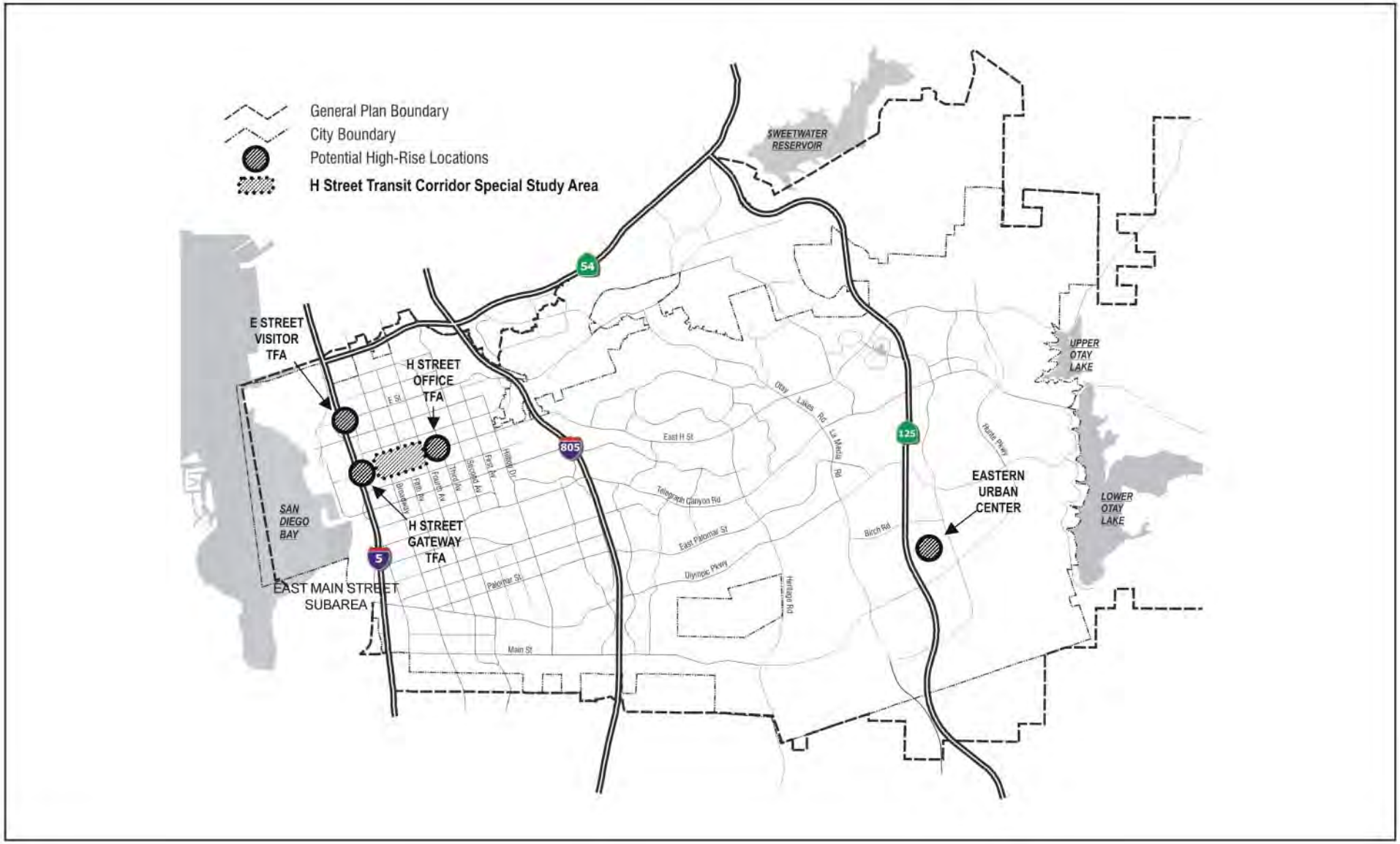

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FIGURE 5.1-6

Locations of Proposed Transit Focus Areas and the H Street Transit Corridor Special Study Area

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Evaluation of the potential impact of a high-rise building, and thereby its community character impact, depends upon its design and setting. Objectives LUT 2 and 3 and their associated policies and Policy LUT 53.5 would establish development standards that address the development of high-rise buildings:

Objective LUT 2

Limit locations for the highest development intensities and densities, and the tallest building forms, to key urban activity centers that are also well served by transit

LUT 2.1: Locate Mixed Use Transit Focus Areas where major transit stations exist or are planned.

LUT 2.2: Locate the highest development intensities and residential densities within Mixed Use Transit Focus Areas where strong City gateway elements exist or key urban activity areas occur.

LUT 2.3: Limit the location of high-rise structures to within these Transit Focus Areas, and the Eastern Urban Center area of Otay Ranch..

LUT 2.4: High-rise buildings will be subject to discretionary review in order to ensure they are a positive addition to the City in accordance with the following provisions:

- The building must reflect unique, signature architecture that symbolizes the City, and can be immediately recognized as a positive Chula Vista landmark.

- The building must be accompanied by clear public benefits in acceptance of the height, such as increased public areas, plazas, fountains, parks or paseos, extensive streetscape improvements, or other public venues or amenities.

- The overall building height and massing must reflect appropriate transitions to surrounding areas in accordance with the future vision for those areas, or if the building is on the periphery of an area of change, to the adjoining neighborhood. Specific Plans, General Development Plans/Sectional Planning Area Plans, or other zoning regulations will provide the basis for defining such transitions.

LUT 2.5: Require proposals for any high-rise buildings to conduct shadow studies to assess the effects on light and solar access on adjacent areas and buildings.

LUT 2.6: Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and to also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings, and any appropriate amendments to this Plan.

LUT 3.1: Adopt urban design guidelines and/or other development regulations for all Districts or Focused Areas of Change, (as presented in the Area Plans (Sections LUT 8-10)) as necessary to ensure that new development or redevelopment recognizes and enhances the character and identity of adjacent areas, consistent with this General Plan's vision.

LUT 53.5: The Urban Core Specific Plan, or other zoning regulations, shall establish design standards for the Mixed Use Transit Focus Area within the H Street Office Focus Area, consistent with the above policies and vision and policies.

These policies would reduce the community character impact resulting from the adoption of the Preferred Plan, but not to below a level of significance. While the policies require the preparation of urban design standards for such issues as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Mixed-Use Transit Focus Area, development of these standards would be done as part of the Urban Core Specific Plan. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Interstate 5 Corridor District. The Interstate 5 Corridor District is characterized by low-rise multi-family housing extending from C to I Streets; mobile home parks between F and G Streets; three roadway connections to the Bayfront (E, F, and H Streets); a lack of accessible park facilities; and poor pedestrian connectivity crossing I-5 to the Bayfront or to Broadway. The Preferred Plan proposes a major mixed-use district, with high density mixed-use residential within a quarter mile of the E and H Street trolley stations; increased commercial, some multi-family housing on Broadway; and visitor-serving uses in select areas. The lower-density mobile home parks would be redeveloped with higher-intensity housing types.

A pedestrian-oriented F Street Promenade is proposed to link the district to the Bayfront and to the Downtown Third Avenue District. Building heights within this district would include low-, mid-, and high-rise buildings. Objectives LUT 54 through 58 and their associated policies apply to the Interstate 5 Corridor District. Policies associated with Objectives LUT 54 through 58, which address the community character within the Interstate 5 Corridor District, are listed below:

LUT 54.6: The Urban Core Specific Plan shall include specific guidelines for the development of mixed use projects on North Broadway, between C and E Streets.

LUT 55.11: The Urban Core Specific Plan, or other zoning regulations, shall establish design standards for the Mixed Use Transit Focus Area of E Street and Woodlawn Avenue, consistent with the above vision and policies.

LUT 55.12: The Urban Core Specific Plan shall provide development standards and guidelines, including the provision of building setbacks and massing diagrams to ensure the enhancement of a primary gateway to the City along E Street, and a pleasant and safe pedestrian experience.

LUT 56.7: The Urban Core Specific Plan shall prepare specific design guidelines for the development of mixed use projects on Broadway, between F and G Streets.

LUT 57.6: Encourage the upgrading of older and/or marginal retail uses along H Street and Broadway.

LUT 57.7: The Urban Core Specific Plan, or other zoning regulations, shall establish design standards for the Mixed Use Transit Focus Area, and other mixed use projects on H Street and on Broadway, consistent with the above policies and vision.

LUT 58.8: The Urban Core Specific Plan shall include specific guidelines for the development of mixed-use projects on H Street and on Broadway.

LUT 58.9: The Urban Core Specific Plan shall include development standards and guidelines, including the provision of building setbacks and massing diagrams to ensure the enhancement of a primary gateway to the City and the establishment of a grand, transit boulevard along H Street, as well as to ensure a pleasant and safe pedestrian experience.

LUT 58.11: As part of the Urban Core Specific Plan, specific guidelines for the development of mixed-use projects south of the H Street frontage shall be prepared that provide an appropriate buffer to protect existing residential neighborhoods south of I Street.

Implementation of Policies LUT 54.6, 55.11, 55.12, 56.7, 57.6, 57.7, 58.8, 58.9, and 58.11, as well as Policies LUT 11.1 through 11.5, would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the Interstate 5 Corridor District, but do not reduce the impact to below a level of significance. While the policies require design standards and guidelines be prepared that allow for the provision of building setbacks and massing diagrams to ensure the enhancement of a primary gateway to the City and ensure compatibility and appropriate buffering with the existing residential neighborhoods, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

There are two areas proposed for high-rise buildings in the Mixed-Use Transit Focus Areas within the I-5 Corridor District. These buildings are proposed near the E Street and H Street Trolley Station. The Mixed-Use Transit Focus Areas are proposed to function as major transportation corridors with high-intensity transit focus mixed-uses, including higher density residential units, offices, and ground floor retail. Land uses surrounding these areas include visitor-serving uses, office buildings, and multi-family residential. As discussed above for the Mixed-Use Transit Focus Area in the H Street Corridor District, the extent to which a high-rise building results in a significant community character impact depends upon its design and setting. Objective LUT 2 and LUT 3 and their associated policies and Policy LUT 53.5 listed above would establish policies and development standards through the Urban Core Specific Plan that address the development of high-rise buildings. This policy would require the preparation of urban design standards for such issues as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Mixed-Use Transit Focus Area. These standards would be developed as part of the Urban Core Specific Plan and would establish design standards for mixed-use development that achieve a pedestrian-scaled environment. Policy 53.5 would require these design standards to be done as part of the Urban Core Specific Plan or zoning regulation. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Mid-Broadway District. The existing Mid-Broadway District consists mainly of retail establishments. The Preferred Plan proposes the Mid-Broadway District for mixed-use, with primarily local-serving ground floor retail and higher density residential units. Building heights for the Mid-Broadway District would be primarily low-rise, with some mid-rise

buildings. Objective LUT 59 encourages redevelopment activities within the Mid-Broadway District that would establish a pedestrian-oriented commercial corridor providing housing opportunities and compatible neighborhood-serving commercial uses. Policy LUT 59.8 addresses future development within the Mid-Broadway District:

> LUT 59.8: The Urban Core Specific Plan shall establish design guidelines and/or zoning standards that provide for building heights that step down adjacent to single-family neighborhoods.

Objective 8 stresses the maintenance and enhancement of physical features that distinguish Chula Vista's neighborhoods.

> Objective LUT 8: Strengthen and sustain Chula Vista's image as a unique place by maintaining, enhancing and creating physical features that distinguish Chula Vista's neighborhoods, communities, and public spaces, and enhance its image as a pedestrian-oriented and livable community.

Implementation of Policy LUT 59.8 as well as Policies LUT 11.1 through 11.5 and Objective LUT 8 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the Mid-Broadway District, but do not reduce the impact to below a level of significance. While the policies require design guidelines be prepared that step back building heights to visually blend with the existing single-family area, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Mid-Third Avenue District. The Mid-Third Avenue District consists primarily of professional offices north of J Street and a mix of retail and professional offices uses south of J Street. The Preferred Plan for the Mid-Third Avenue District would remain relatively stable, with primarily office uses, some housing between I and J Streets, and segregated retail and office uses between J and L Streets. Land uses on the west side of Third Avenue, south of J Street, would provide local retail services for adjoining residential neighborhoods, while the east side of Third Avenue would consist of offices. Building heights for the Mid-Third Avenue District would be primarily low-rise, with some mid-rise buildings. Objective LUT 60 reinforces the existing land use patterns of predominantly retail uses on the west side of Third Avenue, and office uses on the east side of Third Avenue between J Street and L Street. Policy LUT 60.3 addresses future development within the Mid-Third District:

> LUT 60.3: The Urban Core Specific Plan shall establish design guidelines and/or zoning standards that provide for buildings heights that step down adjacent to single family neighborhoods.

Implementation of Policy LUT 60.3 as well as Policies LUT 11.1 through 11.5 and Objective LUT 8 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the Mid-Third District, but do not reduce the impact to below a level of significance. While the policies require design guidelines be prepared that step back building heights to visually blend with the existing single-family area, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

SOUTHWEST PLANNING AREA

As discussed in Section 5.1.1.1 above, the existing character of the community within the Southwest Planning Area consists of several mature neighborhoods, including Harborside, Castle Park, Otay Town, Woodlawn Park, Broderick Acres, Whittington Subdivision and West Fairfield. The planning area has a grid street pattern and a diversity of land uses, including a mix of residential, commercial, and industrial businesses that, in some cases, have evolved over time without adequate planning, and have resulted in land use conflicts. The Southwest Planning Area has one subarea for which changes are proposed as part of the General Plan Update, the Montgomery Subarea. Within the Montgomery Subarea, the objectives and policies, as well as changes to existing land use designations, are intended to focus redevelopment efforts generally south of L Street along the South Broadway, South Third Avenue, and Main Street corridors, and on either side of I-5 in the vicinity of the Palomar Street Trolley and the West Fairfield area. Among the important goals for this area is facilitation of economic opportunities through appropriate designation of transit-oriented, industrial, commercial and higher-density residential in mixed-use or other appropriate density to facilitate smart growth planning.

The acreage of land uses by district for the Montgomery Subarea is provided in Table 5.1-4 and illustrated in Chart 5.1-3. As is shown on this chart, the acreage designated for residential use increases with the proposed amendments over the adopted General Plan and remains about the same as the existing condition. In all cases, the acreage designated for industrial use is higher than it is for the existing condition. A comparison of the residential units for the Montgomery Subarea is shown in Chart 5.1-2. This chart illustrates the residential use increases with the proposed amendments over existing conditions. An estimated 3.5 square miles of the previously adopted Montgomery Specific Plan area are located within this update area. Until that specific plan is modified, development within the Specific Plan area is subject to the regulations of the Montgomery Specific Plan, adopted by the City in 1988.

The General Plan Update would reduce impacts to adjacent parcels below a level of significance by requiring that the quality of existing, stable residential neighborhoods be maintained (Policy LUT 4.2), ensuring that development adheres to sized and designed to be

TABLE 5.1-4
LAND USE BY DISTRICT FOR THE MONTGOMERY SUBAREA[1,2,3,4,5,6]
(acres)

District/Type	Scenario 1	Scenario 2	Scenario 3	Preferred	Existing
Main Street					
Commercial	7	5	32	10	20
Industrial	279	287	257	245	174
Open space	91	91	91	102	
Other					179
Park	10	10	10	35	4
Public	16	16	16	16	16
Residential	150	144	147	144	158
Main Street Total	553	553	553	553	553
Palomar Gateway					
Commercial	62	54	52	58	53
Industrial	38	36	47	36	47
Open space	5	5	5	5	
Other					25
Park	5	5	5	9	
Public	10	10	10	10	10
Residential	72	81	73	73	57
Palomar Gateway Total	192	192	192	192	192
South Broadway					
Commercial	64	48	48	54	42
Industrial	14	14	14	14	23
Open space	8	8	8	8	
Other					6
Residential	66	83	83	77	81
South Broadway Total	152	152	152	152	152
South Third Avenue					
Commercial	52	55	73	50	60
Industrial					2
Open space	13	9	9	9	
Other					12
Park	10	10	10	10	4
Public	20	20	20	20	22
Residential	81	81	64	86	75
South Third Avenue Total	175	175	175	175	175
West Fairfield					
Commercial	58		15	58	2
Industrial		58			5
Other					46
Residential			44		5
West Fairfield Total	58	58	58	58	58
TOTAL	1,130	1,130	1,130	1,130	1,130

[1]Includes existing parks that are designated public and quasi-public under the adopted General Plan and would remain designated as public and quasi-public.
[2]Mixed use designations are comprised of commercial and residential transit focus areas in some areas.
[3]Park acreage for Scenarios 1, 2, and 3 does not reflect the ultimate park acreage.
[4]Totals may vary due to rounding.
[5]Other includes vacant, easements, and right-of-way
[6]Approximately 38 acres located outside adopted General Plan boundary are being considered for addition to the general Plan area.

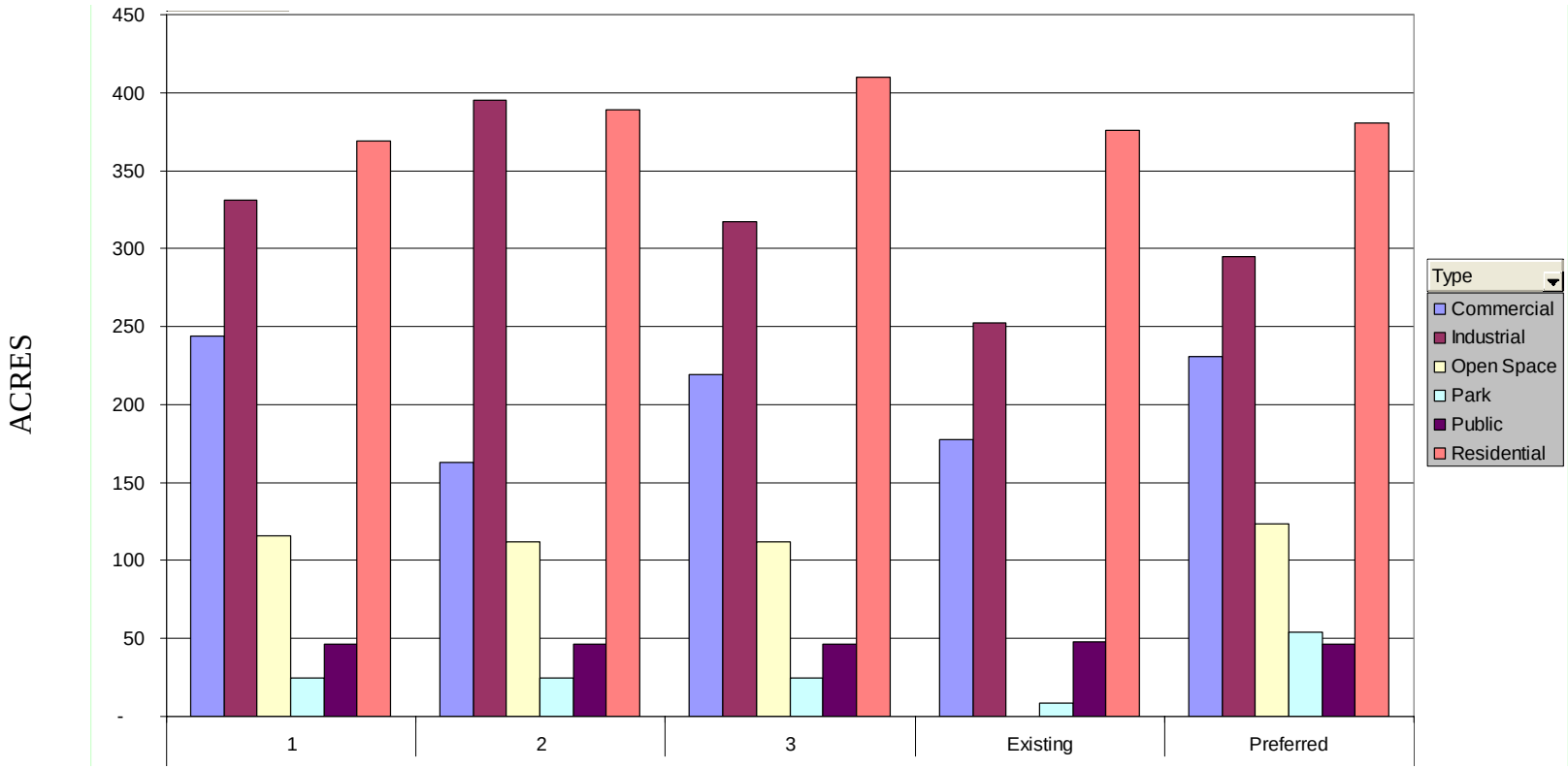

Chart 5.1-3
Land Use Comparison
Montgomery Subarea

compatible with the neighborhoods character (Policy LUT 4.4), and ensures good street design to minimize and control traffic in residential neighborhoods (Policy LUT 4.6). Implementation of citywide and specific policies for the Montgomery Subarea is intended to facilitate revitalization while preserving assets. The General Plan Update contains six objectives which apply specifically to the overall Montgomery Subarea (Objectives LUT 35-45). One major objective is to provide the community with its own civic and town focus along Third Avenue near Oxford Street. Policies target the need to improve circulation between this and other areas of the city, upgrade commercial activity centers, and provide for the protection and enhancement of existing residential neighborhoods by increasing residential, retail, commercial and professional services through mixed-use development. Special attention is given to the area of the Palomar Trolley Station and southerly segments of Broadway and Third Avenue. Proposed land use changes are also intended to maximize use of the existing and future transit routes along Palomar Street, Third Avenue, and Industrial Boulevard. Policies to phase out or relocate conflicting uses would enhance overall community character of the area.

Planning efforts are directed at improving transportation linkages between the area, downtown and the bay to enhance connectivity to other areas of the city. These measures are intended to preserve and enhance community character through development of a town focus and additional measures to develop architectural guidelines, improve code enforcement, upgrade infrastructure, and underground utilities.

As discussed in Section 3.5.1.2, the Montgomery Subarea contains five districts that may be subject to change over time as the city continues to mature. These districts include the South Third Avenue District, South Broadway District, Palomar Gateway District, West Fairfield District, and the Main Street District. Specific objectives and policies are proposed to preserve the character and retain the quality of the adjacent existing, residential neighborhoods within each of these districts. The following discussion analyzes the effects to community character from the adoption of the Preferred Plan within the five districts of the Montgomery Subarea.

South Third Avenue District. The South Third Avenue District consists primarily of retail and services along Third Avenue, which support adjacent residential areas. Civic uses, including a post office and Lauderbach Park, are located near the intersection with Oxford Street. The Preferred Plan proposes an area with neighborhood-serving commercial uses and good transit service for residents of the single-family and multi-family homes. The transit station is within a quarter mile of the Oxford Street/Third Avenue intersection, which would enable the Oxford Town area to extend and be redeveloped south on Third Avenue to the intersection of Palomar Street and Third Avenue. Due to proximity to transit, residential densities would be higher south of Oxford Street than north of Oxford Street. Objective LUT 41 encourages redevelopment of the South Third Avenue District to create a vibrant, mixed-use area near the intersection of Oxford Street and Third Avenue. Policies LUT 41.13

through 41.15 address the design aspects of future development within the South Third Avenue District:

LUT 41.13: Prior to or concurrent with the approval of the first specific plan or other zoning regulations in the South Third Avenue Planning District, establish a design code that reinforces the safety and serenity of the area, and seeks to establish a coherent, aesthetic, international character to the Southwest Planning Area.

LUT 41.14: The specific plan or other regulations prepared to guide development in this area shall address design issues that create a sense of place, a pedestrian-friendly environment, enhanced pedestrian linkages, and compatibility with the scale and feel of a cohesive neighborhood community.

LUT 41.15: A specific plan or other regulations in the South Third Avenue District shall require the use of wide sidewalks, through block paseos, and other appropriate design features that enhance the pedestrian environment to link high use areas, such as the post office, library, park, or a concentration of shops, with transit stations or transit stops.

Implementation of Policies LUT 41.13 through 41.15 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the South Third Avenue District, but do not reduce the impact to below a level of significance. While the policies require design standards and guidelines be prepared prior to the approval of the first specific plan or other appropriate document in the Southwest Planning Area to be compatible with the scale and feel of the surrounding neighborhood, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

South Broadway District. The South Broadway District includes automobile services, major retail stores and local-serving services for adjacent residential neighborhoods. Automobile-related/repair shops currently exist on South Broadway from L Street to Naples Street and are not compatible with surrounding uses. The Preferred Plan proposes additional residential units along South Broadway, and the phased removal of conflicting automobile-related service/repair shops from L Street to Naples Street. Automobile-related shops would be focused south of Naples Street within areas designated as light industrial areas along Main Street. This would provide a compatible location for necessary automotive services and avoid land use conflicts that currently exist on South Broadway, north of Naples Street. Objective LUT 42 addresses the revitalization of land uses along South Broadway between L

Street and Naples Street. Policies LUT 42.14 through 42.16 address the provision of guidelines for future development within the South Broadway District:

LUT 42.14: Prior to or concurrent with the approval of the first specific plan or other zoning regulations in the South Broadway District between L Street and Naples Street, prepare specific guidelines for the development of mixed use projects on South Broadway.

LUT 42.15: Concurrent with the approval of zoning for industrial uses at the northwest corner of Industrial Boulevard and Naples Street in the South Broadway District, ensure that light industrial uses on Colorado Street are designed and constructed to front on Colorado Street, provide parking and entry door access on the west side of buildings, and are appropriately buffered from residential uses.

LUT 42.16: Prior to, or concurrent with the approval of the first specific plan or other zoning regulations in the South Broadway District, develop siting guidelines and criteria for locating automobile-related service/repair shops in areas that adjoin residential neighborhoods.

Implementation of Policies LUT 42.14 through 42.16 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the South Broadway District, but do not reduce the impact to below a level of significance. While the policies act to improve upon the appearance of this major corridor and require standards and guidelines be prepared to establish buffering and siting criteria for industrial uses and automobile shops in areas adjacent to the surrounding residential neighborhoods, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Palomar Gateway District. The Palomar Gateway District is characterized by the Palomar Trolley Station located at the southeast quadrant of Palomar Street and Industrial Boulevard. North of Palomar Street are light industrial businesses and multi-family housing. South of Palomar Street consists of a mix of single-family and multi-family housing extending south to Anita Street. The Preferred Plan proposes additional housing and support uses near a regional transit route. Adding higher density residential development within walking distance of the Palomar Trolley Station would provide additional affordable housing opportunities where few currently exist. Objective LUT 43 establishes policies for a Mixed-Use Transit Focus Area surrounding the Palomar Trolley Station. There are two policies that address community character within the Palomar Gateway District:

LUT 43.1: The City shall prepare, or cause to have prepared, a specific plan, master plan, or other regulatory document to guide the coordinated establishment of a Mixed Use Transit Focus Area within the Palomar Gateway District on properties north and south of Palomar Street within walkable distance of the Palomar Trolley Station. The specific plan or other regulatory document shall include guidelines and zoning-level standards for the arrangement of land uses that include plans for adequate pedestrian connections and support services for residents as well as those using the transit station.

The City will prepare an Implementation Program to assure establishment of the above plan/regulations, which Program will also include interim provisions for the consideration of any projects within this area prior to completion and adoption of the according plan/regulations.

LUT 43.10: The specific plan or other regulatory document for the Palomar Gateway District shall establish design and landscape guidelines for the improvement of Palomar Street as a gateway to the City.

Implementation of Policies LUT 43.1, and 43.10 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the Palomar Gateway District, but do not reduce the impact to below a level of significance. The policies would ensure that a Specific Plan be prepared for the Mixed-Use Transit Focus Area which would focuses on appropriate land uses for the area. While the policies require design standards and guidelines be prepared that include design, streetscape, and landscape guidelines to visually blend with the area and establishes a pedestrian friendly environment, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

West Fairfield District. The West Fairfield District has a mix of light industrial and office uses interspersed with older single-family homes and vacant lots. West Fairfield is separated from the rest of Chula Vista, due to Interstate 5 forming its east edge and the San Diego Wildlife Refuge to the west. Pedestrian routes across the freeway are limited and road area heavily traveled by cars and trucks. A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA. The City of San Diego portion is approximately 38 acres and is designated within the San Diego MHPA as “developed.” Any development proposed in this area would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update. The annexation requirements for this area are discussed

in Section 5.3.3.4 of the Biology section of this report, and requires that the City of Chula Vista reach an agreement with the City of San Diego and the wildlife agencies regarding appropriate conservation and consistency with the goals of the MSCP.

The Preferred Plan proposes a mix of retail commercial, professional office, and potentially a small amount of limited manufacturing designated as Mixed-Use Commercial. An educational facility within the West Fairfield District to serve the residents of the South Bay and take advantage of transit facilities at the Palomar Trolley Station is also proposed. Development of mixed-use commercial provides the City with an opportunity to enhance the city's image along the I-5 corridor as new uses are proposed and constructed along this highly visible segment. The introduction of mixed-use commercial could serve as a catalyst to revitalization by increasing the number of jobs and economic vitality of this area. Uses would be proximate to the Palomar Street Trolley Station and other transit-oriented development proposed in the area and would conform to smart growth objectives, serving to contribute to community cohesiveness and providing an area of focus for neighborhood activities.

Objective LUT 44 contains policies that address the redevelopment of the West Fairfield District into an employment center. Policy LUT 44.1 requires a Specific Plan to guide redevelopment within the district:

> LUT 44.1: The City shall prepare, or cause to have prepared, a specific plan,-master plan or other regulatory document to coordinate and guide the comprehensive redevelopment of the West Fairfield District.
>
> The City will prepare an Implementation Program to assure establishment of the above plan/regulations, which Program will also include interim provisions for the consideration of any projects within the West Fairfield District area prior to completion and adoption of the applicable plan/regulations.

This policy would reduce any adverse effect on the community character within and adjacent to the West Fairfield District but not to below a level of significance. While the policy addresses allowable uses, design standards, and general development requirements, these requirements cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

The West Fairfield District currently consists of both vacant and occupied parcels and is located immediately to the east and north of the South San Diego Bay Unit of the San Diego

Bay Wildlife Refuge. The purpose of the wildlife refuge is to protect and manage key habitats for endangered and threatened species and maintain areas of high biological diversity in San Diego County. The Preferred Plan proposes a mix of retail commercial, professional office, research and limited manufacturing designated as Mixed-Use Commercial adjacent the wildlife refuge. This designation would allow for more intensive development, which has the potential to bring more people and/or activity to the area than what is currently there. This would result in significant impacts to the adjacent protected habitat within San Diego Bay Wildlife Refuge.

Main Street District. The Main Street District is predominantly an industrial corridor. While there are relatively large commercial properties on the north side of Main Street, west of Broadway, remaining land uses on the north and south sides of Main Street consist of light industrial uses. Several storage facilities and some businesses consisting of outdoor storage areas exist in the area. The Preferred Plan proposes Limited Industrial uses on Zenith Street and within previously disturbed development areas south of Main Street to the edge of the Otay River Valley open space. Redesignation of existing residential on the south side of Zenith Street from just west of Fourth Avenue easterly to Albany Avenue to industrial use is incompatible with existing residential uses which would be maintained on the north side of Zenith Street unless suitable buffers or design guidelines are implemented**.** The proposed industrial use is compatible with existing industrial uses to the south along Main Street and with retail uses along Third Avenue. A benefit of the proposed change would be to provide increased job opportunities proximate to the future transit station at Main Street and Third Avenue and residential neighborhoods which conform to smart growth objectives.

Objective LUT 45 sets policies to provide for and enhance a strong business district along Main Street that can be balanced between meeting the community's economic needs and establishing a strong open space connection with the nearby neighborhoods. Policies 45.5, 45.13, and 45.14 address community character and future development within the Main Street District.

LUT 45.5: The City shall prepare, or cause to have prepared, a specific plan or plans, for the Main Street District that address an increase in depth of Limited Industrial designated land use on the north side of Main Street back to Zenith Street; establishes design and landscape guidelines and zoning-level standards; and addresses the interface of the Otay Valley Regional Park with land uses on or near Main Street.

The City will prepare an Implementation Program to define logical planning units within the overall Main Street District, and to assure establishment of the above plans/regulations for the overall District and the identified planning units. The Implementation Program will also include interim provisions for the consideration of any projects

within this area prior to completion and adoption of the applicable plan/regulations.

LUT 45.13: The appropriate Specific Plans for the Main Street Corridor shall include design guidelines and standards that address urban development adjacent to the Otay Valley Regional Park.

LUT 45.14: Require development adjacent to the Otay Valley Regional Park to orient buildings for maximum public access to open space and to provide compatible landscaping along the Park's edge.

Implementation of Policies LUT 45.5, 45.13, and 45.14 as well as Policies LUT 11.1 through 11.5 would reduce the community character impact resulting from the adoption of the Preferred Plan within and adjacent to the Main Street District, but do not reduce the impact to below a level of significance. While the policies require design standards and guidelines be prepared that include design, streetscape, and landscape and buffer guidelines to visually blend with the area and address the interface of the Otay Valley Regional Park with the proposed land uses, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

EAST PLANNING AREA

Proposed revisions to the City's adopted land use plan in the East Planning Area would result in adjustments to the boundaries and overall densities for residential, commercial, industrial, and public/quasi-public uses. The amount and location of open space and parklands would also be adjusted. The acreage of land uses by district for the Otay Ranch Subarea and land uses within the East Main Street Subarea is provided in Table 5.1-5. A comparison of the residential units for the Otay Ranch and East Main Street Subareas are shown in Chart 5.1-2. This chart illustrates that residential use increases slightly with the proposed amendments over the adopted General Plan within the East Main Street Subarea and decreases slightly within the Otay Ranch Subarea. Currently, the land within both of these subareas is undeveloped~~vacant~~; therefore, any proposed changes would cause an increase over the existing condition.

The Preferred Plan has the potential to cause an adverse effect on the community character of the surrounding villages within the East Planning Area adjacent to the areas of change. The proposed Land Use and Transportation Element addresses issues and presents policies that are important to the entire East Planning Area as well as issues and policies for the six subareas. There are five objectives which apply to the East Planning Area. These objectives include policies to: create balanced communities to maintain a high quality of life for its residents (Objective LUT 61); require development to consider and plan for careful use of

TABLE 5.1-5
LAND USE BY DISTRICT FOR THE OTAY RANCH SUBAREA[1,2,3]
(acres)

District/Type	Scenario 1	Scenario 2	Scenario 3	Preferred	Adopted
Central					
Commercial	32	44	14	18	19
Industrial	0	0	337	0	0
Open space	11	11	0	11	0
Park	110	115	94	101	31
Public	95	95	85	103	95
Residential	670	652	388	472	773
Central Total	918	918	918	705	918
Eastern University District (except Freeway Commercial and EUC)					
Commercial	34	34	34	51	43
Industrial	0	0	0	200	0
Open space	0	0	0	0	66
Park	22	25	15	24	0
Public	647	493	698	540	671
Residential	77	229	34	178	0
Eastern University District (except Freeway Commercial and EUC) Total	780	780	780	993	780
Eastern University District (Freeway Commercial and EUC					
Commercial	345	311	345	273	320
Industrial	0	0	0	0	0
Open Space	0	0	0	0	0
Park	20	24	20	35	45
Public	10	10	10	35	10
Residential	0	30	0	32	0
Eastern University District (Freeway Commercial and EUC Total	375	375	375	375	375
Otay Valley					
Commercial	0	29	29	0	0
Industrial	40	40	40	40	0
Open space	36	0	36	36	262
Park	209	194	180	209	0
Public	0	0	0	0	23
Residential	0	22	0	0	0
Otay Valley Total	285	285	285	285	285
Western					
Commercial	14	21	21	46	19
Industrial	261	171	302	261	261
Open space	39	0	39	39	39
Park	14	24	14	15	37
Public	54	54	54	54	54
Residential	332	445	284	299	304
Western Total	714	714	714	714	714
TOTAL	3,072	3,072	3,072	3,072	3,072

NOTE: In the Preferred Alternative, 212.1 acres immediately west of SR-125 is included in the Eastern University District. In Scenarios 1, 2, and 3, these 212.1 acres are included in the Central District. Consequently, in the Preferred Alternative, the Eastern University District's are total is 212.1 acres larger than in Scenarios 1, 2, and 3. Correspondingly, in the Preferred Alternative, the Central District's area total is 212.1 acres less than in Scenarios 1, 2, and 3.
Totals may vary due to rounding.

[1]Includes existing parks that are designated public and quasi-public under the adopted General Plan and would remain designated as public and quasi-public.

[2]Mixed use designations are comprised of commercial and residential transit focus areas in some areas.

[3]Park acreage for Scenarios 1, 2, and 3 does not reflect the ultimate park acreage.

natural and man-made resources (Objective LUT 62); provide efficient multi-modal access and connections to and between activity centers (Objective LUT 63); establish an urban center to function as the high density, mixed-use downtown and regional heart of the Otay Ranch Subarea and East Planning Area (Objective LUT 64); and promote and provide for the future location of a higher education facility in the East Planning Area (Objective LUT 65).

Unincorporated Sweetwater Subarea. The Unincorporated Sweetwater Area is composed of primarily stable, well-maintained single-family neighborhoods, limited supporting retail commercial, and substantial open space, including the Sweetwater Regional Park. The Area has been within the City's General Plan Area and Sphere of Influence for over 20 years. The Sweetwater Area and Chula Vista are tied through naturally supportive infrastructure and services, and the actions of each have an influence upon the other.

As a largely developed community, residents' and property owners' general, current desire is to remain unincorporated. At present, guiding land use and other general plan policies for the area are contained within San Diego County's General Plan and the County's Sweetwater Community Plan. The Preferred Plan does not propose any changes within the Sweetwater Subarea. The area would continue to be an area of well-maintained single-family residential neighborhoods that are compatible with and complement adjacent neighborhoods. The General Plan Update establishes Objective LUT 66 which would ensure the ongoing and future coordination with the County of San Diego to ensure existing and planned land use compatibility.

Otay Ranch Subarea. The Otay Ranch Subarea consists of a number of villages that integrate neighborhoods, shops and employment opportunities with parks, schools and other civic facilities to create a community with a shared sense of pride and place. Neighborhoods are designed to encourage community interaction. More detailed master planning through the Otay Ranch GDP and subsequent Sectional Planning Area (SPA) Plans is required prior to the development of individual villages. Village SPA Plans are based upon the objectives and policies of the General Plan, and the guiding principals as expressed in the Otay Ranch GDP. Amendments are proposed to the Otay Ranch GDP which are consistent with the proposed General Plan Update. These proposed GDP amendments consist of revisions to the GDP text and to the GDP land use maps and tables. The proposed GDP amendments are analyzed below in Section 5.1.3.2, Regulatory Plans and Policies.

The acreage of land uses by District for the Otay Ranch Subarea is provided in Table 5.1-5 and illustrated in Chart 5.1-4. As is illustrated on this chart, the acreage designated by the Preferred Plan for residential, industrial, and commercial land use is increased over existing conditions. The proposed Land Use and Transportation Element addresses issues and presents policies that are important to the Otay Ranch Subarea as well as issues and policies for the four districts within the subarea. Five objectives apply specifically to the Otay Ranch Subarea. These objectives include policies to: develop comprehensive, well-integrated and

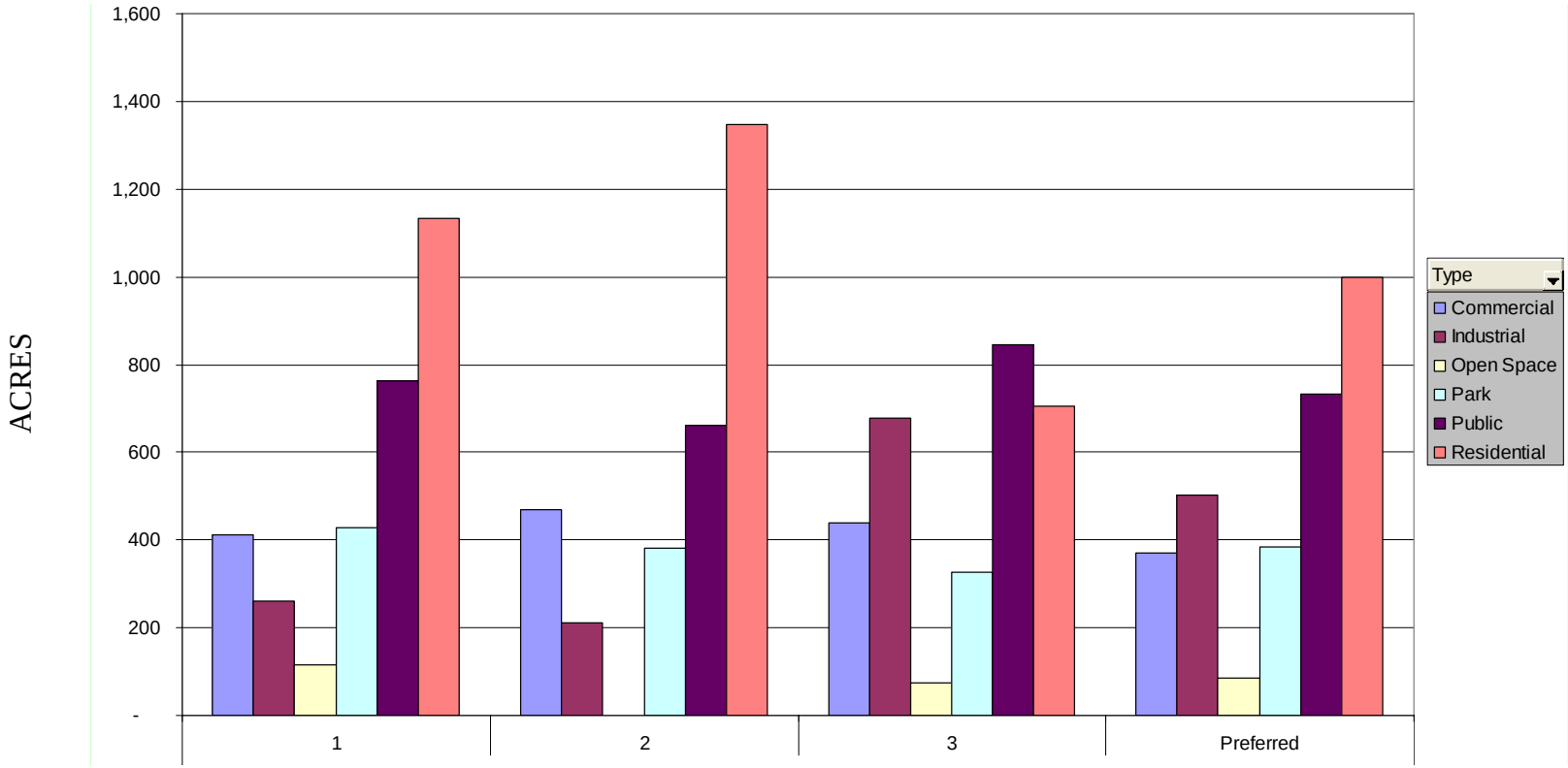

Chart 5.1-4
Land Use Comparison
Otay Ranch Subarea

balanced land uses within villages and town centers, compatible with the surroundings (Objective LUT 72); promote alternative modes of transportation (Objective LUT 73); accommodate land uses that diversify the economic base within Otay Ranch and the surrounding south San Diego County region (Objective LUT 74); preserve and protect Otay Ranch's significant resources and open space lands with environmentally sensitive development (Objective LUT 75) and; provide public services and facilities to meet the needs of the Otay Ranch residents (Objective LUT 76).

The proposed General Plan Update would establish a new Town Center (TC) land use designation that allows for higher density housing, office, retail and other commercial development than allowed in traditional village cores in Villages 8 and 9 (Central and Eastern University Districts respectively) within the Otay Ranch Subarea. Town centers would use a more extensive grid street system, which promotes direct access for pedestrians, cyclists, and cars from the surrounding village developments. A new street system classification ("Town Center Arterial") necessary to serve Town Centers is also proposed.

Although there could be a reduction in the total area encompassed by the quarter-mile walking radius surrounding a Town Center compared to the Village Cores, the Town Center plan increases multi-family residential densities surrounding the Town Centers to correspond with transit policies of a minimum of 18 dwelling units per acre. Additionally, the town centers would result in the extension of the transit service to as yet undeveloped villages that previously were not served by transit. Inclusion of the new Town Center designation and implementation of policies included in the General Plan Update would not result in a significant adverse affect on community character because there would be an increase in densities around community centers providing increased access to transit and improved pedestrian access to services.

The Otay Ranch Subarea has four planning districts: the Western District (Villages 2, 2 West, and 3); the Central District (Villages 4, 7, and the westerly portion of Village 8); the Eastern University District (Village 9, University Campus, Planning Area 12, and the easterly portion of Village 8); and the Otay Valley District. Specific objectives and policies are proposed to facilitate compatible land uses within and between each of the districts as well as preserve the character and retain the quality of the surrounding areas. The following discussion analyzes the effects to community character from the adoption of the Preferred Plan within the four districts of the Otay Ranch Subarea.

Western District

The Western District borders the Otay Landfill on three sides; therefore, it is important that appropriate land uses be designated within the established landfill buffer to avoid impacts to air quality, noise, hazards, and public safety. The Preferred Plan proposes industrial land uses adjacent to the Otay Landfill (see Appendix B). This plan eliminates the option for residential uses in place of industrial uses within Village Three from the Otay Ranch GDP.

Objective LUT 79 addresses the development of the Western District and would establish policies for appropriate land uses adjacent to the landfill.

Objective LUT 79

Establish appropriate land uses adjacent to the Otay Landfill and Wolf Canyon that reflect the unique land use and landform characteristics of these areas.

Policies

LUT 79.1: Prior to or concurrent with the approval of a SPA Plan for Village Two, Two West, and the Otay Ranch industrial/business park, ensure that the design of these areas reflects the unique characteristics of the landform and surrounding land use.

LUT 79.2: Preserve and protect view opportunities and provide view corridors to open space areas to the south and east from the high mesa locations of Village Two and from along the edges of Poggi and Wolf Canyons.

LUT 79.4: Prior to or concurrent with approval of a SPA Plan for Village Two West, ensure that single-family residential development in Village Two West provides appropriate open space adjacent to industrial uses that are located adjacent to the Otay Landfill.

LUT 79.5: Limit land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks.

Implementation of these policies would ensure that the Preferred Plan does not result in a significant impact associated with land uses adjacent to the landfill because the policies ensure that a transition from the landfill is provided by proposing light industrial between the landfill and the residential uses within Village Two. The policies would also ensure that the Preferred Plan does not result in a significant impact associated with land uses adjacent to Poggi and Wolf Canyon because the policies ensure that the design of these areas reflects the unique characteristics of the landform and surrounding land use as well as establish that landform grading techniques be utilized adjacent to the canyon.

Central District. The Central District of the Otay Ranch Subarea is comprised of Villages Four, Seven and Eight of the Otay Ranch GDP. The Preferred Plan for the Central District proposes a mixture of land uses and intensities that includes a large community park, a pedestrian-oriented mixed-use town center; single-family and multi-family residential uses surrounding a typical village core; and a middle school. A pedestrian-oriented Town Center,

with transit services and town center arterials in the form of "couplets" or other pedestrian-oriented arterial street design, is proposed along portions of La Media Road and Rock Mountain Roads where Villages Four, Seven, and Eight meet. As part of the Preferred Plan, the alignment of Rock Mountain Road is being revised and the extension of Main Street is being eliminated. The purpose of this realignment is to minimize road construction to MSCP Preserve land in Otay Valley and limit the environmental effects of the road in Wolf Canyon. Objective LUT 81 and associated policies address development within the Central District:

> **Objective LUT 81**
>
> Develop a higher density, mixed-use, transit-oriented town center centered on the intersection of Rock Mountain Road and La Media Road, surrounded by lower density residential use and a large community park, and preserve Rock Mountain as an important landform and visual resource.

A pedestrian-oriented Town Center and a new street system classification or arterial necessary to serve Town Centers is proposed within the Central District. Changes that include the new Town Center designation and implementation of policies included in the General Plan Update would ensure that the Preferred Plan does not result in a significant adverse impact on community character because there would be an increase in densities around community centers providing increased access to transit and improved pedestrian access to services.

Otay Valley District. Currently, the Otay Valley District is made up of primarily undeveloped and relatively level properties located on both sides of the Otay River. The District also includes a topographically constrained site, for which a portion of which has been used for industrial activities. The Preferred Plan proposes Open Space-Active Recreation, Light Industrial, and Open Space uses within the Otay Valley District (see Appendix B). This plan would redesignate approximately 209 acres from Open Space to Active Recreation in accordance with the adopted Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan (RMP). Only limited commercial uses/activities related to active recreation would be permitted within the area, consistent with the Chula Vista MSCP Subarea Plan and the RMP.

The Otay Valley District contains the "Bird Ranch" site and a former gun club. Because of the age and past use of Bird Ranch, the GPU requires an evaluation of the historic value of the ranch prior to any significant alteration. If Bird Ranch is determined to be an historic resource in accordance with Section 15064.5 of the State CEQA Guidelines, any impacts to the historical value of Bird Ranch resulting from development allowed under the proposed General Plan Update would be significant.

Proposed Objectives LUT 82 and 83 and associated policies would direct future development within the Otay Valley district without threatening the valuable resources:

Objective LUT 82

Designate and allow for appropriate and carefully planned land uses that provide additional recreational activities, both public and private, that do not threaten the viability of sensitive biological habitats or the Otay Valley's function as a key component of the Otay Ranch Preserve.

Policies

LUT 82.1: Limit public and private active recreational uses to the previously disturbed, non-sensitive areas deemed appropriate for active recreation development by the City's MSCP Subarea Plan and Otay Ranch Resource Management Plan. Access to these sites should be readily accessible from existing and planned public roads and should not intrude into core Preserve areas.

LUT 82.2: Prior to the approval of any project that proposes in the demolition or significant alteration of a potentially significant historic resource within the "Bird Ranch" property in Otay Valley, as defined pursuant to applicable state and federal laws, require the completion of an historic survey report to determine significance. If determined to be significant, require appropriate and feasible mitigation, pursuant to CEQA Guidelines Section 15064.5.

LUT 82.3: Active recreation uses authorized by Policy LUT 82.1, above, shall be sited to minimize the potential negative effects of these uses on adjacent Preserve areas.

LUT 82~~1~~.4: Prior to approval of any discretionary permit in the Otay Valley District ensure that the proposed project is consistent with the Otay Valley Regional Park Concept Plan, and assist implementation of the Concept Plan through project features and design that support or provide access, staging areas, trails, and appropriate buffering.

Objective LUT 83

Promote limited industrial development opportunities, where appropriate access to non-residential circulation roadways is provided and environmental impacts are minimized.

Policies

LUT 83.1: Allow limited industrial development on property east of Heritage Road and south of Otay Valley, subject to the preparation of a master development plan that addresses appropriate street improvements, vehicular access, screening from public viewsheds, development infrastructure, protection of adjacent environmentally sensitive resources, water quality, and phasing.

Implementation of Policies LUT 82.1 through 82.4 ensure that the Preferred Plan does not result in a significant land use impact adjacent to the Otay Ranch Preserve, the Otay River, and to the potentially historic structures on the Bird Ranch site by providing appropriate preservation of the historic Bird Ranch structures, limiting public and private active recreational uses to the previously disturbed, non-sensitive areas deemed appropriate for active recreation development by the City's MSCP Subarea Plan and Otay Ranch Resource Management Plan that supports or provides access, staging areas, trails, and appropriate buffering. This would minimize the negative effects of these uses on sensitive resources within the MSCP Preserve. Additionally, Policy LUT 83.1 requires limited industrial development in the "southwest corner" on properties east of Heritage Road and south of the Otay Valley to the preparation of a master development plan that addresses appropriate street improvements, vehicular access, screening from public viewsheds, development infrastructure, protection of adjacent environmentally sensitive resources, water quality, and phasing. This further ensures impacts associated with land uses adjacent to the Otay Ranch Preserve and the Otay River does not result in a significant impact.

Eastern University District. The Eastern University District is an approximately 1,400-acre area comprised of five focus areas. The five focus areas are undeveloped and are in various stages of planning. The five primary land uses for the five focus areas within the State Route 125 corridor include: (1) a region-serving urban center with the highest residential densities and an office/commercial focus; (2) a sub-regional retail/life style center; (3) higher education institution(s) that make up a multi-institutional university center or a traditional university campus; (4) town center providing university-related retail, service, cultural and entertainment centers; and (5) a research and technology oriented light industrial business park. Within this District, a "University Study Area" would be designated in the GPU on properties that surround the site of the future campus in order to maximize the opportunities resulting from the planned university campus. The University Study area includes the Eastern Urban Center, Regional Technology Park, University Campus, and University Village Focus Areas.

The Preferred Plan proposes approximately 530 acres as public and quasi-public for a university campus and deletes secondary land uses underlying the current university designation (residential alternative) from the Otay Ranch GDP that could otherwise potentially be developed. This represents a reduction in the area specifically designated for

the university from the 1,270 acres under the adopted General Plan. The Preferred Plan designates the area surrounding the campus as a new Town Center, which would establish a university-oriented town center of transit serving mixed-use and medium-high residential densities. Therefore, the secondary residential land use is effectively removed and the Town Center is being established. These changes would not result in an incompatible use because a mixed-use residential land use designation is consistent with the existing single-family residential designation.

Objectives LUT 84, 85, and 86 and their associated policies for the Eastern University District in the proposed General Plan Update focus on housing, economic, cultural, and academic factors and relationships within this area. Significant impacts to community character would occur if land uses are not planned to facilitate compatible land use. The following policies address the community character and future land uses within the Eastern University District:

LUT 85.4: As part of any SPA plan within the University Study Area, establish a coordinated system of physical elements that interconnect and unify the corridor's Focus Areas, including streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character.

LUT 85.6: Complete preparation of a framework strategy for the University Campus, University Village, Eastern Urban Center and Regional Technology Park Focus Areas included within the "University Study Area" prior to or concurrently with any future GDP amendments and/or SPA plans for villages within the Eastern University District. This strategy shall identify and consider important land use, economic, circulation, and design elements, and relationships between these Focus Areas. The strategy shall also identify key principles or "ground rules" for development to allow subsequent SPA planning for the individual focus areas and ownerships to proceed independently.

Implementation of these policies would reduce community character impacts resulting from the adoption of the Preferred Plan within and between the focus areas in the Eastern University District, but do not reduce the impact to below a level of significance. While the policies establish a SPA Plan for the University Study Area that interconnect and unify the corridor's focus areas, including streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character as well as intermixing uses that support and complement those contained in adjoining districts and subareas, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Policy LUT 85.6 establishes the use of a framework strategy for the University Study Area to identify the housing, economic, cultural and academic factors to be considered with subsequent land planning documents. Implementation of these policies and requiring a framework strategy to guide future development and subsequent detailed planning would reduce any community character impacts resulting from the adoption of the Preferred Plan within and between the focus areas in the Eastern University District, but do not reduce the impact to below a level of significance. The framework strategy would focus on the development of the university site and the integration of adjacent uses, urban form, and community character within the area. Development of the framework strategy would be done prior to or concurrently with any future GDP amendments and/or SPA plans for villages within the Eastern University District. The current project is a General Plan Update and the development of the framework strategy is a specific plan effort. Until the framework strategy is developed and zoning specifications are implemented impacts remain significant.

East Main Street Subarea

The East Main Street Subarea consists of approximately 1,800 acres with varied land uses that include single-family neighborhoods along Brandywine Avenue; entertainment sites such as Coors Amphitheater and Knott's Soak City waterpark; the Otay Landfill; and several auto-wrecking yards. The Preferred Plan proposes retail commercial along Main Street and medium residential land uses on Brandywine Avenue within the East Main Street Subarea. Proposed Objective LUT 70 and associated policies establish policies that direct future development within this subarea to expand and/or establish commercial uses to serve residents and visitors; to increase city revenues; and to improve the district's appearance:

Objective LUT 70

Develop and improve the East Main Street Subarea to expand and/or establish commercial uses to serve residents and visitors; to increase City revenues; and to improve the area's appearance.

Policies

LUT 70.1: Maintain the existing stable single-family neighborhoods.

LUT 70.2: Support the existing entertainment uses and seek to expand their activities, including other compatible uses.

LUT 70.3: Phase out the auto wrecking yards by expediting the process of relocation.

LUT 70.4: Preserve and protect significant resources and open space lands with environmentally sensitive development.

LUT 70.5: Resolve any existing boundary issues between the City and other jurisdictions.

Changes to existing land uses in the East Main Street Subarea and implementation of policies associated with Objective LUT 70 would not physically divide the community or result in a significant adverse affect on community character.

The following discussion focuses on the difference between the Preferred Plan and the individual scenarios. Where the impacts are the same as the Preferred Plan listed above, they are not repeated below.

Scenario 1

NORTHWEST PLANNING AREA

As with the Preferred Plan, Scenario 1 modifies designated land uses within the Northwest Planning Area to allow for an increase of mixed-use development. This scenario would introduce increased residential density in areas currently restricted to retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and increased residential and transit-oriented uses in the vicinity of major transit corridors.

The acreage of land uses by District for the Urban Core Subarea is provided in Table 5.1-3 and illustrated in Chart 5.1-1. As is illustrated on this chart, there would be more acreage of land designated for residential use with Scenario 1 as compare to either the Preferred Plan or existing conditions. There are also a greater number of units planned for this Scenario than any of the other Scenarios. A comparison of the residential units for the Urban Core Subarea is shown in Chart 5.1-2. As illustrated on Chart 5.1-1 and Chart 5.1-2, the acreage of land designated for residential use and the residential units would increase for the Scenario 1 compared to the Preferred Plan and existing conditions. In general, proposed uses would result in an increase in development density in conformance to smart growth goals which would be considered a positive effect on the urban core subarea and city as a whole.

As with the Preferred Plan, Scenario 1 would implement the objectives and policies of the General Plan Update. Implementation of the objectives and policies included in the General Plan Update would reduce any impacts associated with community character within the Northwest Planning Area for Scenario 1, but do not reduce the impact to below a level of significance. While these policies would address community character and provide for improved connectivity between neighborhoods and open space; protections for important natural landform features and historic resources; installation of special treatments along gateways, including themed signage and landscape material; and other measures that preserve or protect community character and cohesion, they cannot be developed with available information. The current project is a General Plan Update and the development of design

standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

SOUTHWEST PLANNING AREA

As compared to existing conditions and the Preferred Plan, Scenario 1 would increase the transit focus area at the Palomar Street Trolley Station, retain retail uses on Broadway south of L Street and north of Naples Street, introduce mixed-uses on Third Avenue and in the vicinity of the Palomar Trolley Station, and expand industrial use in the area south of Main Street on existing designated open space. As with the Preferred Plan, objectives and policies established for the Southwest Planning Area would apply and act to reduce impacts to community character, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Proposed changes in land use under Scenario 1 could adversely affect community character in the following two districts:

Main Street District. Scenario 1 proposes industrial uses adjacent to the MSCP preserve within this district. Under Scenario 1, a reduction of designated open space would occur on lands adjacent to protected habitat within the City's MSCP Preserve in the area south of Faivre Street, east of Broadway, and north of the Otay River Valley. Development with industrial uses south of Main Street would otherwise be consistent with existing nearby and adjacent industrial and retail uses to the north and would not physically divide or adversely affect the community. However, future industrial use adjacent to protected habitat would be a significant impact. Scenario 1 avoids the potentially significant land use conflict from redesignation of residential to industrial use on the south side of Zenith Street as compared to the Preferred Plan.

West Fairfield District. The West Fairfield District currently consists of both vacant and occupied parcels and is located immediately to the east and north of the South San Diego Bay Unit of the San Diego Bay Wildlife Refuge. As with the Preferred Plan, Scenario 1 proposes a mix of retail, commercial, professional office, research, and limited manufacturing designated as Mixed-Use Commercial. An educational facility is also proposed within the West Fairfield District to serve the residents of the South Bay and take advantage of transit facilities at the Palomar Trolley Station. This designation would allow for more intensive development, which has the potential to bring more people and/or activity to the area than what is currently there. This would result in significant impacts to the adjacent protected habitat within the San Diego Bay Wildlife Refuge.

A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA. Any development proposed in this area under this scenario would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update. The annexation requirements for this area is discussed in Section 5.1.3.3 below.

Policy LUT 44.1 requires a Specific Plan to guide redevelopment within the West Fairfield District. This policy would reduce adverse effects on the community character within and adjacent to the West Fairfield District but does not reduce the impact to below a level of significance. While the policy ensures that a Specific Plan be prepared for the area which would address allowable uses, design standards, and general development requirements, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

No other impacts with the potential to disrupt or divide a neighborhood or affect community character have been identified.

EAST PLANNING AREA

As compared to existing conditions and the Preferred Plan, Scenario 1 would increase the residential densities and decrease the commercial and public uses in the Otay Ranch Subarea. Scenario 1 would retain the EUC and the Freeway Commercial areas north of Rock Mountain Road, east of SR-125 as designated under the adopted General Plan. The Regional Technology Park within the Eastern University District located west of SR-125 is not a component of this scenario.

There have been no land uses identified for Scenario 1 that conflict with adjacent land uses or impact community character within the East Planning Area over that of the Preferred Plan. Implementation of the objectives and policies of the General Plan Update would reduce community character impacts but not to below a level of significance. While the policies address community character and provide for improved connectivity between neighborhoods, focus areas, and districts; protections for important natural landform features; and other measures that preserve or protect community character and cohesion, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Scenario 2

NORTHWEST PLANNING AREA

Proposed changes in land use under Scenario 2 could adversely affect community character at two locations: the Chula Vista Center, and along North Broadway. Under Scenario 2, the portion of the Chula Vista Center facing I Street would be designated for medium density residential immediately adjacent to the retail center along I Street in the vicinity of Fifth Avenue. Currently, this area is designated low-medium residential. While the placement of medium density residential would conform to nearby residential uses, the proximity to the Chula Vista Center could result in land use conflicts between the proposed use and existing retail or proposed mixed-use commercial at the Chula Vista Center.

The existing residential uses are redesignated for retail use along north Broadway under Scenario 2. The proximity of retail uses to remaining existing residential uses would be considered a significant community character impact unless specific design features are incorporated to adequately buffer residences from noise, lighting and disruptive activities associated with retail operations. There are no other proposed land use changes which would adversely divide the community or affect community character.

As with the Preferred Plan, objectives and policies established for the Northwest Planning area would apply and act to reduce impacts to community character, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

SOUTHWEST PLANNING AREA

As with the Preferred Plan, objectives and policies established for the Southwest Planning Area would apply and act to reduce impacts to community character, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Proposed changes in land use under Scenario 2 could adversely affect community character in the following two districts over that identified for the Preferred Plan:

Main Street District. Under Scenario 2, a reduction of designated open space would occur by proposing future industrial use on lands adjacent to protected habitat within the City's MSCP Preserve in the area south of Faivre Street, east of Broadway, and north of the Otay River Valley. Development with industrial uses south of Main Street would otherwise be consistent with existing nearby and adjacent industrial and retail uses to the north and would not physically divide or adversely affect the community. However, future industrial use adjacent to protected habitat would be a significant impact.

The proposed designation of low medium density residential (3-6 du/ac) on existing lands designated for industrial use and located south of Main Street, about midway between Industrial Boulevard and Broadway, would introduce a potentially incompatible use to an area surrounded by existing and proposed industrial or existing retail uses. The site is not adjacent to an existing or future transit station or any other residential neighborhoods. Approval of the proposed residential use at this location would therefore be considered a significant direct impact, isolating a future residential use between potentially incompatible uses. This would be a significant impact.

Potentially significant direct land use impacts would also result from the proposed designation of the south side of Zenith Street for retail use**.** Future retail development at this location could impact the existing low medium density residential neighborhood unless design guidelines and other appropriate measures are identified to prevent conflicts with residential uses on the north side of the street.

West Fairfield District. Scenario 2 proposes Limited Industrial within the West Fairfield District adjacent to the San Diego Bay Wildlife Refuge. This designation would allow for more intensive development, which has the potential to bring more people and/or activity to the area than what is currently there. As with the Preferred Plan and Scenario 1, this would result in significant impacts to the adjacent protected habitat within the San Diego Bay Wildlife Refuge.

A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA. Any development proposed in this area under this scenario would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update. The annexation requirements for this area is discussed in Section 5.1.3.3 below.

EAST PLANNING AREA

As compared to existing conditions and the Preferred Plan, Scenario 2 would increase the residential, commercial, and park uses and decrease the public uses in the Otay Ranch Subarea. Scenario 2 would retain the EUC area north of Rock Mountain Road, east of SR-125 as designated under the adopted General Plan. A Regional Technology Park within the Eastern University District is not a proposed component of this scenario. As with the

Preferred Plan, objectives and policies established for the East Planning Area would apply and act to reduce impacts to community character, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Proposed changes in land use under Scenario 2 could adversely affect community character in the following two districts over that identified for the Preferred Plan:

Otay Valley District. Within the Otay Valley District, Scenario 2 proposes to add medium high and high density residential to approximately 23 acres, add approximately 29 acres of mixed-use commercial in support of existing entertainment related land uses and planned residential uses, designate approximately 55 acres previously designated as open space to Open Space-Active Recreation, designate a neighborhood park, and designate approximately 40 acres that is currently utilized as industrial use from Open Space to Limited Industrial. According to Section 6.2.1 of the Chula Vista MSCP Subarea Plan, residential uses are not considered compatible in this area. Residential development in this area completed in conformance with Scenario 2 would therefore have a significant impact.

Western District. Scenario 2 proposes residential uses within the 1,000-foot buffer within Village Two and Sunbow Master Plan Community adjacent to the Otay landfill. The General Plan Update has policies that would limit the placement of residential use in the landfill buffer. Policies LUT 79.1 through 79.5 address land uses adjacent to the Otay Landfill. Objective LUT 79 states:

> Establish appropriate land uses adjacent to the Otay Landfill and Wolf Canyon that reflect the unique land use and landform characteristics of these areas.

Specifically, Policy 79.5 states:

> Limit land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks.

By placing residential uses next to the landfill, future residents would be exposed to potentially excessive levels of dust, odors and noise resulting from landfill activities. Implementation of LUT Policy 79.5 would ensure that development adjacent to the landfill does not result in a significant impact because the policy ensures that a transition from the landfill is provided by proposing light industrial between the landfill and the residential uses

within Village Two. Because Scenario 2 places residential uses adjacent to the landfill, it is in conflict with this proposed policy. As such, it is a significant impact.

Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a Boundary Adjustment to the City of Chula Vista MSCP Preserve. This scenario would remove Preserve land in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. It should be noted that the Preserve Boundary Adjustment proposal depicted in Scenario 2 is not covered by this EIR and, therefore, cannot be adopted as part of any of the proposed General Plan Update actions that rely upon this EIR.

Scenario 3

NORTHWEST PLANNING AREA

As with the Preferred Plan, Scenario 3 modifies designated land uses within the Northwest Planning Area to allow for an increase of mixed-use development. This scenario would introduce increased residential in areas currently restricted to retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and increased residential and transit-oriented uses in the vicinity of major transit corridors.

The acreage of land uses by District for the Urban Core Subarea is provided in Table 5.1-3 and illustrated in Chart 5.1-1. As is illustrated on this chart, there would be more acreage of land designated for residential use with Scenario 3 as compare to either the Preferred Plan or existing conditions. A comparison of the residential units for the Urban Core Subarea is shown in Chart 5.1-2.

Similar to Scenario 2, Scenario 3 proposes replacement of existing residential along North Broadway with retail uses. Proximity to remaining residential uses would be considered an adverse effect unless specific design features are incorporated to adequately buffer residences from noise, lighting, and disruptive activities associated with retail operations.

As with the Preferred Plan, objectives and policies established for the Northwest Planning area would apply and act to reduce impacts to community character for Scenario 3, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

SOUTHWEST PLANNING AREA

Major differences exist between Scenario 3 and the Preferred Plan and other Scenarios for the Southwest Planning Area. These include: designation of the West Fairfield district for mixed-use with residential and a potential educational facility; redesignation of existing residential as limited industrial at the northwest intersection of Industrial Boulevard and Palomar Street/Oxford Avenue; redesignation of existing industrial use along Main Street from west of Fourth Avenue to Albany Avenue, and existing residential on the south side of Zenith Street as retail; and designation of mixed-use and/or higher density residential in the vicinity of the Palomar Trolley Station, along south Broadway and south of Naples Street on Third Avenue, east of existing retail uses. As with the Preferred Plan, objectives and policies established for the Southwest Planning Area would apply and act to reduce impacts to community character for Scenario 3, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Proposed changes in land use under Scenario 3 would adversely affect community character in the following three districts:

West Fairfield. Scenario 3 proposes mixed-use development with residential uses within the West Fairfield District. This could cause significant impacts to nearby wildlife in the San Diego Bay Wildlife Refuge. Scenario 3 has the potential to have a greater impact on the adjacent habitat than the land uses proposed for the Preferred Plan and Scenario 1 and 2 because the scenario includes multi-family residential development at approximately 36 dwelling units per acre. This designation would allow for more intensive development, which has the potential to bring more people and/or activity to the area than what is currently there. This would result in significant impacts to the adjacent protected habitat within the San Diego Bay Wildlife Refuge.

A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA. Any development proposed in this area under this scenario would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update. The annexation requirements for this area is discussed in Section 5.1.3.3 below.

Palomar Gateway District. Scenario 3 proposes limited industrial uses in an existing residential area northwest of the Industrial Boulevard/Palomar Street intersection in the Palomar Gateway District. Surrounding uses include mixed-use residential to the north,

south, and east with limited industrial to the west. Potential significant adjacent land use impacts would result from this land use change.

Main Street District. Scenario 3 proposes industrial uses adjacent to the MSCP preserve within this district. As with Scenarios 1 and 2, a reduction of designated open space would occur under Scenario 3 on lands adjacent to protected habitat within the City's MSCP Preserve in the area south of Faivre Street, east of Broadway, and north of the Otay River Valley. Development with industrial uses south of Main Street would otherwise be consistent with existing nearby and adjacent industrial and retail uses to the north and would not physically divide or adversely affect the community. However, future industrial use adjacent to the MSCP preserve would be considered a significant impact and require mitigation.

Scenario 3 also proposes retail for the area with existing industrial uses along Main Street from west of Fourth Avenue to Albany Avenue, and existing residential on the south side of Zenith Street. This change to retail adjacent to residential and industrial would represent a significant land use adjacency impact.

East Planning Area

As compared to the Preferred Plan, Scenario 3 increases the residential, commercial, industrial, and open space uses and decreases the public uses in the Otay Ranch Subarea. Scenario 3 retains the EUC and the Freeway Commercial areas north of Rock Mountain Road, east of SR-125 as designated under the current General Plan. Proposed changes in land use under Scenario 3 would adversely affect community character in the following two districts:

Eastern University District. Within the Eastern University District, Scenario 3 designates approximately 545 acres designated as public/quasi-public for a university campus, a reduction from 1,270 acres under the adopted plan, and larger than that proposed under Scenarios 1 and 2 and slightly more than under the Preferred Plan. (Note that an undetermined amount of the 1,270 acres of land designated for the university under the adopted plan would be included in open space).

Western District. Scenario 3 also proposes residential land uses on a limited basis adjacent to the Otay Landfill. By placing residential uses next to the landfill, future residents would be exposed to potentially excessive levels of dust, odors and noise resulting from landfill activities. Because Scenario 2 places residential uses adjacent to the landfill it is in conflict with this proposed policy. As such, it is a significant impact.

As with the Preferred Plan, objectives and policies established for the East Planning Area would apply and act to reduce impacts to community character for Scenario 3, but not to below a level of significance. While the policies would establish design standards and guidelines that dictate future development and address community character, they cannot be

developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. As with the Preferred Plan, until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

5.1.3.2 Threshold 2: Regulatory Plans and Policies

Threshold 2 states that the proposed General Plan Update would result in a significant impact to land use if it would conflict with any applicable land use plan, policy, or regulation or an agency with jurisdiction over the project (including but not limited to the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

General Plan

The purpose of the General Plan Update is to adopt land use objectives that better balance land uses, preserve or enhance stable neighborhoods, allow mixed-use development, avoid or minimize potential conflicts between uses, enhance the community image, better integrate land use and transportation facilities, and address the specific planning needs of focus areas within each of the subareas. In promoting those objectives, policies that conform to adopted plans, policies and regulations are proposed. A comparison of the adopted General Plan and the proposed General Plan Update is discussed as part of the No Project Alternative, in Chapter 10 of this report.

Zoning Ordinance

The proposed General Plan Update policies identify the need for a subsequent update of the adopted zoning code to conform to the General Plan Update.

Regional Land Use Planning

The proposed General Plan Update objectives and policies are consistent with the various plans and policies developed to coordinate growth within the region. This includes SANDAG's RCP, RTP, and CMP which promote smart growth principles; Regional Housing Program; Employment Lands Inventory; MTDB trolley extension, including the Otay Ranch Transitway Alignment and scenarios; and MTDB's Transit First studies.

Local Coastal Program

The proposed General Plan Update does not propose any changes to the adopted Local Coastal Program (LCP) and, therefore, would have no effect on existing or future uses in the coastal zone and would conform to other adopted plans for the Bayfront area.

Brown Field Airport Land Use Compatibility Plan

The adopted Brown Field Airport Land Use Compatibility Plan (ALUCP) established the Airport Influence Area for this airport, which encompasses a limited area of the East Planning Area. A small portion of the plan area is within the Brown Field Airport Influence Area. The Preferred Plan designates a portion of the Otay Valley District area within the Airport Influence Area as Active Recreation and a limited portion for Light Industrial and Open Space. These uses are consistent with the land uses indicated in the adopted Airport Land Use Compatibility Plan.

Otay Ranch General Development Plan (GDP)/Subregional Plan

The Otay Ranch GDP/Subregional Plan was approved jointly by the City of Chula Vista and County of San Diego for the future development of Otay Ranch. The environmental review of the adopted GDP was completed in 1992. This review included impacts and mitigation measures which were presented in the Final Program EIR for the Otay Ranch General Development Plan/Sub-Regional Plan EIR (90-01). Land use changes proposed as part of the General Plan Update would not be consistent with the adopted Otay Ranch GDP and would require amendments to the Otay Ranch GDP to achieve consistency. A review of these amendments, which considers their applicability to the goals and objectives of the adopted GDP is presented below for the Preferred Plan.

1. GENERAL DEVELOPMENT PLAN MAP

Adopt a new Otay Ranch General Development Plan Land Use Diagram to provide for land use changes within focused areas as established by the proposed General Plan Update. A map illustrating the land use revisions to the Otay Ranch GDP land use diagram is included in Appendix C of this EIR. The adoption of the GPU Update will result in consistency between the GDP and the GPU.

2. TOWN CENTER DESIGNATION

This amendment would establish a new Town Center designation that allows for higher density housing, office, retail and other commercial developments than allowed in traditional village cores, utilizing a more extensive grid street system, which promotes direct access for pedestrians, cyclists and motorists from the surrounding village developments. The Town Center concept maintains the quarter-mile pedestrian-shed radius that contains the number of households needed to support viable public transit stations. A unique road arterial ("Town Center Arterial") is a major feature of the Town Center. This arterial is designed to accommodate pedestrian-oriented development based on larger dwelling unit quantities and higher densities. Transit Stations serving the future expansion of the Bus Rapid Transit technology will be the centerpiece for the Town Centers in the Otay Ranch. New Town

Center policies will require the same transit-oriented densities and permit a gradual reduction in multi-family and single-family densities farther away from the Town Center.

The existing Otay Ranch GDP contains objectives, goals and policies which provide for higher residential density organized around village cores sufficient to encourage and support the expansion of transit and promote pedestrian-oriented developments. The proposed town centers are an extension of this concept that increases residential density in the core areas of the villages sufficient to sustain even larger levels of retail and other commercial services, close to residential areas. The town centers will create an even greater sense of community in the villages and provide for more pedestrian-friendly villages. The town centers will also result in the extension of the transit service to villages that previously were not served by increasing ridership generated from the more intense town center cores. Expanding transit service and providing more opportunities for transit-oriented development further implement the goals of the General Plan Update and the adopted Otay Ranch GDP.

The villages of the Otay Ranch were originally planned to be surrounded by arterials with transit separated and traveling from village core to village core. Only Villages One, Five, Six and Nine were served by transit. The expansion of transit to the other non-transit villages of Village Two and Eight allows for the increase in multi-family densities from 14.5 to 18 dwelling units per acre as provided for in the Otay Ranch GDP. In the existing GDP, only villages served by transit are planned for a gross density of 18 dwelling units per acre within one-quarter mile of the future transit stations in the village cores. The villages that were not originally planned for transit service had a planned multi-family density of 14.5 dwelling units per gross acre in the village cores. This intensification of the non-transit villages to transit served town centers furthers the existing goals of the Otay Ranch GDP by providing additional multi-family units that will support transit. This additional density is planned within the one-quarter mile pedestrian-shed of the transit station in the center of the town.

The expansion of transit and arterial streets using pedestrian oriented systems such as the one way couplet better implements the goals and objectives of the Otay Ranch GDP by providing for a more intense transit and pedestrian oriented development. The Town Center development provides streets and buildings to complement humans rather than the automobile.

3. TOWN CENTER ARTERIAL

This amendment would create a new street system classification or arterial ("Town Center Arterial") necessary to serve Town Centers. The Town Center Arterial provides vital pedestrian, vehicular and transit opportunities in a walkable environment in and around Town Center developments. Town Center Arterials are typically a pair of two- or three-lane, one-way streets designed to provide equivalent capacity to a four- or six-lane arterial of the same classification. These pairs of one-way streets allow for better integration of pedestrian traffic by allowing for slower automobile speeds and minimizing street crossing widths

without reducing road carrying capacity. This arterial design allows for comfortable pedestrian movement through the high activity of a Town Center. The grid-like pattern of the Town Center Arterial in the Town Center also offer more frequent block intersections promoting more store-front businesses among other mixed-uses. Shorter block lengths are a feature in the Town Centers, which increase the vitality of commercial service areas, and at the same time avoid "strip commercial" development. The one-way Town Center Arterial resolves problems experienced on traditional high-volume traffic arterials requiring a wider roadway.

The new town center arterial is consistent with the goals and objectives of the General Plan Update transportation policies and the existing Otay Ranch GDP mobility goals and policies. The Town Center arterial provides for a more seamless and efficient development pattern and promotes better pedestrian access within villages and between villages and town centers which will provide for a stronger sense of community while reducing reliance on the automobile. However, vehicular carrying capacity of the arterials is maintained sufficient to accommodate anticipated traffic volumes.

The Town Center Arterial supports and further implements the existing Otay Ranch GDP goals of balancing auto and pedestrian trips by bringing the arterials into the pedestrian setting of the village core and reducing the scale of the street by splitting the six lane arterial road into two three-lane one-way streets. This split reduces the distance that pedestrians have to cross these streets. The spilt also increases the number of intersections, which slows traffic to more pedestrian friendly speeds. However, due to the elimination of left-turn waiting periods on the one-way streets, travel time through the town center is actually decreased. This decreased travel time and reduced street-crossing distance for pedestrians effectively balance auto and pedestrian travel within the town centers.

4. BUS RAPID TRANSIT (BRT) SYSTEM AND ALIGNMENT

This amendment would integrate SANDAG's adopted *Transit First!* Strategy into the Otay Ranch community. The modifications involve changing the Light Rail Transit (LRT) description to Bus Rapid Transit by incorporating new BRT vehicles into the GDP's circulation system. As Otay Ranch continues to develop, additional express or corridor transit routes and station locations were identified to directly serve people traveling to or from Otay Ranch. The BRT technology uses high quality, rubber-tired vehicles, offering the speed, comfort and amenities of a light rail trolley with the flexibility of non-fixed modes of transportation. BRT vehicles may travel in their own vehicle lanes on arterials and/or receive priority at signalized intersections. Upgraded transit stations will have shelters, passenger information and other features.

This amendment requires coordination of BRT system requirements and implementation policies with SANDAG to provide available infrastructure for transit stops and other BRT facilities for Otay Ranch. BRT involves coordinated improvements in a transit system's

infrastructure, equipment, operations and technology that provide preferential treatment to buses on roadways or through use of dedicated rights-of-way. BRT may encompass a variety of approaches, including operation in mixed flow lanes, exclusive transit ways using advanced technology such as optical readers, or managed lanes on highways. BRT vehicle and system characteristics may include: traffic signal priority and exclusive travel lanes; limited stops to provide express service; improved stations and shelters; improved boarding facilities; cleaner, quieter and more attractive vehicles; and intelligent transportation system technologies such as automated fare collection and real time "next bus" arrival information.

The change from a Light Rail Transit (LRT) to a Bus Rapid Transit system together with an expansion in service to previously unserved Villages Two and Eight of the Otay Ranch provide great opportunities for non-auto oriented trips and is therefore consistent with the goals and objectives of the General Plan Update and the mobility policies of the existing Otay Ranch General Development Plan. The BRT will provide the same type of mass transit service as the LRT. The change in transportation system to Villages One, Five, Six and Nine and expansion of service to Villages Two and Eight are consistent with the GDP Mobility policies and would not create a land use impact because the Otay Ranch policies promote the use of transit as an alternative to automobile travel.

5. MOBILITY/CIRCULATION ELEMENT REVISIONS

Revise the General Development Plan (map and text revisions) to incorporate GPU Circulation Element changes to the following roadways:

- Delete Alta Road

The deletion of Alta Road is required to plan and implement the University Campus. The realignment of Rock Mountain Road into Eastlake Parkway also eliminated the need for Alta Road. The deletion of Alta Road from the Circulation Element will eliminate an arterial road through the University campus allowing a more cohesive land use within the campus. The road is not needed for access to the campus because sufficient vehicular access is provided by existing Hunte Parkway, the planned extension of Eastlake Parkway and Otay Valley Road, and the extension of the BRT through Village Nine. In addition, the elimination of the road across the Otay Valley will reduce impacts on open space and habitat in the Otay Valley, consistent with the City's MSCP Subarea Plan and thus is consistent with the Environmental Element of the General Plan Update. The traffic study prepared for the General Plan Update indicates the road is not needed for area-wide circulation because a major portion of Otay Mesa south of the valley is now included as part of the MSCP Preserve (see Appendix E).

- Realign Rock Mountain Road/Main Street at Heritage Road

Rock Mountain Road will be realigned east of Heritage Road in order to reduce environmental impacts on Wolf Canyon and Otay River Valley and to accommodate a new Town Center Arterial circulation system through Village Four and Village Eight. East of Heritage Road, Main Street will be realigned to accommodate the Rock Mountain road alignment. The realignment of Rock Mountain Road from Otay Valley will reduce environmental impacts to both Wolf Canyon and Otay River Valley. This realignment is consistent with the City's MSCP Subarea Plan and goals, objectives, and policies of the Environmental Element of the General Plan Update. The new alignment also accommodates the new Town Center Arterial circulation system proposed through Village Four and Village Eight. The realignment of the road maintains the over all circulation system envisioned in the existing Otay Ranch GDP and results in a GDP road alignment that is consistent with the alignment proposed in the General Plan Update.

- Realign Heritage Road north of Main Street

In order to connect Heritage Road to Village Two and Three and accommodate the re-alignment of Rock Mountain Road, Heritage Road must be realigned through Village Three. The realignment of Heritage Road provides a superior design solution to the existing alignment and constitutes only relatively minor vertical and horizontal alignment revisions from that provided in the existing Otay Ranch GDP. The new alignment complies with the City's design criteria for arterial streets, minimizes topographic and other environmental impacts, and accommodates proposed land uses and densities of the General Plan Update and Otay Ranch GDP. The proposed realignment maintains the overall circulation system envisioned in the existing Otay Ranch GDP and supports the proposed General Plan Update.

- Realign Otay Valley Road

Otay Valley Road will be realigned and reduced to a four-lane major serving the southernmost portion of Village Eight, Village Nine and the University Campus. Otay Valley Road also serves as a future connection to an interchange onto SR-125. Otay Valley Road will no longer serve as a connection to Rock Mountain Road or Main Street in an east/west direction. Realigning Main Street away from Otay Valley Road at its current easterly terminus will reduce impacts to open space and habitat in the valley, consistent with policies in the adopted Chula Vista MSCP Subarea Plan. Main Street between La Media and Eastlake Parkway will be renamed Otay Valley Road and provide a connection to the SR-125 interchange for the Village Eight and Nine Town Centers, Regional Technology Park and the University. These changes are also necessary to reflect the alignment proposed in the General Plan Update for Main Street and to maintain consistency with the Environmental Element.

- Realign Rock Mountain east of the SR-125 Interchange

Rock Mountain Road north of the Town Center and south of the EUC will become a Town Center Arterial and will align to Hunte Parkway serving as the featured east/west connection in the southern part of the Otay Valley Parcel. As described above, the Town Center Arterial is designed as a three-lane, one-way fashion. This road may be offset slightly to act as a "gateway" to the University Campus. The traffic analysis for the Preferred Alternative indicates there are sufficient traffic volumes on Hunte Parkway to necessitate a direct connection to the Rock Mountain Road interchange with SR-125. Projected traffic volumes can be accommodated by the proposed Town center Arterial to be used between SR-125 and Eastlake Parkway. This change to the Rock Mountain Road alignment reflects the alignment proposed in the General Plan Update and is consistent with goals and policies within the Land Use and Transportation Element. Therefore, a change in the Otay Ranch GDP alignment is necessary to maintain consistency with the General Plan Update. However, the overall circulation system for the GDP is maintained.

6. REGIONAL TECHNOLOGY PARK (RTP)

Apply the proposed Regional Technology Park (RTP) General Plan land use designation into the Otay Ranch GDP. The RTP provides for the opportunity to develop new research institutions, industries and businesses intended to capitalize upon the research activities of the proposed University Campus. The RTP accommodates research and development, light manufacturing and supporting retail, service, professional office and finance businesses. It will pro-actively attract the development of incubator industries and research institutions that may be induced by the presence of a University Campus. The RTP designation is added to Village Eight of the Otay Ranch GDP.

The RTP will provide for a new and significant employment center within the city. Its inclusion in the GDP amendment reflects the goals, objectives and policies of the General Plan Update and existing Otay Ranch GDP policies by providing for economic development and a stronger jobs/housing balance within the city. By providing for the RTP in the Otay Ranch GDP, the resulting jobs/housing balance in Otay Ranch is enhanced and existing planning principles as expressed in the existing GDP are enhanced. These principles include creating balanced communities by providing work places in or near the residential communities; minimizing reliance on automobile use by siting employment close to residential communities; and awareness of the relationship between vibrant, healthy communities and having sufficient economic and employment opportunities located within the community.

7. OPEN SPACE-ACTIVE RECREATION LAND USE (OTAY VALLEY DISTRICT)

This amendment creates a new General Plan Open Space-Active Recreation land use designation in the Otay River Valley that provides opportunities for public and private recreational activities, including, but not limited to, outdoor campgrounds; tennis, soccer or other sports fields; spas, golf courses and golf driving ranges. The adopted Otay Ranch GDP

provides for up to 400 acres of active recreation uses in the Otay Valley but did not identify a specific area for these uses. The City's MSCP Subarea Plan defines 246 acres of land that would be suitable for active recreation uses. This amendment creates the land use designation and applies it to a portion of the land identified by the adopted MSCP Subarea Plan appropriate for this use. This new designation implements existing GDP policies which call for the establishment of an open space preserve and the provision of sufficient recreational opportunities for its residents. Vehicular access to active recreation uses will be addressed at the SPA level. Its application to land in the Otay Valley is consistent with the existing GDP because it identifies the specific area that is only generally described in the existing GDP and is consistent with policies within the Environmental Element of both the existing General Plan and the proposed General Plan Update.

8. RESOURCE MANAGEMENT PLAN (RMP) BOUNDARY AMENDMENT AT VILLAGE NINE, UNIVERSITY (VILLAGE 10) AND VILLAGE 11

The Preferred Plan includes proposed amendments to the Otay Ranch GDP and RMP preserve boundaries within Villages 4, 9, 10, 11, and the University area (refer to Figure 5.3-3). The intent of these proposed boundary modifications are to ensure that the GDP and RMP map is consistent with the adopted Chula Vista MSCP Subarea Plan. As part of the preparation and approval of the Chula Vista MSCP Subarea Plan, the proposed boundary changes were previously evaluated in the Final EIR/EIS for the MSCP Subregional Plan (City of Chula Vista 1997); the Addendum to the Final EIR/EIS for the Chula Vista MSCP Subarea Plan (City of Chula Vista 2000); and the Supplemental EIR/EA for the Revised Chula Vista MSCP Subarea Plan (City of Chula Vista 2002). These documents determined that the proposed preserve configuration would result in an overall benefit by concentrating development in select areas, while ensuring the dedication of large contiguous areas of open space. The proposed preserve boundary changes are consistent with the adopted Subarea Plan and will not result in new or greater impacts to land use than those previously identified.

9. GROWTH MANAGEMENT – DELETE ANNUAL REPORT REQUIREMENT

Delete Section D – Annual Report and Review Process from Chapter 9 – Growth Management. In the original GDP approval, an annual monitoring report was required to analyze the supply and demand for public facilities and services governed by threshold standards. The City's Growth Management Ordinance requires the same process and is reviewed by the City's Growth Management Oversight Commission (GMOC) on an annual basis. To avoid duplication of efforts, annual reporting of a fiscal analysis of the supply and demand of Otay Ranch infrastructure and services will be managed by the GMOC. The Otay Ranch GDP Growth Management Annual Report is a duplication of efforts with the City's Growth Management Program. The development of the Otay Ranch has been included in the City GMOC Report every year since the Otay Valley Parcel annexation to the City in 1995. The GMOC review reports on the same public facilities as required by the Otay Ranch GDP Annual Report. The Otay Ranch GDP does not have a review and approval process, as does

the GMOC process, which is reviewed and approved by the City Council each year prior to budget adoption. The Otay Ranch GDP will remain consistent with the General Plan Update by its continued inclusion in the City's annual GMOC review as required by General Plan Growth Management policies

10. GDP CONSISTENCY WITH GMOC POLICIES/ORDINANCE

Modify Section A, B and C of the GDP to ensure consistency with current GMOC polices and procedures. Policies shall be reviewed and modified to reflect any changes to the Growth Management Ordinance. By participating in the City annual GMOC review as required by the General Plan Growth Management, policies within the Otay Ranch GDP will remain consistent with the General Plan Update. The GMOC reporting process covers the same public facilities and service as required in the Otay Ranch Growth Management requirements.

11. RECOGNIZES UNIVERSITY STUDY AREA

The GDP Amendment recognizes the GPU policy that identifies the "University Study Area" surrounding the University Campus, Village Nine, the EUC and the Regional Technology Park. It includes a policy statement that directs a "framework strategy" should be prepared that identifies the important planning and land use elements that should be accommodated in preparation of subsequent Sectional Planning Area plans for those areas within the Study Area. This amendment reflects and incorporates policies included within the General Plan Update. The amendment recognizes the "University Study Area" and requires preparation of the "framework strategy," consistent with the General Plan Update. The requirement to prepare the framework strategy does not constitute a land use change, but rather sets in place a tool to help implement the coordinated development of the Otay Ranch in the areas that surround the planned university. This approach is consistent with policies within the existing GDP, which call for the development of balanced and mutually supportive communities within the Otay Ranch that compliment and integrate with each other and with the regional context. It is also consistent with the existing GDP because it seeks to enhance implementation of the university, which is an objective of the existing GDP.

12. VILLAGE ONE

No changes.

13. VILLAGE TWO (& TWO WEST)

Amend Village Two in the GDP to designate it as a new "transit village" in the Otay Ranch served by the future extension of the BRT. The amendment will integrate SANDAG's adopted *Transit First!* Strategy into the Otay Ranch and locate a station within Village Two. The station location in Village Two will serve as a vital stop for travel to other Otay Ranch

and regional destinations. Transit village policies described in the GDP require higher densities in the village core area including a minimum of 18 dwelling units per acre within a quarter-mile radius of the transit station. As a result, Village Two will contain a larger village core area than anticipated in the original GDP with higher multi-family densities (consistent with GDP policies for transit villages) as well as a modest increase in single-family densities outside the village core. The transit village policies and other pedestrian-oriented GDP policies applied to Village Two require increasing the dwelling units from 1,719 to a maximum of 2,510 and creating a larger, more intensive village core with expanded mixed-use and commercial activities.

The amendment also includes a modest increase in Low-Medium residential density and development area in Village Two, west of Heritage Road. In addition, the plan includes relocating the 25-acre Community Park from Village Two to Village Four and replacing the Community Park designation with Low-Medium village densities and adjacent open space. The existing Landfill Buffer in Village Two West and Village Three adjacent to Village Two will be maintained and continue to permit Industrial land uses. The plan also amends the village boundary to reflect the boundary of Preserve open space identified in the RMP and MSCP Subarea Plan. The development envelope is consistent with the current adopted MSCP Subarea Plan.

The amendments to the GDP take Village Two from a non-transit served village to a Transit Village consistent with mobility and other land use policies of the Western District in the General Plan Update and consistent with existing GDP policies that identify transit villages. The affect of this amendment is to apply transit village policies to other villages in the Otay Ranch GDP and enhancing public transit opportunities in Otay Ranch, consistent with existing policies. Transit village policies described in the GDP require higher densities in the village core area including a minimum of 18 dwelling units per acre within a one-quarter - mile radius of the transit station. The increase in intensity and density of uses proposed are necessary to support transit service to Village Two, consistent with existing policies and providing alternatives to the automobile for even more village residents. Therefore, the increases in number of units and intensity of uses are consistent with the General Plan Update and existing GDP policies.

14. VILLAGE THREE (INCLUDES FORMER PLANNING AREA 18B)

The amendments to the GDP eliminate the secondary residential urban village scenario that the County of San Diego identified as its primary land use in the County SRP and the City of Chula Vista identified as the alternative land use to Industrial. Pursuant to the 1998 Tax Sharing Agreement between the City and County of San Diego, a 1,000-foot nuisance easement was established to surround the Otay Landfill and prohibited any residential uses within that area. In addition, the location and size of the village limited its function and viability as an urban village in the Otay Ranch. The spatial relationship with existing

adjacent and planned industrial development around Village Three provides complimentary Light Industrial/Business Park land uses.

Delete the term "Planning Area 18B" (PA 18B) in the GDP. Consolidate Industrial land area identified in Planning Area 18B into Village Three by moving all policy and land use data to Village Three. As a result of Village Three remaining an Industrial land use, it is more practical to include the land in Planning Area 18B into Village Three. Planning Area 18A, located south of the Otay River, will now become "Planning Area 18."

Heritage Road and Rock Mountain Road will be realigned within Village Three to accommodate road alignments that create the least impacts to the Otay Ranch Preserve and MSCP Preserve boundaries.

The proposed GDP amendments to eliminate the County residential village alternative in Village Three are consistent with existing General Plan policies as well policies within the Western District of the General Plan Update. The land was annexed to the City in 1995 and the County no longer has land use jurisdiction over the property. The Preferred Plan designates Village Three for Industrial land uses. The County's alternative is no longer applicable to the property. The amendments are consistent with the City's Landfill Agreement with the County which specifies restricting residential land uses within the 1,000- foot landfill buffer.

15. VILLAGE FOUR

Village Four designates approximately 82 gross acres (70 acres net usable) on the north side of the village, west of La Media Road, for a major Community Park facility, accommodating a relocation of park acreage from Village Two and other villages' community park obligation pursuant to the City's Park Land Dedication Ordinance (PLDO). On the north side of the village, the 82-gross acre Community Park highlights this section of the village.

The balance of Village Four contains single-family residential areas on the north and south side of Rock Mountain Road, and surrounding Rock Mountain itself. The amendment includes a small increase in residential densities because of its adjacency to the new Town Center in nearby Village Eight. The density increase has changed from Low to Low-Medium resulting in an increase in units from 131 to 432 single-family units. The amendment also provides for increased densities in the western portion of the Village Four area currently designated low density residential. As a result of the Town Center in nearby Village Eight, the village boundaries between Village Four and Village Eight were modified, which moved approximately 87 acres of Village Four land area into Village Eight. As a result, the village core in Village Four has been deleted.

The amendment applies Low Density Residential Designation to the Rock Mountain area, but encourages (or directs) the ridge line to be preserved by allowing transfer of the qualified

density to surrounding property, increasing allowable density for designated Low Density Residential properties.

The creation of a Community Park and increase in density of single family housing in Village Four reflect policies and land use designations proposed in Central District of the General Plan Update. The proposed GDP amendment maintains land use policies within the existing GDP meant to preserve and protect sensitive viewshed and topographic resources in the area of the ridgeline area along Rock Mountain Road, while allowing for a transition to higher residential density closer to the town center area of Village 8. Thus policies that are intended to preserve sensitive resources while providing for balanced, complementary, and integrated uses within Otay Ranch are maintained and supported. The designation of an enlarged the community park in the Central District maintains policies in the adopted GDP and General Plan that promote the provision of adequate parks to meet the recreation needs of the residents of Otay Ranch and all of eastern Chula Vista.

16. VILLAGE FIVE

No changes.

17. VILLAGE SIX

No changes.

18. VILLAGE SEVEN

Village Seven decreases in land area as a result of locating a new Town Center in nearby Village Eight. The boundary for Village Seven will be modified to accommodate the Village Eight Town Center. The 25-acre Middle School is the main feature of the boundary adjustment and will be a part of Village Eight. A small portion of the residential densities adjacent to the Middle School will also be moved from Village Seven to Village Eight. Overall, the unit count for Village Seven decreases from 1,501 to 1,476 dwelling units. The amendments to Village Seven are proposed to facilitate implementation the larger Town Center in Village Eight as indicated in the General Plan Update for the Central District. Consolidating land in one village under a single ownership is consistent with existing segmenting policies of the GDP, which allow development in a village to be planned by ownership. This amendment will consolidate the ownership within Village Eight allowing the comprehensive planning of Village Eight under one Sectional Planning Area Plan.

19. VILLAGE EIGHT

The amendment to Village Eight includes locating a new high density Town Center at the intersection of La Media Road and Rock Mountain Road and eliminating the prior Village Core designation for Village Eight. The Town Center in Village Eight will contain a new

Transit Station designed for the BRT and, therefore, incorporates transit oriented village policies. The Town Center increases multi-family residential densities accommodating intensified mixed-use commercial activities including retail, office and residential. Densities in the Town Center will correspond with transit policies to a minimum of 18 dwelling units per acre, totaling 1, 017 dwelling units. The main features of the pedestrian-oriented Town Center include increased commercial land uses and a Town Center Arterial over a portion of Rock Mountain Road and La Media Road. The design of the Town Center Arterial promotes pedestrian orientation and provides an extensive grid-like street pattern to the village. As a result of the village boundary adjustments, approximately 30 acres of Low Medium Village residential (25 acres of it is the Middle School) is transferred from Village Seven to Village Eight. In addition, approximately 87 acres of Low density residential is transferred from Village Four to Village Eight. Densities for single-family residential will vary from 3.5 to 4.8 dwelling units per acre outside of the Town Center area in the village.

Another major feature of Village Eight will be the location of a Regional Technology Park (RTP) to the east of the Town Center, south of Rock Mountain Road. The RTP will enable the accommodation of a major employment and research center to provide, in part, an even jobs/housing balance in Otay Ranch. The amendment designates the RTP on approximately 200 acres west of Future SR-125, south of Rock Mountain Road. The RTP area will compliment the adjacent research institutes planned for the University Village in Village Nine as well as other employment and business opportunities is the Eastern Urban Center.

The amendment also establishes a development envelope consistent with the City's MSCP Subarea Plan. It preserves Rock Mountain as open space as well. The plan also modifies 11 acres of Residential Low Density west of planned community park to open space recreation.

These amendments are necessary to reflect land use policies proposed in the General Plan Update. As with Village Two, transit service is planned for Village Eight. The creation of Town Center based on transit service and the couplet system is consistent with and implement the existing mobility policies of the adopted GDP as well as Town Center policies of the General Plan Update. These policies are intended to promote the extension of transit services and reduce dependency on the automobile. The Town Center is based on the intersection of Rock Mountain Road and La Media Road where the transit station will be located. The Town Center is designation has a one-quarter mile pedestrian-shed from the transit station located at the Rock Mountain Road/La Media Road intersection. The transit service to Village Eight allows for the increase in intensity of land uses to support the transit line. The increase in retail land uses are intended to meet the daily needs of the residences to reduce automobile trips out of the village. The designation of Village Eight as a Town Center is consistent with the General Plan policies and current GDP policies on transit densities and service. The Town Center Arterial will be implemented within the Town Center creating a superior pedestrian/roadway system and therefore is consistent with the General Plan Updated and new GDP policies for Town Centers.

20. VILLAGE NINE – UNIVERSITY TOWN CENTER/VILLAGE

The amendment to the GDP eliminates the secondary residential development scenarios provided for in the original GDP for Villages Nine and Ten in the event the university campus was not realized in a specified time frame. In exchange, the GPU provides development opportunities to each of the land areas independent of and in conjunction with development of the university campus.

In the proposed GDP Amendment, Village Nine serves an important role as the main "gateway" for the University Campus. Village Nine establishes itself as the University Town Center with its own policies intended to foster Village Nine's relationship to the University Campus and provide housing, retail, and other services required by the university. The amendment applies a new Town Center designation south of Rock Mountain Road and east of the SR-125 interchange, which would establish a University-oriented Town Center featuring a Transit Station for the future BRT serving mixed-use and medium-high residential densities. The Town Center will incorporate the development of mixed-uses featuring commercial retail shops, office uses, high-density multi-family housing and other community supporting land uses and services. The Town Center Arterial will serve as the main road arterial and incorporate a dynamic grid-street system that the University Campus and other university related uses will feed from. In Village Nine, Rock Mountain Road will also serve as a Town Center Arterial roadway east of SR-125 and connects into Hunte Parkway and Eastlake Parkway. The arterial will be designed as a "gateway" into the University Campus providing synergy between the Village Nine Town Center/University Campus and the Eastern urban Center to the north.

The Town Center policies will include an increase in densities and units in Village Nine. Because this Town Center lends major support to the nearby University Campus, the development will also include land uses dedicated to research institutes and a cultural arts center. Village Nine will include 52 acres of dedicated University land uses including a "Campus Core" featuring, among other things, a large 10-acre cultural arts center, 10 acres of research institute facilities, as well as opportunities for faculty and student housing. The relationship with the faculty/student housing and the Town Center increases the units to a total of 3,659 in the Village, most of which is multi-family in the high density Town Center.

The amendment also includes modifications to the Otay Ranch Preserve ensuring that the open space and development envelope is consistent with the MSCP Subarea Plan and Resource Management Plan at south and east edges of Village Nine, Village 11, and the University.

The proposed designation of the Town Center on Village Nine in support of the university is consistent with the Land Use and Transportation Element policies of General Plan Update and the existing GDP that promote pedestrian-orientated development, encourage public transportation, and establish communities that are conveniently located close to necessary

services. Existing GDP policies that envision and promote a University and supporting land uses for Village Nine are continued and further refined. As indicated with Village Two, establishing Village Nine as a pedestrian-oriented village further advances policies within the existing GDP intended to enhance transit service to villages, reduce reliance on the automobile, and create more balanced communities with housing, shops, work places, schools, parks and civic facilities located all nearby. The amendment eliminates the secondary village land use thereby identifying one land use plan for the property, which emphasizes the university and related land uses in support of the university as the preferred development in the Village Nine area.

21. UNIVERSITY CAMPUS

The amendment to Village Ten formally deletes the urban village alternative in the GDP as an option for Village Ten. The Village Ten designation in the GDP is also replaced with University Campus as the name for the "village." New policies for a new University Campus are identified for this area as necessary to reflect the characteristics of the new university and its relationship to surrounding land uses.

The plan designates approximately 530 acres as public/quasi-public for a university campus and its related facilities. In addition, the new University Campus concept establishes a "University Study Area" to the GDP, recognizing that a framework strategy be developed to further define future detailed land use and land use relationships between areas within the Study Area. The framework strategy for the University Study Area will identify the housing, economic, cultural and academic factors to be considered with subsequent land planning documents and to take advantage of opportunities and stimulus to be created by the presence of the University Campus.

The amended GDP also establishes the open space/development envelope consistent with the MSCP Subarea Plan and Resource Management Plan at the south and east edges of the University. Alta Road, which previously bisected the University, is deleted from the GDP circulation system by virtue of revised alignments for Hunte Parkway and Rock Mountain Road.

The proposed GDP amendments reflect policies added to the General Plan Update intended to strengthen development of the university in the Village Ten area. The policies that are added to the GDP further characterize the type, nature, and size of the university. These policies therefore enhance and strengthen existing GDP policies intended to implement the City's vision for a University on the Otay Ranch. Refer to Village Nine for the discussion on the elimination of the secondary land uses.

22. VILLAGE ELEVEN

No changes.

23. PLANNING AREA 12 (EUC & FC)

Freeway Commercial. The amended GDP will add a Mixed-Use designation with a strong residential component to approximately 34 acres at the northern portion of the Freeway Commercial site, adjacent to Olympic Parkway. The amendment will allow 475 multi-family units with approximately 5 acres of retail along the frontage of a spine road that connects Olympic Parkway with the southern 86 areas of the Freeway Commercial site. The amendment would provide for residential units over ground floor commercial. The implementation of a mixed-use project will further the goals for pedestrian oriented projects on the Otay Ranch. While isolated from schools and parks, the project will be within the ¼ mile pedestrian shed of the Freeway Commercial Park and Ride facility and the commercial uses in the regional center in the Freeway Commercial. The amendment can be considered consistent with the General Plan and GDP goals, objectives, and policies.

Eastern Urban Center. The amended GDP would make revisions to the land use table for the Eastern Urban Center (EUC). With the proposed changes, the EUC will reflect a greater residential and retail land use character than the adopted GDP. However, other aspects of the EUC would remain, including its character as the vital commercial and services activity node for the east Chula Vista Area, providing regional services not available in other villages of Otay Ranch. Specific changes include a change in the boundary of the EUC with Village 9, reducing the acreage of the EUC by approximately 49 acres, a significant increase in the number of higher density residential units; an increase in the acreage allocated to retail commercial; a significant reduction in low-rise office acreage; and a slight reduction in visitor commercial acreage. A fire station, previously planned for Village Nine would be located in the EUC.

The amendments are necessary for the GDP to remain consistent with the goals of the General Plan Update. The existing GDP already identifies the EUC as the urban hub for Otay Ranch and eastern Chula Vista. This planned use is maintained in the revised GDP policies for the EUC, but refinements are provided. As amended, the GDP would maintain the same variety and character of land uses, although the amount or area of some land uses would be changed to accommodate or reflect changes occurring in surrounding villages. These changes maintain the intent of the EUC as a vibrant, urban hub, providing a mix of higher density residential, retail, business, entertainment, cultural, and civic and other public uses.

24. VILLAGE 13, 14, 15, 16, 17

No changes.

25. PLANNING AREA 18

The amended GDP eliminates the designation of "Planning Area 18B" for the area located west of Village Three. This area, along with the land use policies, are incorporated into Village Three, and continue to reflect the Industrial land use planned for in the adopted GDP. Planning Area 18A is revised to Planning Area 18 and its land use designations and policies remain unchanged.

The amendments constitute only a reorganization of the subject planning area as discussed in the General Development Plan in to Village Three and do not reflect a change in land use designations or policies. Since the County alternative for a residential village in Village Three is proposed to be eliminated under the General Plan Update and GDP amendments, all industrial land uses in Village Three and Planning Area 18B can be consolidated into one village, which will allow for a more comprehensive planning of the industrial land uses. Therefore, the proposed amendment is consistent with the goals of the GDP.

The amendments are necessary for the GDP to remain consistent with the goals of the General Plan Update. The existing GDP already identifies the EUC as the urban hub for Otay Ranch and eastern Chula Vista. This planned use is maintained in the revised GDP policies for the EUC, but refinements are provided. As amended, the GDP would maintain the same variety and character of land uses, although the amount or area of some land uses would be changed to accommodate or reflect changes occurring in surrounding villages. These changes maintain the intent of the EUC as a vibrant, urban hub, providing a mix of higher density residential, retail, business, entertainment, cultural, and civic and other public uses consistent with the adopted Otay Ranch GDP and the General Plan Update.

26. PLANNING AREA 19

No changes.

27. PLANNING AREA 20 (OTAY VALLEY) IN GDP

The GDP is amended to add a new "Planning Area 20." This area, previously unidentified in the adopted plan, constitutes an area previously shown in the GDP as open space. Under the amended GDP, approximately 209 acres of land previously identified as open space would be designated for open space-active recreational uses. Active recreation uses, both public and private, would be limited by the siting criteria contained in the City's MSCP Subarea Plan and the Otay Ranch RMP.

An alternative recommendation for this area includes a GDP map and text amendment to add a mixed-use designation to 15 acres for southwesterly end of Otay Valley. This recommendation would add policies and objectives for a mixed-use area limited to retail and

office commercial uses intended to support adjacent active recreation and entertainment amenities including the existing amphitheater and water park to the west.

The MSCP Subarea Plan designates up to 246 acres of land for active recreational uses in the Otay River Valley. The proposed GDP amendment for PA 20 brings this area into consistency with the MSCP Subarea Plan and the Environmental Element of the General Plan Update. It will allow for low intensity uses to be established in certain areas of the MSCP Open Space Preserve that were previously found to be suitable to support such uses.

5.1.3.3 Threshold 3: MSCP Subregional Plan and Chula Vista MSCP Subarea Plan

Threshold 3 states that the proposed General Plan Update would result in a significant impact to land use if it would conflict with any applicable habitat conservation plan or Natural Communities Conservation Plan.

Northwest Planning Area

Proposed land use changes in the Northwest Planning Area would not affect lands designated for preservation under the City's MSCP Subarea Plan.

Southwest Planning Area

A portion of the West Fairfield District is currently within the jurisdiction of the City of San Diego and within the City of San Diego MHPA and is designated a Special Study Area in the City of San Diego's Otay Mesa-Nestor Community Plan. Any development proposed in this area would need to be annexed to the City of Chula Vista from the City of San Diego prior to development under the proposed General Plan Update in accordance with the City of Chula Vista General Plan and the MSCP Subarea Plan. An MSCP Annexation Agreement would be required between the City, the City of San Diego, and the wildlife agencies as part of the annexation process, to ensure that any development of the annexed land proceeds in accordance with the conservation goals of the MSCP. Section 5.3.1.1 of the Chula Vista MSCP Subarea Plan lists the requirements when property is annexed into the City from another jurisdiction which has an approved Subarea Plan. These requirements are detailed in Section 5.3, Biological Resources, of this EIR. Implementation of Section 5.3.1.1 of the City of Chula Vista MSCP would avoid significant biological impacts associated with annexation of City of San Diego MHPA land and any proposed development.

East Planning Area

The proposed General Plan Update includes modifications to the General Plan Land Use Diagram to ensure that the map is consistent with the adopted City of Chula Vista MSCP Subarea Plan for Villages 4, 9, 10, 11, and the University area. The proposed mapping changes also include a minor map correction and an added note for clarification purposes

that would bring the General Plan map into consistency with the MSCP Subarea Plan, thereby eliminating conflict between the components of the General Plan. As part of the preparation and approval of the Chula Vista MSCP Subarea Plan, the proposed boundary changes were previously evaluated in the Final EIR/EIS for the MSCP Subregional Plan (City of San Diego 1997); the Addendum to the Final EIR/EIS for the Chula Vista MSCP Subarea Plan (City of Chula Vista 2000); and the Supplemental EIR/EA for the Revised Chula Vista MSCP Subarea Plan (City of Chula Vista 2002a). These documents determined that the proposed preserve configuration would retain the overall integrity of the preserve design while maintaining or improving the conservation of covered species. The proposed preserve boundary changes are consistent with the adopted Subarea Plan and will not result in new or greater impacts to sensitive biological resources than those previously identified.

Scenario 2 places residential land use in a portion of the area identified for preservation in the MSCP Subarea Plan. This land use occurs in a finger canyon off of Wolf Canyon in Village 2 and would require a boundary amendment to the MSCP Preserve. This is a significant land use impact.

Impacts associated with implementation of the proposed scenarios are discussed in detail in the Biological Resources section in Chapter 5.3.

5.1.4 Level of Significance Prior to Mitigation

A summary of the land use impacts within each planning area is provided below.

5.1.4.1 Northwest Planning Area

The Preferred Plan and all three Scenarios modify designated land uses to allow for an increase of mixed-use development and focus on redevelopment efforts in the Urban Core, along gateways and major transit corridors. Changes to increase density and allow for a greater mix of uses facilitates transit goals and would be consistent with smart growth objectives. Adding more density and increasing the number of multi-family units within the Urban Core has the potential to cause an adverse effect on the community character of the existing residential neighborhoods adjacent to the areas of change.

Implementation of the objectives and policies of the General Plan Update would lessen the impact that would result from the adoption of the plan. By requiring that the quality of existing, stable residential neighborhoods be maintained (Policy LUT 4.2), ensuring that development is sized and designed to be compatible with surrounding neighborhoods (Policy LUT 4.4), and ensure good street design to minimize and control traffic in residential neighborhoods (Policy LUT 4.6) impacts of the Preferred Plan on community character would be limited. Additionally, Policy LUT 11.5 would require that development in accordance with the Preferred Plan would have a reduced impact on community character by requiring multi-family, commercial, and industrial development to go through a design

review process. The design review process would promote quality architecture, landscape, and site design to enhance the character of the area.

LUT 2 and 3 further control impacts to community character of the Northwest Planning Area. LUT 2 requires the establishment a program for development to provide public amenities and/or community services necessary to support urban development and implement the following policies, and LUT 3 focuses on the urban design and form of new development and redevelopment in a manner that blends with and enhances Chula Vista's character and qualities, both physical and social.

While the adoption of the objectives and polices discussed above would limit the community character impacts associated with the adoption of the Preferred Plan or any of the Scenarios, the impacts would be reduced but not eliminated. The objectives and policies do not completely mitigate the impact because development standards have not been developed. Specific development standards are developed through subsequent planning and zoning actions. As illustrated in Chart 5.1-5, there are a series of steps in the implementation of land uses that are established by the General Plan Update. The needed standards for development occur at the time Redevelopment Plans or Specific Plans are prepared and zoning is established and applied. Without those standards and these actions, impacts remain significant.

Specific objectives and policies are proposed to preserve the character and retain the quality of the adjacent existing, residential neighborhoods within each of the districts. The following policies would limit the community character impacts of the Preferred Plan and all three Scenarios within the five districts of the Urban Core Subarea.

- Downtown Third Avenue District –Policies LUT 50.12, 50.13, and 50.16
- H Street Corridor District –Policy LUT 2.4, 3.1, 52.7, and 53.4
- Interstate 5 Corridor District –Policies LUT 54.6, 55.11, 55.12, 56.7, 57.6, 58.8, 58.9, and 58.11
- Mid-Broadway District –Policies LUT 59.7 and 59.8
- Mid-Third District –Policies LUT 60.2 and 60.3

These policies would reduce impacts to community character within the five districts of the Urban Core Subarea from the implementation of the Preferred Plan and all three Scenarios, but not to below a level of significance. While the policies require design standards and guidelines be prepared that incorporate and preserve the traditional character of the districts and ensure compatibility with the existing residential neighborhoods by including design and step back guidelines to visually blend with the adjacent existing residential neighborhood, they cannot be developed with available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Source: City of Chula Vista General Plan Update

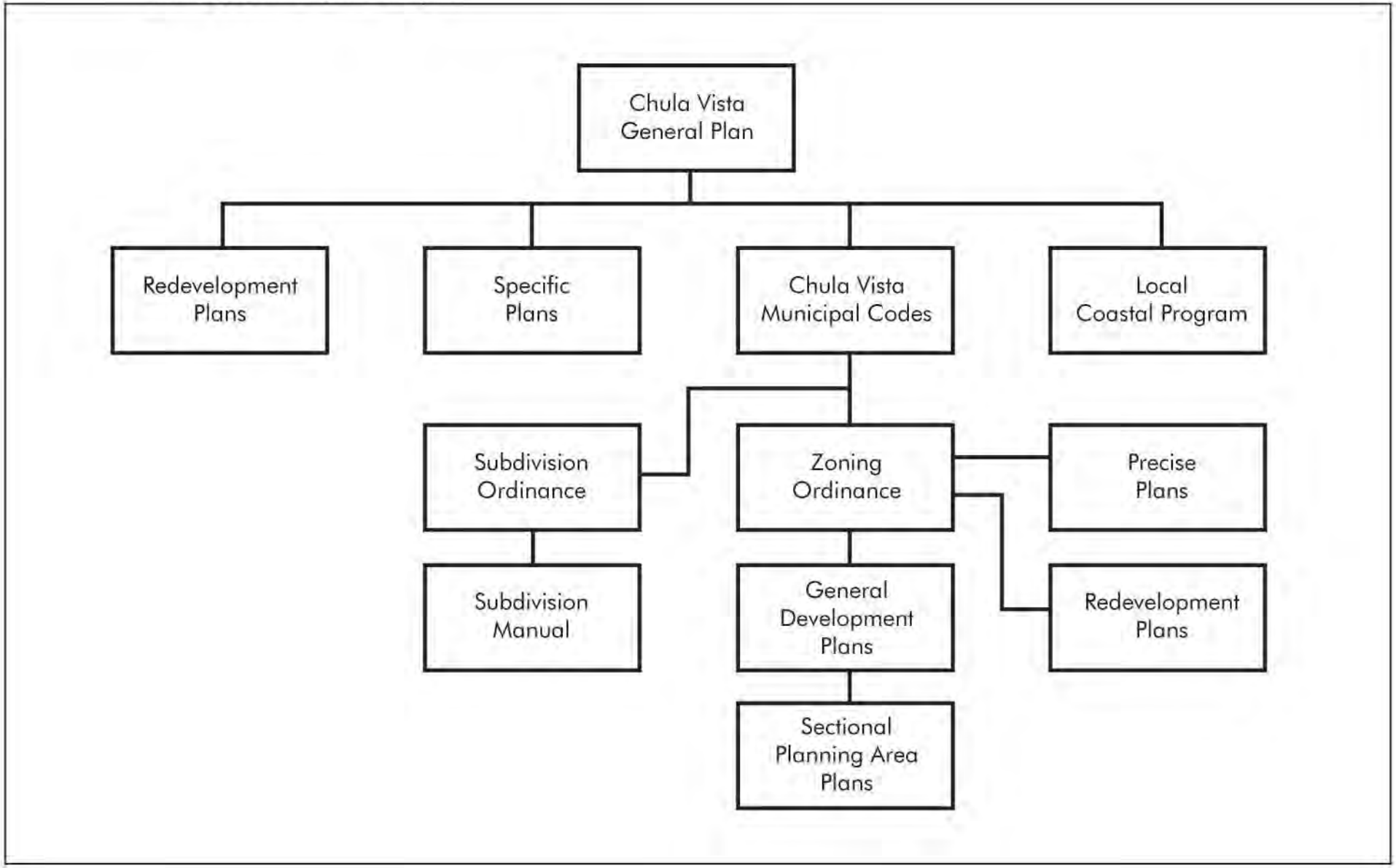

CHART 5.1-5
General Plan Update Implementation Tools

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The General Plan Update establishes two Transit Focus Areas and an H Street Transit Corridor Special Study Area within the H Street Corridor District. The purpose of the special study for the H Street Transit Corridor Special Study Area is to analyze and evaluate the appropriateness of plan changes that could result in mixed land uses, increased intensities, and potential high-rise buildings along H Street between Interstate 5 and Third Avenue. In view of existing land uses along H Street, the future intensification planned with the two Transit Focus Areas at either end of the corridor, and the potential for future market forces to focus on H Street as a key corridor, a special study is needed that examines further potential changes in land use and intensity, building mass, the potential for taller buildings, and the relationship and appropriate transitions to adjacent stable neighborhoods. This study would be conducted subsequent to the adoption of any potential high-rise buildings along H Street between Interstate 5 and Third Avenue within the study area.

The Preferred Plan proposes high-rise buildings in the Mixed-Use Transit Focus Areas within the H Street Corridor District and the I-5 Corridor District. The extent to which a high-rise building results in a significant community character impact depends upon its design and setting. Policies associated with Objective LUT 2 and Policies LUT 49.16 and LUT 53.4 listed above establish policies and development standards through the Urban Core Specific Plan that address the development of high-rise buildings. These policies reduce impacts to community character from the development of high-rise buildings resulting from development of the Preferred Plan and all three Scenarios, but not to below a level of significance. While the policies require the preparation of urban design standards for such issues as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Mixed-Use Transit Focus Area, development of these standards will be done as part of the Urban Core Specific Plan and cannot be developed with current available information. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

5.1.4.2 Southwest Planning Area

Within the Montgomery Subarea, the objectives and policies, as well as changes to existing land use designations, are intended to focus redevelopment efforts generally south of L Street along the South Broadway, South Third Avenue and Main Street corridors, and on either side of I-5 in the vicinity of the Palomar Street Trolley and the West Fairfield area. Among the important goals for this area is facilitation of economic opportunities through appropriate designation of transit-oriented, industrial, commercial and higher density residential in mixed-use or other appropriate density to facilitate smart growth planning. As with the Northwest Planning Area, the General Plan Update would reduce impacts to adjacent parcels by requiring that the quality of existing, stable residential neighborhoods be maintained (Policies LUT 4.2, 4.3), ensuring that development adheres to quality design standards (Policy LUT 4.4), and ensure good street design to minimize and control traffic in

residential neighborhoods (Policy LUT 4.6). Implementation of citywide and specific policies for the Montgomery Subarea is intended to facilitate revitalization while preserving assets.

Specific objectives and policies are proposed to preserve the character and retain the quality of the adjacent existing, residential neighborhoods within each of the districts. The following policies would reduce impacts to adjacent land uses within the 5 districts of the Montgomery Subarea from the adoption of the Preferred Plan.

- South Third Avenue District–Policies LUT 41.13, 41.14, 41.15
- South Broadway District–Policies LUT 42.14, 42.15, 42.16
- Palomar Gateway District–Policies LUT 43.1, 43.10
- West Fairfield District–Policy LUT 44.1 and 44.11
- Main Street District–Policies LUT 45.5, 45.13, and 45.14

These policies would reduce community character impacts by requiring that design guidelines and zoning standards be prepared for future development, improving circulation between this and other areas of the city, upgrading commercial activity centers and providing for the protection and enhancement of existing residential neighborhoods by increasing residential, retail, commercial and professional services through mixed-use development. These policies as well as Policies LUT 3.1, 3.2, 4.2, 4.4, 4.6, and 11.1 through 11.5 would lessen the effect that the Preferred Plan and each of the Scenarios have on community character.

While the adoption of the objectives and policies discussed above would limit the community character impacts in the Southwest Planning Area associated with the adoption of the Preferred Plan or any of the Scenarios would be reduced but not eliminated. The objectives and policies do not completely mitigate the impact because development standards have not been developed. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Significant impacts to nearby wildlife in the San Diego Wildlife Refuge would result from development within the West Fairfield District under the Preferred Plan and all three Scenarios. The designation of existing land uses for more intensive development adjacent to the Wildlife Refuge is a significant impact because more intensive land uses could affect sensitive species.

For Scenarios 1, 2, and 3, significant impacts to neighborhood community character have been identified due to redesignation of land uses in the Montgomery Subarea from open space to an industrial designation on lands adjacent to protected habitat within the City's MSCP Preserve in the area south of Faivre Street, east of Broadway, and north of the Otay River Valley. Development with industrial uses south of Main Street would otherwise be

consistent with existing nearby and adjacent industrial and retail uses to the north and would not physically divide or adversely affect the community. However, future industrial use adjacent to protected habitat is a significant impact and requires mitigation.

5.1.4.3 East Planning Area

Proposed revisions to the City's adopted land use plan in the East Planning Area would result in adjustments to the boundaries and overall densities for residential, commercial, industrial, and public/quasi-public uses. The amount and location of open space and parklands would also be adjusted. Currently, the land within the areas of change within the East Planning Area is undeveloped~~vacant~~, therefore, any proposed changes would cause an increase over the existing condition. Surrounding development in this area has occurred over the last several years and is progressing pursuant to the adopted Otay Ranch GDP. The Preferred Plan and the three Scenarios have the potential to cause an adverse effect on the community character of the surrounding villages within the East Planning Area. Specific objectives and policies are proposed to facilitate compatible land uses within and between each of the districts as well as preserve the character and retain the quality of the surrounding areas. The following policies would reduce community character impacts from implementation of the Preferred Plan within the East Planning Area:

- Unincorporated Sweetwater Subarea –Policy LUT 66.1
- Western District –Policies LUT 77.2, 77.5 79.1, 79.4, 79.5
- Central District –Policy LUT 81.3
- Otay Valley District –Policies LUT 82.1, 82.2, 82.3, 83.1
- Eastern University District –Policies LUT 85.4, 85.6
- East Main Street Subarea –Policies LUT 70.1, 70.3, and 70.4

These policies reduce the impact to community character within and between the Districts in the East Planning Area but not to below a level of significance. The policies interconnect and unify the districts, including streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character as well as intermixing uses that support and complement those contained in adjoining subareas. The objectives and policies do not completely mitigate the impact because development standards have not been developed. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Scenarios 2 and 3 propose residential uses within the 1,000-foot buffer within Village Two around the Otay landfill. Residential land uses within the landfill buffer is a significant land use adjacency impact and would require mitigation.

The General Plan Update has policies that would limit the placement of residential use in the landfill buffer. Policies LUT 79.1 through 79.5 address land uses adjacent to the Otay Landfill. Objective LUT 79 states:

> Establish appropriate land uses adjacent to the Otay Landfill and Wolf Canyon that reflect the unique land use and landform characteristics of these areas.

Specifically, Policy 79.5 states:

> Limit land uses adjacent to the Otay Landfill to open space and limited industrial uses or business parks.

Scenarios 2 and 3 place residential uses adjacent to the landfill and are, therefore, in conflict with this policy. This is a significant impact.

Implementation of Scenario 2 would require a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a Boundary Adjustment to the City of Chula Vista Subarea Plan. The scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. Absent a demonstration of functional equivalency, this is considered a significant, unmitigated impact.

5.1.5 Mitigation Measures

5.1.5.1 Land Use Adjacency Impacts (Divide or Affect Community Character)

5.1-1 To mitigate the impacts of establishing planned industrial uses along the Otay River Valley, future projects for this area shall be evaluated and required to incorporate sufficient buffers, source water protection devices, setbacks, and design features to avoid edge effects to sensitive biological resources to the satisfaction of the Environmental Review Coordinator.

5.1-2 At the time projects are proposed within the West Fairfield District, a detailed land use assessment shall be performed showing, to the satisfaction of the Environmental Review Coordinator, that the proposed project is compatible with adjacent land uses. Any development adjacent to the San Diego Wildlife Refuge shall adhere to the land use adjacency guidelines defined in the Chula Vista Subarea Plan, Section 7.5.2. These include, but are not limited to: sufficient buffers and design features, barriers (rocks/boulders, signage, and appropriate vegetation) where necessary, lighting directed away from the refuge, and berms or walls adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization.

5.1.5.2 MSCP Subregional Plan and Chula Vista MSCP Subarea Plan

Impacts resulting from development associated with Scenario 2 would be significant. Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. The following mitigation measure would be required for Scenario 2.

5.1-3 Prior to approval of a discretionary action allowing a portion of Wolf Canyon to be filled to accommodate development, the City shall complete a boundary adjustment in accordance with the adopted procedures of the Subarea Plan. These procedures are provided in Section 5.4.2 of the MSCP Subarea Plan and are summarized below.

- A preliminary determination of the biological value of a proposed boundary adjustment shall be made by the Director of Planning and Building in accordance with Section 5.4.2 of the MSCP Subarea Plan.

- The City shall notify the Wildlife Agencies in writing of the boundary adjustment including written findings of equivalency made by the Director of Planning and Building.

- The adjusted boundary shall become the adjusted boundary upon project approval unless the Wildlife Agencies object to the adjusted boundary within 30 days of receipt of City's written notice to the Wildlife Agencies. Objections by the Wildlife Agencies to boundary adjustments shall be made in writing and shall state the rationale in support of objection.

- If the City receives written objection to a determination of a boundary adjustment by the Wildlife Agencies within 30 days of receipt of City's written notice to the Wildlife Agencies, the City and Wildlife Agencies shall have 60 days to meet, confer, and reach agreement upon final Preserve boundaries. The boundary adjustment as proposed shall not be approved if an agreement is not reached.

- If the Wildlife Agencies fail to respond to the City's notice within 30 days of receipt of the City's determination, the decision by the Director of Planning and Building shall be deemed accepted.

A significant land use impact would occur from application of residential land use designation to this portion of Wolf Canyon as proposed by Scenario 2 because a boundary adjustment is required prior to the adoption of the designation of residential use in this area, and since that determination has not yet been made, specific mitigation is unavailable at this time. The impacts to land use as a result of Scenario 2 remain significant and unavoidable.

Impacts from Scenarios 2 and 3 would remain significant because they retain residential uses adjacent to the Otay Landfill in conflict with Objective LUT 79.

5.1.6 Level of Significance After Mitigation

Conformance with the above mitigation measures and compliance with the objectives and policies of the proposed General Plan Update would reduce the land use adjacency/community character and planning conformance impacts from implementation of the Preferred Plan and each of the Scenarios but not to below a level of significance. Because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process, impacts remain significant and unmitigable. At such time that specific development standards are developed through subsequent planning and zoning actions, these effects will be avoided.

A significant land use impact would occur from application of residential land use designation to a portion of Wolf Canyon as proposed by Scenario 2 because a boundary adjustment is required prior to the adoption of the designation of residential use in this area, and since that determination has not yet been made, specific mitigation is unavailable at this time. The impacts to land use as a result of Scenario 2 remain significant and unmitigated.

Impacts resulting from the adoption of Scenarios 2 and 3 remain significant and unavoidable because of conflicts resulting from land uses proposed for areas adjacent to the Otay Landfill.

5.2 Landform Alteration/Aesthetics

5.2.1 Existing Conditions

5.2.1.1 Regulatory Plans and Policies

In addition to the General Plan, the City has a Design Review program and a Local Coastal Program which address landform alteration and aesthetics.

Chula Vista Local Coastal Program

The Chula Vista Local Coastal Program (LCP) provides a detailed plan for the orderly growth, development, redevelopment, and conservation of the Chula Vista Local Coastal Zone. The LCP boundary is depicted in Figure 5.1-3 of the Land Use section of this EIR.

The preservation and enhancement of visual resources is a key component of the LCP, which provides for the removal of visual blight and improvements for public access to allow the public to experience the views from the perimeter of the Bayfront outward. Chapter III.C.1-6 of the LCP identifies the specific policies for the treatment of gateways, architectural edges, views, and landscaping. Implementation of these policies are intended to preserve wetlands, upgrade the area's existing substandard industrial image, improve the visual quality of the shoreline, improve public parkland and open space, remove (or mitigate through the use of landscaping) structures or conditions that have a blighting influence on the area and develop an improved relationship between the Bayfront and freeway, and arterial approaches.

Design Review

Multi-family, commercial, and industrial development and redevelopment within redevelopment project area boundaries are subject to design review. The City's Design Manual provides specific site planning, architectural, and landscaping guidelines for single-lot single-family and multi-family residential, commercial, and industrial development. Additional sign guidelines apply to commercial and industrial development. Architectural guidelines require that a proposed project address the compatibility of a site for a proposed use and other considerations such as the building scale, articulation, color, and exterior lighting.

5.2.1.2 Existing Citywide Conditions

Landforms and Open Space

Figure 5.2-1 shows the major landform features depicted in the adopted General Plan. The coastal plain defines the area generally west of I-805 while mesas and canyons are the dominant landforms east of I-805. Landmarks such as the San Miguel, Jamul, and San

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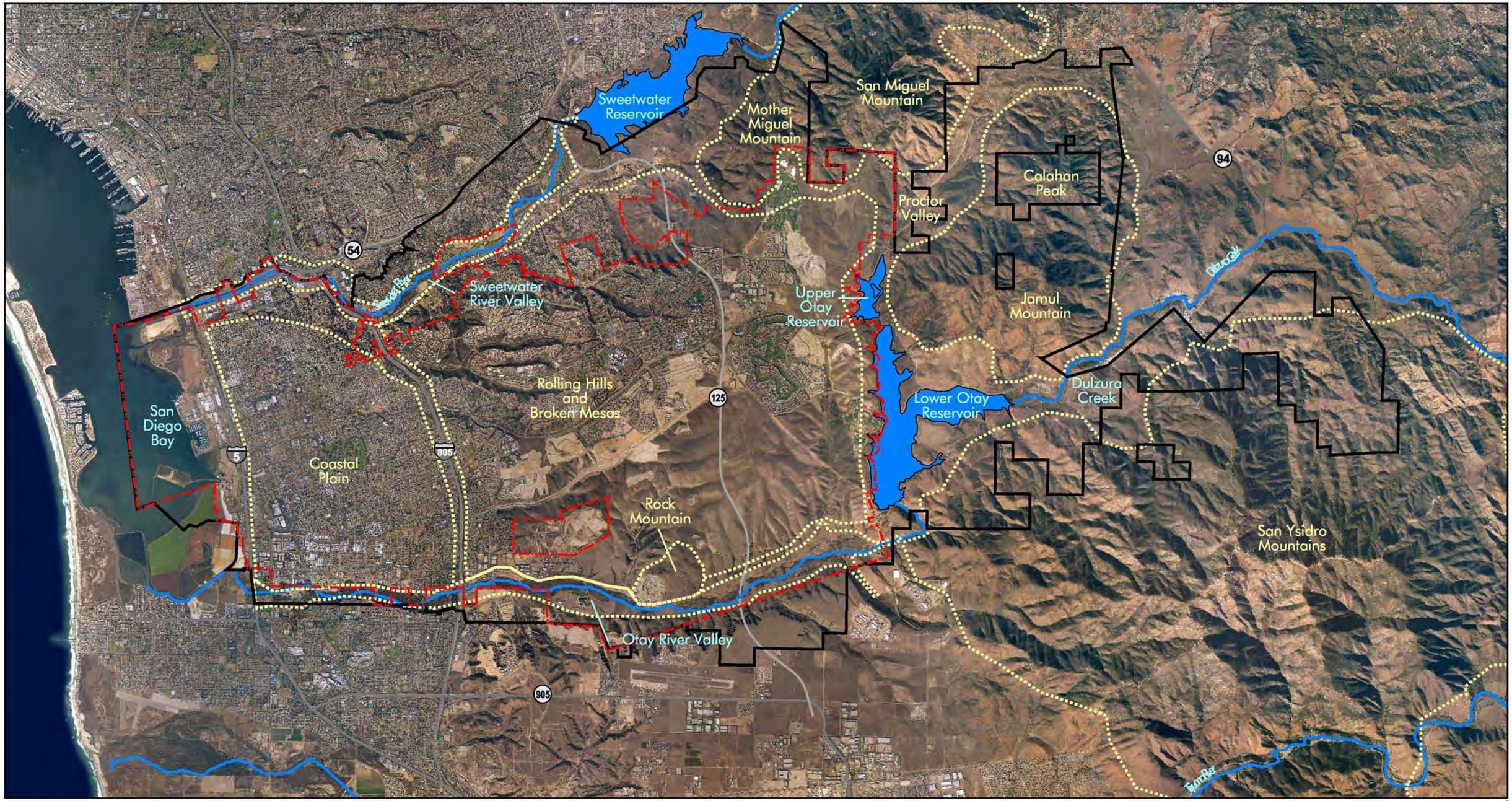

Chula Vista municipal boundary
Chula Vista General Plan area
SR-125 South proposed alignment
Freeway
Major Landform
Reservoirs
Streams

0 Miles 1.4 N

FIGURE 5.2-1
Major Landform Features
(as presented in the adopted General Plan)

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fig5.2-1 (landform) 09/14/05

Ysidro Mountains are located at the eastern fringe or beyond the northern or eastern boundary of the Plan area, but provide an important backdrop for the community. Urban canyons provide visual relief for many of the communities located east of I-805.

Another major feature identified in the adopted General Plan is the Chula Vista Greenbelt, identified as the backbone of the city's open space and park system. The Greenbelt incorporates developed and undeveloped open space and potential new open space linkages to form a continuous 28-mile open space and park system around the perimeter of the city as shown in Figure 5.1-4. At the north end of the city, the Greenbelt extends easterly through the Sweetwater Valley and Sweetwater Regional Park and from Interstate 5 (I-5) westerly to the bay. From there it parallels Marina Parkway south to the Chula Vista Bayfront Park, incorporating the adjacent open space, wetlands, natural reserves, the Nature Center, and developed parks. To the south, the Greenbelt is an enhancement of the Bay Boulevard corridor from the Chula Vista Bayfront Park, south to the Otay River from where it extends easterly through the Otay Valley Regional Park to the Lower Otay Lake. The Chula Vista Greenbelt extends southerly into the neighboring jurisdictions of San Diego County and the city of San Diego, encompassing the entire Otay River valley and the defining slopes and bluffs. Bluffs along the southern perimeter of the valley, south of the city's jurisdictional boundary and in the vicinity of Beyer Way, afford long distance views overlooking Chula Vista. Developed parks in the system are linked by a hiking and bicycle trail system.

Scenic Vistas

The mountains and foothills to the east and the bay and ocean to the west are visible from a number of viewpoints within the city, especially those occupying the mesa tops. The Sweetwater and Otay Reservoirs and associated regional parks also offer scenic vistas. Rural landscapes dominate views at the eastern terminus of Otay Lakes Road. Newer residential development, including areas such as the park and walking trail in Rice Canyon along Rancho del Rey Parkway, also contribute to the aesthetic appeal of this area.

Some neighborhood or corridor views are negatively influenced by their proximity to industrial or commercial areas, including power-generating facilities and substations. Such uses obscure or diminish views of San Diego Bay, bayfront parkland, the marina, and other prominent views. Additionally, views of older neighborhoods are affected by the presence of numerous overhead power lines which detract from neighborhood aesthetics, as compared to newer developments where lines have been located underground.

The adopted General Plan identifies two types of scenic highways – urban and rural. Urban routes are those "that traverse an urban area with the scenic corridor offering a view of attractive and exciting urban scenes." Rural scenic highways provide for an enriched experience of natural scenic resources and aesthetic values and may include large preserved canyons or natural areas, or areas within the Chula Vista Greenbelt.

Gateways

Access to Chula Vista is provided from six main city gateways (entryways) identified in the adopted General Plan, located generally at the intersections of I-5, I-805, and the future SR-125 with the northern city limits and SR-54 and at the intersections of the I-5, I-805, and SR-125 alignments with the southern city limits (Figure 5.2-2). These gateways correspond to the locations of regional transit stations and intra-city bus routes and a potential future urban core to bayfront shuttle bus route.

In addition, the following are also gateways because they facilitate movement through and establish linkage within the city: J Street between I-5 and the Bayfront; Palomar Street within the Montgomery community, which also corresponds to the Palomar Transit Station; Bonita Road east of I-805; and the F Street and Fourth Avenue intersection.

5.2.1.3 Update Areas

Urban Core Subarea

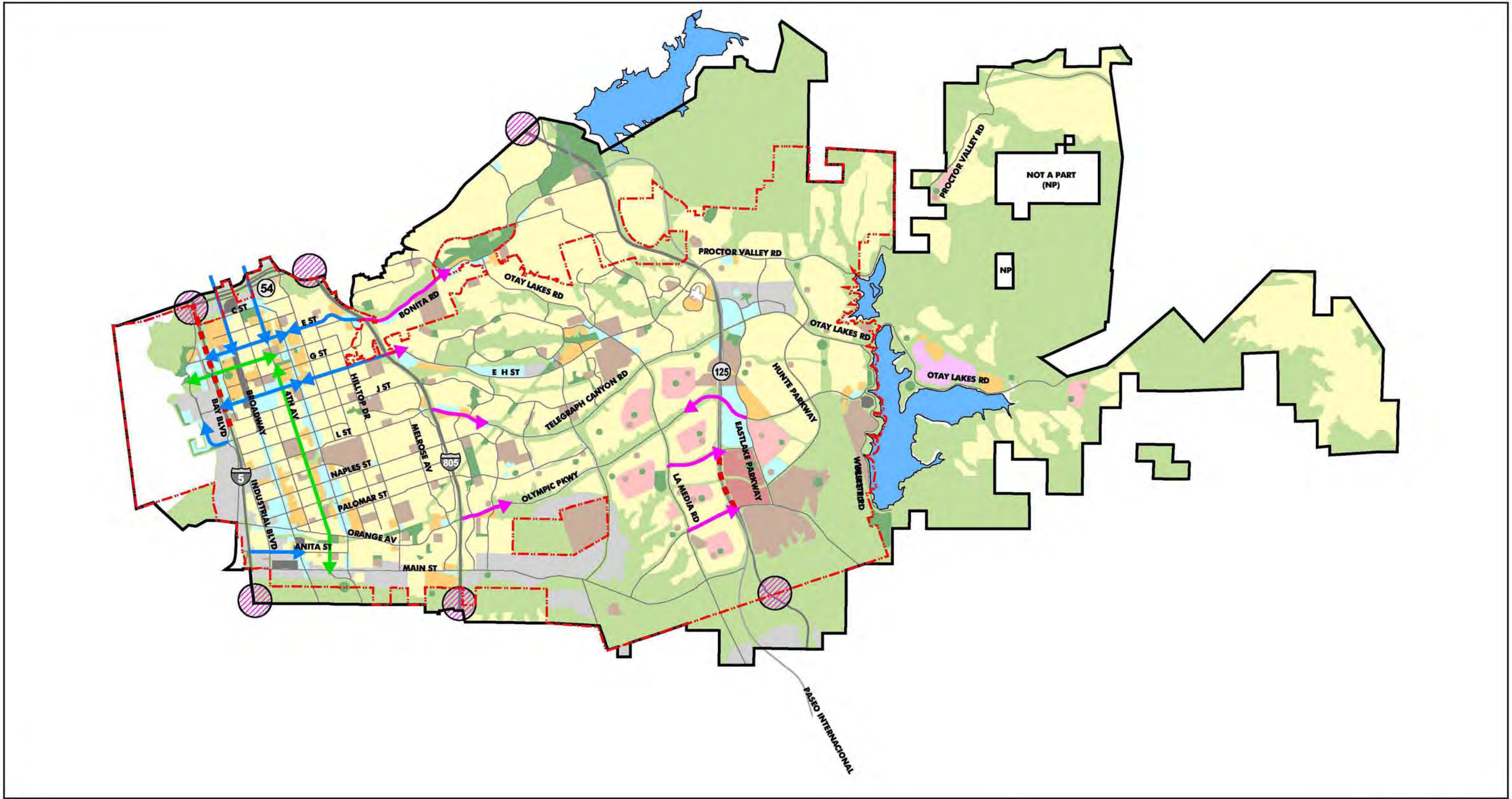
The Urban Core Subarea in the Northwest Planning Area is urbanized and developed with a mixture of public and private land uses, including the South San Diego County Superior Court complex, Norman Park Senior Center, Memorial Park, Friendship Park, the Chula Vista Center, the 60,000-square-foot Park Plaza commercial center, the Chula Vista Civic Center (including Main Branch Library and Central Police Station), and a variety of other office, retail, and residential uses.

Along segments of Broadway in the Urban Core Subarea, current assets, such as the palm-lined streets, accessibility to I-5 and trolley stations, proximity to downtown, and views to the bay, are often overshadowed by negative influences such as deteriorating streetscapes and signage, along the corridor segments.

Views occur in many settings and include aesthetically pleasing downtown streetscapes as represented in Photographs 5.2-1 and 5.2-2. Photographs 5.2-3 and 5.2-4 compare the visual effect along F Street in the older urban area of the city with newer development areas. F Street is a designated scenic highway and gateway.

Residential areas west of Second Avenue and north of I Street are in transition with portions of these areas zoned and developed with large- and small-scale multi-family residential. Areas of commercial, industrial, and institutional lands (including parks) establish the remaining areas. Streets and freeways account for an estimated 30 percent of the area.

Two designated main gateways provide access to the Urban Core Subarea: SR-54 and I-5 to the northwest and SR-54 and I-805 to the northeast. In addition, two gateways to the Urban



Chula Vista municipal boundary
Chula Vista General Plan area

Existing and proposed freeway
Circulation Roads
Reservoir
Streams

General plan land use designations
Commercial
Thoroughfare and right of way
Eastern urban center
Industrial
Residential - low to medium density
Open space
Park
Public/Quasi public
Residential - medium to high density
Resort
Village center

Gateways
Gateway elements demarcating the Chula Vista urban core and eastern urban center
Gateway forming entrances to the urban core
Gateway forming entrances to the eastern urban center
Other gateways
Main city gateway

0 Miles 1.4 N

FIGURE 5.2-2
Gateways
(Identified in Adopted General Plan)

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fig5.2-2 (gateways) 09/14/05

PHOTOGRAPH 5.2-1

Panoramic View Looking North on 3rd and F Street

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PHOTOGRAPH 5.2-2
Looking East from the Intersection of Fourth Avenue/F Street

PHOTOGRAPH 5.2-3
F Street Looking ~~West~~ East-Effect of Overhead Power Lines
on Typical Older Residential Neighborhood

PHOTOGRAPH 5.2-4
700 Block of East J Street Looking West - Aesthetic Benefit of
Underground Power Lines in a Typical Residential Neighborhood

Core and three other gateways within the Northwest Update Area facilitate movement and provide access to the city including:

E and H Streets. These principal roadways provide access to the Urban Core from I-5 and I–805. The character of both roadways is influenced by the residential and public facilities that predominate and their access to the two freeways.

Marina Parkway. This principal roadway provides access along the Bayfront redevelopment area. Between the National City boundary and E Street, Marina Parkway runs adjacent to the Sweetwater Marsh, a unit of the San Diego Bay National Wildlife Refuge. The segment of the roadway between E Street and J Street is expected to change character with a more urban landscaping consistent with the urban development of the Bayfront area. The intersection of F Street, a designated scenic roadway and Gateway, with Marina Parkway forms a major connection between the Bayfront and the Chula Vista Urban Core.

F Street Gateway. F Street is a greenspace corridor with wider setbacks for new development and a consistent landscape theme emphasizing its linear, connecting character through the urban core.

Fourth Avenue. This major north-south connector passes through the Northwest Update Area to the Southwest Update Area. Its character is influenced by the residential and public facilities that predominate and its location between two commercial streets, Broadway and Third Avenue, provides opportunities for ongoing enhancement as a scenic route. It is the north-south complement to F Street, which is also a residential and public facilities oriented route located between two commercial streets. Fourth Avenue's intersection with the F Street scenic route occurs at the location of the Civic Center, Central Library/Friendship Park, and new police station. Fourth Avenue is planned to retain its existing primarily residential/public facilities focus.

Montgomery Subarea

As with the Northwest Planning Area, current assets along segments of Broadway in the Southwest Planning Area such as palm-lined streets, accessibility to I-5 and trolley stations, proximity to downtown, and views to the bay, are often overshadowed by negative influences such as deteriorating streetscapes and signage along the corridor segments.

The Montgomery Subarea is characterized by industrial, commercial, thoroughfare, and residential uses. The visual character of the area is dominated by the built environment, which in numerous instances has suffered from a lack of conformance to minimum design standards and unified, integrated developments. Consequently, the City Council has identified code enforcement as a top priority for this area and redevelopment efforts are

beginning to be more evident. Important redevelopment projects such as the city's new animal shelter serve to upgrade the visual character of the area.

Two main gateways provide access to the Southwest Planning Area: I-5 in the south-westernmost portion of the Update Area and I-805 in the southeast portion. Main Street is also a gateway and traverses the Southwest Planning Area:

Main Street. Main Street is the southernmost major east/west connector between I-805 and areas to the east. Main Street currently terminates at Heritage Road. The designated scenic portion passes near or through the Chula Vista Greenbelt, and includes existing and future segments from Heritage Road to Hunte Parkway. Scenic resources include the Otay Valley Regional Park and major visitor attractions.

Otay Ranch Subarea

A significant portion of the Otay Ranch Subarea is undeveloped. The Otay Landfill is located adjacent and west of the Otay Ranch Subarea. Rock Mountain is located within the Otay Ranch Subarea. Future reclamation of mined portions of Rock Mountain, the city's only active mining operation, is intended to complement uses in the adjacent Otay Valley Regional Park and minimize impacts on future recreation, preserve natural resources, and provide other open space compatible with the Otay Valley. The Otay Valley Regional Park, part of the city's Greenbelt, runs along the southern boundary of the East Planning Area.

Two main city gateways, SR-125 southern and northern alignments, provide access to the East Update Area. Additionally, two gateways, as discussed in the Gateways section above, are in the Otay Ranch Subarea, one gateway segment within the Unincorporated Sweetwater Subarea, and one gateway segment within the Other Miscellaneous Areas Subarea of the East Planning Area:

Olympic Parkway. Between I-805 and SR-125, Olympic Parkway is similar to Telegraph Canyon Road with views of adjacent land uses on the mesas and natural slopes of Poggi Canyon.

Main Street. Main Street is the southernmost major east/west connector between I-805 and areas to the east. Main Street currently terminates at Heritage Road. The designated scenic portion passes near or through the Chula Vista Greenbelt, and includes existing and future segments from Heritage Road to Hunte Parkway. Scenic resources include the Otay Valley Regional Park and major visitor attractions.

Telegraph Canyon Road/Otay Lakes Road. This principal roadway provides access between I-805 and SR-125. The character of Telegraph Canyon Road is influenced by adjacent residential land uses.

Bonita Road. This principal roadway provides access to the Sweetwater and Bonita area. The character of Bonita Road is influenced by adjacent residential, commercial, and open space/park land uses.

5.2.2 Thresholds of Significance

The proposed project would result in a significant impact to landform alteration/aesthetics if it would:

Threshold 1: Have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings.

Threshold 2: Substantially degrade the existing visual character or quality of Chula Vista.

5.2.3 Impacts

The proposed General Plan Update would result in increased density in all Update areas of the city as compared to the baseline setting. In areas of the built environment, direct impacts would occur if, as a result of plan implementation, development substantially alters existing scenic resources. In open areas, there is the potential that future development, as permitted by the plan, would impact important scenic resources. Because the development footprint and relative intensity of land uses for each of the scenarios is similar, impacts resulting from implementation of any of the scenarios (Preferred Plan and Scenarios 1, 2, or 3) would be the same regardless of which is ultimately selected. The proposed Land Use and Transportation Element contains objectives and polices that address scenic resources and visual character for the General Plan Area.

5.2.3.1 Threshold 1: Scenic Resources and Vistas

Threshold 1 states that the proposed project would result in a significant impact to landform alteration/aesthetics if it would have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings. Chula Vista has several designated Scenic Roadways, where views of unique natural features and roadway characteristics, including enhanced landscaping, adjoining natural slopes, or special design features make traveling a pleasant visual experience. Fundamental to the preservation of scenic resources is development of the city's greenbelt and open space network and development of major gateways to incorporate views of the Otay and Sweetwater River Valleys, Upper and Lower Otay Lakes, Sweetwater Reservoir, San Miguel and Mother Miguel Mountains, and the high mountain peaks to the east. The proposed Preferred Plan and all three Scenarios would result in increased density in all Update areas of the city as compared to the existing conditions. Select policies associated with Objectives LUT 13 and LUT 9 address scenic resources.

Objective LUT 13

Preserve scenic resources in Chula Vista, maintain the city's open space network, and promote beautification of the city.

Policies

LUT 13.1: Identify and protect important public viewpoints and viewsheds throughout the planning area, including features within and outside the planning area, such as mountains, native habitat areas, San Diego Bay, and historic resources.

LUT 13.2: Continue to implement the city's planned open space network.

LUT 13.4: Any discretionary projects proposed adjacent to scenic routes, with the exception of individual single-family dwellings, shall be subject to design review to ensure that the design of the development proposal will enhance the scenic quality of the route. Review should include site design, architectural design, height, landscaping, signage, and utilities. Development adjacent to designated scenic routes should be designed to:

- Create substantial open areas adjacent to scenic routes through clustering development;
- Create a pleasing streetscape through landscaping and varied building setbacks, and
- Coordinate signage, graphics and/or signage requirements, and standards.

Objective LUT 9

Create enhanced gateway features for city entry points and important other entries, such as to special districts.

Policies

LUT 9.2: The City will prepare, or cause to have prepared, entryway/gateway master plans for each of the identified entryways/gateways within the City to appropriately guide development within these areas (see LUT section 3.2 and Figure 5-6). These master plans will provide design guidelines and standards for public improvements, as well as for

private or public development within these designated areas. Examples may include enhanced pavement and/or sidewalk standards, enhanced landscape standards, thematic sign standards, and special architectural standards for buildings or other structures.

The City will prepare a General Plan Implementation Program to assure establishment of these gateway master plans, which Program will also include interim provisions for the processing of any projects within these areas prior to completion and adoption of the according entryway/gateway master plan.

LUT 9.3: As part of the approval process for projects within designated city entryway/gateway areas, the City shall confirm that the design conforms to applicable entryway/gateway design guidelines and standards.

Implementation of these policies ensure that the Preferred Plan and all three Scenarios do not result in a significant impact to scenic resources because the policies provide opportunities to improve the City's appearance, establish a stronger community image, maintain the city's open space network, and promote the beautification of the city. Policy 13.4 specifically requires that all new development adjacent to scenic routes will be subject to design review to ensure that it will enhance scenic quality of the route. Additionally, these policies promote the use of special design treatments, which may include themed signage, landscape and architectural design enhancements, and other elements to signify arrival into the City and progression to key destinations along gateway streets. Therefore, impacts to scenic vistas or resources would not be significant.

5.2.3.2 Threshold 2: Visual Character

Threshold 2 states that the proposed project would result in a significant impact to landform alteration/aesthetics if it would substantially degrade the existing visual character or quality of Chula Vista. The General Plan Update affects visual resources through the designation of land use types and land management practices. Land use patterns established by the General Plan Update define the city's visual appearance. As land uses are introduced into the landscape they become part of the visual environment. Like other physical resources, the visual environment can be subject to fragmentation and integrity loss, especially when under the stress of competing uses. The intensification of urban and rural land uses, or activities that impact components of the physical environment, can result in significant impacts on citywide visual resources. For these reasons, the visual environment, like other resources, often warrants management through protective policies. Future growth has the potential to impact the visual environment through fundamental changes in land use and/or impacts to components of the landscape that contribute to visual quality.

Adoption of the proposed Preferred Plan and all three Scenarios would result in substantial changes to landforms and visual quality in currently undeveloped portions of the city. Increased density within the Urban Core and Montgomery Subareas would result in increased building heights and mass. In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses. Objectives LUT 8, 9, 10, and 11 contain policies that address the maintenance and preservation of the existing visual quality of the General Plan Area:

Objective LUT 8

Strengthen and sustain Chula Vista's image as a unique place by maintaining, enhancing and creating physical features that distinguish Chula Vista's neighborhoods, communities, and public spaces, and enhance its image as a pedestrian-oriented and livable community.

Policies

UT 678.1: Develop a program to enhance the identity of special districts and neighborhoods to create variety and interest in the built environment, including such items as signage, monuments, landscaping and street improvements.

LUT 8.2: Emphasize certain land uses and activities, such as cultural arts, entertainment, specialty retail, or commercial recreation, to enhance or create the identity of specialized districts or Focus Areas in the City.

LUT 8.3: Ensure that buildings are appropriate to their context and designed to be compatible with surrounding uses and enhance the desired character of their district.

LUT 8.4: Encourage and require, where feasible, the incorporation of publicly accessible urban open spaces, including parks, courtyards, water features, gardens, passageways, paseos, and plazas, into public improvements and private projects.

LUT 8.5: Prepare urban design guidelines that help to create pedestrian-oriented development by providing:

- Pedestrian circulation among parcels, uses, transit stops, and public or publicly accessible spaces;
- Human scale design elements;

- Varied and articulated building facades;
- Visual (first floor clear glass windows) and physical access for pedestrians;
- Ground floor residential and commercial entries that face and engage the street; and
- Pedestrian-oriented streetscape amenities.

LUT 8.6: Develop a master plan for artwork in public places that would identify the types of art desired and establish appropriate settings for the display of art, including within public rights-of-way and landscape medians.

LUT 8.7: Ensure that vacant parcels and parcels with unsightly storage uses, such as auto salvage yards, are appropriately screened from the street to reduce their negative visual effects.

LUT 8.8: Encourage the upgrading, beautification, and revitalization of existing strip commercial areas and shopping centers.

Objective LUT 10

Create attractive street environments that complement private and public properties, create attractive public rights-of-way, and provide visual interest for residents and visitors.

Policies

LUT 10.1: The City shall create unique landscape designs and standards for medians for each major thoroughfare to distinguish each from the other and to provide a special identity for districts and neighborhoods.

LUT 10.2: The landscape designs and standards shall include a coordinated street furniture palette including waste containers and benches, to be implemented throughout the community at appropriate locations.

LUT 10.3: Provide a well-designed, comfortable bus stop for use throughout the city.

LUT 10.4: Prior to the approval of projects that include walls that back onto roadways, the City shall require that the design achieves a uniform appearance from the street. The walls shall be uniform in height, use of materials and color, but also incorporate elements that add visual interest, such as pilasters.

LUT 10.5: Require undergrounding of utilities on private property and develop a priority-based program of utility undergrounding along public rights-of-way.

LUT 10.6: Study the locational requirements of utility, traffic control and other cabinets and hardware located in the public right-of-way to determine alternative locations for these items in less obtrusive areas of the street environment.

LUT 10.7: Work with utility providers to coordinate the design of utility facilities (e.g., substations, pump stations, switching buildings, etc.) to ensure that the facilities fit within the context of their surroundings and do not cause negative visual impacts.

Objective LUT 11

Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

Policies

LUT 11.1: Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and bay sight lines, and important gateways into the city.

LUT 11.2: Promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista, and create a vital and attractive environment for businesses, residents and visitors.

LUT 11.3: The City shall, through the development of regulations and guidelines, ensure that good project landscape and site design creates places that are well-planned, attractive, efficient, safe and pedestrian friendly.

LUT 11.4: Actively promote architectural and design excellence in buildings, open space, and urban design.

LUT 11.5: Require a design review process for all public and private discretionary projects (which includes architectural, site plan, landscape and signage design) to review and evaluate projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.

These policies promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista. This would be done by using the design review process for all developments to review and evaluate projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.

Northwest Planning Area

The Urban Core Subarea encompasses the downtown area of Chula Vista. As the city continues to mature, there will be more infill development and redevelopment of existing properties within the Urban Core. As discussed in Section 5.1, Land Use, of this EIR, the Northwest Planning area consists predominantly of single-story, single-family homes with limited multi-family units along major roadways. The multi-family units consist of condominiums, townhouses, and apartments that are generally two to three stories in height. Retail uses are located primarily along Broadway from E to L Streets and along Third Avenue from E to H Streets. Despite having many unique and attractive characteristics, some neighborhoods have experienced decline over the years and blighted commercial and residential areas have been targeted for revitalization.

Redevelopment programs are intended to revitalize older commercial, industrial, and residential areas. Multi-family residential units are proposed in several districts of the Urban Core in locations where new growth or redevelopment can best be accommodated to create mixed-use urban environments that are oriented to transit and pedestrian activity. Adding more density and increasing the multi-family units within the Urban Core has the potential to cause an adverse effect on the visual character of the Urban Core.

The following policies are proposed in the General Plan Update that address the maintenance and preservation of the existing visual quality of the Urban Core Subarea:

LUT 49.10: Support the development of public and private recreation and urban parks that include pedestrian-oriented plazas, benches, other streetscape amenities and, where appropriate, landscaped play areas.

LUT 49.11: Establish locations within focus areas where the permitted heights and densities are greater than in locations adjacent to single-family areas.

LUT 49.12: Establish standards for transitions in building height that respond to public view corridors and proximity to single-family areas.

LUT 49.13: Limit high-rise development to the three transit-oriented mixed use areas near the E Street, H Street and Third Avenue/H Street transit stations, subject to the provisions of LUT Section 7.2.

LUT 49.14: Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan. (see also LUT 2.6).

LUT 49.15: Recognize that different portions of the Urban Core Subarea have a desirable character, and develop specific plans and programs to strengthen and reinforce their uniqueness. Develop land use, density, special design features, and building guidelines for appropriate Focus Areas.

LUT 49.16: Prepare urban form guidelines and standards for development as part of the Urban Core Specific Plan.

LUT 49.17: With the adoption of the Urban Core Specific Plan, establish policies, development standards, and/or design guidelines in the Urban Core Specific Plan to address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design should respond to public view corridors.

LUT 49.18: With the adoption of the Urban Core Specific Plan, establish design standards for mixed use development that achieves a high quality pedestrian-scaled environment and promotes side or rear located parking areas, streetfront windows and entries, and public and private open space.

LUT 49.19: With the adoption of the Urban Core Specific Plan, create a pedestrian-oriented realm by requiring retail or public uses at the ground floor of buildings.

LUT 49.20: Encourage the linkage and integration of new development with existing neighborhoods by means of open space areas, parks, and pathways as a means of enhancing pedestrian connections.

LUT 49.21: Where a park, natural open space, or urban open space exists adjacent to or near a transit-oriented development, these features should be incorporated into the development as open space amenities.

LUT 49.23: Specific Plans should identify building and site design guidelines for commercial or mixed use areas to include the height above which buildings must step back; the location of the building's horizontal articulation; and other design elements.

LUT 49.24: Reinforce or encourage the establishment of a strong pedestrian orientation in designated districts, activity centers, and pedestrian-oriented focus areas, so that these areas may serve as a focus of activity for the surrounding community and a focus for investment in the community.

These policies require the preparation of urban design standards such as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Urban Core. The Urban Core Specific Plan will establish design standards for mixed-use development that achieves a high-quality pedestrian-scaled environment and promotes side or rear located parking areas, streetfront windows and entries, and public and private open space. Requirements for the Urban Core Specific Plan include building and site design guidelines as specified in Policies LUT 49.15, 49.16, 49.17, and 49.23. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 2, 3, and 11 reduce visual quality impacts within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented, impacts remain significant.

In addition, Policy LUT 11.5 provides the mechanism to review design specifications for individual projects prior to issuance of building permits.

Within the Urban Core Subarea, the Preferred Plan and all three Scenarios propose high-rise buildings between Third and Fourth Avenues and near the E Street and H Street Trolley

Stations in the Mixed Use Transit Focus Areas. These designations are proposed at the Third Avenue/H Street, E Street, and H Street transit stations and include a mix of office, retail, and residential densities planned for a gross density of up to 60 dwelling units per acre. The extent to which a high-rise building results in a significant impact depends upon its design setting. Visually, it has to do with architectural design and with pedestrian orientation and scale. Policies associated with Objective LUT 2 and LUT 49.16 as well as Policies LUT 49.11 through 49.24 require the establishment of policies, development standards and/or design guidelines in the Urban Core Specific Plan that address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design shall respond to public view corridors. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 2, 3, and 11 reduce visual quality impacts from the development of high-rise buildings within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

In addition to the Transit Focus Areas, the Preferred Plan and all three Scenarios proposes an H Street Transit Corridor Special Study Area within the H Street Corridor District (see Figure 5.1-6). The purpose of the special study for the H Street Transit Corridor Special Study Area is to analyze and evaluate the appropriateness of plan changes that could result in mixed land uses, increased intensities, and potential high-rise buildings along H Street between Interstate 5 and Third Avenue. In view of existing land uses along H Street, the future intensification planned with the two Transit Focus Areas at either end of the corridor, and the potential for future market forces to focus on H Street as a key corridor, a special study is needed that examines further potential changes in land use and intensity, building mass, the potential for taller buildings, and the relationship and appropriate transitions to adjacent stable neighborhoods. This study would be conducted subsequent to the adoption of any potential high-rise buildings along H Street between Interstate 5 and Third Avenue within the study area.

Southwest Planning Area

Development within the Montgomery Subarea would include redevelopment as well as new development. This would have the potential to impact the existing visual quality of the area. Several polices have been established which pertain to aesthetics and design within the Montgomery Subarea. The policies associated with Objectives LUT 41, 42, and 43 address mix use areas and design considerations such as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Montgomery Subarea:

LUT 41.13: Prior to or concurrent with the approval of the first specific plan or other zoning regulations in the South Third Avenue District, establish a design code that reinforces the area, and which establishes a coherent, aesthetic character to the Southwest Planning Area.

LUT 41.14: The specific plan or other regulations prepared to guide development in this area shall address design issues that create a sense of place, a pedestrian-friendly environment, enhanced pedestrian linkages, and compatibility with the scale and feel of a cohesive neighborhood community.

LUT 41.15: A specific plan or other regulations in the South Third Avenue District shall require the use of wide sidewalks, through block paseos, and other appropriate design features that enhance the pedestrian environment to link high use areas, such as the post office, library, park, or a concentration of shops, with transit stations or transit stops.

LUT 42.13: Encourage the upgrading of older and/or marginal retail uses along the South Broadway District.

LUT 42.14: Prior to or concurrent with the approval of the first specific plan or other zoning regulations for the South, Broadway District between L Street and Naples Street, prepare specific guidelines for the development of mixed use projects on South Broadway.

LUT 42.15: Concurrent with the approval of zoning for industrial uses at the northwest corner of Industrial Blvd. and Naples Street in the South Broadway District

LUT 43.7A: Building heights in the Palomar Gateway District Mixed Use Transit Focus Area shall be low-rise with some mid-rise buildings.

LUT 43.10: The specific plan or other regulatory document for the Palomar Gateway District shall establish design and landscape guidelines for the improvement of Palomar Street as a gateway to the city.

LUT 43.11: Provide for safe, effective and aesthetic pedestrian crossings and improvements to Palomar Street and Industrial Blvd.

These policies establish a design code that reinforces the safety and serenity of the area, and seeks to establish a coherent, aesthetic, international character to the Southwest Planning Area. Additionally they require the specific plan or other appropriate document prepared to guide development in this area to address design issues to create a sense of place, a

pedestrian-friendly environment, enhanced pedestrian linkages, and compatibility with the scale and feel of a cohesive neighborhood community. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 8, 9, 10, and 11 reduce visual quality impacts within the Montgomery Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

East Planning Area

Adoption of the Preferred Plan and all Scenarios would result in substantial changes to landforms and visual quality in currently undeveloped portions of the East Planning Area. In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses. Development completed in conformance with the proposed General Plan Update would result in grading of mesatops and hillsides representing a visual impact to the area. Views of mesas and hillsides would be replaced by an urban landscape. This would have the potential to impact the existing visual quality of the area. Several polices have been established which pertain to aesthetics and design within the Otay Ranch Subarea. The policies associated with Objectives LUT 75, 80, 81, 83, 85, 89, and 94 address mixed-use areas and urban design considerations such as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the East Planning Area:

Objective LUT 75

Preserve and protect Otay Ranch's significant natural resources and open space lands with environmentally sensitive development.

Objective LUT 80

Protect the natural features of the Otay Ranch Preserve located in Wolf Canyon.

Objective LUT 81

Develop a higher density, mixed use, transit-oriented town center centered on the intersection of Rock Mountain Road and La Media Road, surrounded by lower density residential use and a large community park, and preserve Rock Mountain as an important landform and visual resource.

Objective LUT 83

Promote limited industrial development opportunities, where appropriate access to non-residential circulation roadways is provided and environmental impacts are minimized.

Policies

LUT 83.1: Allow limited industrial development on property east of Heritage Road and south of the Otay Valley, subject to the preparation of a master development plan that addresses appropriate street improvements, vehicular access, screening from public viewsheds, development infrastructure, protection of adjacent environmentally sensitive resources, water quality, and phasing.

Objective LUT 85

Establish a distinctly identifiable corridor that creates a unique sense of place through its integration of diverse uses and land use focus areas into a cohesive development pattern and its linkages between the district's focus areas, and with the subregion, adjoining communities, and open spaces.

LUT 85.2: Locate and design buildings, public spaces, and landscapes to create a distinct character and identity for each focus area, emphasizing development patterns that foster pedestrian activity and enhance community livability.

LUT 85.3: Connect the corridor's uses to surrounding open spaces with pedestrian paths and greenbelts.

LUT 85.4: As part of any SPA plan within the University Study Area, establish a coordinated system of physical elements that interconnect and unify the corridor's Focus Areas including streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character.

LUT 89.1: Prior to the adoption of a SPA involving the University site or area supporting the campus, locate and design the development of university and supporting uses to achieve a cohesive and integrated campus environment, in consideration of the following principles:

- Development of a campus "core" as the highest intensity of use, which concentrates classrooms, offices, libraries, and other

academic uses that is surrounded by housing, athletic fields, and other complementary uses.

- The campus "core" shall be located in proximity and linked to the Town Center, establishing continuity of urban form, density, street network, pedestrian sidewalks, paths, and landscape. Uses that may be shared by the university and surrounding community should be concentrated along the campus/Town Center edge, such as art galleries, cultural facilities, retail, food service, and similar uses. A "permeable" edge between the campus and Town Center shall be established.

- The campus "core" shall be linked with the transit center established within the Town Center.

- Individual research institutes that may be developed with a Multi-Institutional Teaching Center (MITC) may be distributed throughout the university site and/or as an interface with the Town Center or Eastern Urban Center (EUC). In either case, there should be direct physical linkages with the campus "core."

- The university's uses and buildings shall be linked and unified through a system of plazas/quads, pathways, transportation corridors, recreational areas, and open spaces.

- Greenway linkages shall be established between the university campus and surrounding open spaces.

- Buildings shall be sited along common sidewalks, pathways, and plazas to stimulate a high level of pedestrian activity.

- Parking shall be located on the periphery of the campus "core" and university campus, to the extent feasible.

LUT 94.4: Develop the EUC as an "intense urban form," with mid- and high-rise buildings typically located in the central core and near transit.

LUT 94.5: Apply the Design Review process for discretionary projects to ensure that building facades are designed and oriented to accentuate and enhance the pedestrian experience and urban street scene. Buildings fronting on pedestrian spaces shall be designed to support and enhance dining, entertainment, and art and cultural activities.

LUT 94.6: As part of to the approval of a SPA, provide pedestrian-oriented plazas, through-block paseos, and landscaped squares to add interest and provide contrast to the buildings, which shall generally be built to the sidewalk's edge.

These policies would reduce visual quality impacts from implementation of the Preferred Plan and all three Scenarios within the East Planning Area because they establish a common system of elements that interconnect and unify streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character. These policies would also connect the corridor's uses to surrounding open spaces with pedestrian paths and greenbelts. Impacts remain significant, however, because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant. Additionally, the open, rolling hills would be permanently altered by development and the change from open areas to developed areas in the east is a significant adverse visual quality impact of the Preferred Plan, as it is under all three Scenarios.

5.2.4 Level of Significance Prior to Mitigation

Because the development footprint and relative intensity of land uses for each of the scenarios is similar, impacts resulting from implementation of any of the scenarios (Preferred Plan and Scenarios 1, 2, or 3) would be the same regardless of which is ultimately selected.

5.2.4.1 Threshold 1: Scenic Resources and Vistas

Threshold 1 states that the proposed project would result in a significant impact to landform alteration/aesthetics if it would have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including, but not limited to, trees, and rock outcroppings. There are several scenic vistas located throughout the city. The intensification of urban land uses, or activities that impact components of the physical environment, can result in significant impacts on scenic resources throughout the city. Compliance with Objectives LUT 9 and 13 and their associated policies as required by Policy LUT 13.4 would ensure that the Preferred Plan and Scenarios 1, 2, or 3 do not result in significant impacts to scenic resources and vistas because they would maintain the city's open space network, create enhanced gateway features for city entry points and important other entries, such as to special districts, and promote beautification of the city. Policy LUT 13.4 requires development adjacent to designated scenic routes to be designed to create substantial open areas, create pleasing streetscapes and coordinate sign standards. It further requires that this condition be met through the design review process for all development adjacent to scenic roadways. Therefore, impacts to scenic vistas or resources would not be significant.

5.2.4.2 Threshold 2: Visual Character

Threshold 2 states that the proposed project would result in a significant impact to landform alteration/aesthetics if it would substantially degrade the existing visual character or quality of Chula Vista. Future growth has the potential to impact the visual environment through fundamental changes in land use and/or impacts to components of the landscape that contribute to visual quality. Adoption of the Preferred Plan and all three Scenarios would result in substantial changes to landforms and visual quality throughout the General Plan area. Increased density within the Urban Core and Montgomery Subareas would result in increased building heights and mass. In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses. Objectives LUT 2, 3, 4, 6, 10, and 11 promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista. The design review process would occur for multi-family, commercial and industrial development, and redevelopment within redevelopment project area boundaries to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.

Northwest Planning Area

The Northwest Planning Area has been previously developed with commercial, residential, and industrial uses. Implementation of any of the scenarios would allow for greater land use intensity within the Urban Core compared to existing conditions. Adding more density and increasing the number of multi-family units within the Urban Core has the potential to cause an adverse effect on the visual character of the Urban Core. Policies LUT 49.11 through 49.24, as well as the policies associated with Objectives LUT 2, 3, 4, 6, 10, and 11 require the preparation of urban design standards such as building heights and massing, public view corridors, circulation linkages, and the appearance of important gateways within the Urban Core. This would be done as part of the Urban Core Specific Plan and would establish design standards for mixed-use development that achieves a high quality pedestrian-scaled environment and promotes side or rear located parking areas, streetfront windows and entries, and public and private open space. Implementation of Policies LUT 49.11 through 49.24, as well as compliance with the policies associated with Objectives LUT 10 and 11 reduce visual quality impacts within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Within the Urban Core Subarea, the Preferred Plan and all three Scenarios propose high-rise buildings between Third and Fourth Avenues in the Mixed Use Transit Focus Area. The extent to which a high-rise building results in a significant impact depends upon its design

setting. Visually, it has to do with architectural design and with pedestrian orientation and scale. Policies associated with Objective 2, and Policy LUT 49.17 listed above, as well as Policies LUT 49.11 through 49.24 require the establishment of policies, development standards and/or design guidelines in the Urban Core Specific Plan that address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design shall respond to public view corridors. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 2, 3, 10, and 11 reduce visual quality impacts from the development of high-rise buildings within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Southwest Planning Area

Development completed in conformance with any of the scenarios within the Montgomery Subarea would result in greater land use intensity which would, necessarily, result in increased building heights and mass. This would have the potential to impact the existing visual quality of the area. Policies LUT 41.13 through 41.15, 43.7A, and LUT 43.10 and 43.11 establish a design code that reinforces the safety and serenity of the area, and seeks to establish a coherent, aesthetic, international character to the Southwest Planning Area. Implementation of these policies as well as compliance with the policies associated with Objectives LUT 3, 4, 6, 10, and 11 reduce visual quality impacts within the Southwest Planning Area resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

East Planning Area

Development in accordance with the Preferred Plan and all three Scenarios would significantly change the visual character of the area. The existing character within the East Update Area would be changed from an undeveloped area to an urban area, which would affect the aesthetic character and consequently the views of the project site from surrounding areas. This would have the potential to impact the existing visual quality of the area. Compliance with policies established in Objectives LUT 75, 80, 81, 83, 85, 89, and 94 as well as Objectives LUT 3, 10, and 11 would reduce visual quality impacts within the East Planning Area because they establish a common system of elements that interconnect and unify streets, transit, sidewalks, streetscapes, signage, lighting, building placement and form, and architectural character. These policies would also connect the area's uses to surrounding

open spaces with pedestrian paths and greenbelts. Impacts remain significant, however, because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant. Additionally, the existing open, rolling hills would be permanently altered by development and the change from open areas to developed areas in the east is a significant adverse visual quality impact of the Preferred Plan, as it is under all three Scenarios.

5.2.5 Mitigation Measures

5.2.5.1 Threshold 1: Scenic Resources and Vistas

No mitigation is required.

5.2.5.2 Threshold 2: Visual Character

In the East Planning Area, the conversion of open, rolling hills to a developed condition was identified as a significant adverse impact. The following mitigation is designed to reduce the aesthetic impacts.

5.2-1 Within the East Planning Area, prior to approval of grading plans, the applicant shall prepare grading and building plans that conform to the landform grading guidelines contained in the grading ordinance, Otay Ranch GDP, and General Plan. The plans shall be prepared to the satisfaction of the Director of Planning and Building and the City Engineer. These plans and guidelines shall provide the following that serve to reduce the aesthetic impacts:

- A Landscape Design that addresses streetscapes, provides landscape intensity zones, greenbelt edge treatments, and slope treatment for erosion control.

- Grading Concepts that ensure manufactured slopes that are contoured and blend and mimic with adjacent natural slopes.

- Landscaping Concepts that provide for a transition from the manicured appearance of developed areas to the natural landscape in open space areas.

- Landscaping Concepts that include plantings selected to frame and maintain views. Landscaping should not block views created through grading and/or site design.

5.2.6 Level of Significance After Mitigation

Conformance with the proposed General Plan Update objectives and policies reduce visual quality impacts within the General Plan Update Area resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented, impacts remain significant. Additionally, within the East Planning Area, the conversion of open, rolling hills to a developed condition was identified as a significant adverse impact. Implementation of mitigation measure 5.2-1 reduces the significant landform alteration and aesthetics impacts; however, the open, rolling hills would be permanently altered by development and the impact due to the change from open areas to developed areas remains significant and unmitigated.

5.3 Biological Resources

5.3.1 Existing Conditions

5.3.1.1 Regulatory Plans and Policies

City of Chula Vista Multiple Species Conservation Program (MSCP)

The City of Chula Vista Multiple Species Conservation Program Subarea Plan (Subarea Plan), which has been incorporated by reference in Section 1.4 of this EIR and summarized below, is a subregional plan under the California Natural Communities Conservation Planning Act (NCCP). The City adopted the Subarea Plan on May 13, 2003, as a new element of the General Plan. The MSCP is a comprehensive, long-term habitat conservation program intended to protect species against the potential impacts of habitat loss associated with development of both public and private lands. The Subarea Plan is an implementation mechanism for the broader MSCP Subregional Framework Plan, which ultimately executes and enforces the NCCP. Once implemented, any projects subject to City approval must be in conformance with the Subregional Plan, as well as the Chula Vista MSCP Subarea Plan.

The Subarea Plan is a comprehensive long-term habitat conservation plan that addresses the needs of multiple species and the preservation of natural vegetation communities for lands within the City's jurisdiction. The Chula Vista Subarea is comprised of lands within the incorporated city limits for which Take Authorization through the resource agencies will be granted. Until Take Authorization is granted to the City, projects impacting listed species must obtain their own individual permits through the resource agencies.

The larger Chula Vista MSCP Planning Area totals 57,849 acres and includes lands within both the City's General Plan boundary and unincorporated County of San Diego. The City's Preserve will eventually encompass approximately 5,000 acres of the City's most sensitive open space areas. In addition, another approximately 4,200 acres outside the City's jurisdiction would be preserved as a result of development occurring within the City's urban boundaries. Lands set aside within the Preserve would be managed while continuing to provide passive recreational opportunities consistent with the MSCP Subarea Plan for the public.

The goals of the Chula Vista MSCP Subarea Plan are as follows:

- To conserve Covered Species and their habitats through the conservation of interconnected significant habitat cores and linkages.
- To delineate and assemble a Preserve using a variety of techniques including public acquisition, on- and off-site mitigation, and land use regulations.

- To provide a Preserve Management Program that, together with the federal and state management activities, will be carried out over the long term, further ensuring the conservation of Covered Species.
- To provide necessary funding for a Preserve management program and biological monitoring of the Preserve.
- To reduce or eliminate redundant federal, state, and local natural resource regulatory and environmental review of individual projects by obtaining federal and state authorizations for 86 covered species.

The Subarea Plan provides the framework for habitat planning and establishes areas of conservation and development within the Chula Vista MSCP Subarea. The provisions of the Subarea Plan and Implementing Agreement (the instrument that enforces the provisions of the plan) are intended to supercede those of other elements of the General Plan in the event of conflicts.

The Subarea Plan provides for the conservation and management of key sensitive species and habitats while ensuring a contiguous preserve design. The Subarea Plan identifies areas designated for development for which hard-line Preserve boundaries have been established. Covered Projects contain specific areas delineated for development, as well as 100 percent conservation. Covered Projects include Rolling Hills Ranch (Salt Creek Ranch), San Miguel Ranch, Bella Lago, and Otay Ranch (including the University site). Preserve boundaries have been established in these areas on an individual project basis after evaluation of biological data and consultation with the wildlife agencies.

For those areas outside of covered projects, impacts to sensitive biological resources are regulated under the Habitat Loss and Incidental Take (HLIT) Ordinance. The purpose of the HLIT Ordinance is to protect and conserve native habitat within the city of Chula Vista and the viability of the species supported by those habitats. The HLIT provisions are intended to implement the Subarea Plan by placing priority on the preservation of biological resources within the planned and protected preserve.

As discussed in the Final EIR/EIS for the MSCP Subregional Plan (City of San Diego 1997), which has been incorporated by reference in Section 1.4 of this EIR and summarized below, impacts to narrow endemic species must be avoided to the maximum extent possible. If impacts are unavoidable, the Subarea Plan limits encroachment of narrow endemic species habitat based the on the project's location within the Chula Vista Subarea. The Subarea Plan requires implementation of conservation measures to ensure long-term survival of narrow endemic species.

Incorporated in the Subarea Plan is the Wetlands Protection Program, which provides wetlands protection through project entitlement reviews and the CEQA process. This process will provide an evaluation of wetlands avoidance and minimization and will ensure

compensatory mitigation for unavoidable impacts to wetlands in order to achieve a no net loss of wetland functions or values. Impacts to wetlands will be avoided or minimized to the maximum extent practicable pursuant to the Wetlands Protection Program, Section 5.2.4 of the Subarea Plan.

The Subarea Plan also provides guidelines to address Adjacency Management Issues in order to address indirect impacts associated with development adjacent to the Preserve. All new development must adhere to these guidelines which address potential drainage issues, overspill of lighting and noise into the Preserve, use of non-invasives, and limiting of public access in order to preserve the habitat integrity.

Federal Endangered Species Act (FESA)

The General Plan does not specifically address existing state and federal regulations related to biological resources. However, the Subarea Plan includes the conservation requirements for covered species under FESA and provides for wetland protections that are consistent with Section 404 of the Clean Water Act and Section 1600 of the California Fish and Game Code.

Section 7 of the FESA stipulates that a federal action such as issuance of a permit under the Clean Water Act by the U.S. Army Corps of Engineers (USACE) requires the federal agency (e.g., USACE) to enter into consultation with the U.S. Fish and Wildlife Service (USFWS) to ensure that the federal action is not likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical (Section 7[a][2]).

Section 9 of the FESA prohibits the taking of species listed by the USFWS as threatened or endangered. As defined by the FESA, “taking” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, or capture or collect, or attempt to engage in such conduct.” With respect to threatened and endangered plants, the FESA makes it unlawful to remove, damage, or destroy any such species in knowing violation of the law.

Section 10(a) of the FESA provides for takings that are incidental to, but not the purpose of, otherwise lawful activities. Similar provisions also are found under Section 7 for actions by federal agencies. FESA protection for threatened plants is substantially the same as that given to endangered plants, except that the seeds of threatened plants may be collected.

California Endangered Species Act (CESA)

Section 2080 of the California Endangered Species Act prohibits the import, export, take, possession, purchase, or sale of listed species unless explicitly authorized by other provisions of the law. Section 2053 of the CESA states that “. . . it is the policy of the state that state

agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available with conserving the species or its habitats which would prevent jeopardy."

California Fish and Game Code

Sections 1600-1603 of the California Fish and Game Code regulate all diversions, obstructions, or changes to the natural flow of bed, channel, or bank of any river, stream, or lake in California that supports fish or wildlife. Under state law, California Department of Fish and Game (CDFG) must be contacted for a streambed alteration agreement for any activity that may impact a streambed or wetland. CDFG has maintained a "no net loss" policy regarding potential impacts and traditionally has required replacement of wetlands on at least an acre-for-acre (1:1) basis. In practice, replacement ratios are typically higher than 1:1 to compensate for the immediate loss, replacement time, and inherent failures of mitigation attempts.

Clean Water Act

Wetlands protection is provided throughout the city through individual project entitlement reviews, MSCP compliance, the CEQA process, and the federal and/or state wetland permitting process. Section 404 of the Clean Water Act, which is administered by the USACE, regulates the discharge of dredged and/or fill material into "waters of the United States." Wetlands are further defined in 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support . . . a prevalence of vegetation typically adapted for life in saturated soil conditions." The permitting process entails consultation with federal agencies, public notice, and preparation of a project alternatives analysis in accordance with guidelines issued by the U.S. Environmental Protection Agency (EPA). In accordance with the provisions of Section 404, Fish and Wildlife Coordination Act, and, if federally listed species are present, Section 7 of the FESA, USACE is required to consult with the USFWS prior to acting on the permit. Development projects which contain wetlands would be required to demonstrate that impacts to wetlands have been avoided to the greatest extent practicable and, where impacts are nonetheless proposed, that such impacts have been minimized.

California Coastal Commission

The California Coastal Commission (CCC) is charged with the regulation of development in California's coastal zone as stipulated in the California Coastal Act. Sections 30230, 30231, 30233, 30236, and 30240 of the Coastal Act are directly applicable to the preservation and

protection of wetlands and other environmentally sensitive areas. Section 30233(a) lists the types of development for which diking, filling, or dredging may be permitted in open coastal waters, wetlands, estuaries, and lakes occurring in the coastal zone. This section also stipulates the criteria under which development is permitted (i.e., least environmentally damaging alternative and existence of feasible mitigation measures).

5.3.1.2 Local Plans and Policies

Greenbelt Master Plan

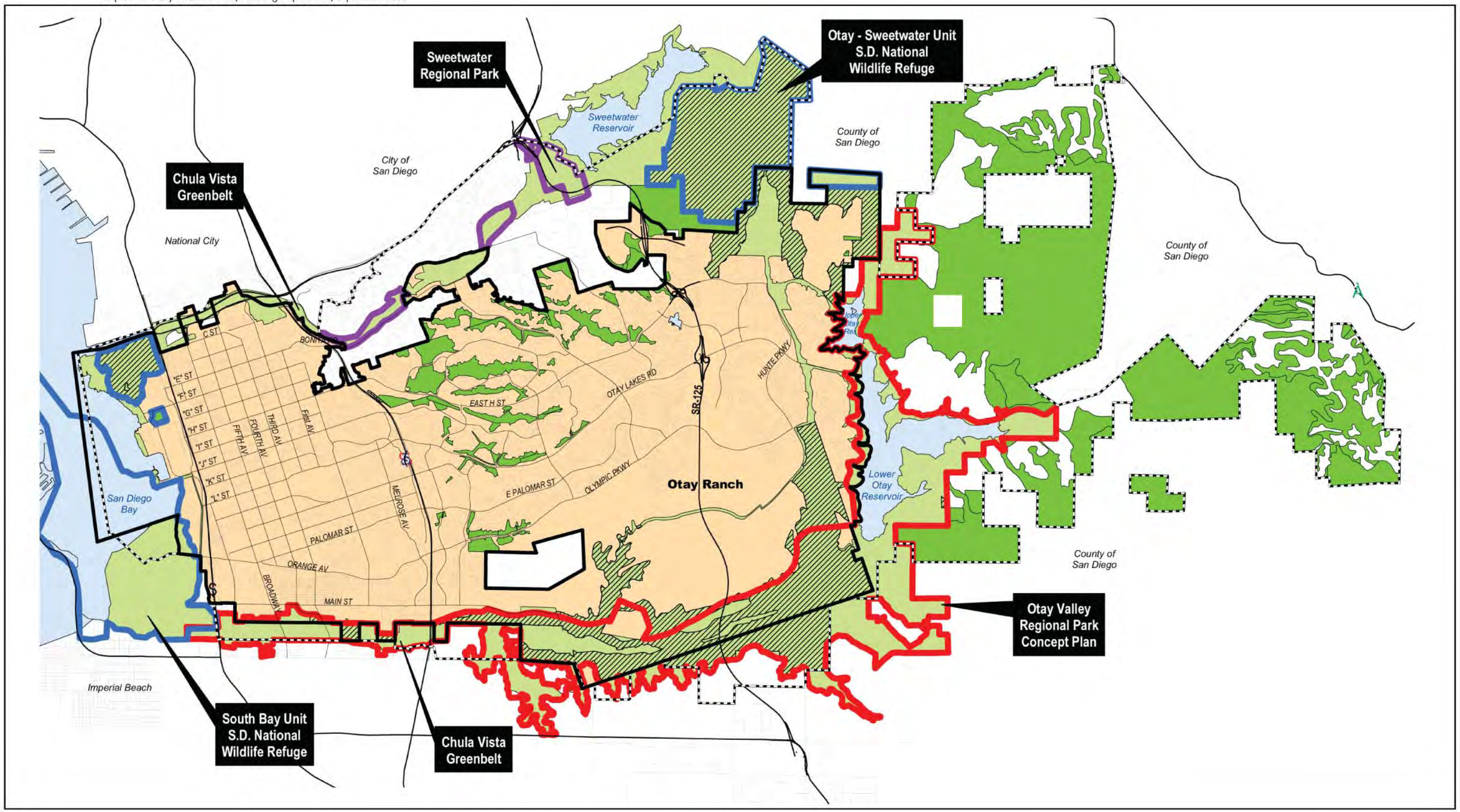
The Greenbelt Master Plan was adopted by the City Council on September 16, 2003 and provides guidance and continuity for planning open space and constructing and maintaining trails that encircle the city. The Plan's primary purpose is to provide goals and policies, trail design standards, and implementation tools that guide the creation of a Greenbelt System of multi-use trails through open space corridors. Implementation of the Greenbelt System creates a unique identity for the city while unifying the western and eastern areas of the city. The Greenbelt Master Plan concept for open space is contained within the Preserve areas depicted in Figure 5.1-4 in the Land Use section of this EIR. That figure also shows the proposed trail system that is part of the Greenbelt Master Plan.

Section 7 of the Land Use Element of the adopted General Plan under the subheading of Chula Vista Greenbelt discusses uses that are compatible with the open space character of the Greenbelt including commercial recreational uses and recreational activities. This section of the General Plan also specifies that trails through the Greenbelt may need to be paved, and may be up to 11 feet wide to ensure continuous access for maintenance and security. However, Section 7.5.3 of the MSCP Subarea Plan contains specific trail and construction guidelines for trails within preserve lands. These guidelines supersede those found in the Greenbelt Master Plan wherever there is overlap.

Otay Valley Regional Park (OVRP) Concept Plan

The Otay Valley Regional Park Concept Plan was adopted in July 1997 by the City of San Diego and the County of San Diego, and in May 2001 by the City of Chula Vista through a Joint Exercise of Powers Authority (JEPA). The Concept Plan area encompasses a large area of sensitive resources, including areas that are currently undergoing, or are proposed for restoration and enhancement along the Otay River, as depicted in Figure 5.3-1. To ensure that the Otay Valley Regional Park meets the diverse goals of a Regional Park, policies focus on providing recreation facilities, protecting resources, and coordinating the park's development with adjacent land uses to ensure compatible development, buffering, and linkages with other regional resources.

Map Source: City of Chula Vista, Planning Department, September 2003



MSCP Preserve Area
Greenbelt Area
Greenbelt and MSCP Overlap
Otay Valley Regional Park Concept Plan
San Diego National Wildlife Refuge
Sweetwater Regional Park
Water Features
City Boundary
General Plan Boundary

0 Feet 6500 N

FIGURE 5.3-1
Natural Systems Open Space

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fig5.3-1.ai 03/21/05

Active recreation areas are identified in the OVRP Concept Plan and the MSCP Subarea Plan. These areas are not a part of the Preserve, and include both existing and proposed active and passive recreation sites. Active recreation uses are identified in the Otay Ranch GDP as allowed uses in the Otay Ranch Preserve and are not subject to the 100-foot Edge Plan requirements. Within the Otay Ranch portion of the OVRP, the GDP and the RMP include policies and criteria for siting and design of active recreational uses.

Otay Ranch Resource Management Plan (RMP)

The Otay Ranch Resource Management Plan was adopted by the City of Chula Vista in October 1993, provides guidance for resource protection within Otay Ranch. An important part of the RMP is the creation of the Otay Ranch Preserve. The Otay Ranch Preserve includes approximately 11,375 acres to be set-aside as mitigation for impacts to sensitive resources resulting from Otay Ranch development that would occur both within the city and in the county of San Diego. According to the RMP, of this 11,375 acres, 400 acres (206 acres by the Subarea Plan) can be used for active recreation land uses. The Otay Ranch Preserve has been designed and would be managed specifically for protection and enhancement of natural resources present within Otay Ranch, including sensitive biological resources.

The single unifying goal of the Resource Management Plan is the establishment of an open space system that would become a permanent preserve dedicated to the protection and enhancement of the biological, paleontological, cultural (archaeological and historical), floodplain, scenic resources, and visual quality of Otay Ranch, the maintenance of long-term biological diversity, and the assurance of the survival and recovery of native species and habitats within the Preserve.

5.3.1.3 Existing Citywide Conditions

The majority of the natural biological resources within the city consist of native upland habitats including coastal sage scrub (3,815 acres), grasslands (3,125 acres), and small areas of maritime succulent scrub (293 acres). Approximately 15 percent of the natural vegetation communities within the city also consist of wetland resources including southern coastal salt marsh (204 acres) and riparian/tamarisk scrub (604 acres) and natural flood channels (159 acres) (City of Chula Vista MSCP Subarea Plan, February 2003). Table 5.3-1 provides an estimate of existing natural vegetation communities within the city. Table 5.3-1 summarizes the vegetation mapping that was performed for the MSCP Subregional Planning efforts. The MSCP vegetation mapping is depicted in Figure 5.3-2 (City of Chula Vista 2004c).

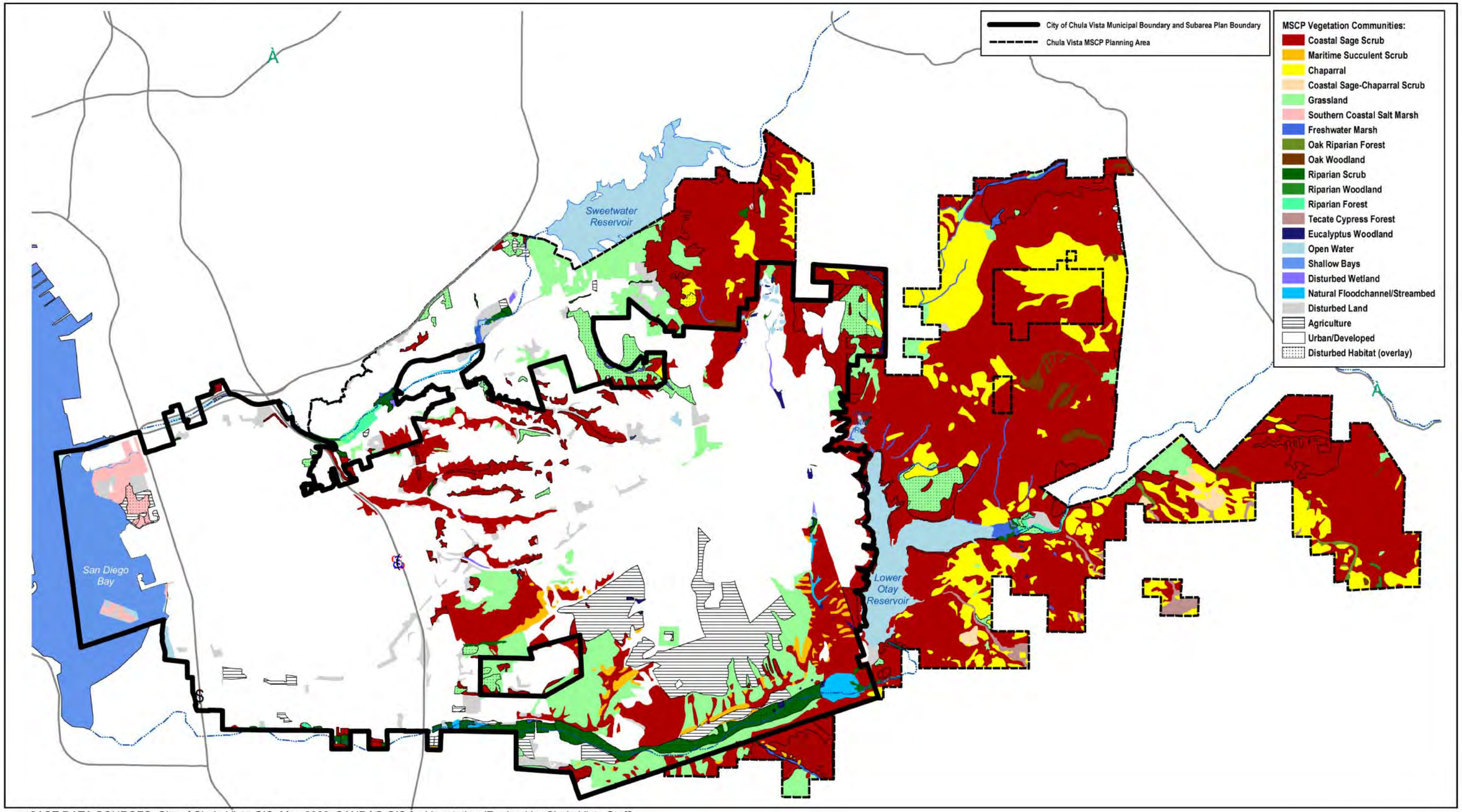
In total, implementation of the Chula Vista MSCP Subarea Plan ensures conservation and management of approximately 9,243 acres. An estimated 4,993 of the 9,243 acres would be

TABLE 5.3-1
EXISTING VEGETATION COMMUNITIES ESTIMATES
FOR CITY OF CHULA VISTA

Vegetation Communities	Acreage within City Boundaries
Upland Habitats	
Coastal Sage Scrub	3,815
Maritime Succulent Scrub	293
Chaparral	28
Coastal Sage Scrub/Chaparral Scrub	0
Grassland (all types)	3,125
Oak Woodland	2
Tecate Cypress Forest	0
Eucalyptus Woodland	43
Upland Subtotals	7,306
Wetlands	
Southern Coastal Salt Marsh	204
Freshwater/Alkali Marsh	16
Riparian Forest	10
Oak Riparian Forest	0
Riparian Woodland	0
Riparian/Tamarisk Scrub	604
Open Water/Freshwater	59
Disturbed Wetlands	28
Natural Flood Channel	159
Wetland Subtotals	1,080
TOTAL ALL VEGETATION	8,386

SOURCE: Chula Vista MSCP Subarea Plan, February 2003.

Map Source: City of Chula Vista, 2004



BASE DATA SOURCES: City of Chula Vista GIS, May 2003; SANDAG GIS for Vegetation (Revised by Chula Vista Staff)

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FIGURE 5.3-2
MSCP Vegetation Mapping

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located within the city boundaries and would result in a Preserve that is managed by the City and/or designated Appropriate Managing Entities. In addition, approximately 4,250 acres would be conserved outside the city's current corporate boundaries but within the General Plan Area. Through the combined, cooperative planning efforts of both the City and the County (primarily associated with the Otay Ranch), new urban-level development within the Chula Vista General Plan Area has been directed into the existing incorporated area of the city, adjacent to existing and planned infrastructure, while substantial habitat conservation has been directed into both the incorporated and unincorporated areas.

The USFWS has established the San Diego National Wildlife Refuge (NWR) for purposes of protecting and managing key habitats for endangered and threatened species and maintaining areas of high biological diversity in San Diego County. The Otay/Sweetwater Unit of the San Diego NWR study area encompasses approximately 43,860 acres located in southwestern San Diego County, including portions of the San Miguel Ranch located within the city.

This USFWS also manages ~~has designated~~ approximately 2,620 ~~3,940~~ acres of land and water in South San Diego Bay as the ~~South~~ San Diego Bay ~~Unit of the San Diego~~ NWR, which is partly located within the jurisdictional boundaries of Chula Vista. Within the refuge boundaries, USFWS ~~will~~ protects and manages native fish and ~~the remaining~~ wildlife habitat in and around the southern end of San Diego Bay. ~~using a variety of habitat protection methods.~~ Coordinating with landowners, ~~local~~ local, state, and federal agencies, and the ~~U.S. Navy,~~public, USFWS is currently ~~will be~~ developing a management plan that will describe the desired future conditions of the San Diego Bay MWR and provide long-range guidance and management direction for ~~to~~ conserving ~~e~~ wildlife and habitat resources within the Refuge. ~~through land acquisition, protection through interagency agreements with the Navy, and cooperative agreements, coordinated planning and shared resources with local, federal, and state agencies.~~

Designated by the USFWS, the Sweetwater Marsh NWR includes 316 acres of salt marsh and coastal uplands located on the east side of South San Diego Bay. The Sweetwater Marsh NWR supports populations of light-footed clapper rail, California least terns, Belding's savannah sparrows, and two federally listed plants, salt marsh bird's beak and Palmer's frankenia.

5.3.1.4 Update Areas

Overview

A comprehensive list of sensitive species that occur within the Chula Vista Subarea is included in the Final EIR/EIS prepared for the MSCP Subregional Plan and the Chula Vista MSCP Subarea Plan. Representative plant and animal species for each planning area are

discussed within this biological resources section. Additional details and description of biological resources can be reviewed in the Subregional Plan and the Chula Vista Subarea Plan.

Biological Resources

The majority of the land area within the Northwest and Southwest Planning Areas has been previously developed with residential, commercial, and industrial uses. The potential for significant biological resources to be present in the Northwest Planning Area and the northern portion of the Southwest Planning Area is low.

The Otay/Sweetwater Unit of the San Diego NWR and the South San Diego Bay Unit of the San Diego Bay NWR are adjacent to the Southwest Planning Area. Wildlife species known to occur in these ~~is~~ areas include ~~gull-billed tern, egrets, elegant terns,~~ least Bell's vireo, California gnatcatcher, the quino checkerspot butterfly, San Diego horned lizard, ~~and~~ arroyo toads, California lest tern, western snowy plover, gull billed tern, and elegant tern, among many others. In addition, the Otay River valley extends roughly east-west along the southern boundary of the Southwest Planning Area. There are very small patches of coastal sage scrub and riparian scrub along this segment. Additionally, portions of this segment within the Southwest Planning Area are within both the Greenbelt and MSCP Preserve area (see Figure 5.1-4 in the Land Use section of this EIR). It should be noted that while the General Plan Update does not propose any changes in land use designation for the Bayfront Planning Area, the southernmost portion of this planning area, south of Palomar Street, is proposed to become part of the Southwest Planning Area. This area contains important wetland resources and will not be impacted by adoption of the proposed General Plan.

The East Planning Area is largely undeveloped, former ranching and grazing land. Portions of the East Planning Area are within both the Greenbelt and MSCP Preserve area (see Figure 5.1-4 in the Land Use section of this EIR). The majority of this planning area is covered by grasslands and agricultural lands, with small patches of maritime succulent scrub and coastal sage scrub. Representative wildlife species occurring in the East Planning Area includes least Bell's vireo, coastal California gnatcatchers, Thorne's hairstreak butterfly, Hermes copper butterfly, red-diamond rattlesnake, San Diego black-tailed jack rabbit, orange-throated whiptail lizard, California horned lark, Bell's sage sparrow, southern California rufous-crowned sparrow, San Diego horned lizard, cactus wren, burrowing owl, northern harrier, and Cooper's hawk.

5.3.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to biological resources if it would:

- Threshold 1: Have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species or any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- Threshold 2: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Threshold 3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Threshold 4: Conflict with any local policies or ordinances protecting biological resources or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.3 Impacts

5.3.3.1 Threshold 1: Sensitive Species/Habitats

Threshold 1 states that the General Plan Update would result in a significant impact if adoption of the plan would have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species or any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.

Implementation of the Preferred Plan or any of the scenarios has the potential to impact existing sensitive habitat and wildlife species found within the city. Portions of the Otay River valley within the Southwest Planning Area and portions of the East Planning Area are within both the Greenbelt and MSCP Preserve area. The Otay River valley along the southern boundary of the Southwest Planning Area contains very small patches of coastal sage scrub and riparian scrub. The Otay/Sweetwater Unit and South San Diego Bay Unit of the San Diego NWR are adjacent to the Southwest Planning Area. Wildlife species known to occur in this area include gull billed tern, egrets, elegant tern, least Bell's vireo, coastal California gnatcatcher, quino checkerspot butterfly, San Diego horned lizard, and arroyo toad. Impacts to sensitive habitats and species would be significant.

The East Planning Area is largely undeveloped, former ranching and grazing land with the majority of the planning area covered by grasslands and agricultural lands, with small patches of maritime succulent scrub and coastal sage scrub. The adoption of the Preferred Plan or any of the Scenarios for the East Planning Area has the potential to impact the state

and federally listed least Bell's vireo. In addition, several CDFG species of special concern that are known to occur in this planning area could be impacted, including yellow-breasted chat, Cooper's hawk, burrowing owl, and yellow warbler. Species that are locally sensitive that could be impacted include great blue heron, blue-gray gnatcatcher, black-crowned night heron, grasshopper sparrow, and red-shouldered hawk. Impacts to these species would be significant.

In order to reduce impacts to these sensitive biological resources, the City adopted the MSCP Subarea Plan in February 2003. The Subarea Plan is intended to implement habitat and species conservation goals and requirements consistent with the MSCP Subregional Plan. Impacts to covered species and other sensitive resources are regulated through the implementation of appropriate policies and ordinances such as the HLIT Ordinance, protection provisions for narrow endemic species, the Wetlands Protection Program, and guidelines for Adjacency Management issues. In addition, the Subarea Plan also provides measures to ensure long-term management of the Preserve consistent with the MSCP Subregional Plan.

Impacts to sensitive biological resources would be reduced to below a level of significance with the implementation of proposed Objective EE 1 and Policy EE 1.1, which address sensitive biological resources.

Objective EE 1

Conserve Chula Vista's sensitive biological resources.

Policy

EE 1.1: Implement the City of Chula Vista MSCP Subarea Plan.

Implementation of this policy ensures that the Preferred Plan and all three Scenarios would not result in a significant impact to sensitive biological resources because the policies ensure conservation of core biological resource areas and associated habitat linkages identified in the MSCP Subregional Plan. This plan addresses the guidelines and regulations established in the FESA, CESA, the State Fish and Game Code, Section 404 of the Clean Water Act, the Chula Vista MSCP Subarea Plan, and the Otay Ranch RMP.

5.3.3.2 Threshold 2: Wetlands

Threshold 2 states that the General Plan Update would result in a significant impact if adoption of the plan would result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The adoption of the General Plan Update has the potential to result in a substantial adverse effect on federally protected wetlands. The proposed General Plan contains Policy EE 1.1, which implements the Chula Vista MSCP Subarea Plan. The Subarea Plan contains a Wetlands Protection Program (Section 5.2.4), which requires development projects to demonstrate that impacts to wetlands have been avoided or minimized to the greatest extent practicable. In addition, this program would provide wetland protection throughout the Subarea through individual project entitlement reviews and the associated CEQA process. The process involves an evaluation of wetlands, avoidance, and minimization and would ensure compensatory mitigation (at ratios identified in Table 5-6 of the Subarea Plan) within the Chula Vista Subarea for unavoidable impacts to wetlands, thereby achieving no overall net loss of wetlands. In addition, impacts to wetlands and riparian habitat are regulated by existing state and federal regulations (USACE, CDFG, and California Coastal Commission [CCC]). Projects subject to state and federal regulations must also demonstrate compliance with applicable policies of these agencies. Implementation of Policy EE 1.1 ensures that the Preferred Plan or any of the three proposed Scenarios would not result in a significant impact to wetland resources because the policy in the proposed General Plan Update provides for wetland protection.

Because the development footprint and relative intensity of land uses for the Preferred Plan or Scenarios 1, 2, or 3 are similar, impacts resulting from implementation of any of the scenarios would be the same regardless of which is ultimately selected. Potential impacts to wetland resources resulting from adoption of the proposed General Plan Update are self-mitigated by implementation of Objective EE 1 and Policy EE 1.1.

5.3.3.3 Threshold 3: Wildlife Corridors

Threshold 3 states that the General Plan Update would result in a significant impact if adoption of the plan would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The adoption of the General Plan Update has the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or to impede the use of native wildlife nursery sites. One of the goals of the Subarea Plan is to conserve covered species and their habitats through the conservation of interconnected significant habitat cores and linkages. Areas targeted for preservation within Chula Vista represent large, interconnected locks of habitat, which follow natural topography and include areas with varying biodiversity and land with “high” and “very high” biological values. The Preferred Plan would apply Objective EE 1 and Policy EE 1.1, which implement the City of Chula MSCP Subarea Plan. This would ensure conservation of core biological resource areas and associated habitat linkages.

Because the development footprint and relative intensity of land uses for the Preferred Plan and Scenarios 1, 2, or 3 is similar, impacts resulting from implementation of any of the scenarios (Preferred Plan, Scenarios 1, 2, or 3) would be the same regardless of which is ultimately selected. The movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors would be protected through the implementation of the Subarea Plan. Therefore, impacts are self-mitigated.

5.3.3.4 Threshold 4: Local Policies and Ordinances

Threshold 4 states that the General Plan Update would result in a significant impact if adoption of the plan would conflict with any local policies or ordinances protecting biological resources or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As discussed above, the proposed General Plan Update contains Policy EE 1.1, which is to implement the Chula Vista MSCP Subarea Plan. Implementation of the Subarea Plan would ensure conservation of core biological resource areas and associated habitat linkages identified in the MSCP Subregional Plan located within the incorporated boundaries of the Chula Vista Subarea. In addition, implementation of the Subarea Plan would contribute significant conservation outside the Chula Vista Subarea within the Chula Vista MSCP Planning Area in the unincorporated County Multi-Habitat Planning Area (MHPA). The Subarea Plan is intended to implement all relevant sections of the MSCP Subregional Plan, including the habitat and species conservation goals and requirements found in Table 3-5 of the Subregional Plan. Any project approved by the City must be in conformance with the Subarea Plan. The General Plan Update contains policies that ensure development does not conflict with the provisions of adopted local policies and ordinances.

Preferred Plan

The Preferred Plan includes amendments to the General Plan text, the General Plan land use and circulation diagrams, as well as proposed modifications to portions of the Otay Ranch GDP and RMP preserve boundaries in order to reflect the adopted Subarea Plan. A brief description of the proposed changes is provided below:

(1) Adopt a new General Plan text, comprised of five new elements consisting of revisions to the elements comprising the current General Plan, with the exception of the current Housing Element. The proposed new elements consist of the following: Land Use and Transportation Element; Economic Development Element; Public Facilities and Services Element; Growth Management Element; and Environmental Element. The proposed General Plan text also contains additional chapters, including an implementation chapter.

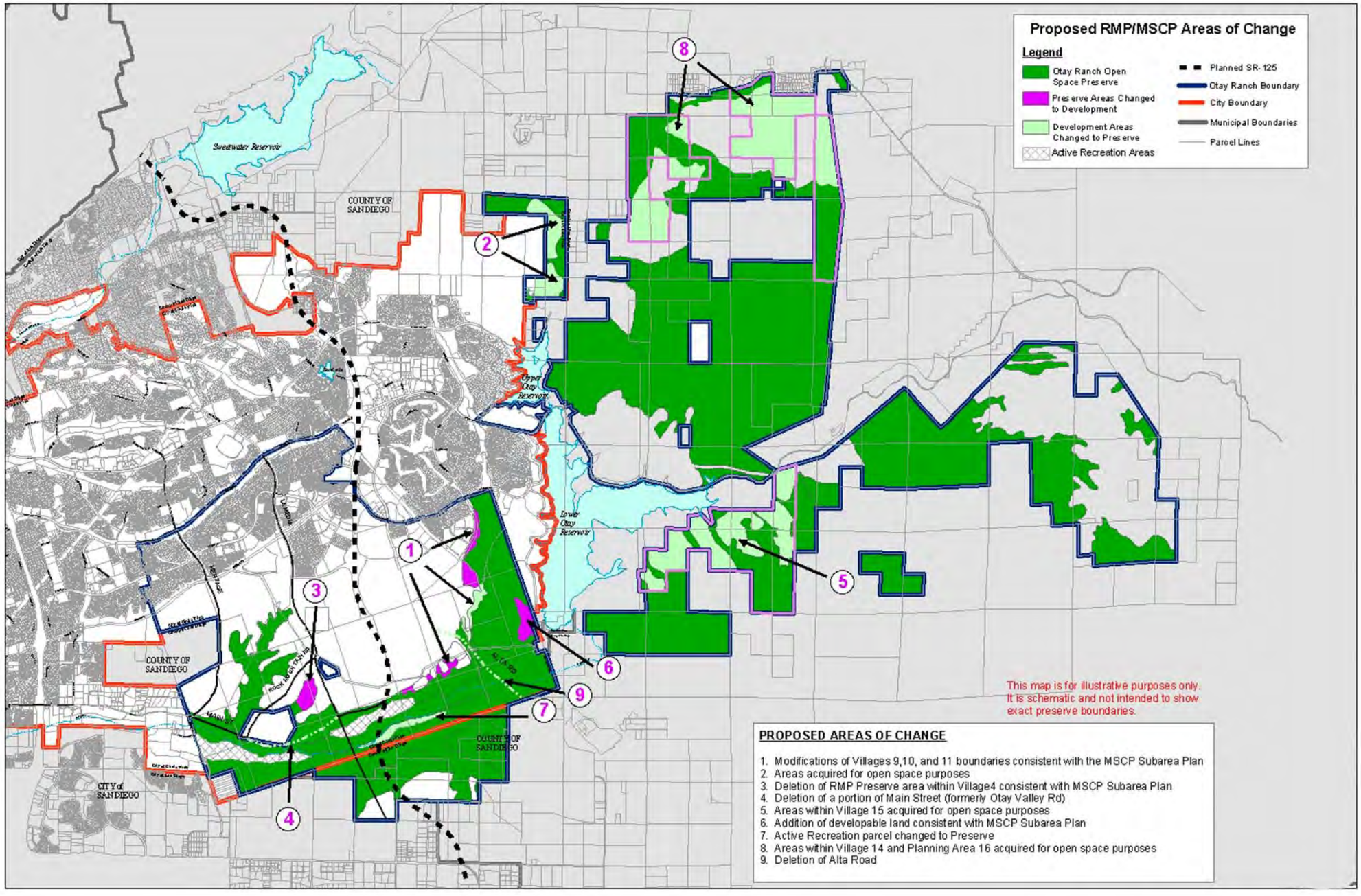

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FIGURE 5.3-3
Proposed GDP/RMP/MSCP Areas of Change

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(2) Adopt a new General Plan Land Use Diagram to provide for land use changes within focused areas as described in the preceding pages and to establish the following new land use designations: mixed-use residential, mixed-use commercial, mixed-use transit focus area, and urban core residential (28–60 dwelling units/acre). This component of the General Plan amendment includes the redesignation of areas currently designated as open space throughout the General Plan area to open space, open space preserve, open space recreation, and active recreation in accordance with the definition of these proposed land use categories in the proposed Land Use and Transportation Element. For example, the land use designation of all areas within the Chula Vista MSCP Preserve are proposed to be changed to open space preserve.

(3) Adopt a new Circulation Diagram and Transit System.

(4) Amend the Otay Ranch GDP and RMP preserve boundaries in order to generally reflect the approved and adopted Subarea Plan within Villages 4, 9, 10, 11, and the University area. An illustrative depiction of these proposed changes is shown in Figure 5.3-3.

(5) Amend changes to the General Plan Land Use Diagram and GDP land use maps to add a note of clarification denoting the planned development areas within a portion of the Inverted "L" property of Village 14, and portions within Village 15 and 16 that have been recently acquired for conservation purposes. In addition, the proposed General Plan update also includes an amendment to the GDP and RMP to implement a mapping correction to change approximately 45 acres of land designated for active recreation uses within the Otay River valley to Preserve.

The Preferred Plan includes proposed amendments to the Otay Ranch GDP and RMP preserve boundaries within Villages 4, 9, 10, 11, and the University area (refer to Figure 5.3-3). The intent of these proposed boundary modifications are to ensure that the GDP and RMP map is consistent with the adopted Chula Vista MSCP Subarea Plan. As part of the preparation and approval of the Chula Vista MSCP Subarea Plan, the proposed boundary changes were previously evaluated in the Final EIR/EIS for the MSCP Subregional Plan (City of San Diego 1997); the Addendum to the Final EIR/EIS for the Chula Vista MSCP Subarea Plan (City of Chula Vista 2000); and the Supplemental EIR/EA for the Revised Chula Vista MSCP Subarea Plan (City of Chula Vista 2002a). These documents determined that the proposed preserve configuration would retain the overall integrity of the preserve design while maintaining or improving the conservation of covered species. The proposed preserve boundary changes are consistent with the adopted Subarea Plan and will not result in new or greater impacts to sensitive biological resources than those previously identified.

As a part of the Preferred Plan, the proposed amendment includes changes to the General Plan Land Use Diagram and GDP land use maps to add a note of clarification denoting the

planned development areas within a portion of the Inverted "L" property of Village 14, and portions within Villages 15 and 16 that have been recently acquired for conservation purposes. In addition, the proposed General Plan update also includes an amendment to the GDP and RMP to implement a mapping correction to change approximately 45 acres of land designated for active recreation uses within the Otay River valley to Preserve. The proposed map notation and correction will identify where additional areas have been conserved for open space purposes (see Figure 5.3-3). No significant impacts to biological resources would result because these proposed changes result in an overall benefit to the preservation of biological resources.

Under the Preferred Plan, a mixed-use commercial land use designation for the West Fairfield District is proposed within the Southwest Planning Area, which is currently in a portion of the City of San Diego MHPA. If development is proposed in this area, the land will need to be annexed from the City of San Diego. Section 5.3.1.1 of the Chula Vista MSCP Subarea Plan states that when property is annexed into the City from another jurisdiction which has an approved Subarea Plan, the following applies:

1. An MSCP Annexation Agreement shall be reached between the City, the detaching jurisdiction, and the wildlife agencies as part of the annexation process, to ensure that any development of the annexed land proceeds in accordance with the conservation goals of the MSCP. If plans for development of the annexing area are consistent with this Subarea Plan and the detaching jurisdiction's approved Subarea Plan, the wildlife agencies will not withhold approval of the MSCP Annexation Agreement.

2. Take Authorization for the annexed territory will be transferred from the detaching jurisdiction to the City upon approval of the wildlife agencies, in accordance with applicable permit transfer requirements.

3. The City's Implementing Agreement (IA) shall apply to the annexed territory upon recordation of the annexation in the County's Assessor's Office, without the need for amendment of the IA.

4. The MSCP Annexation Agreement will be automatically incorporated by reference into the Subarea Plan. If necessary, the Subarea Plan will be amended by administrative approval to incorporate the annexed territory, including estimated Take and conservation acreage as reflected in the MSCP Annexation Agreement. Revisions to the Subarea Plan, if needed, will not be required to be completed prior to the transfer of Take Authority.

Implementation of Section 5.3.1.1 of the City of Chula Vista MSCP would avoid significant biological impacts associated with annexation of City of San Diego MHPA land and any proposed development.

In the East Planning Area, the Preferred Plan specifies active recreation land use designation for currently designated open space land within the Otay Valley District. According to Section 6.3.4 of the Chula Vista MSCP, active recreation areas are identified in the OVRP Concept Plan and in the Subarea Plan. These areas are not part of the Preserve, and include both existing and proposed active and passive recreation sites. Within the OVRP, active recreation areas were sited according to the criteria contained in RMP1 Policy 6.2 listed below:

1. Active recreation areas should be located in previously disturbed, non-sensitive areas.

2. Active recreation uses should be readily accessible from existing and planned public roads and should not intrude into areas within the Preserve.

3. Active recreation uses should be clustered to minimize the extent of the edge between active recreation uses and sensitive resources within the Preserve.

4. Limited commercial uses/activities related to active recreation may be allowed within the 400 acres designated for active recreation.

5. Public parks and recreation facilities may be operated commercially by private operators within active recreation areas.

6. Emphasis shall be placed on providing the majority of the active recreation in the Otay River Valley to the extent that this is consistent with OVRP Concept Plan, as may be adopted.

There is one objective in the proposed Land Use and Transportation Element that addresses sensitive biological resources within the Otay Valley District of the East Planning Area. In promoting this objective, policies addressing the protection of important resources are proposed. This proposed objective and policies are:

Objective LUT 82

Designate and allow for appropriate and carefully planned land uses that provide additional recreational activities, both public and private, that do not threaten the viability of sensitive biological habitats or the Otay Valley's function as a key component of the Otay Ranch Preserve.

Policies

LUT 82.1: Limit public and private active recreational uses to the previously disturbed, non-sensitive areas deemed appropriate for active

recreation development by the City's MSCP Subarea Plan and Otay Ranch Resource Management Plan. Access to these sites should be readily accessible from existing and planned public roads and should not intrude into core Preserve areas.

LUT 82.3: Active recreation uses authorized by Policy LUT 81.1, above, shall be sited pursuant to the MSCP Subarea Plan to minimize the potential negative effects of these uses on adjacent Preserve areas.

LUT 82.4: Prior to approval of any discretionary permit in the Otay Valley District ensure that the proposed project is consistent with the Otay Valley Regional Park Concept Plan, and assist implementation of the Concept Plan through project features and design that support or provide access, staging areas, trails, and appropriate buffering.

Application of Policy LUT 82.1 limits public and private active recreational uses to the previously disturbed, non-sensitive areas deemed appropriate for active recreation development by the City's MSCP Subarea Plan and Otay Ranch Resource Management Plan. Policies LUT 82.3 and 82.4 requires that any limited commercial or active recreational use be sited to minimize any affect on sensitive resources in the MSCP Open Space Preserve and ensures that development would be consistent with the Otay Valley Regional Park Concept Plan. This includes assisting implementation of the Concept Plan through project features and design that support or provide access, staging areas, trails, and appropriate buffering. Additionally, all development adjacent to the Preserve would be required to adhere to the MSCP adjacency guidelines as described in Section 7.2.5, Adjacency Management Issues of the Subarea Plan. These guidelines include provisions for drainage requirements (applicable NPDES Best Management Practices), toxic substances, lighting, noise, invasives, and appropriate buffers adjacent to the Preserve. Any active recreation development or limited commercial uses/activities related to active recreation allowed within the Otay Valley District would be required to adhere to the adjacency guidelines. Therefore, implementation of the Preferred Plan within the Otay Valley District would avoid any significant biological impacts with any local policies or ordinances protecting biological resources or conflict with other approved local, regional, or state habitat conservation plan.

Scenarios 1 and 3

As with the Preferred Plan, the proposed land use changes for Scenarios 1 and 3 would not affect lands designated for preservation within the MSCP Subarea. The proposed discretionary actions for Scenarios 1 and 3 would include a modification of the General Plan map to ensure that the general map corresponds to the boundaries of the adopted MSCP Subarea Plan. The action covered by this EIR addresses the modification of the Otay Ranch RMP preserve boundaries in order to reflect the approved and adopted Subarea Plan. The proposed boundary modifications would occur along the eastern and southern boundaries of

Villages 9, 10, and 11 and along a portion of the Preserve area within Village 4, which is consistent with the adopted Chula Vista MSCP Subarea Plan. This action would bring the adopted General Plan map into consistency with the Subarea Plan, thereby eliminating boundary conflicts and ensuring that a conflict with the Subarea Plan does not rise to a level of significance.

Scenarios 1 and 3 would designate currently open space lands for active recreation and mixed-use commercial for portions of the Otay Valley District. The proposed mixed-use commercial would be related to active recreation as required in Section 6.3.4 of the Chula Vista MSCP. As discussed above for the Preferred Plan, compliance with Policies LUT 82.1 through 82.4 would ensure that impacts resulting from currently designated open space for active recreation and mixed-use commercial for portions of the Otay Valley District would be avoided because the policies limit public and private active recreational uses to the previously disturbed, non-sensitive areas deemed appropriate for active recreation development by the City's MSCP Subarea Plan and Otay Ranch Resource Management Plan as well as requires that any limited commercial or active recreational use be sited to minimize any affect on sensitive resources in the MSCP Open Space Preserve and ensures that development would be consistent with the Otay Valley Regional Park Concept Plan. Additionally, all development adjacent to the Preserve would be required to adhere to the MSCP adjacency guidelines as described in Section 7.2.5, Adjacency Management Issues of the Subarea Plan. These guidelines include provisions for drainage, toxic substances, lighting, noise, invasives, and appropriate buffers adjacent to the Preserve. Any active recreation development or limited commercial uses/activities related to active recreation allowed within the Otay Valley District would be required to adhere to the adjacency guidelines. Therefore, Scenarios 1 and 3 would avoid any significant biological impacts with any local policies or ordinances protecting biological resources or conflict with other approved local, regional, or state habitat conservation plan.

Scenario 2

Scenario 2 proposes to designate portions of the Otay Valley District as residential medium-high. According to Section 6.3.4 of the Chula Vista MSCP, active and passive recreation uses and limited commercial uses/activities related to active recreation is allowed within the 400 acres designated for active recreation. Residential development in this area completed in conformance with Scenario 2 would conflict with the uses allowed for in the Chula Vista MSCP and would therefore be a significant impact.

Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a Boundary Adjustment to the City of Chula Vista MSCP Subarea Plan. This scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. The Preserve Boundary Adjustment proposal depicted in Scenario 2 is not covered by this EIR and, therefore, cannot be adopted as part of any of the proposed General

Plan Update actions that relies upon this EIR. If this scenario is proposed, a separate environmental analysis would be required.

5.3.4 Level of Significance Prior to Mitigation

5.3.4.1 Threshold 1: Sensitive Species/Habitats

Impacts of future development on sensitive species or their habitats may occur as a result of the implementation of the Preferred Plan or Scenarios 1, 2, or 3. Development has the potential to remove or degrade natural habitats, including sensitive plant communities and habitats supportive of unique, rare, and endangered species. The General Plan Update contains Objective EE 1 and Policy EE 1.1, which implement the City of Chula MSCP Subarea Plan. The Subarea Plan addresses regulations such as FESA, CESA, the state Fish and Game Code, and Section 404 of the Clean Water Act. Compliance with Objective EE 1 and Policy EE 1.1 would ensure that impacts to sensitive biological resources resulting from development associated with the General Plan Update would be avoided because the policies in the proposed plan ensure conservation of core biological resource areas and associated habitat linkages. In addition, implementation of the Subarea Plan would contribute significant conservation outside the Chula Vista Subarea within the Chula Vista MSCP Planning Area in the unincorporated County of San Diego MHPA. Impacts to sensitive biological resources are self-mitigated.

5.3.4.2 Threshold 2: Wetlands

Threshold 2 states that the General Plan Update would result in a significant impact if adoption of the plan would result in a substantial adverse effect on federally protected wetlands. Compliance with Objective EE 1 and Policy EE 1.1 would ensure that impacts to wetland resources are avoided because application of Policy EE 1.1 includes a Wetlands Protection Program (Section 5.2.4 of the Chula Vista MSCP), which would provide wetland protection that would be provided throughout the subarea through individual project entitlement reviews and the associated CEQA process. The process would provide an evaluation of wetlands avoidance and minimization and would ensure compensatory mitigation within the Chula Vista Subarea for unavoidable impacts to wetlands, thereby achieving no overall net loss of wetlands. Impacts to wetland resources are self-mitigated.

5.3.4.3 Threshold 3: Wildlife Corridor

Threshold 3 states that the General Plan Update would result in a significant impact if adoption of the plan would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. Development completed in conformance with the proposed Preferred Plan or Scenarios 1, 2, or 3 has the potential to impede wildlife movement between significant habitat areas, to the detriment of wildlife populations. The movement of any native resident

or migratory fish species which use established wildlife corridors would be protected through the implementation of the Subarea Plan. Compliance with Objective EE 1 and Policy EE 1.1 ensures that impacts to the movement of any native resident or migratory fish or wildlife species are avoided because the plan contains policies that provide for habitat protection. Application of Policy EE 1.1 ensures the conservation of covered species and their habitats through the conservation of interconnected significant habitat cores and linkages identified in the MSCP Subregional Plan located within the boundaries of the Chula Vista Subarea, comprised of the land area within the incorporated boundary of the City. Impacts to wildlife corridors are self-mitigated.

5.3.4.4 Threshold 4: Local Plans and Policies

Threshold 4 states that General Plan Update would result in a significant impact if adoption of the plan would conflict with any local policies or ordinances. Compliance with Objective EE 1 and Policy EE 1.1 ensures that impacts to sensitive biological resources are avoided. Policy EE 1.1 implements the Chula Vista MSCP Subarea Plan and ensures development does not conflict the provisions of adopted local policies and ordinances. The Subarea Plan is intended to implement all relevant sections of the MSCP Subregional Plan, including the habitat and species conservation goals and requirements found in Table 3-5 of the Subregional Plan. Any project approved by the City must be in conformance with the Subarea Plan.

For Threshold 4, impacts resulting from development associated with Scenario 2 would be significant. Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. Development under this scenario would require a boundary adjustment to the City of Chula Vista MSCP Subarea Plan. This scenario would remove Preserve in the western fork of Wolf Canyon and add Preserve in the northern portion of the main drainage of the canyon. This is a significant impact in two areas. It does not conform to the Subarea Plan, requiring a boundary adjustment and equivalency analysis, and it potentially represents an impact to biological resources. This determination requires approval by the City and concurrence by the resource agencies. While it may be possible to demonstrate functional equivalency for a boundary adjustment, that process has not been completed at this time. Without that determination, availability and adequacy of measures to lessen the effect cannot be determined.

Scenario 2 proposes to designate portions of the Otay Valley District for commercial and residential use in an area specified for active recreation. These uses are not compatible with the MSCP and the RMP. As such, impacts for Threshold 4 are significant for Scenario 2.

5.3.5 Mitigation Measures

There are no significant impacts to biological resources under the Preferred Plan and Scenarios 1 and 3. Therefore, no mitigation for these plans is required.

Impacts resulting from development associated with Scenario 2 would be significant. Scenario 2 proposes to allow a portion of Wolf Canyon to be filled to accommodate development. The following mitigation measure would be required for Scenario 2.

5.3-1 Prior to approval of a discretionary action allowing a portion of Wolf Canyon to be filled to accommodate development, the City shall complete a boundary adjustment in accordance with the adopted procedures of the Subarea Plan. These procedures are provided in Section 5.4.2 of the MSCP Subarea Plan and are summarized below.

- A preliminary determination of the biological value of a proposed boundary adjustment shall be made by the Director of Planning and Building in accordance with Section 5.4.2 of the MSCP Subarea Plan.

- The City shall notify the Wildlife Agencies in writing of the boundary adjustment including written findings of equivalency made by the Director of Planning and Building.

- The adjusted boundary shall become the adjusted boundary upon project approval unless the Wildlife Agencies object to the adjusted boundary within 30 days of receipt of City's written notice to the Wildlife Agencies. Objections by the Wildlife Agencies to boundary adjustments shall be made in writing and shall state the rationale in support of objection.

- If the City receives written objection to a determination of a boundary adjustment by the Wildlife Agencies within 30 days of receipt of City's written notice to the Wildlife Agencies, the City and Wildlife Agencies shall have 60 days to meet, confer, and reach agreement upon final Preserve boundaries. The boundary adjustment as proposed shall not be approved if an agreement is not reached.

- If the Wildlife Agencies fail to respond to the City's notice within 30 days of receipt of the City's determination, the decision by the Director of Planning and Building shall be deemed accepted.

A significant biological resources impact would occur from application of residential land use designation to this portion of Wolf Canyon as proposed by Scenario 2 because a boundary adjustment is required prior to the adoption of the designation of residential use in this area, and since that determination has not yet been made, specific mitigation is unavailable at this time. The impacts to biological resources as a result of Scenario 2 remain significant and unavoidable.

5.3.6 Level of Significance After Mitigation

There are no significant impacts to biological resources under the Preferred Plan and Scenarios 1 and 3. Impacts resulting from the adoption of Scenario 2 remain significant and unmitigated.

5.4 Cultural Resources

Cultural resources consist of buildings, structures, objects, archaeological sites, districts, landscapes, places, traditional cultural properties, manuscripts, and other resources deemed to be historically significant or significant from an architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural standpoint at the local, state, or national level. A cultural resource may: be the location of a prehistoric or historic occupation or activity; be a locale which has been, and often continues to be of religious, mythological, cultural, economic, and/or social importance to an identifiable ethnic group; be associated with events that have made a significant contribution to history or cultural heritage; be associated with the lives of important persons; embody the distinctive characteristics of a type, period, region, or method of construction; represent the work of an important creative individual; possess high artistic values; or yield information important in prehistory or history.

5.4.1 Existing Conditions

5.4.1.1 Regulatory Plans and Policies

Historic preservation is not addressed in the adopted Chula Vista General Plan nor does the City have an historic preservation ordinance. The legislative basis for historic preservation in Chula Vista is compliance with CEQA and the Chula Vista Municipal Code (Chapter 2.32, Sections 2.32.030 (J), 2.32.070, and 2.32.090), which falls under the purview of the City's Resource Conservation Commission (RCC).

The RCC advises the City Council on ways to safeguard the city's historic, aesthetic, social, economic, political, and architectural past. As part of this responsibility, the commission recommends to the City Council the designation of any site which it has found to meet the criteria as an historical site. The City adopted the Mills Act Program in 2001, which is a tax-incentive program for owners of historic properties. The historic designation process identified above and the Mills Act program have resulted in the development of a list of designated historic resources within the City of Chula Vista. These resources are identified in the citywide conditions discussion below.

CEQA provides a definition of an "historic resource" as a resource which includes the following:

> (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

In 2002, the City approved the formation of an Ad Hoc Historic Preservation Committee to develop an historic preservation plan that would coordinate with the General Plan Update. The purpose of the Ad Hoc Preservation Committee was to:

- Evaluate the City’s existing historic preservation program;
- Make a recommendation for an appropriate program for the future;
- Identify short-term and long-term tasks that would assist the City of Chula Vista in accomplishing the mission for historic preservation.

The report of the Ad Hoc Committee titled An Evaluation of Historic Preservation in Chula Vista was adopted by the City Council on September 30, 2003 [Resolution #2003-416] and is attached in Appendix J.

5.4.1.2 Existing Citywide Conditions

a. Historic Background

Native American presence in San Diego County is known to extend back some 9,000 years before the present. The oldest sites in the region are represented by an artifact assemblage that was first described by Malcolm Rogers as the "Scraper-makers" and later named the San Dieguito (Rogers 1929, 1945, 1966). The people who are associated with this period, circa 9,000 years before the present, left an artifact assemblage that is typified by large flaked stone tools.

In the South County region there is evidence to suggest that the most widely represented period of site development is the very long La Jolla phase. Robbins-Wade (1990) concludes that "Otay Mesa appears to have been used mainly between 7000 and 2000 years ago, but the chronometric data come from only 13 of the almost 200 sites recorded on the mesa." This description can be applied with some confidence to the remaining area or the baseline coverage.

Following the La Jolla phase is the Late Prehistoric Period. This period probably reflects the emergence of populations related to the ethnographic populations of the area. In the study region there is sporadic evidence for Late Prehistoric settlement based primarily on the occurrence of ceramic items at recorded sites and on published records. The presence of ceramics, long considered an indication of Late Period association, is rare in the coastal Chula Vista region. Significant Late Prehistoric sites occur in the Otay River valley and the far eastern portion of the General Plan area, east of the Otay Lakes.

The Chula Vista area was part of a Spanish land grant known as Rancho del Rey, the King's Ranch. Under Mexican rule in 1821, this ranch became known as Rancho de la Nacion. It encompassed National City, Chula Vista, Bonita, Sunnyside, and the Sweetwater Valley. In 1845, the ranch was granted to Juan Forster, son-in-law of Mexican governor Pio Pico.

In 1885, Frank Kimball brought the Santa Fe Railroad to southern California, with its first terminus in National City. Several directors of the Santa Fe Railroad and Colonel W.G. Dickinson, a professional town planner, formed the San Diego Land and Town Company. They began developing the area by subdividing a 5,000-acre portion into five-acre lots. The lots were separated with avenues and streets 80 feet in width and a steam motor passing through the center of the streets. The purchaser was required to build thereon.

The Sweetwater Dam was built by the San Diego Land and Town Company to bring water to Chula Vista; a railroad was built to connect Chula Vista and Otay with National City and San Diego. The people coming to Chula Vista grew lemons, and in time, the area became the largest lemon-growing center in the world.

The city was incorporated in 1911 with a population of 550. After its incorporation, Chula Vista continued to be a leading lemon-growing center. Other important crops were tomatoes, celery, and salt. The Western Salt Works has been operating on the Chula Vista bay front since the beginning of the century. From 1916 to 1920, Chula Vista had a kelp processing plant that produced potash and acetone to make cordite used by the British to make bombs during World War I. This plant, previously located on the site known as Gunpowder Point, had the largest kelp harvesting fleet and tank farm in the world at that time. Just after World War II, Rohr Aircraft Company was established on the bay front.

The Rohr Aircraft Corporation moved to Chula Vista in 1941. Rohr was started in San Diego in 1940 and moved to their Chula Vista location in February of the following year. In July of 1941 they employed 752 people and by the height of World War II they employed 9,000 people. By 1945 Rohr was the largest producer of aircraft power packages in the world, and by 1950 the influx of workers to the facility had doubled the population of Chula Vista to over 16,000.

b. Resource Information

As a result of the research conducted in the city, numerous historic and archaeological resources have been identified. The current planning area supports at least 611 cultural resource sites. Largely, these sites have been recorded over the past 30 years. A percentage of these resources are no longer present at their mapped locations as they were destroyed as a result of development. However, many remain in part or in total. Most of these resources were recorded as a result of the CEQA process completed by the city for specific developments.

In 1985, the City of Chula Vista sponsored a local historic resources inventory. The inventory was limited to the area of Trousdale Drive to the north, L Street to the south, Interstate 5 to the west, and Hilltop Drive on the east. As a result, approximately 258 homes were included on the survey list with 42 of the homes being included on the Chula Vista List of Historic Sites. There are currently ~~61~~ 69 sites on the List of Historic Structures in the city (Table 5.4.1). These 69~~1~~ structures have been determined by the City Council to meet the City's historic criteria.

The EIR for the 1989 General Plan contained a map of "areas of cultural resource potential." With the work that has been completed since that study, the areas of prehistoric archaeological resource potential have been updated (Figure 5.4-1).

TABLE 5.4-1
CHULA VISTA DESIGNATED HISTORIC SITES

Site No.	Address	Historic Name	Common Name	Resource Conservation Commission Recom.	City Council App.
1	699 E St.	Site of Greg Rogers House			7/28/87
2	3 North Second Ave.	James Bulmer House	Blumer House		7/28/87
3	210 Davidson St.	Alfred Haines House	Handel Cordrey House		7/28/87
4	666 Third Ave.	Our House	Orchard House		7/28/87
5	276 F St.	First Congregational Church			7/28/87
6	525 F St.	James Johnson House	James Johnson House		7/28/87
7	669 Del Mar Ave.	George Worthington House	El Nido		7/28/87
8	671 Fourth Ave.	William Haines House	Seaman Haines House		7/28/87
9	21 F St.	Reginald Vaughn House	Augusta Starkley House		7/28/87
10	613 Second Ave.	Byron Bronson House	Byron Bronson House		7/28/87
11	640 Fifth Ave.	Engebretson-Stafford House	Stafford House		7/28/87
12	357 G St.	Chula Vista Women's Club		5/7/84	5/22/84
13	264 I St.	Clara Smith House	Four Seasons Day Care Center	7/28/86 (M)	7/28/87
14	617 Del Mar	Frances Fisher House	Glen Roberts House	7/28/86 (M)	7/28/87
15	630 Del Mar	George Rife House	Rosemary Bullen House	7/28/86 (M)	7/28/87
16	30 F St.	Herbert Bryant House	Michael Carson House	8/4/86	7/28/87
17	50 F St.	Herman Hotel Carriage House	William Smith House	8/4/86	7/28/87
18	54 F St.	W.J.S. Browne House	William Browne House	8/4/86	7/28/87
19	88 L St.	San Diego Country Club	San Diego Country Club	8/4/86	7/28/87
20	62 Cook Court	Hazel Goes Cook House	Hazel Goes Cook House	8/4/86	7/28/87
21	89 Country Club Dr.	Theodore Thursten House	Theodore Thursten House	8/4/86	7/28/87
22	344 Hilltop	Dupree-Gould House	Gould House	8/4/86	7/28/87
23	170 Cypress	L.G. Spring House	Ruth Weatherbie House	8/18/86 (M)	7/28/87
24	34 Davidson	Carl Boltz House	Mary Boltz House	8/18/86	7/28/87
25	124 Hilltop	Leo Christy House	Leo Christy House	8/18/86 (M)	7/28/87
26	151 Landis	Albert Barker House	Abraham Eitzen House	8/18/86 (M)	7/28/87
27	209 D St.	Nancy Jobes House	Marcos Carver House	8/18/86	7/28/87
28	503 G St.	Kindergarten Building	Old Kindergarten Building	8/18/86	7/28/87
29	511 G St.	San Diego County Insectary	Insectary Building	8/18/86	7/28/87
30	44 North Second Ave.	Edward Gillette House	Marcella Darling House	8/18/86	7/28/87
31	301-305 Third Ave.	Melville Block	Security Trust Bank Building	8/18/86	7/28/87
32	410 Church	Elmer Mikkelson House	Rex Budel House	8/25/86	7/28/87
33	665 Del Mar	Mary Mill House	Mary Miller House	8/25/86	7/28/87
34	374 Roosevelt St.			8/25/86	7/28/87
35	155 G St.	Mrs. B.K. Maude House	The Boarding House	8/25/86	7/28/87
36	33 I St.	Robert Mueller House	Celia Flynn House	8/25/86	7/28/87

TABLE 5.4-1
CHULA VISTA DESIGNATED HISTORIC SITES
(continued)

Site No.	Address	Historic Name	Common Name	Resource Conservation Commission Recom.	City Council App.
37	379 J St.	Evelyn Haines House	Theodore Curtis House	8/25/86	7/28/87
38	435 First Ave.	William Sallmon House	William Smith House	8/25/86	7/28/87
39	320 Second Ave.	Allison Crocket House	Allison Crocket House	8/25/86	7/28/87
40	10 Second Ave.	Lucious Wright House	Lucious Wright House	8/18/86	7/28/87
41	614 Second Ave.	Nadine Davies House	Lee Burch House	7/28/86	7/28/87
42	616 Second Ave.	Greg Rogers House	Greg Rogers House	7/28/86	7/28/87
43	642 Second Ave.	Garrettson-Frank House	Frank House	7/28/86	7/28/87
44	644 Second Ave.	Jennie MacDonald House	Jean McCall House	7/28/86	7/28/87
45	311 D St.	Frank Damren House	Margaret Cameron House		
46		Rohr Manor		8/25/86	7/28/87
47	200 K St.	Edmund Russ House		7/2/01	9/25/01
48	224 Fig	George Steese House		10/15/01	12/4/01
49	279 J St.	Victory Day House		12/3/01	12/11/01
50	466 E St.	The Galligan House		12/3/01	1/22/02
51	292 Sea Vale	Harold Payton House		4/15/02	6/11/02
52	209 I St.	Summer-Lee House		4/29/02	6/11/02
53	190 K St.	Erle Halliburton House		4/15/02	6/11/02
54	475 E St.	William Drew House		6/3/02	8/6/02
55	840 First	Mary Drew House		6/3/02	8/6/02
56	462 E St.	Cleaton Robertson House		7/1/02	8/6/02
57*	No Site Listed				
58	7 Cresta Way	Hadlye Johnson House		8/19/02	9/17/02
59	415 Hilltop	Southern Beauty		8/19/02	9/17/02
60	616 Del Mar	Edwin T. Smith Sr. House		8/19/02	9/17/02
61	382/384 Del Mar	The First Woman's Clubhouse		8/19/02	9/17/02
62	475 E St.	The William Ada Monroe House		9/30/02	11/19/2002
63	20 Second Avenue	Rose Barrows House			
64	254 Fifth Avenue	Martin Sette House			
65	181 Madrona Street	Almond Pickering House			
66	238Second Avenue	John M. Davidson House			
67	186 Cypress Street	James Williams House			
68	3487 Main Street	Lorenzo Anderson House			
69	470 E Street	The Horace Sloan House			

*Site 57 was not listed because the owners submitted letters to the City Council at the 7/28/87 meeting requesting no designation.

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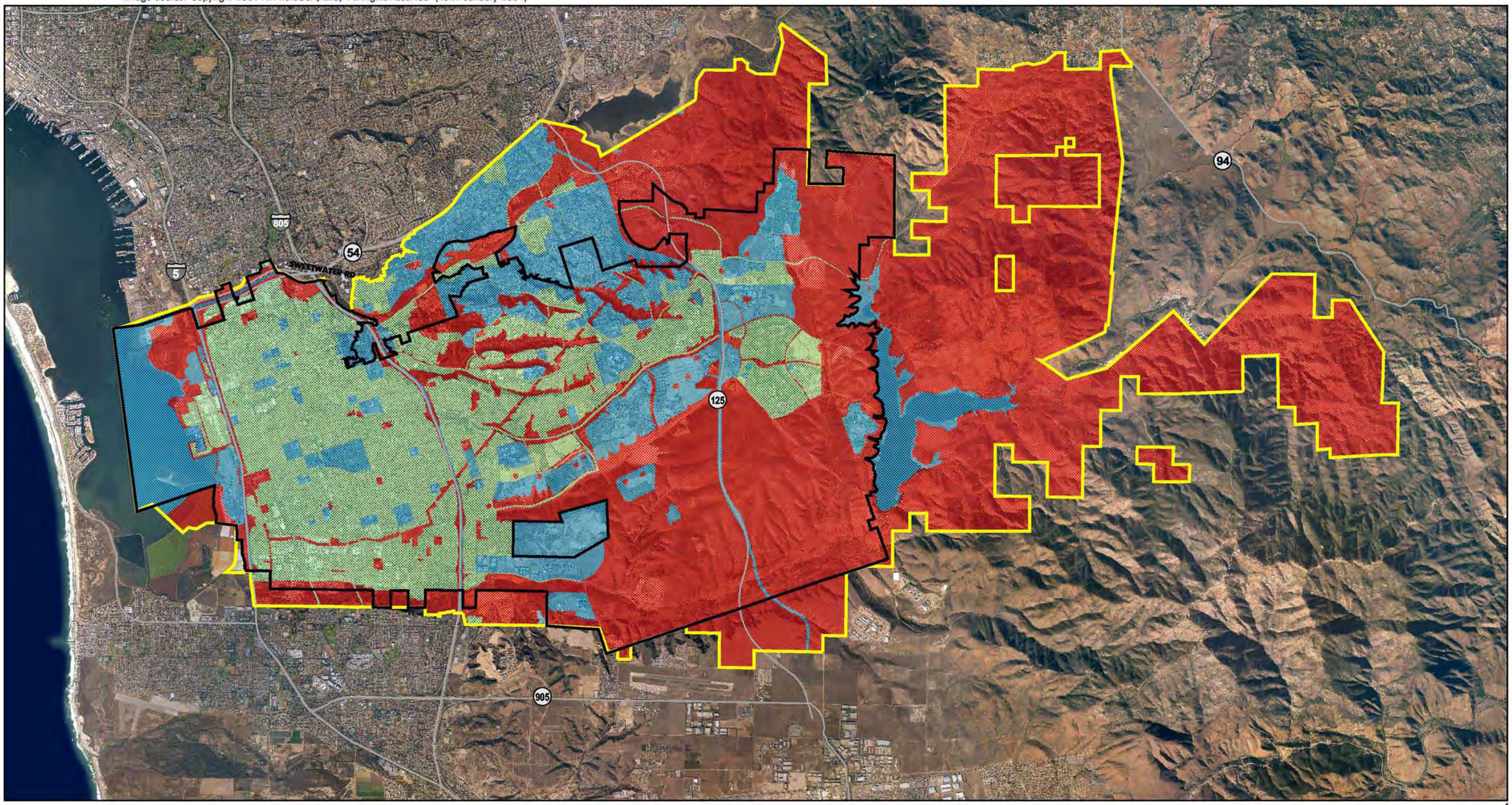

Chula Vista municipal boundary
Chula Vista General Plan area
SR-125 South proposed alignment
Freeway
Sensitivity Levels
high
moderate
low

0 Miles 1.4 N

FIGURE 5.4-1
Prehistoric Archaeological Resource Sensitivity Areas

M:\jobs2\3776\env\gis\gpu_eir.apr\
fig5.4-1 (sensitivity) 09/14/05

5.4.1.3 Update Areas

Northwest Planning Area

The Urban Core Subarea of the Northwest Planning Area encompasses the downtown area of Chula Vista, which contains a designated historic site and other potential historic properties. While the historic significance of individual buildings has not been determined, the downtown corridor of Third Avenue between E and G Streets represents a significant community character resource. The effects of the General Plan Update on community character are discussed in the Land Use section of this EIR.

Southwest Planning Area

Cultural resources within the Southwest Planning Area and the Montgomery Subarea have been studied less than in the northwest and east areas of the city. As with the northwest, there has not been a building-by-building historic significance review in this planning area. There are some potential historic resources known in the vicinity; however, determining the historic significance of such resources would require additional investigations. In addition to structural resources, the Southwest Planning Area has some potential for archaeological deposits along the northern edge of the Otay River Valley.

East Planning Area

The East Planning Area has been the subject of several archaeological surveys. Otay Ranch was initially surveyed by RECON in 1989 and subsequently investigated by Ogden Environmental in 1992. As a result of these investigations, archaeological and historic sites were recorded. The Otay Ranch Resource Management Plan has a three-step program to approach these resources. These include: (1) a comprehensive resource study, (2) site importance and boundary testing, and (3) development of a conservation program involving preservation and/or data recovery for those site determined important.

5.4.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to cultural resources if it would:

- Threshold 1: Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in State CEQA Guidelines §15064.5.

- Threshold 2: Disturb any human remains, including those interred outside of formal cemeteries.

5.4.3 Impacts

5.4.3.1 Threshold 1: Substantial adverse Change in Significance

Threshold 1 states that the General Plan Update would have a significant impact on historic or archaeological resources if it would result in a significant change to resources as defined in State CEQA Guidelines §15064.5. This section of the Guidelines defines a significant change in a historical resource as one that demolishes or materially alters the physical characteristics of a resource that convey the historic significance of that resource. Specifically §15064.5(b)(1) identifies a significant effect on the environment if it causes a substantial adverse change in the significance of an historical resource. It defines a substantial adverse change as follows:

> Substantial adverse change in the significance of an historical resource means physical demolition destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historic resource would be materially impaired.

As noted above, the current planning area supports at least 611 archaeological resource sites. Largely, these sites have been recorded over the past 30 years. A percentage of these resources are no longer present at their mapped locations as they were destroyed as a result of development. However, many remain in part or in total. In addition, there are 69~~1~~ sites/structures that have been determined by the City Council to meet the local criteria and are currently listed on the Chula Vista List of Historic Sites (see Table 5.4-1).

In addition to the known resources, there are areas of the city that have not been subject to exhaustive archaeological and historic surveys and there may be significant resources that have yet to be identified.

Development in accordance with the Preferred Plan or any of the Scenarios may result in impacts to historic resources. In areas of the built environment, direct impacts could occur if, as a result of plan implementation, buildings determined to be historic were demolished or significantly altered. In addition, there is the potential that future development, as permitted by the plan, could impact historic and prehistoric archaeological sites.

Impacts to cultural resources would be reduced through adoption and compliance with the policies in the proposed General Plan Update associated with Objectives LUT 11 and LUT 12. Policy LUT 12.1 provides for the development of a preservation program as outlined in "An Evaluation of Historic Preservation in Chula Vista". Policy LUT 12.2 calls for an amendment to the zoning code to implement the recommendations contained in that document, and LUT 12.4 requires a comprehensive survey of historic properties. In addition, Policies LUT 12.7, LUT 12.11, LUT 12.12 and EE 9.1 require that an assessment and mitigation of impacts resulting from private development and public projects be completed

in accordance with CEQA. These policies along with the other policies addressing historic resources are as follows:

Objective LUT 12

Protect Chula Vista's important historic resources.

Policies

LUT 12.1: Establish a formalized process for historic preservation by evaluating requirements for certified local government status as defined by the state historic preservation office.

LUT 12.2: Amend City zoning codes as necessary to implement the recommendations contained in "An Evaluation of Historic Preservation in Chula Vista", and any related subsequent evaluations and studies.

LUT 12.3: Adopt a Historic Preservation ordinance that implements the goals established by the City Council in February, 2000; the City Council strategic themes of 2003, and the document "An Evaluation of Historic Preservation in Chula Vista,"

LUT 12.4: Conduct an objective, comprehensive city-wide survey of Chula Vista's historical assets for the purpose of establishing a list of buildings appropriate for formal historical designation.

LUT 12.5: Recognize the inherent public value of historic preservation in contributing to the beauty, character, and sense of place in Chula Vista, and promote and facilitate participation in the Mills Act and other appropriate incentive programs to encourage the preservation of cultural resources.

LUT 12.6: Through the City's development regulations, acknowledge and recognize those areas of the City that contain historic resources. Examine current and future zoning and development regulations and design guidelines to ensure they support preservation and restoration of designated historic resources, and as appropriate require new development or redevelopment to acknowledge these in context.

LUT 12.7: Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to historic

resources in accordance with the California Environmental Quality Act.

LUT 12.8: As practicable, the City will support and encourage the rehabilitation of sound historic buildings.

LUT 12.9: Encourage and promote the adaptive reuse of historic resources and buildings, and where appropriate, the non-historic buildings that embody Chula Vista's cultural or historic character.

LUT 12.10: Promote the maintenance, repair, stabilization, rehabilitation, restoration, and preservation of historical resources in a manner consistent with federal and state standards.

LUT 12.11 Prior to the approval of any projects that propose the demolition or significant alteration of a potentially significant historic resource as defined pursuant to applicable state and federal laws, require the completion of an historic survey report to determine significance. If determined to be significant, require appropriate and feasible mitigation pursuant to CEQA Guidelines Section 15064.5.

LUT-12.12: Require the implementation of an appropriate conservation program in accordance with applicable state and federal laws, in instances where projects may adversely affect significant historic resources.

LUT-12.13: Protect, preserve, and seek to restore publicly-owned historical resources (such as Rohr Manor House and the Chula Vista Women's Club).

Objective EE 9

Protect Chula Vista's important cultural resources and support and encourage their accessibility to the public.

Policies

EE 9.1: Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to cultural resources in accordance with the California Environmental Quality Act.

EE 9.2: Support and encourage the accessibility of Chula Vista's important cultural resources to the public for educational, religious, cultural, scientific and other purposes, including the establishment of

museums and other facilities accessible to the public where such resources can be appropriately studied, exhibited, curated, etc.

EE 9.3: Conduct a comprehensive survey and establish and maintain an up-to-date inventory of historic properties

EE 9.4: Discourage disruption, demolition, and other negative impacts to historic cultural resources.

These policies reduce impacts to historic resources that could result from the adoption of the Preferred Plan or any of the Scenarios. Policies LUT 12.7, 12.11, 12.12, and EE 9.1 require that an assessment and mitigation of impacts resulting from private development and public projects be completed in accordance with CEQA. While impacts to historic resources in accordance with Threshold 1 are reduced by these policies, impacts to historic resources would be significant without the mitigation measure detailed below. Because the development footprint and relative intensity of land uses of each of the scenarios is similar, impacts resulting from implementation of any of the scenarios (Preferred Plan, Scenarios 1, 2, or 3) would be the same regardless of which is ultimately selected.

Threshold 2: Human Remains

Threshold 2 indicates that a significant impact would result if the project would disturb any human remains, including those interred outside of formal cemeteries.

The Preferred Plan or any of the Scenarios would not affect any formal cemeteries or known burials outside of formal cemeteries. When currently undeveloped areas are developed there is the potential that currently unknown human remains may exist that would be disturbed through development. As with Threshold 1, Policy LUT 12.7 requires that an assessment and mitigation of impacts resulting from private development and public projects be completed in accordance with CEQA. Compliance with this policy would reduce adverse impacts to these as yet unknown resources. While impacts to historic resources in accordance with Threshold 2 are reduced by the policies associated with Objectives EE 9 and LUT 12, impacts to historic resources would be significant without the mitigation measure detailed below. The proposed scenarios (Preferred Plan and Scenarios 1, 2, or 3) would not result in the disturbance of any known human remains, either within or outside of formal cemeteries.

5.4.4 Level of Significance Prior to Mitigation

Threshold 1: Substantial adverse Change in Significance

The Preferred Plan represents potential increased development densities in the Northwest and Southwest Update Areas and increased potential for conversion of open areas to

developed land uses in the East Update Area. In areas of the built environment, significant direct impacts could occur if, as a result of plan implementation, buildings determined to be historic were demolished or significantly altered. In open areas, there is the potential that future development, as permitted by the plan, could significantly impact historic and prehistoric archaeological sites.

While impacts to historic resources in accordance with Threshold 1 are reduced by the policies associated with Objectives EE 9 and LUT 12, impacts to historic resources would be significant without the mitigation measure detailed below.

Threshold 2: Human Remains

The Preferred Plan or any of the Scenarios would not affect any formal cemeteries or known burials outside of formal cemeteries. When currently undeveloped areas are developed there is the potential that currently unknown human remains may exist that would be disturbed through development. While impacts to historic resources in accordance with Threshold 2 are reduced by the policies associated with Objectives EE 9 and LUT 12, impacts to historic resources would be significant without the mitigation measure detailed below.

5.4.5 Mitigation Measures

Implementation of the following measures and the policies identified above would reduce significant impacts to cultural resources to below a level of significance. In addition, Section 15064.5 (b)(3) of the CEQA guidelines indicates that:

> Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving Rehabilitating Restoring and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.

5.4-1 Implementation of Policies LUT 12.7 and EE 9.1 shall include the following measures:

1. Any future development project that has not been previously examined shall be subject to a cultural resource survey or review, to identify any specific resources that could be potentially affected by the proposed project.

2. In western Chula Vista, an archaeological survey shall be completed for any development project that includes previously undisturbed acreage and has not been previously examined or for which there is reason to expect a potentially significant historic or prehistoric archaeological resources, to identify any specific resources that could be potentially affected by the proposed project.

3. The City will promote maintenance, repair, stabilization, rehabilitation, restoration, and preservation of historical resources. Where these will be undertaken, they will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

4. Prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource, as defined pursuant to applicable state and federal laws, shall complete an historic survey report to determine potential historic significance. The determination of resource significance shall be made in accordance with CEQA Guidelines Section 15064.5 and the program established as a result of Policies LUT 12.3, 12.4, 12.7, and 12.11 and EE 9.1, and shall be completed to the satisfaction of the appropriate decision maker.

5. In the event that significant resources could be adversely affected by the proposed action, as established in Policy LUT 12.12, a conservation program shall be implemented in accordance with applicable state and federal laws, to the satisfaction of the appropriate decision maker. The conservation program shall be designed to reflect the reason that the identified resource is considered important. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation. For archaeological remains, conservation of a resource for which preservation in place is not feasible would include the execution of a research design directed program of scientific data collection and analysis.

5.4.6 Level of Significance After Mitigation

Compliance with the policies associated with Objectives LUT 12 and EE 9 and the mitigation measures identified above would reduce the impact to cultural resources resulting from the adoption of the General Plan Update to below a level of significance.

5.5 Geology and Soils

5.5.1 Existing Conditions

5.5.1.1 Regulatory Plans and Policies

The state regulates development within California to reduce or mitigate potential hazards from earthquakes and other geologic hazards. Development in potentially seismically active areas is also governed by the Alquist-Priolo Earthquake Fault Zoning Act (California Public Resource Code, Section 2621-2630).

The purpose of the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (renamed in 1994) is "to regulate development near active faults so as to mitigate the hazard of surface fault rupture." The State Geologist (chief of the Division of Mines and Geology) is required to delineate Earthquake Fault Zones (formerly known as "Special Studies Zones") along known active faults. Cities and counties affected by the zones must regulate certain development within the zones. They must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. Typically, structures for human occupancy are not allowed within 50 feet of the trace of an active fault. There are no known active faults within the General Plan area. However, the potentially active La Nacion fault is present.

Local governments are required under the Tanner Act (Assembly Bill [AB] 2948) to adopt "siting criteria" for evaluating hazardous waste facility proposals within established "general areas." Geological constraints are evaluated when considering the designation of "general areas" that may be used for siting hazardous waste facilities. Specific geological conditions to be considered include flood hazard areas, areas subject to tsunamis, seiches, and storm surges, proximity to active and potentially active faults, areas of potential slope instability or rapid geologic change, subsidence/liquefaction, and dam failure inundation areas.

5.5.1.2 Existing Citywide Conditions

Topography and Land Use

The overall site topography varies from generally level mesas, river valleys, and coastal plains to steeply sloping canyons, arroyos, drainages, and mountains. Elevations across the area range from sea level to roughly 2,000 feet above mean sea level (MSL). The land use in the plan area varies from developed land to open, former agricultural land, and undisturbed native habitat.

The topography of western Chula Vista, which extends from San Diego Bay to I-805 (west to east), and roughly from the Sweetwater River to the Otay River (north to south), ranges from low-lying tidal and river valleys with elevations at or near sea level, to relatively level mesas

with elevations up to approximately 260 feet above MSL. The mesas generally slope gradually downward toward the west with steeper slopes occurring along the I-805 area and Telegraph Canyon.

East of I-805 from State Route 54 and the Sweetwater Reservoir to Telegraph Canyon Road and Otay Lakes Road (north to south) and from I-805 to the eastern city limits of Chula Vista (west to east), includes the relatively level Sweetwater River valley, intermittent flat-topped mesas and relatively steep drainage canyons including Long Canyon, Rice Canyon, and Telegraph Canyon, and hilly to mountainous terrain with steep slopes including Mother Miguel Mountain and portions of San Miguel Mountain. Elevations in this area range from approximately 20 feet above MSL in the Sweetwater River valley to approximately 1,800 feet above MSL on the ridges of San Miguel Mountain.

South of Telegraph Canyon Road and Otay Lakes Road, east to the Lower Otay Reservoir, the area varies from low-lying river valley along the Otay River to hilly areas with intervening drainages and stream valleys, as well as small mesa portions. Major drainages include the Otay River and Poggi, Johnson, O'Neal, and Wolf Canyons. Elevations range from approximately 80 feet above MSL in the Otay River channel to approximately 750 feet above MSL near Fenton Ranch.

East of the Otay Lakes are the Jamul and San Ysidro Mountains, Jamul and Dulzura Creeks, and Sycamore and Cedar Canyons. Topographically, this area is generally hilly to mountainous with creek and drainage valleys and steep slopes. Elevations in this area range from approximately 500 feet above MSL at Lower Otay Reservoir to approximately 1,700 feet above MSL in the Jamul Mountains.

LANDFORMS

The two distinct geomorphological areas that exist within the General Plan area include the coastal plain of the Coastal Province, which comprises the majority of the plan area, and the foothills of the Peninsular Range Province in the eastern edge.

The north-south trending La Nacion fault traverses the Eastern Territories, and consists of several branching, minor faults. The La Nacion fault is considered potentially active with a maximum credible magnitude of 6.0 on the Richter scale. Earthquake faults within 40 miles of the plan area include the Rose Canyon fault, which travels under San Diego Bay, the Coronado bank, and the San Diego Trough zones under the Pacific Ocean. The Elsinore and the San Miguel fault zones lie to the east.

The plan area is underlain generally by artificial fill, alluvium and slope wash, landslide deposits, stream terrace deposits, marine terrace deposits (Bay Point Formation and Unnamed Nearshore Marine Sandstone) and materials of the Lindavista Formation, San Diego Formation, Otay Formation, Unnamed Fanglomerate Deposits, Mission Valley

Formation, and Santiago Peak Volcanics, which are shown on Figure 5.5-1 and described below.

- Artificial Fill (not presented on the Geologic Map)

  Significant portions of the western portion of the plan area are underlain by fill material placed during land reclamation projects along San Diego Bay. Large fill areas are located in the vicinity of the west end of H Street, the salt evaporators west of I-5 at Main Street, and near the mouth of the Sweetwater River. Much of the fill has been placed as hydraulic fill and has not been engineered. It is anticipated that many portions of the plan area are underlain by artificial fill placed during the grading of the developments. Due to the scale of the plan area and the geologic map, fill material was not mapped as a separate unit. Fill materials encountered at specific sites should be evaluated on a case-by-case basis to evaluate the condition of existing fill relative to proposed improvements.

- Alluvium (map symbol Qal)

  Holocene-age alluvial deposits are mapped in numerous drainage courses that cross the plan area including the Sweetwater River valley, the Otay River valley, Telegraph Canyon, and along San Diego Bay on the western edge of the plan area. Localized deposits of alluvium may also be present beneath the fill in some areas. Alluvial deposits are generally composed of uncemented sand, silt, clay, and gravel with varying amounts of cobbles and gravel. Slope wash/colluvium is generally present along the flanks and base of slopes. These units have not been differentiated from alluvial deposits on the geologic map.

- Landslide Deposits (not presented on the Geologic Map)

  Landslide deposits are mapped in numerous locations throughout the plan area. Some of the larger landslide locations include the bluffs along the south bank of the Otay River valley; the slopes above Telegraph Canyon, Poggi Canyon, Johnson Canyon, and O'Neal Canyon; the slopes of Mother Miguel Mountain, Gobbler's Knob, and Long Canyon; as well as a small area in the Jamul Mountains. Most of the landslides in the plan area are rotational gravity slides or slumps in the San Diego and Otay Formations resulting from basal erosion of oversteepened slopes, groundwater saturation, and surface water erosion where poorly consolidated rock and/or adverse geologic structure is present.

- Stream Terrace Deposits (map symbol Qt)

  Sediments mapped as Quaternary-age stream terrace deposits are mapped along many of the slopes above the Sweetwater River and Otay River valleys. The deposits include unconsolidated sand and gravel derived locally from the sedimentary, igneous, and metamorphic rocks of the area.

Map Source: Ninyo & Moore, 2003

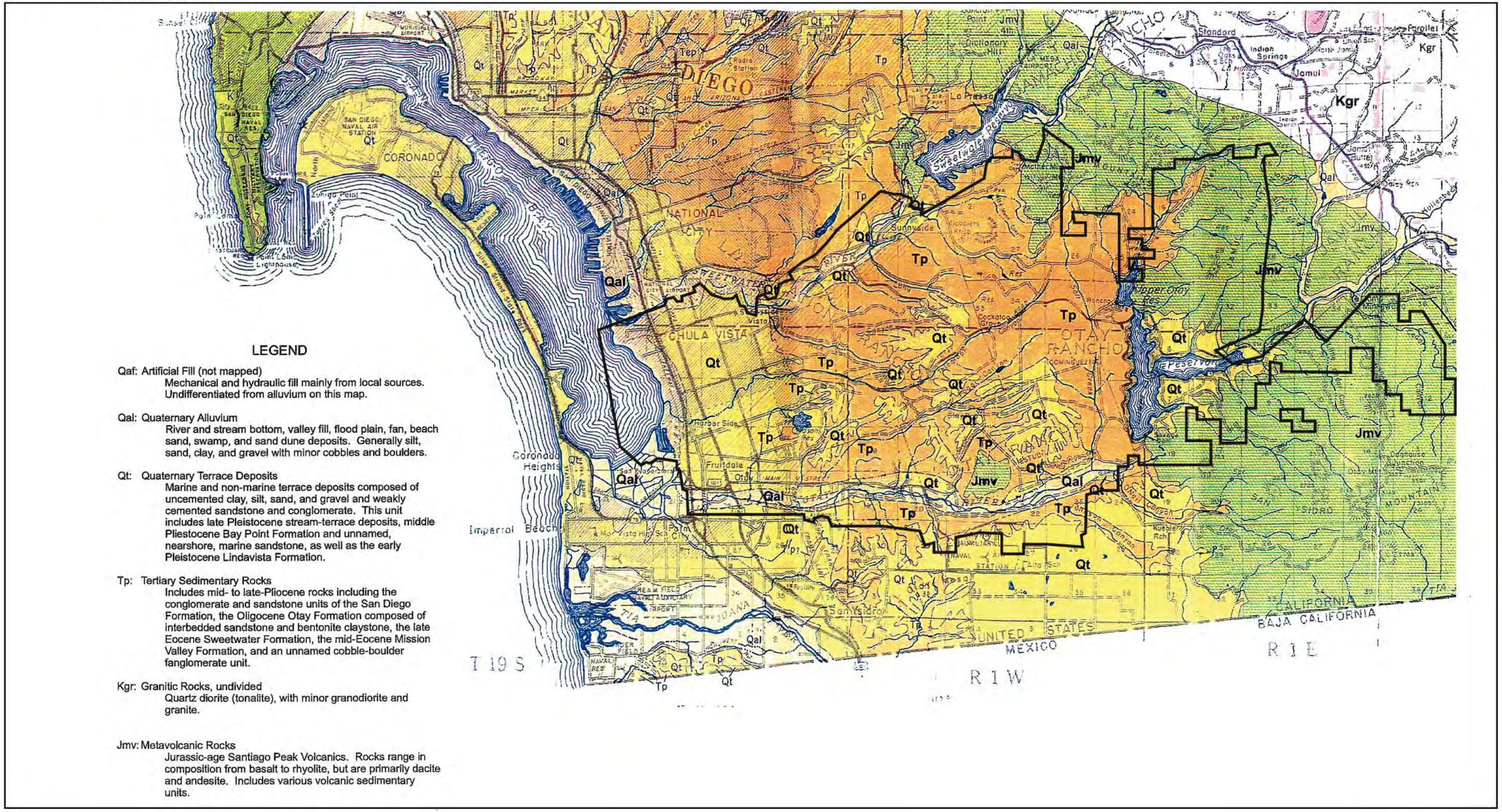

FIGURE 5.5-1
Geologic Map

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- Marine Terrace Deposits (Bay Point Formation, map symbol Qt)

  Quaternary-age terrace deposit sediments, mapped as Bay Point Formation together with an unnamed nearshore marine sandstone, are present in the coastal plains area of Chula Vista. In general, the marine terrace deposits are composed of yellowish to reddish and light brown, moist to saturated, medium dense to dense, fine to medium sand with varying amounts of silt and clay. The terrace deposits may also be present as weakly cemented sandstone with local fossiliferous or concretion-bearing sandstone beds.

  Terrace deposits are generally not susceptible to liquefaction or seismically induced settlement. They commonly possess sufficient bearing capacity to support deep or conventional foundations, and are readily excavatable. Terrace deposits in the plan area generally do not form steep, instability-prone slopes.

- Lindavista Formation (map symbol Qt)

  Materials of the Pleistocene-age Lindavista Formation are described as consisting generally of reddish brown, moderately cemented, medium- to coarse-grained sandstone, conglomeritic sandstone, and cobble conglomerate. The Lindavista Formation tops many of the mesas in the central and southeastern portions of the plan area above roughly elevation 450 feet above MSL. The Lindavista Formation is generally stable and resistant to erosion. This formation possesses good compressibility characteristics, and cut slopes inclined at 2:1 (horizontal:vertical) are generally stable to heights in excess of 50 feet. However, clay and claystone present in the unit may form expansive soils.

- San Diego Formation (map symbol Tp)

  Materials of the Pliocene-age San Diego Formation locally underlie the Pleistocene-age Lindavista Formation, generally mapped in the central portion of the plan area. Deposits of the San Diego Formation are described as consisting generally of yellowish-brown, weakly cemented, fine- to medium-grained sandstone, with interbeds of cobble conglomerate, bentonite, marl, and brown mudstone. The San Diego Formation is resistant to erosion and outcrops in steep natural exposures.

- Otay Formation (map symbol Tp)

  In general, the Oligocene-age Otay Formation consists of light gray, moderately cemented massive to thin-bedded sandstone with beds of bentonitic clay up to six feet or more in thickness. The Otay Formation is mapped as underlying central portion of the plan area, and much of the Otay Ranch and EastLake areas.

  Because it is a formational unit, the Otay Formation should have reasonably good bearing characteristics. Due to the possible, localized presence of bentonite clay, which

typically has a low shear strength, localized cut slopes constructed in the Otay Formation may need remedial measures due to slope stability concerns. Active landslides and ancient landslide deposits have been mapped in areas underlain by the Otay Formation. The bentonite clay is also typically highly expansive.

- Unnamed Fanglomerate Deposit (map symbol Tp)

  An unnamed mid-Tertiary-age boulder-fanglomerate is in the vicinity of the Lower Otay Reservoir. The unit is described as being composed of angular clasts of locally derived metamorphic and granitic rock in a matrix of sandstone and bentonite. Portions of this unit are considered correlative with the Oligocene-age Sweetwater Formation.

- Mission Valley Formation (map symbol Tp)

  Materials of the Eocene-age Mission Valley Formation are mapped in the northeastern portion of the plan area, mainly east of the La Nacion fault and in the slopes above the Otay River. The Mission Valley Formation is unconformably overlain by younger Pliocene marine rocks and is composed primarily of light olive gray, soft and friable, fine- to medium-grained sandstone interbedded with weakly indurated claystone. The unit is mapped as being prone to landsliding and several landslides are mapped in areas underlain by the unit south of the Sweetwater Reservoir. Portions of the Mission Valley Formation are considered correlative with the Oligocene-age Sweetwater Formation.

- Santiago Peak Volcanics (map symbol Jsp)

  Rocks of the Santiago Peak Volcanics are mapped in the northeastern and eastern portions of the plan area. The Santiago Peak Volcanics are composed primarily of dacitic and andesitic volcanic rock, including a wide variety of breccia, agglomerate, volcanic conglomerate, fine-grained tuff, and tuff breccia. The unit has locally been subject to low-grade metamorphism. The Santiago Peak Volcanics are generally hard and resistant to weathering and erosion. Soils formed from the unit are relatively thin and excavation in moderately to slightly weathered rock may necessitate the use of mechanical rock breaking or blasting. The unit is generally stable to semi-stable on slopes, but due to severe jointing and steep slopes, it is locally subject to raveling, erosion, rock fall, and debris flow.

Soils

Four main groups of soil types are included in the plan area and are described below.

SALINAS-CORRALITOS ASSOCIATION

This association is generally moderately well drained to somewhat excessively drained clays, clay loams, and loamy sands on alluvial fans. It is found on 0 to 9 percent slopes at elevations ranging from 25 to 300 feet above MSL. These soils tend to be found in the Otay and Sweetwater River valleys.

HUERHUERO-STOCKPEN ASSOCIATION AND REDDING-OLIVENHAIN ASSOCIATION

These associations are made up of soils that developed on marine terraces. They are generally moderately well drained loams, gravelly clay loams, and cobbly loams that have a subsoil of clay or gravelly clay over a hardpan of cobbly alluvium. They are found on 0 to 50 percent slopes at elevations ranging from sea level to 600 feet above MSL. These soils are found in the western portion of the plan area and southeast, north, and east sides of Otay Lake. Soils of the Olivenhain series may be subject to expansion.

EXCHEQUER-SAN MIGUEL AND FRIANT-ESCONDIDO ASSOCIATIONS

This association is made up of soils that developed in material from hard metavolcanic or metasedimentary rock. It is generally well drained silt loams, sandy loams, and very fine sandy loams. They are found on 30 to 75 percent slopes at elevations ranging from 400 to 3,500 feet above MSL. These soils are found in the foothills of the eastern plan area.

DIABLO-LINNE AND DIABLO-ALTAMONT ASSOCIATIONS

These associations are made up of soils that were derived from soft marine sandstone, soft calcareous marine sandstone, and shale. Soils in these associations are generally moderately well drained clays and clay loams. They are found on 5 to 50 percent slopes at elevations ranging from 100 to 600 feet above MSL. These soils are found southeast of the Sweetwater River and north of Otay River. Soils in the Diablo series are known to be prone to erosion and may be expansive.

Faulting and Seismicity

Chula Vista is situated within a seismically active region. However, the General Plan area is not underlain by known active fault splays (i.e., faults that exhibit evidence of ground displacement during the last 11,000 years). Ground surface rupture due to active faulting is not considered likely in the plan area due to the absence of any known active faults underlying the plan area. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also considered unlikely. The Rose Canyon fault, located approximately 14 miles northwest of the plan area, is currently classified as “active” by the state of California, and lies within an earthquake fault zone. The Rose Canyon fault has an assigned maximum earthquake magnitude of 6.9 and is most likely to affect the plan area.

Traces of the La Nacion fault zone, considered "potentially active" by the City of Chula Vista and the state of California, are known to cross the General Plan area in a generally north-south direction roughly in the vicinity of I-805. The location of mapped traces of the La Nacion fault zone are presented on the Figure 5.5-2. The greatest magnitude earthquake expected on the La Nacion fault is estimated at 6.0.

Distances from central Chula Vista to active fault ruptures within 100 kilometers of the site are presented in Table 5.5-1 below.

TABLE 5.5-1
ACTIVE FAULT DISTANCES

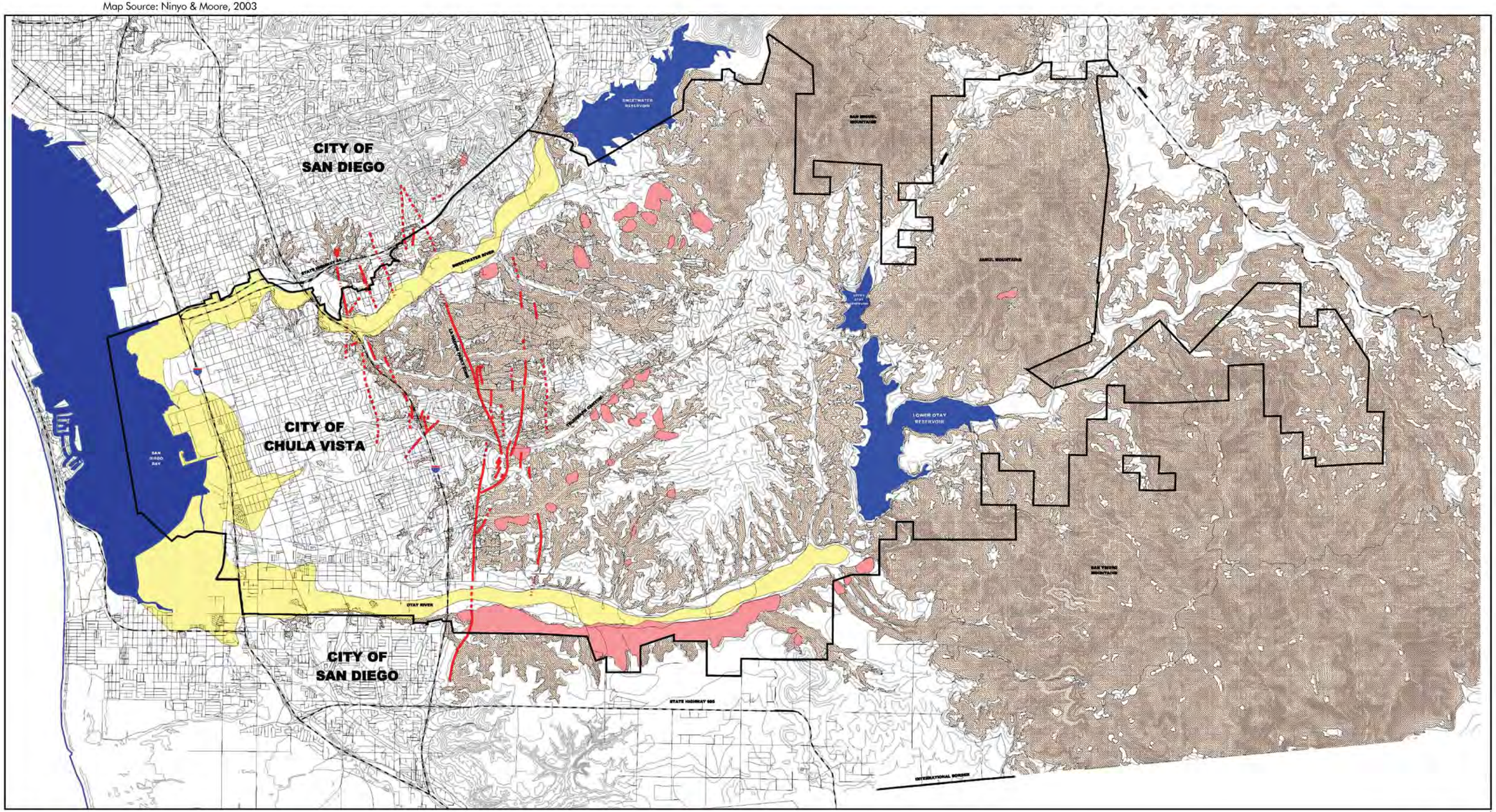
Fault	Distance (Km)	Maximum Moment Magnitude
Rose Canyon	14	6.9
Coronado Bank	30	7.4
Elsinore Fault–Julian	64	7.1
Newport–Inglewood (Offshore)	69	6.9
Elsinore–Coyote Mountain	70	6.8
Earthquake Valley	70	6.5
Elsinore–Temecula	81	6.8
San Miguel	87	6.0
San Jacinto–Coyote Creek	97	6.8
San Jacinto–Borrego	97	7.2

Historically, the Chula Vista area has generally been spared a major destructive earthquake. However, based on a search of earthquake databases of the United States Geological Survey (USGS) – National Earthquake Information Center (NEIC), several major earthquakes (Magnitude 5.0 or more) have been recorded within approximately 100 kilometers of the plan area since 1800. Table 5.5-2 summarizes the approximate magnitude and distance to these seismic events.

TABLE 5.5-2
HISTORICAL EARTHQUAKES

Date	Magnitude (M)	Epicentral Distance (Km)
11/22/1800	6.5	48
05/27/1862	5.9	19
02/24/1892	6.7	65
05/28/1892	6.3	96
10/23/1894	5.7	25
11/04/1949	5.7	65
12/22/1964	5.6	93
1/12/1975	5.1	92
7/13/1986	5.8	88

Map Source: Ninyo & Moore, 2003



General Plan Area

Water bodies

Fault locations*

Fault trace

Approximate or inferred fault

Concealed fault

*Mapped fault locations have been compiled from those presented in Farrand (1977), Kennedy and Tan (1977), Trelman (1984), and from information provided by the City of Chula Vista. The La Nacion fault zone is considered potentially active by the criteria of the State of California.

Landslide hazard areas

Areas containing active landslide-prone terrain. Such areas typically contain incompetent sedimentary rocks, slopes generally steeper than 25 degrees, and factors of safety less than 1.5.

Steep slope areas

Areas with slopes 25 degrees or steeper. Such areas may be prone to hazards such as slope instability, debris flow, rock falls, erosion, and slope creep.

Liquefaction hazard areas

Areas with shallow groundwater tables and poorly consolidated granular sediments potentially subject to hazards associated with seismically-induced liquefaction. Detailed geotechnical liquefaction analysis is encouraged.

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FIGURE 5.5-2
Geologic Hazards Map

The plan area contains some areas that may be subject to liquefaction. Groundwater is likely to be shallow below the existing ground surface in many areas mapped as being underlain by fill and unconsolidated alluvial sediments. Based on the presence of these conditions, the California Divisions of Mines and Geology (CDMG) classifies these areas as having a high potential for liquefaction and seismically induced settlement. Areas with high liquefaction potential are presented on Figure 5.5-2, and include the Chula Vista coastal areas and most of the western plan area, the Sweetwater River valley, and the Otay River valley.

Landsliding, Slope Instability, and Erosion

Landslides were mapped or observed at several locations in the General Plan area during the 2003 reconnaissance survey by Ninyo and Moore. Most of the landslides in the plan area are rotational gravity slides or slumps in the Sweetwater and Otay Formations. Many slopes in the plan area have been mapped as "generally susceptible" to slope instability or contain active or ancient landslides. Areas of known landslides or areas generally susceptible to landsliding are presented on Figure 5.5-2.

Deep-seated landslides are likely to impact small portions of the plan area based on the published and observed geologic and engineering properties of the mapped formational units in the plan area. However, surficial slope instability would more likely impact the proposed development areas if adversely modified. Potential hazards associated with slope instability may include surficial failures, earthflows, debris flows, mudslides, rockfalls, soil creep, or erosion. Slopes steeper than 25 degrees (approximately 2:1), potentially subject to instability, are presented on Figure 5.5-2.

The potential for earthquake-induced landsliding in hillside terrain in the plan area is also present. In general, areas such as the steep slopes of the Jamul and San Ysidro Mountains are considered to be relatively susceptible to earthquake-induced landsliding. In addition to earthquake-induced failures of natural slopes, failures of man-made slopes could also occur in some of the previously developed portions of Chula Vista.

5.5.1.3 Update Areas

The majority of the Urban Core Subarea has been previously developed with residential, commercial, and industrial uses. This Urban Core Subarea is underlain with Quaternary Terrace deposits.

The Montgomery Subarea has also been previously developed with residential, commercial, and industrial uses. The Montgomery Subarea is underlain with Quaternary Alluvium deposits and Tertiary Sedimentary Rocks.

The East Planning Area contains undeveloped former ranch and grazing land. The southernmost boundary of the East Planning Area is located within an area containing active

landslide-prone terrain. The East Planning Area is underlain with Tertiary Sedimentary rocks, Metavolcanic Rocks, and Quaternary Terrace and Alluvium deposits.

Areas with shallow groundwater tables and poorly consolidated granular sediments potentially subject to hazards associated with seismically induced liquefaction occur in all three update areas. The liquefaction hazard areas are located along the northern boundary of the Urban Core Subarea and continue south, adjacent to I-5 through the Montgomery Subarea, traversing east along the Southwest and East Planning Area boundaries.

Potentially active faults are located east of the Northwest and Southwest Update Areas, and traverse north-south in the general vicinity of I-805. There area no potentially active faults in the vicinity of the East Update Area.

5.5.2 Thresholds of Significance

The proposed General Plan Update would result in a significant geology and soils impact if it would:

- Threshold 1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning or based on other substantial evidence of a known fault; or

  ii) Place sensitive uses in situations that have the potential to be adversely affected by soil conditions.

5.5.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts if the plan would expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault or place sensitive uses in situations that have the potential to be adversely affected by soil conditions.

Implementation of the proposed land uses identified in the Preferred Plan or Scenarios 1, 2, or 3 has the potential to result in significant impacts from potential geologic hazards. In areas of the built environment, direct impacts would occur if, as a result of plan implementation, land uses, buildings, or other structures are determined to be unsafe from geologic hazards. In undeveloped areas, there is the potential that significant impacts from potential geologic hazards could occur as a result of development allowed by the plan.

Construction on liquefiable soils within drainage courses could result in injuries or loss of property during ground shaking of sufficient magnitude and duration. Expansive soils within pavement, foundation, or slab subgrade could heave when wetted, resulting in cracking or failure of these development improvements. Expansive soils have been reported to be present in localized areas throughout the plan area and are especially prevalent in the Diablo Series and Olivenhain Series soils. Zones of highly expansive bentonite may be encountered in the Otay Formation. Evaluation of on-site soils for expansion potential will be performed as a portion of the geotechnical evaluation for proposed developments on a case-by-case basis in conformance with policies contained in the proposed Objective EE 14.

Loose or compressible soils are found over much of the plan area, especially in undeveloped areas in the east with deposits of alluvium or slope wash/colluvium, and in developed areas with hydraulic or uncompacted fill. These materials are subject to settlement under increased loads, or due to an increase in moisture content from site irrigation or changes in drainage conditions.

Groundwater is likely to be shallow below the existing ground surface in areas mapped as being underlain by fill and unconsolidated alluvial sediments along the northern and western boundaries of the Urban Core Subarea and along the southern boundary of the Montgomery Subarea and the East Planning Area. Based on the presence of these conditions, the CDMG classifies these areas as having a high potential for liquefaction and seismically induced settlement.

Ground surface rupture due to active faulting is not likely in the plan area due to the absence of any known active faults underlying the plan area. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also unlikely. Accordingly, there is no potentially adverse impact from ground surface rupture.

There are no known active faults underlying the city of Chula Vista. The closest known active fault is the Rose Canyon fault, located approximately 14 miles northwest of the plan area. The Rose Canyon fault has an assigned maximum earthquake magnitude of 6.9 (California Division of Mines and Geology 1998). Based on a Probabilistic Seismic Hazard Assessment for the western United States, issued by the United States Geological Survey (1999), Chula Vista is located in a zone where the horizontal peak ground acceleration having a 10 percent probability of exceedance in 50 years ranges from 0.19 g (19 percent of the acceleration of gravity) to 0.26 g. The north-south trending La Nacion fault traverses the East Planning Area and is potentially active, which means it has not offset geologic formations younger than 11,000 years old.

The General Plan Update proposes the adoption of one objective and five associated policies to reduce potential impacts associated with geologic hazards. The objective and policies are:

Objective EE 14

Minimize the risk of injury, loss of life, and property damage associated with geologic hazards.

Policies

EE 14.1: To the maximum extent practicable, protect against injury, loss of life, and major property damage through engineering analyses of potential seismic hazards, appropriate engineering design, and the stringent enforcement of all applicable regulations and standards.

EE 14.2: Prohibit the subdivision, grading, or development of lands subject to potential geologic hazards in the absence of adequate evidence demonstrating that such development would not be adversely affected by such hazards and would not adversely affect surrounding properties.

EE 14.3: Require site-specific geotechnical investigations for proposals within areas subject to potential geologic hazards and ensure that all measures deemed necessary by the City Engineer and/or Building Official to avoid or adequately mitigate such hazards will be implemented.

EE 14.4: Promote programs to identify un-reinforced masonry buildings and other buildings and structures that would be at risk during seismic events and promote strengthening of these buildings and structures where appropriate.

EE 14.5: Wherever feasible, land uses, buildings, and other structures determined to be unsafe from geologic hazards shall be discontinued, removed, or relocated.

Impacts to soils and geology can be avoided through the implementation of these policies. Implementation of Policy EE 14.1 requires an engineering analysis which would identify potential seismic hazards prior to construction, and allow for project-specific design to take into account and avoid seismic hazards. By complying with Policies EE 14.2 and 14.3, a comprehensive, site-specific soil and geologic evaluation would be conducted for all future projects to determine potential hazards and site conditions. The design of the structures developed in conformance with the proposed General Plan Update will comply with the requirements of the Uniform Building Code and standard practices of the Association of Structural Engineers of California.

5.5.4 Level of Significance Prior to Mitigation

5.5.4.1 Threshold 1: Exposure to Effects of Faults and Adverse Soil Conditions

Threshold 1 indicates that there would be a significant impact if the proposed plan were to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning or based on other substantial evidence of a known fault; or ii) Place-sensitive uses in situations that have the potential to be adversely affected by soil conditions.

Adverse geological impacts resulting from development completed in conformance with the Preferred Plan or any of the Scenarios will be reduced to below a level of significance because the plan contains policies which ensure protection from geologic hazards. Compliance with Policy EE 14.1 requires an engineering analysis in order to identify potential seismic hazards prior to construction, and allow for project-specific design to take into account and avoid seismic hazards. Application of Policy EE 14.2 prohibits approval of a subdivision, grading, or development of lands subject to potential geologic hazards in the absence of adequate evidence demonstrating that such development would not be adversely affected by such hazards and would not adversely affect surrounding properties. In addition, Policy EE 14.3 requires a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential geologic/soils hazards; the results of which shall be subject to the review of City staff.

With the implementation of these policies, the potential to expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning or based on other substantial evidence of a known fault or to place sensitive uses in situations that have the potential to be adversely affected by soil conditions is avoided. Therefore, impacts are self mitigated.

5.5.5 Mitigation Measures

No mitigation is necessary, because the objectives and policies avoid the potential impact.

5.5.6 Level of Significance After Mitigation

Not significant.

5.6 Paleontological Resources

Paleontological resources (fossils) are the remains and/or traces of prehistoric animal and plant life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, leaves, and so on, are found in the geologic deposits (rock formations) within which they were originally buried. Fossil remains are important as they provide indicators of the earth's chronology and history. They represent a limited, nonrenewable, and sensitive scientific and educational resource.

5.6.1 Existing Conditions

5.6.1.1 Regulatory Plans and Policies

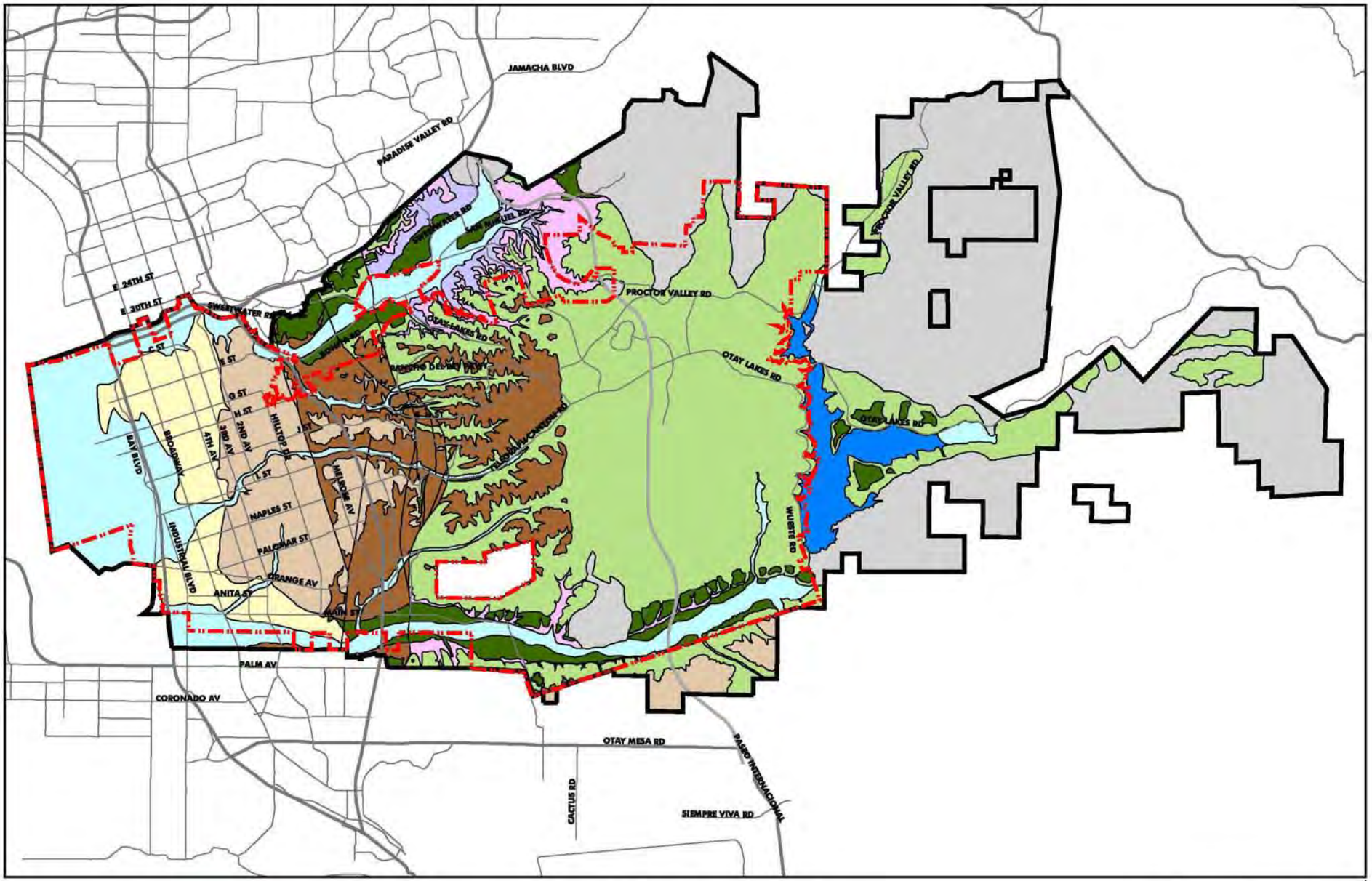
For activities subject to CEQA (California Public Resources Code Sections 21000 – 21178), potential impacts to paleontological resources must be evaluated. Pursuant to Section 15065 of the State CEQA Guidelines (California Code of Regulations Sections 15000 – 15387), a lead agency must find that a project may have a significant effect on the environment where the project has the potential to eliminate important examples of the major periods of California prehistory, which includes the destruction of significant paleontological resources.

5.6.1.2 Existing Citywide Conditions

The General Plan area can be subdivided into three distinct geomorphic regions: the Coastal Terraces Region between San Diego Bay and Interstate 805; the Inland Mesa and Canyon Region between Interstate 805 and Lower Otay Lake; and the Peninsular Ranges Foothill Region between Lower Otay Lake and State Route 94. The paleontological sensitivity of the following geologic formations that occur within the General Plan area are listed below and shown in Figure 5.6-1.

Coastal Terraces Region

The Coastal Terraces Region of Chula Vista is underlain by a thick accumulation of Pleistocene to recent marine and non-marine sedimentary rocks deposited within a seismically active, fault-bounded, pull-apart basin formed by faults of the Rose Canyon fault zone. These faults generally strike north-south and are responsible for the formation of modern San Diego Bay. The general flat topography of this region is largely a factor of deposition at or near sea level in a broad coastal floodplain. For the most part, the low topographic relief, extensive residential and commercial development, and widespread native and introduced vegetation that characterize the Coastal Terraces Region are also responsible for the limited number of areas where the underlying geology is exposed in outcrop. In turn, this lack of geologic exposure is probably also responsible for the paucity of paleontological collecting sites recorded from the Coastal Terraces Region. These few sites have produced a limited assemblage of terrestrial mammals including fossil species of tapir, horse, and rabbit.



Chula Vista municipal boundary

Chula Vista General Plan area

Geological formations (draft)
(Source: SDNHM, 2004)

KJsp	Tmv
Qal	To
Qlv	Tsd
Qt	Tsw
Qu	W

0 Miles 2 N

FIGURE 5.6-1
Geologic Formations (Draft)

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The following geologic formations occur within the Coastal Terraces Region:

Later Quaternary Alluvium (Qal); Low Sensitivity

Bay Point Formation & Unnamed Nearshore Marine Sandstone (Qu); Moderate Sensitivity

Inland Mesa and Canyon Region

The Inland Mesa and Canyon Region of Chula Vista is underlain by a layer-cake sequence of Eocene to Pleistocene marine and non-marine sedimentary rocks deposited within a variety of paleonenvironments from ancient river floodplain to open marine sea floor to protected estuarine mud flats. The general layer-cake arrangement of this sedimentary sequence has been locally deformed by normal faults of the La Nacion fault zone. Pleistocene and Recent rivers and streams flow west from the Peninsula Ranges. The oldest sedimentary strata in this region are assigned to the Mission Valley Formation, which is exposed in only a limited area. These strata are overlain by sedimentary rocks of the Otay Formation, which are exposed over a large portion of the eastern area of Chula Vista. The San Diego Formation overlies the Otay Formation in the western portion of the Inland Mesa and Canyon Region. The relatively high topographic relief in this region coupled with its numerous faults and recent urbanization is responsible for the great abundance of known paleontological collecting sites. These sites have produced diverse assemblages of terrestrial mammals (e.g., insectivores, rodents, carnivores, rhinoceros, camels, and oreodonts) from the Otay Formation and diverse assemblages of marine mammals (e.g., sea cows, fur seals, walruses, dolphins, porpoises, sperm whales, and baleen whales) from the San Diego Formation.

The following geologic formations occur within the Inland Mesa and Canyon Region:

- Unnamed River Terrace Deposits (Qt); Moderate Sensitivity
- Lindavista Formation (Qlv); Moderate Sensitivity
- San Diego Formation (Tsd); High Sensitivity
- Otay Formation (To); High Sensitivity
- Sweetwater Formation (Tsw); High Sensitivity
- Mission Valley Formation (Tmv); High Sensitivity

Peninsular Ranges Foothill Region

The Peninsular Ranges Foothill Region of Chula Vista is primarily underlain by Mesozoic metavolcanic and metasedimentary rocks with Mesozoic plutonic (“granitic”) rocks

occurring immediately to the east and north. Although subsequent crustal uplift and regional erosion eventually exposed these crystalline basement rocks at the surface, they were later reburied beneath a thick accumulation of Cenozoic sedimentary rocks. Thus, the isolated resistant peaks of Mesozoic crystalline rocks at Rock Mountain on the north side of Otay Valley and at Mother Miguel Mountain on the north side of Proctor Valley are actually "rooted" at a depth to the buried Mesozoic crystalline rock terrane. These basement "highs" demonstrate the amount of topographic relief on the buried landscape of the eastern portion of Chula Vista. Presently, there are no reported occurrences of paleontological collecting sites within the Peninsular Ranges Foothill Region. However, the presence of isolated patches of Oligocene fanglomerates of the Otay Formation suggests that fossil remains may eventually be discovered in this region.

The only geologic formation that occurs within the Peninsular Ranges Foothill Region is Santiago Peak Volcanics (KJsp), and is assigned a Marginal Sensitivity.

Update Areas

The Urban Core and Montgomery Subareas are located in the Coastal Terraces Region. The majority of the Northwest and Southwest Update Areas are underlain with unnamed nearshore marine sandstone (Qu). Additionally, later quaternary alluvium (Qal) and Lindavista Formation (Qlv) occur within these update areas.

The northern portion of the East Planning Area is located within the Inland Mesa and Canyon Region and the southern portion is located within the Peninsular Ranges Foothill Region. The East Planning Area is underlain by San Diego Formation and Otay Formation. Along the Otay River Valley in the southern portion of the East Update Area, unnamed river terrace deposits are well preserved on Otay Ranch east of Main Street. Additionally, a small portion of this update area contains Sweetwater Formation (Tsw).

5.6.2 Thresholds of Significance

The proposed project would result in a significant impact to paleontological resources if it would:

- Threshold 1: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.6.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to paleontological resources if the plan would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The City of Chula Vista is located in a highly sensitive area for paleontological resources. Development completed in conformance with the proposed Preferred Alternative or Scenarios 1, 2, or 3 has the potential to result in significant adverse impacts to paleontological resources. Each of the scenarios would result in increased development in the Northwest, Southwest, and East Planning Areas. Because the development footprint and relative intensity of land uses for each of the scenarios is similar, impacts to paleontological resources resulting from implementation of the Preferred Plan or Scenarios 1, 2, or 3 would be the same regardless of which is ultimately selected.

The General Plan Update proposes the adoption of the following objective and associated policies that address the protection of paleontological resources:

Objective EE 10

Protect important paleontological resources and support and encourage public education and awareness of such resources.

Policy

EE 10.1: Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to paleontological resources in accordance with the California Environmental Quality Act.

Compliance with Objective EE 10 and policy EE 10.1 would reduce impacts to paleontological resources. Application of Policy EE 10.1 requires that assessment and mitigation of impacts resulting from private development and public projects be completed in accordance with CEQA. Application of this policy would reduce potential impacts to paleontological resources resulting from development completed in accordance with the proposed General Plan Update; however, not to below a level of significance. Without mitigation measures, implementation of the land use modifications proposed in each of the scenarios would result in a substantial adverse change to paleontological resources.

5.6.4 Level of Significance Prior to Mitigation

5.6.4.1 Threshold 1: Destroy a Unique Paleontological Resource

Chula Vista is located in a highly sensitive area for paleontological resources and as such, adoption of the proposed General Plan may have significant impacts to paleontogical resources.

In areas of the built environment, significant direct impacts could occur if, as a result of plan implementation, sensitive geological formation were substantially disturbed during

development. In open areas, there is the potential that future development, as permitted by the plan, could impact paleontological resources.

Policies associated with Objectives EE 10 demonstrate Chula Vista's commitment to the protection of paleontological resources. Policy EE 10.1 requires that assessment and mitigation of impacts resulting from private development and public projects be completed in accordance with CEQA. This policy, however, would not preclude impacts to paleontological resources. Compliance with Objective EE 10 and policy EE 10.1 would reduce impacts to paleontological resources because Policy EE 10.1 would require that an assessment and mitigation of impacts resulting from private development and public projects be completed in accordance with CEQA. Application of Policy EE 10.1 would reduce potential impacts to paleontological resources, but not to below a level of significance. The following mitigation measures are designed to further the application of this policy.

5.6.5 Mitigation Measures

5.6-1 On a case-by-case basis, the following grading thresholds shall be used by the appropriate decision maker to determine whether or not a proposed project may potentially result in significant impacts to sensitive paleontological resources:

Sensitivity Rating	Excavation Volume and Depth Thresholds
High	>1000 cubic yards and >5 feet deep
Moderate	>2000 cubic yards and > 5 feet deep
Zero-Low	Mitigation Not Required

5.6-2 It may be determined that a project may result in potentially significant impacts to sensitive paleontological resources if a known paleontological resource exists within the impact area of a project regardless of the volume and depth of excavation. If it is determined that potentially significant impacts to sensitive paleontological resources may result, then such impacts shall be mitigated by a pre-construction mitigation program or construction mitigation program, or both, to be determined prior to project approval by the appropriate decision maker. All mitigation programs shall be performed by a qualified professional paleontologist, defined here as an individual with a M.S. or Ph.D. in paleontology or geology who has proven experience in San Diego County paleontology and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined here as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.

Pre-construction mitigation. This method of mitigation is only applicable to instances where well-preserved and significant fossil remains, discovered in the

assessment phase, would be destroyed during initial brush clearing and equipment move-on. The individual tasks of this program include:

1. Surface prospecting for exposed fossil remains, generally involving inspection of existing bedrock outcrops but possibly also excavation of test trenches;

2. Surface collection of discovered fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;

3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;

4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;

5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;

6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections (including the fossil specimens, copies of all field notes, maps, stratigraphic sections, and photographs); and

7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

Construction mitigation. Under this program, mitigation occurs while excavation operations are underway. The scope and pace of excavation generally dictate the scope and pace of mitigation. The individual tasks of a construction mitigation program typically include:

1. Monitoring of excavation operations to discover unearthed fossil remains, generally involving inspection of ongoing excavation exposures (e.g., sheet

graded pads, cut slopes, roadcuts, basement excavations, and trench sidewalls);

2. Salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;

3. Recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;

4. Laboratory preparation (cleaning and repair) of collected fossil remains, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;

5. Cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;

6. Transferal, for storage, of cataloged fossil remains to an accredited institution (museum or university) that maintains paleontological collections, including the fossil specimens, copies of all field notes, maps, stratigraphic sections and photographs; and

7. Preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

5.6.6 Level of Significance After Mitigation

Compliance with Policy EE 10.1 of the proposed General Plan Update and the implementation measures provided in mitigation measures 5.6-1 and 5.6-2 would reduce impacts to paleontological resources to below a level of significance.

5.7 Agriculture

5.7.1 Existing Conditions

5.7.1.1 Regulatory Plans and Policies

The Otay Ranch General Development Plan, approved jointly by the City of Chula Vista and County of San Diego for the future development of Otay Ranch, establishes goals, objectives, policies, and implementation measures relative to the protection of agricultural resources.

Chapter 3 of the Otay Ranch Resource Management Plan (RMP) contains several objectives and policies relating to agriculture. The single unifying goal of the RMP is the establishment of an open space system that will become a permanent preserve dedicated to the protection and enhancement of environmental resources. In conformance with the RMP, a Range Management Plan for Otay Ranch was subsequently prepared. In general, the Range Management Plan recommendations and implementing actions provide for ongoing managed grazing activities on conveyed lands if the activity is shown not to negatively affect biological resources.

5.7.1.2 California Land Conservation (Williamson) Act

The California Land Conservation Act of 1965, also referred to as the Williamson Act, is an agricultural protection program that currently protects more than 16 million of the state's 30 million acres of farm and ranch land. Under the Act, a private landowner may voluntarily enter into a rolling term 10-year contract with the local government for the purpose of restricting specific parcels of land to agricultural or compatible open space use. Lands must be located within an agricultural preserve area and be a minimum of 100 acres in size unless a smaller size is authorized by the local government.

There are no active Williamson Act contract properties within the General Plan area.

5.7.1.3 Otay Ranch Grazing Ordinance

The Draft Otay Ranch Grazing Ordinance has been prepared as one of several Chula Vista MSCP Subarea Plan implementing ordinances. The purpose of the ordinance is to implement the goals and recommendations of the Range Management Plan for the Otay River Valley Management Area. The draft Grazing Ordinance states that it is unlawful to conduct grazing activities in the city of Chula Vista on land designated by the Otay Ranch GDP as Otay Ranch Preserve, except as provided in the ordinance. Ordinance regulations apply to all land designated by the Otay Ranch GDP as the Otay Ranch Preserve and as 100 percent Conservation Area in the Chula Vista MSCP Subarea Plan. For areas where interim grazing is allowed, the draft Grazing Ordinance establishes controls or provides for

grazing to be phased out in highly sensitive areas (i.e., riparian areas), unless determined to be biologically beneficial. For areas designated for restoration, cessation of grazing is required for a period of time prior to initiation of restoration activities to facilitate soil preparation and exotic plant control.

5.7.1.4 Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) is implemented by the State Department of Conservation, Division of Land Resource Protection and recognizes the suitability of land for agricultural production. The FMMP is non-regulatory and was developed to inventory land and provide categorical definitions of important farmlands to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The program does not necessarily reflect local General Plan actions, urban needs, changing economic conditions, proximity to market and other factors which may be taken into consideration when government considers agricultural land use policies. *Important Farmland Maps*, which are a hybrid of resource quality (soils) and land use information, are produced by the FMMP.

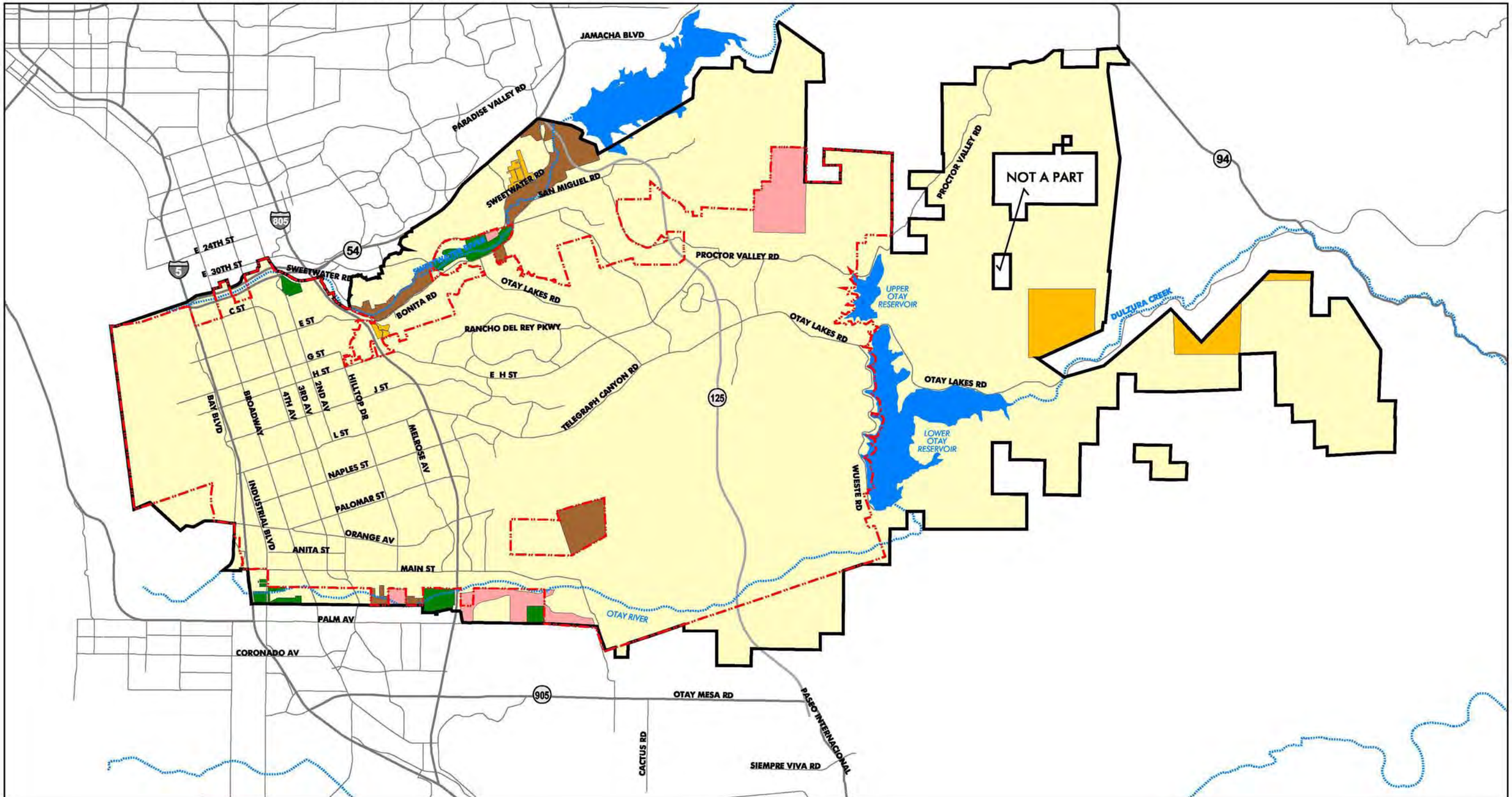
5.7.1.5 Existing Citywide Conditions

There are approximately 3,182 acres of land within the boundaries of the current General Plan area that are zoned for agriculture. The majority of lands retaining agricultural zoning within the General Plan area are located within the unincorporated area of the county. The County of San Diego Zoning Ordinance (Section 2700 et seq.) enacted the A-70 (Limited Agriculture) and A-72 (General Agriculture) use regulations. County of San Diego use regulations for parcels zoned A-70 or A-72 (minimum 2-, 4-, or 8-acre parcels) within the plan area are shown on Figure 5.7-1.

Agricultural activities in the City are allowed on lands zoned for Agriculture (A-8, A-X) and, on an interim basis, Planned Community (P-C). These agricultural zones provide for a minimum lot size of 8 acres (A-8) or more (A-X, with X representing a number of acres greater than eight). These zones are "intended to preserve in agricultural use land which may be suited for eventual development in urban uses and which will encourage proper timing for the economical provision of utilities, major streets and other facilities, so that orderly development will occur" (Section 19.20.010). Of the 3,182 acres of land zoned for agriculture in the planning area, an estimated 883 acres of agriculturally zoned land are located within the City of Chula Vista boundary. The Otay Landfill is one of the areas that is currently zoned for agriculture.

Permitted uses in the City's A-8 or A-X classification include agriculture, one single-family dwelling per lot or parcel, public parks, and factory-built home/mobile home. Agriculture is defined in Chapter 19.04.010 to include farming, dairying, pasturage, agriculture,

Agricultural Zones Data Source: modified from City of Chula Vista GIS department (received November 2002)



Chula Vista municipal boundary
Chula Vista General Plan area

Lakes
Streams

SR-125 South proposed alignment
Freeway
Major roads

Agricultural Zones
City of Chula Vista
A-8 (minimum 8 acres)
A-X (X = minimum parcel size, not less than 8 acres)
County of San Diego
A-70 (minimum 2,4,8 acres)
A-72 (minimum 2,4,8 acres)

0 Miles 1.4 N

FIGURE 5.7-1
Agricultural Zones

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fig5.7-1 (ag zones) 09/14/05

horticulture, floriculture, viticulture, apiaries, animal husbandry (excluding swine), and accessory uses for storing produce but not stockyards or the commercial feeding of garbage or offal to animals.

Farmland data for the county is not broken down by jurisdiction but agriculture has a long history within the city of Chula Vista and the neighboring area. Figure 5.7-2 shows the most recent farmland data for the city and General Plan area. Much of the area indicated as locally important has been developed. In these areas the farm land map is out of date. These include lands designated as prime and unique farmlands, farmland of statewide and local importance, grazing land, urban and built-up, and other land. There are no Farmlands of Statewide Importance within the General Plan area.

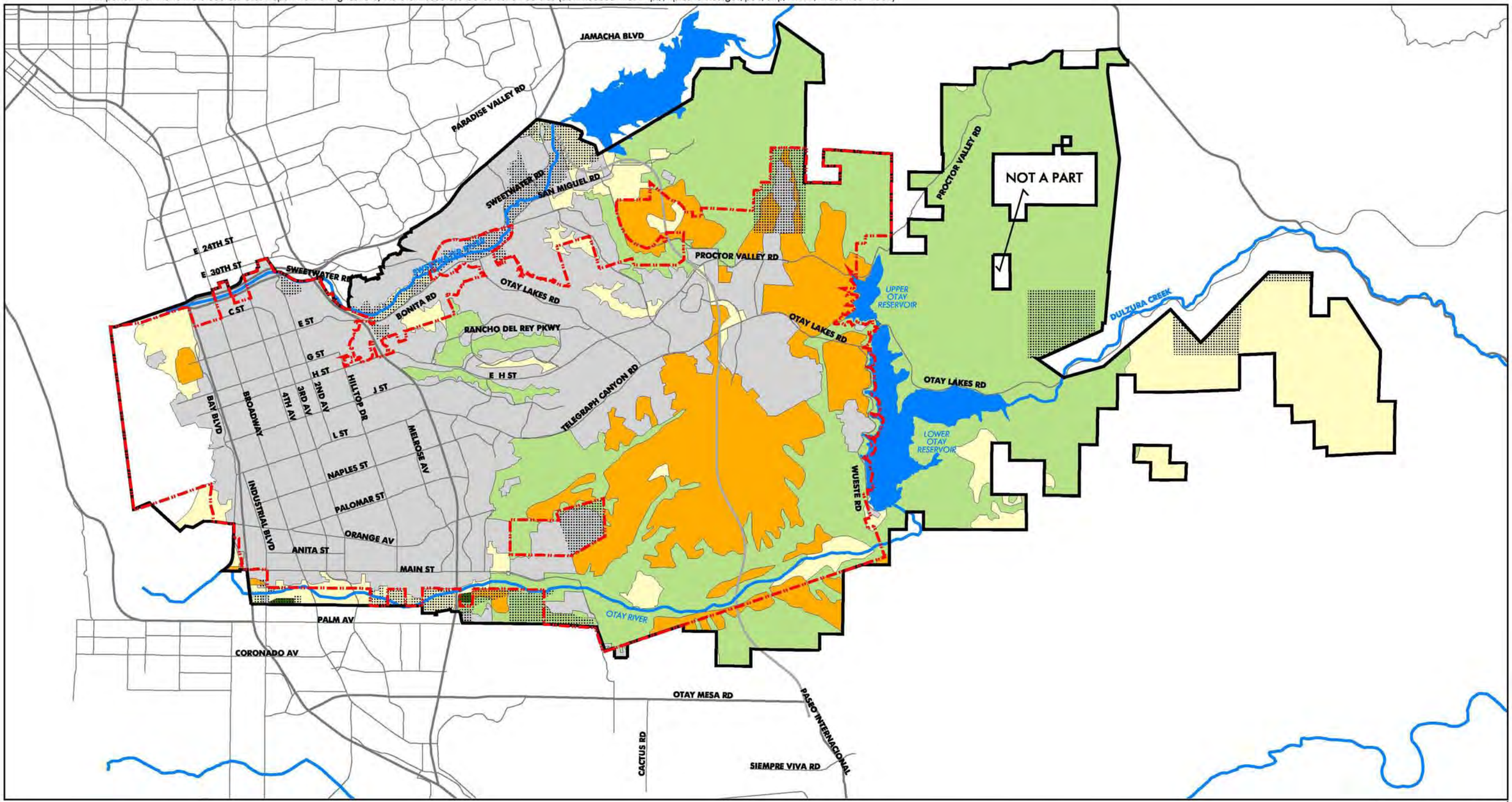
The adopted General Plan does not identify agricultural preserve areas within the plan area and none currently exist. A limited number of parcels still retain agricultural zoning as shown on Figure 5.7-1. The purpose of the agricultural zone is to provide a zone with appropriate uses for areas rural in character, which are undeveloped and not yet ready for urbanization. The zone is intended to preserve in agricultural use land which may be suited for eventual development in urban uses. Much of the land zoned for agriculture west of the Sweetwater Reservoir has been incorporated into parkland. Only a relatively few landholdings within the western planning boundary, located primarily in the vicinity of the Otay River along the southern boundary of the plan area, still retain small-scale agricultural operations and agricultural use within these zones is considered an interim use.

The adopted General Plan identifies Rancho Janal and Otay Ranch as the most important of the yet undeveloped agricultural lands remaining in the plan area, but indicates that access to water for irrigation is a major impediment due to the expense associated with developing a new reservoir and other required water main improvements. Rising land values, water costs, increasing taxes, habitat management planning, and other land use conflicts, combined with pressure for urbanization, have contributed to a significant reduction in agricultural uses and future viability.

The U.S. Soil Conservation Service has rated soils in the area for crop suitability. A substantial amount of acreage of soils within the Plan area, specifically level soils with slopes of 0–9 percent in the East Planning Area, are rated good or fair for agricultural production.

Table 5.7-1 depicts the approximate acreage for each of the FMMP categories within the General Plan area. According to the Important Farmlands Inventory map, lands within the General Plan area contain prime farmland, farmland of statewide and local importance, and grazing land. Urban and built-up land comprises a majority of the plan area west of I-805 and significant areas to the east. The prime farmland mapped in the area is in areas planned as open space. Their status would not change as part of or as a result of the proposed General Plan Update.

Important Farmland Data Source: U.S. Department of Agriculture, Natural Resources Conservation Service (downloaded from ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/ December 2002)



Chula Vista municipal boundary
Chula Vista General Plan area

Lakes
Streams

SR-125 South proposed alignment
Freeway
Major roads

Farmland
Prime farmland
Farmland of local importance
Grazing land
Urban and built-up land
Other land
Not inventoried
Water

Lands zoned for agriculture

0 Miles 1.4 N

FIGURE 5.7-2
Important Farmland Inventory and Existing Agricultural Zoning

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fig5.7-2 (farmland) 09/14/05

TABLE 5.7-1
FARMLAND INVENTORY: CITY OF CHULA VISTA GENERAL PLAN AREA
(acres)

Category	General Plan Area		
	Within the City	Outside the City	Total
Prime farmland	13	21	34
Farmland of statewide importance	0	0	0
Farmland of local importance	6,833	678	7,511
Grazing land	6,363	14,063	20,426
Urban and built-up land	17,084	3,594	20,678
Other land	1,562	5,647	7,209
Water	57	1,198	1,255
Not inventoried	1,452	132	1,584
TOTAL	33,364	25,333	58,697

5.7.1.6 Update Areas

The Northwest Update Area and the majority of the Southwest Update Area have been previously developed with residential, commercial, and industrial uses. These areas do not contain farmlands of importance according to the Important Farmlands Inventory Map. A small portion of the Southwest Update Area, along the Otay River, is zoned for agriculture uses. Both of the small portions of Prime Farmland occur along the Otay River Valley in the Southwest Planning Area.

The East Update Area contains farmlands of local importance and grazing land according to the Important Farmland Inventory Map. Although the project site contains farmland of local importance, the high cost of importing water has become prohibitive for many agricultural activities (City of Chula Vista 1989a). The General Development Plan for the Otay Ranch indicates that agricultural activity is allowed as “an interim use” (City of Chula Vista 1993:426).

5.7.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to agricultural resources if it would:

- Threshold 1: Convert prime farmland or farmland of statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use and/or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

5.7.3 Impacts

Threshold 1: Convert prime farmland or farmland of statewide importance to non-agricultural use.

As specified in Threshold 1, a significant impact to agriculture would occur if a project would convert prime farmland or farmland of statewide importance to non-agricultural uses or result in other changes that could result in such a change.

The city of Chula Vista contains 0.03 percent prime farmland (13 acres) and no farmland of statewide importance. The proposed General Plan Update does not change the land use designation for this 0.03 percent of prime farmland, and it provides for its continued use as farm land. Policy EE 4.1 allows historical agricultural uses to continue within planned development areas as an interim land use in accordance with the MSCP Subarea Plan, and Policy EE 4.2 allows agricultural uses on privately owned property within the Chula Vista Greenbelt and elsewhere, provided the use is consistent with the provisions of the MSCP Subarea Plan as well as the zoning of the property. These policies are associated with Objective 4, which states:

Objective EE 4

Maintain the opportunity for limited agricultural and related uses to occur as an interim land use within planned development areas and as a potential permanent land use within appropriate locations.

Policies

EE 4.1: Allow historical agricultural uses to continue within planned development areas as an interim land use in accordance with the MSCP Subarea Plan.

EE 4.2: Allow agricultural uses on privately owned property within the Chula Vista Greenbelt and elsewhere, provided the use is consistent with the provisions of the MSCP Subarea Plan as well as the zoning of the property.

EE 4.3: Encourage the development of community gardens and similar related uses within appropriate, compatible locations throughout the city.

Because the development footprint and relative intensity of land uses for each of the scenarios are similar, impacts to agricultural resources resulting from implementation of any

of the scenarios (Preferred Plan and Scenarios 1, 2, or 3) would be the same regardless of which is ultimately selected.

Each of the scenarios would result in increased development in areas of the built environment in the northwestern and southwestern portion of the city. Each would also convert farmland of local importance and grazing land in the east for residential, commercial, industrial, and recreational uses.

There are no important farmlands, as defined by FMMP, and no agricultural activities occurring in the Northwest Update Area. As discussed above and shown on Figures 5.7-1 and 5.7-2, a small portion of the Southwest Update Area along the Otay River Valley contains prime farmland and is zoned for agriculture. While the agricultural lands in the Southwest Update Area represent a potential community resource, the limited amount of agricultural land by itself is not considered an important agricultural resource.

The East Update Area contains farmland of local importance and grazing land as defined by the FMMP. The FMMP defines farmland of Local Importance as land of importance to the local economy, as defined by each county's local advisory committee and adopted by its Board of Supervisors. Farmland of Local Importance is either currently producing, or has the capability of production, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. This update area is not zoned for agriculture and the current agricultural activities are an interim land use and consist of intermittent cattle grazing and dry land farming. Although this update area contains farmland of local importance, agricultural crop production is constrained by irrigation availability and cost. Long-term agricultural uses are not planned for this area.

Impacts to agricultural uses as stated in Threshold 1 are not significant because the plan does not require or result in the conversion of prime farmland or farmland of statewide importance. While the proposed General Plan Update would apply non-agricultural land uses to this 0.03 percent of prime farmland (13 acres)—which is zoned for agricultural use—it would also provide for its continued use as farm land. Policy EE 4.1 allows historical agricultural uses to continue within planned development areas as an interim land use in accordance with the MSCP Subarea Plan, and Policy EE 4.2 allows agricultural uses on privately owned property within the Chula Vista Greenbelt and elsewhere, provided the use is consistent with the provisions of the MSCP Subarea Plan as well as the zoning of the property. In addition, no areas of highly productive agricultural lands have been identified within the General Plan area. Past agricultural operations consisted of miscellaneous fruit, vegetable, apiary, cattle grazing, and dry land farming operations. Intermittent cattle grazing and dry land farming occurred primarily in the non-irrigated portions of the Eastern Territories. Production associated with these uses is not significant in terms of countywide agricultural value.

5.7.4 Level of Significance Prior to Mitigation

Threshold 1 states that a significant impact would occur to agriculture if the action would convert prime farmland or farmland of statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

There are no prime farmland or farmlands of statewide importance in the city that would be converted as a result of the proposed land use changes. This land is currently designated, and would remain as open space, and is zoned for agriculture. Therefore, impacts to agriculture are not significant.

5.7.5 Mitigation Measures

Since no adverse impacts to agricultural resources would result, no mitigation is necessary.

5.7.6 Level of Significance After Mitigation

No significant agricultural resources impacts have been identified.

5.8 Energy

5.8.1 Existing Conditions

5.8.1.1 Regulatory Plans and Policies

The San Diego Regional Energy Plan provides policy and program recommendations to achieve energy sustainability and security. The San Diego Regional Energy Office (SDREO) provides a regional focus for several public-good energy program areas, including energy efficiency, renewable energy, coordinating energy issues with regional land use planning, clean fuel vehicles and infrastructure development, and energy information, education, and outreach. These programs are accomplished in conjunction with several state and federal energy programs, including statewide California Public Utilities Commission (CPUC) Energy Efficiency Programs, Department of Energy (DOE) Rebuild America, DOE Million Solar Roofs Initiative, Environmental Protection Agency (EPA) Climate Wise, and the California Energy Commission's (CEC) Renewable Energy and Public Interest Energy Research Programs.

Chula Vista has adopted an energy plan to address the City's long-term energy issues and to protect its residents from unreliable energy supply and volatile prices. The plan, called the Chula Vista Energy Strategy and Action Plan, addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions (City of Chula Vista, February 23, 2001). There are also a number of other plans, projects, and actions that have been developed by the City of Chula Vista to help reduce energy use and costs for the city and the community, including the CO_2 Reduction Plan. The CO_2 Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels.

In October 2000, the Metropolitan Transit Development Board (MTDB) adopted a strategy for improving future transit in San Diego. The strategy, which is a plan to make transit an attractive first choice for everyday trips, is called Transit First. Transit First includes a network of new services with the purpose of providing transit users with increased convenience, comfort, security, and speed.

The City continues to work cooperatively with MTDB, SANDAG, and surrounding local jurisdictions on the South Bay Transit First Program. The South Bay Transit First Program strives to implement the recently adopted Transit First regional transportation vision in the south San Diego County area. This includes identifying transit routes, stations, and priority measures for transit vehicles and addressing integration with transit supportive land uses.

Chula Vista is working on a Transportation Demand Management (TDM) program to aid in the reduction of energy consumption and mobile source emissions. The program works to

provide alternative commute methods such as carpooling. Immediate TDM options currently being considered by the City include express bus service to downtown San Diego from eastern Chula Vista, shuttle service to and from trolley stations, TDM incentives such as payouts for new participants, and the use of a SANDAG vanpool. The City's energy conservation programs reflect the measures listed in Appendix F of the state CEQA guidelines.

5.8.1.2 Existing Citywide Conditions

Electricity

San Diego Gas & Electric Company (SDG&E) is the owner and operator of electricity transmission, distribution, and natural gas distribution infrastructure in San Diego County. Power generation and power use are not linked geographically. In other words, power generated within Chula Vista is not dedicated to users in Chula Vista. Electricity generated is fed into the statewide grid and is generally available to any users statewide.

There is one major power plant in Chula Vista: the South Bay Power Plant. There are also two co-generation facilities in or near the city and a number of smaller generating plants in San Diego County that are used as backup during times of peak power demand. Figure 5.8-1 shows the location of electrical generating facilities and substations within the General Plan area and in the immediate vicinity.

Natural Gas

Natural gas imported into southern California originates from any of a series of major supply basins located from Canada to Texas. Although the San Diego region has access to all of these basins by interstate pipeline, the final delivery into the SDG&E system is dependent on just one Southern California Gas Company (SoCalGas) pipeline.

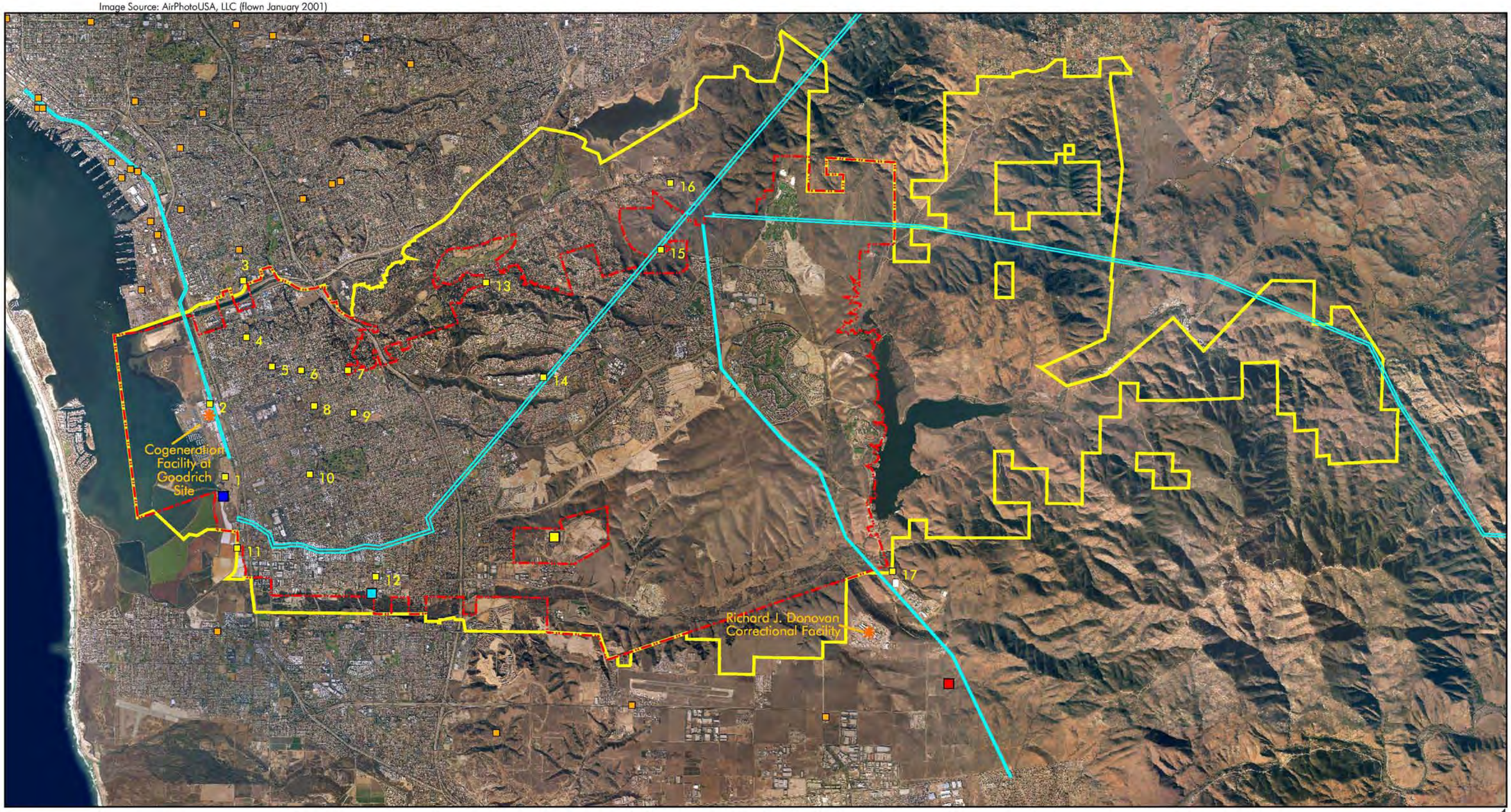
Energy Use

The discussion of energy use is presented in two main sections: fixed uses, such as homes and businesses, and mobile uses, primarily cars and trucks.

FIXED USES

Electricity consumption in the San Diego region varies greatly by sector (residential, commercial, industrial, and agriculture). In 1999, the City of Chula Vista consumed about 700 million kilowatt-hours (kWh) or $62 million of electricity (City of Chula Vista 2001:45). Chart 5.8-1 shows the citywide energy consumption in Chula Vista by sector for the years 1999, 2000, and 2001. As was the case for the San Diego region, the largest electricity

Image Source: AirPhotoUSA, LLC (flown January 2001)



Chula Vista municipal boundary

Chula Vista General Plan area

SDG&E Transmission corridor 138kv & above

Cogeneration Facilities

Electrical generating facilities

- Otay Landfill
- Otay Mesa Generating Facility
- Chula Vista Generating Station
- South Bay Power Plant

Substations outside the plan area (SEMPRA 2001)

Substations in the plan area (SEMPRA 2001)
(transformer voltage - transmission kV/distribution kV)

1. SB Power Plant 138/69/12
2. Montgomery 69/12
3. Sweetwater 69/12/4
4. Flower 12/4
5. Chula Vista 12/4
6. Church 12/4
7. El Rancho Vista 12/4
8. Whitney 12/2.4
9. Hilltop 12/4
10. North Otay 12/4
11. Salt Works 12/2.4
12. Otay 69/12
13. Sunnyside 69/12
14. Telegraph Canyon 69/12
15. Proctor Valley 69/12
16. Miguel 138/69
17. Otay Lakes 69/12

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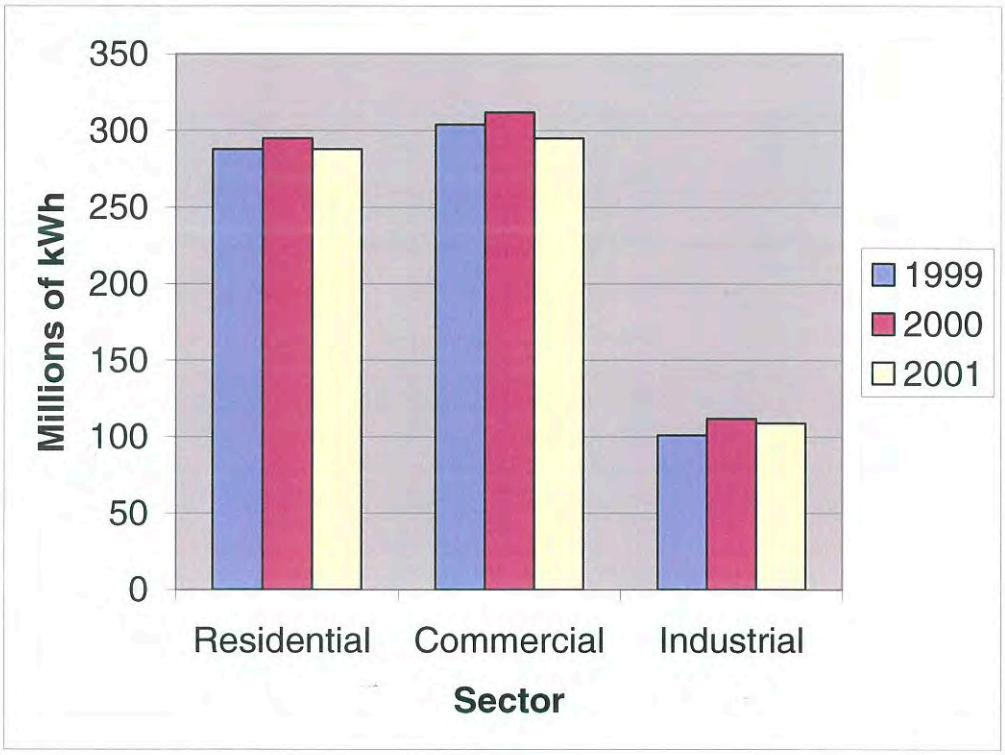
fig5.8-1 (transmissions) 09/14/05

FIGURE 5.8-1
Electrical Generation and Transmission in Chula Vista

CHART 5.8-1
CITYWIDE ENERGY CONSUMPTION
IN CHULA VISTA BY SECTOR: 1999-2001



consumption in Chula Vista comes from commercial uses, followed by residential, industrial, and agriculture.

In 1999, about 150 million therms, or $24 million of natural gas, were consumed in Chula Vista, approximately two-thirds of which was attributable to the South Bay Power Plant (City of Chula Vista 2001). Chart 5.8-2 shows natural gas consumption in Chula Vista by sector.

Natural gas consumption by sector varies somewhat each year. In general, power plants account for the highest percentage of natural gas consumption in the San Diego region. Residential consumption of natural gas is the second highest percentage, followed by cogeneration, commercial consumption, industrial consumption, and natural gas vehicles.

MOBILE USES

The primary mobile use of energy is motorized vehicle travel. Table 5.8-1 presents the 24-hour total vehicle miles of travel on a typical weekday. There were approximately 353.6 miles of roads in the city of Chula Vista in 2000. As Table 5.8-1 shows, approximately 3,223,000 miles were traveled on a typical weekday in the city in 2000. According to the U.S. Department of Energy's Energy Information Administration, the average fuel consumption for all motorized vehicles including passenger cars, vans, pickup trucks, sport utility vehicles, trucks, motorcycles, and buses was approximately 17 miles per gallon in 2000 (U.S. Department of Energy 2001). Using this average, motorized vehicles in Chula Vista consumed approximately 190,000 gallons daily in 2000.

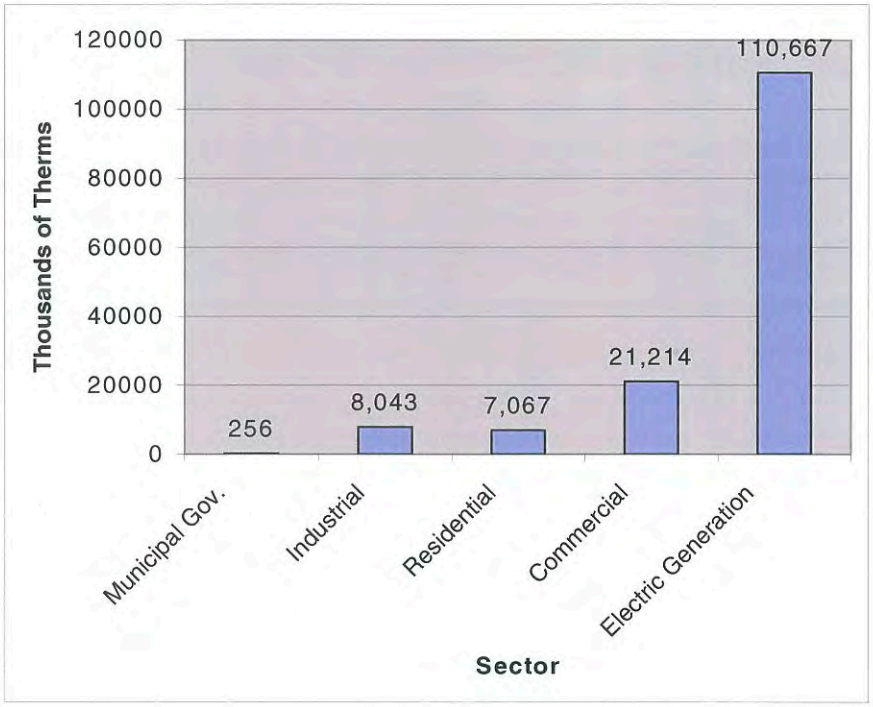
TABLE 5.8-1
POPULATION TRAVEL AND FUEL USE 1995–2030 – CITY OF CHULA VISTA

Year	1995	2000	2010	2020	2030
Population	149,791	174,319	244,332	269,529	282,664
Per Person VMT	18.49	18.49	18.49	18.49	18.49
Per Day VMT	2,769,000	3,223,000	4,517,000	4,984,000	5,226,000
Daily Gallons Used	163,000	190,000	266,000	293,000	307,000

SOURCE: SANDAG 2001; VMT = vehicle miles of travel.

Table 5.8-1 presents the estimated population, vehicle miles of travel (VMT), and vehicle fuel consumption in Chula Vista from 1995 to 2030, as calculated by SANDAG. Projected daily vehicle miles of travel for 1995, 2010, 2020, and 2030 are based on 2000 VMT. This mileage rate was then applied to population figures provided by SANDAG to calculate VMT in other years. An estimate for the amount of vehicle fuel used per day was calculated by dividing the daily VMT by the estimated fuel consumption rate of 17 miles per gallon. By

CHART 5.8-2
NATURAL GAS CONSUMPTION IN CHULA VISTA BY SECTOR



(SOURCE: City of Chula Vista 2001)

using this estimate, it is assumed that the fuel consumption rate in the future will remain nearly the same as it was in the year 2000.

5.8.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to energy if it would:

- Threshold 1: Result in the available supply of energy to fall below a level considered sufficient to meet the City's needs or cause a need for new and expanded facilities.

5.8.3 Impacts

Implementation of the proposed land uses identified in the General Plan Update has the potential to result in impacts to energy supply as a result of anticipated growth. Direct impacts would occur if, as a result of plan implementation, a substantial energy resource is reduced or eliminated, or if future demand outstrips available supply.

Because the proposed action is the adoption of a plan and does not specifically address any particular development project, impacts to energy resources are based on planned growth. The proposed General Plan Update contains energy policies that promote the use of non-polluting and renewable alternatives to vehicle travel, and additional policies identified in the Land Use and Transportation Element that seek to reduce energy consumption by optimizing traffic flow, and directing higher density housing within walking distance of transit facilities, would reduce energy demand.

SDG&E has identified infrastructure needs for the City. Included in these needs are the need for two new electric distribution substations – one corresponding to the Otay Ranch area and one in the western Chula Vista area between I-805 and I-5 in order to serve the City's energy needs requirements (Figure 5.8-2). The transmission source for the east Chula Vista distribution substation initially requires two transmission circuits that may require separate and distinct transmission right-of-ways (ROWs) 25 feet in width. It is also possible that the initial transmission circuits could be installed on one pole line in a single ROW 25 feet in width, or placed partly or entirely within the public right-of-way.

There is a conceptual plan for a new distribution substation west of I-805. The timing and location should be addressed in the future as more detailed information becomes available on the scope of any redevelopment. The transmission source for this distribution substation initially requires at least two separate and distinct transmission ROWs each 25 feet in width. Each ROW may vary in length and location, but will need to maintain reasonably direct access from the new distribution substation to a nearby existing transmission ROW.

In addition, there is a conceptual plan for a new 200-foot-wide transmission ROW in the Northeast section of Chula Vista. The new ROW would be parallel to but at least 2,000 feet

Map Source: City of Chula Vista, 2005

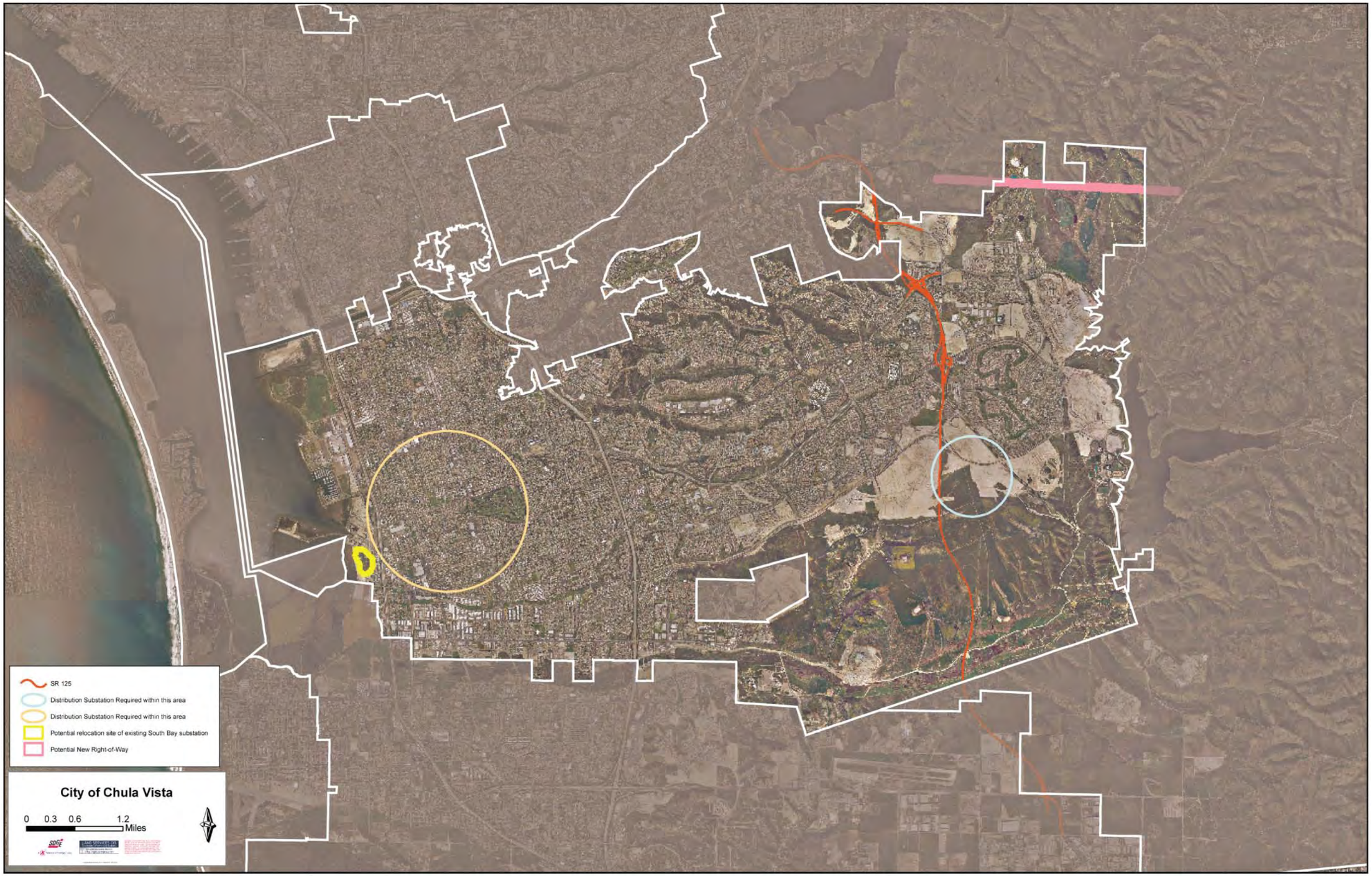


FIGURE 5.8-2
Energy Facility Areas

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from the existing right-of-way. Finally, the South Bay substation may relocate to a new site if the City and SDG&E can determine a mutually agreeable site.

Table 5.8-2 contains electricity and natural gas demand projections for the Preferred Plan and Scenarios 1, 2, and 3 compared to existing conditions. All scenarios represent an increase in energy demand. As can be seen in the table, the Preferred Plan is predicted to have the greatest demand for energy, followed by Scenario 2. This is because the greatest number of residential units occurs under the Preferred Plan. Scenario 3 represents the smallest increase in future energy demand.

TABLE 5.8-2
PROJECTED ENERGY DEMAND

	Electricity (million kWh)		Natural Gas* (million therms)	
Condition	Demand	Demand Increase Above Existing	Demand	Demand Increase Above Existing
Existing	774	NA	41.8	NA
Scenario 1	1,178	404	63.7	21.9
Scenario 2	1,209	435	65.3	23.5
Scenario 3	1,150	376	62.1	20.3
Preferred Plan	1,212	438	65.5	23.7

SOURCE: City of Chula Vista calculations based upon Chula Vista consumption quantities contained in the Chula Vista Energy Strategy and Action Plan (City of Chula Vista 2001).
kWh = kilowatt hours; NA = not applicable
*Demand estimates do not include natural gas consumed by the South Bay Power Plant

Policies associated with proposed Objectives EE 6, EE 7, and PFS 22 and PFS 23 would aid in reducing adverse energy impacts, but would not preclude projects that could result in significant energy consumption impacts. These policies, and the programs currently implemented by the City, promote measures to reduce wasteful, inefficient, and unnecessary consumption of energy and help reduce demand for peak energy demand. These objectives and policies are as follows:

Objective EE 6

Improve local air quality by minimizing the production and emission of air pollutants and toxic air contaminants and limit the exposure of people to such pollutants.

Policies

EE 6.1: Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit.

EE 6.2: Promote and facilitate transit system improvements in order to increase transit use and reduce dependency on the automobile.

EE 6.3: Ensure that operational procedures of the City promote clean air by maximizing the use of low- and zero-emissions equipment and vehicles.

EE 6.4: Avoid siting new or repowered energy generation facilities, and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.

EE 6.5: Ensure that plans developed to meet the City's energy demand use the least polluting strategies, wherever practical. Conservation, clean renewables, and clean distributed generation should be considered as part of the City’s energy plan, along with larger natural gas-fired plants.

EE 6.6: Explore incentives to promote voluntary air pollutant reductions, including incentives for developers who go above and beyond applicable requirements and for facilities and operations that are not otherwise regulated.

EE 6.7: Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City's Air Quality Improvement Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.

EE 6.8: Support the use of alternative fuel transit, City fleet and private vehicles in Chula Vista.

EE 6.9: Discourage the use of landscaping equipment powered by two-stroke gasoline engines within the City and promote less-polluting alternatives to their use.

EE 6.10: The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the HRA shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

EE 6.11: Develop strategies to minimize CO hot spots that address all modes of transportation.

EE 6.12: Promote clean fuel sources that help reduce the exposure of sensitive uses to pollutants.

EE 6.13: Encourage programs and infrastructure to increase the availability and usage of energy-efficient vehicles such as hybrid electric vehicles, electric vehicles, or those that run on alternative fuels.

EE 6.14: The City will implement a clean vehicle/alternative fuel program for City vehicles (except safety vehicles and equipment when not feasible) and promote the development of infrastructure to support their use.

EE 6.15: Site industries in a way that minimizes the potential impacts of poor air quality on homes, schools, hospitals, and other land uses where people congregate.

Objective EE 7

Promote energy conservation through the efficient use of energy and through the development of local non-fossil fuel based renewable sources of energy.

Policies

EE 7.1: Promote development of regulations and building design standards that maximize energy efficiency through appropriate site and building design and through the use of energy-efficient materials, equipment, and appliances.

EE 7.2: Encourage and support the local research, development, generation, and use of non-fossil fuel based renewable sources of energy, including wind and solar resources, that meet local energy needs in an environmentally sensitive manner and reduces dependence on imported energy.

EE 7.3: Develop and provide pertinent information about the benefits of energy conservation and available energy conservation incentive programs to all segments of the community.

EE 7.4: Pursue and encourage the expansion of local energy conservation, energy efficiency and related incentive programs.

EE 7.5: Pursue 40 percent city-wide electricity supply from clean renewable resources by 2017.

EE 7.6: Encourage the construction and operation of "green buildings," considering such programs as the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

EE 7.7: Support tree planting programs that will be implemented to reduce energy needs.

Objective PFS 22

Ensure adequate energy supplies throughout Chula Vista.

Policies

PFS 22.1: Continue to address energy needs in Chula Vista by periodically reviewing and updating the Chula Vista Energy Strategy and Action Plan, and by implementing and monitoring the recommendations of the Strategy.

PFS 22.2: Coordinate with regional energy planning programs and efforts.

PFS 23.3: Ensure adequate area is reserved early in the development process for critical electrical service facilities.

PFS 23.4: Assure that utility facilities safely integrate into the developed landscape.

PFS 23.5: Appropriate secondary land uses (such as nurseries, RV storage, and usable open space and parks, among others) should be encouraged to locate within overhead transmission facility rights-of-way when appropriate. Trails can also be included as a secondary land use pursuant to agreement with SDG&E.

Objective PFS 23

Sensible and efficient electrical and natural gas facility integration into the natural and developed environment.

Policies

PFS 23.1: Use existing transmission corridors as effective wildlife corridors.

PFS 23.2: Provide sufficient open space buffering between utility facilities and residential development.

PFS 23.3: Ensure adequate area is reserved early in the development process for critical electrical service facilities.

PFS 23.4: Wise/efficient use of lands within large transmission ROW by providing opportunities for other appropriate land uses to be located within overhead electrical facility alignment areas.

PFS 23.5: Assure that utility safety integrate into the developed landscape.

PFS 23.6: Appropriate secondary land uses (such as nurseries, RV storage, useable open space and parks, among others) should be encouraged to be located within overhead transmission facility rights-of-way when appropriate. Trails can also be included as a secondary land use pursuant to agreement with SDG&E.

Although these programs and policies would result in more efficient use of energy the projected increase in population resulting from the Preferred Plan or any of the Scenarios would result in an increased demand for energy. None of the policies would ensure that energy supplies will be available when needed. Because there is no assurance of a long-term supply of energy in the future, the increased projected energy demand results in a significant impact.

5.8.4 Level of Significance Prior to Mitigation

5.8.4.1 Threshold 1: Available Supply of Energy

Threshold 1 indicates that a significant impact would result if the proposed General Plan Amendment would cause the available supply of energy to fall below a level considered sufficient to meet the City's needs or cause a need for new and expanded facilities.

Impacts to energy are significant because there is no long-term assurance that energy supplies will be available in 2030, avoidance of energy impacts cannot be assured regardless of land use designation or population size. Although changes to planned land uses in the city would continue to implement the Energy Strategy Action Plan, San Diego Regional Energy Plan and Transit First Plan, implementation of the proposed land uses identified in the General Plan Update would result in impacts to energy resources as a result of anticipated growth.

5.8.5 Mitigation Measures

The following mitigation measure will lessen the extent of energy impacts that will result from the approval of the Preferred Plan or any of the Scenarios. Because there is no long-term assurance that energy supplies will be available in 2030, regardless of land use designation or population size, avoidance of energy impacts cannot be assured and impacts remain significant and unmitigated.

5.8-1 The City shall continue to implement the Energy Strategy and Action Plan, that addresses demand side management, energy efficient and renewable energy outreach programs for businesses and residents, energy acquisition, power generation, and distributed energy resources and legislative actions, and continue to implement the CO_2 Reduction Plan to lessen the impacts on energy.

5.8.6 Level of Significance After Mitigation

While compliance with mitigation measure 5.8-1 and the policies associated with Objectives EE 6, EE 7, PFS 22, and PFS 23 would reduce energy related impacts, because there is no assurance that energy resources will be available to adequately serve the projected increase in population resulting from the Preferred Plan or any of the Scenarios, the impact remains significant and unmitigated.

5.9 Water Resources and Water Quality

This section discusses the expected increase in runoff, potential for downstream flooding, and significant adverse effects on water quality resulting from the proposed General Plan Update. A hydrology study was prepared by PBS&J for the proposed General Plan Update that evaluated the Preferred Plan and each of the three scenarios. This report is included as part of this EIR (Appendix D).

5.9.1 Existing Conditions

5.9.1.1 Regulatory Plans and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas. Section 401 of the CWA requires that any applicant for a federal permit to conduct any activity, including the construction or operation of a facility, which may result in the discharge of any pollutant, must obtain certification from the state. Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants from point sources. Section 404 of the Clean Water Act established a permit program to regulate the discharge of dredged material into waters of the U.S. Section 303 of the CWA requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology.

The Porter–Cologne Water Quality Control Act (1969), California Water Code §13000 et seq., provides for aesthetic values, fish and wildlife preservation, water reclamation, and comprehensive planning and regulation to attain the highest "reasonable" water quality in consideration of conflicting demands. California's Porter–Cologne Water Quality Control Act (1969), which became Division 7 (Water Quality) of the State Water Code, establishes the responsibilities and authorities of the nine Regional Water Quality Control Boards (RWQCBs; previously called Water Pollution Control Boards) and the State Water Resources Control Board (SWRCB), and directs each regional board to formulate and adopt a water quality control plan for all areas within the region.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. (SDWA does not regulate private wells

that serve fewer than 25 individuals.) Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

Point Source Permits (Water Discharge Requirements & NPDES)

The San Diego RWQCB regulates most point source discharges of waste through the issuance of Waste Discharge Requirements (WDR) and NPDES permits. Compliance with these permits requires self-monitoring and reporting to the RWQCB by each individual discharger. All applicable dischargers are required to comply with the conditions of these permits.

Construction Permit

All construction activities must comply with all applicable regulations established by the EPA, as set forth in Section 402 NPDES permit requirements for urban runoff and stormwater discharge. Compliance with NPDES includes meeting the requirements of the General Permit for Stormwater Discharges Associated with Construction Activity (General Construction Permit). In order to be covered under the General Construction Permit, a Notice of Intent must be filed with the RWQCB. Compliance with the permit requires that a stormwater pollution prevention plan (SWPPP) be prepared and implemented for any project within the study area larger than one acre in size.

The Post-Construction Stormwater Management Plan requires that Permanent Best Management Practices (BMPs) be established to prevent the discharge of sediment and other pollutants in stormwater runoff from a completed project. Typical post-development BMPs to treat water quality are concerned with nuisance water and first flush events. This includes the volume of runoff produced from an 85th percentile, 24-hour rainfall event.

The San Diego Municipal Permit

In 1990, under authority of the CWA, but prior to finalization of the NPDES Phase I regulations, the San Diego RWQCB issued its first municipal permit for the San Diego Region (Order 90-42). The Municipal Permit named the 18 municipalities within the county, including the City of Chula Vista, the County of San Diego, and the San Diego Unified Port District as co-permittees. More recently, on February 21, 2001, the San Diego RWQCB adopted Order No. 2001-01, for a new Municipal Permit, which represents the second municipal permit issued to the San Diego County co-permittees. The minimum requirement of the Municipal Permit is to ensure that pollutants in discharges from storm drain systems owned by the co-permittees are reduced to the maximum extent practicable (MEP), and that

pollutants in discharges from construction are reduced by employing BAT/BCT (Best Available Technology/Best Conventional Technology) performance standards. The Municipal Permit outlines the individual responsibilities of the co-permittees including, but not limited to, the implementation of: (1) management programs; (2) BMPs; and (3) monitoring programs.

Each co-permittee is required to implement the requirements of the Municipal Permit across two broad levels of responsibility. Co-permittees have responsibility for the water quality impacts of urbanization within: (1) their jurisdiction, and (2) their watershed(s). The Municipal Permit reflects these two broad levels of responsibility, in that it requires implementation of comprehensive Urban Runoff Management Plans (URMPs) at both jurisdictional and watershed levels. The City of Chula Vista has complied with this condition by producing a Jurisdictional Urban Runoff Management Program (JURMP), which was submitted to the San Diego RWQCB on February 21, 2002. The City, along with seven other municipalities, the County of San Diego, and the San Diego Unified Port District, has submitted the San Diego Bay Watershed Urban Runoff Management Program (WURMP) to the San Diego RWCQB for compliance with the Municipal Permit. These programs are designed to identify and prioritize local water quality problems that can be attributed to urban runoff and provide solutions to mitigate these problems. WURMPs look at land use as one component of watershed management and detail impervious surfaces as a major component to water quality degradation.

The San Diego Bay WURMP provides general information about the San Diego Bay watershed and the regulatory context within which the program was developed. It provides an assessment of the quality of the water of receiving bodies within the watershed and identifies and prioritizes related challenges as well as outline activities the local jurisdictions will undertake in cooperation with others in order to address the water quality problems that have been identified.

The WURMP's primary goal is to positively affect the water resources of the San Diego Bay Watershed while balancing economic, social, and environmental constraints. The Program identifies four primary objectives to strive towards this goal: (1) develop and expand methods to assess and improve water quality within the watershed; (2) integrate watershed principles into land use planning; (3) enhance public understanding of sources of water pollution within the watershed; and (4) encourage and enhance stakeholder involvement within the watershed. To help reach these goals and objectives, the WURMP document identifies and prioritizes water quality related issues within the watershed that can be potentially attributed to discharges from the municipal storm drain systems. Additionally, activities to abate sources of pollution and restore and protect beneficial uses are also identified.

The San Diego Bay WURMP was developed with the input from a diverse set of stakeholders, who will also be an integral part of program implementation. It is the goal of

all participating jurisdictions to work cooperatively with other agencies, non-governmental organizations, and private citizens at the watershed level in order to positively affect the water resources of the region and achieve compliance with the Municipal Permit.

The Municipal Permit requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects. The City of Chula Vista developed the Development and Redevelopment Projects Storm Water Management Standards Requirements Manual (Manual) in November 26, 2002 to address these urban runoff pollution issues. The Manual provides information to applicants for development, redevelopment, and public projects processed through the City on how to comply with permanent and construction storm water requirements. The Manual guides project applicants through the selection, design, and incorporation of storm water BMPs into their projects. The Manual includes the Standard Urban Stormwater Mitigation Plan (SUSMP), which was developed by the City of Chula Vista to address post-construction urban runoff pollution from new development and redevelopment projects meeting the "priority project" classifications. The goal of the SUSMP is to develop and implement policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates and velocities. This goal may be achieved through site-specific controls and/or drainage area–based or shared structural treatment controls. The City of Chula Vista developed the SUSMP to identify appropriate BMPs for certain designated project types to achieve this goal. Under the SUSMP, the City of Chula Vista will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects.

Industrial Permit

Along with the establishment of the Municipal Permit, the EPA published final regulations that establish application requirements for stormwater permits associated with industrial activity (CA 97-03-DWQ General Industrial Stormwater Permit). The regulations require that stormwater associated with industrial activity, which discharges either directly to surface waters or indirectly through municipal separate storm sewers, must be regulated by an NPDES permit.

As with the General Construction Permit described above, the General Industrial Permit requires authorization for continued and future stormwater discharge. If receiving water quality standards are exceeded, facility operators are required to submit a written report providing additional BMPs that would be implemented to achieve water quality standards.

Section 303 (d) Process – Impaired Water Bodies List

Section 303 of the CWA requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list

of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The 303(d) list is required to be updated by the RWQCB and SWRCB bi-annually. The Chula Vista Marina, one of the surface waters located in the plan area has been identified for inclusion on the 303(d) list. Table 5.9-1 indicates that the San Diego Bay Shoreline at the Chula Vista Marina contains bacterial indicators that caused the shoreline to be listed as an impaired water body. Potential sources of these pollutants are from urban runoff and storm sewers, marina and recreational boating, boatyards, and boat discharges or vessel wastes.

TABLE 5.9-1
POTENTIAL EFFECTS TO PROPOSED 303(d) WATER BODIES

Hydrologic Descriptor	Waterbody	Pollutant/Stressor	TMDL Priority	Extent of Impairment
La Nacion HSA (909.12)	San Diego Bay Shoreline: Chula Vista Marina	Bacterial Indicators	Low	0.41 mile

SOURCE: 2002 CWA Section 303(d) list.

State Fish and Game Code

Under Sections 1601-1603 of the State Fish and Game Code, notification to the California Department of Fish and Game is required prior to carrying out any project which would divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. When an existing fish or wildlife resource may be substantially adversely affected, the Department of Fish and Game is required to propose reasonable project changes to protect the resource. These modifications are formalized in a “streambed alteration agreement,” which becomes part of the project design and construction.

City Growth Management Ordinance Threshold Standard

The Growth Management Ordinance Threshold Standard for drainage states that storm water flows and volumes shall not exceed City Engineering Standards and that the GMOC shall annually review the performance of the City’s storm drain system to determine its ability to meet the goals and objectives above.

Chula Vista Subdivision Manual

All development projects are required to adhere to the City of Chula Vista Subdivision Manual. With respect to drainage, the developer of a proposed subdivision is required to:

1. Accept any drainage entering a proposed subdivision and to provide adequate drainage facilities to convey all drainage on the property to discharge into, or connect to, the drainage facility into which the drainage would naturally flow;

2. Provide on-site storm detention facilities such that post-development flow rate for a given design storm does not exceed the pre-development flow rate at the outlet of the subdivision;

3. Provide on-site erosion protection and de-silting facilities;

4. Provide bonds for the cost of design and construction of any drainage facilities, including but not limited to off-site easements or facilities, necessary to accomplish these responsibilities;

5. Provide all graded pads with adequate drainage facilities as approved by the City Engineer; and

6. Submit plans for all private storm drain systems for review and approval by the City Engineer.

5.9.1.2 Existing Citywide Conditions

San Diego Bay Watershed

A portion of the San Diego Bay Watershed lies within the General Plan area and surrounding area. The San Diego Bay Watershed encompasses a 415 square-mile area that extends more than 50 miles to the east to the Laguna Mountains. The watershed lies at sea level at San Diego Bay and reaches a maximum elevation of approximately 6,000 feet above sea level at the eastern boundary. The majority of the watershed land area generally lies north of the border with Mexico and south of Interstate 8. The headwaters of the watershed begin in the unincorporated area of the County and then transect all or portions of seven cities, including Chula Vista.

The San Diego Bay covers 10,532 acres of water and 4,419 acres of tidelands. Only 17 to 18 percent of the original Bay floor remains undisturbed by dredge or fill. Ninety percent of the original salt marshes and fifty percent of the original mudflats have been filled or dredged for development. Construction of dams and extensive use of groundwater in the Sweetwater and Otay Rivers has reduced the input from these rivers to the Bay by 76 percent. The majority of freshwater input to the Bay is from surface runoff from urban areas and intermittent flow from rivers and creeks during rain events. There are over 200 storm drains that discharge into the Bay. The major watercourses feeding the Bay include the Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

The San Diego Bay watershed is comprised of 3 sub-watersheds: the Pueblo San Diego, Sweetwater, and Otay hydrologic units, of which two (Sweetwater and Otay hydrologic units) are within the plan area. Figure 5.9-1 shows these hydrologic units in relation to the plan area. Table 5.9-1 identifies the hydrologic areas and their corresponding sub-areas within the plan area. Pursuant to the California Water Code Section 13240 and the Clean Water Act Section 303, all surface waters and groundwaters in the San Diego region are assigned beneficial uses by the Regional Water Quality Control Board. The beneficial uses for the Sweetwater and Otay hydrologic units within the plan area are listed in Tables 5.9-2 and 5.9-3, respectively.

Sweetwater Hydrologic Unit

The Sweetwater Hydrologic unit is the largest of the three encompassing the San Diego Bay Watershed, with 230 square miles of the approximately 415 square-mile total. Over 86 percent of the watershed is within unincorporated jurisdictions. Major waterbodies in the watershed include the Sweetwater River, Sweetwater Reservoir, Loveland Reservoir, and the San Diego Bay. The dominant land uses in the Sweetwater River watershed are urban (29 percent), open space/agriculture (22 percent), and undeveloped (49 percent). Approximately two-thirds of the land area categorized as urban is composed of residential communities. The most important watershed issues are related to the protection of municipal water supplies and the protection and restoration of sensitive wetland and wildlife habitats.

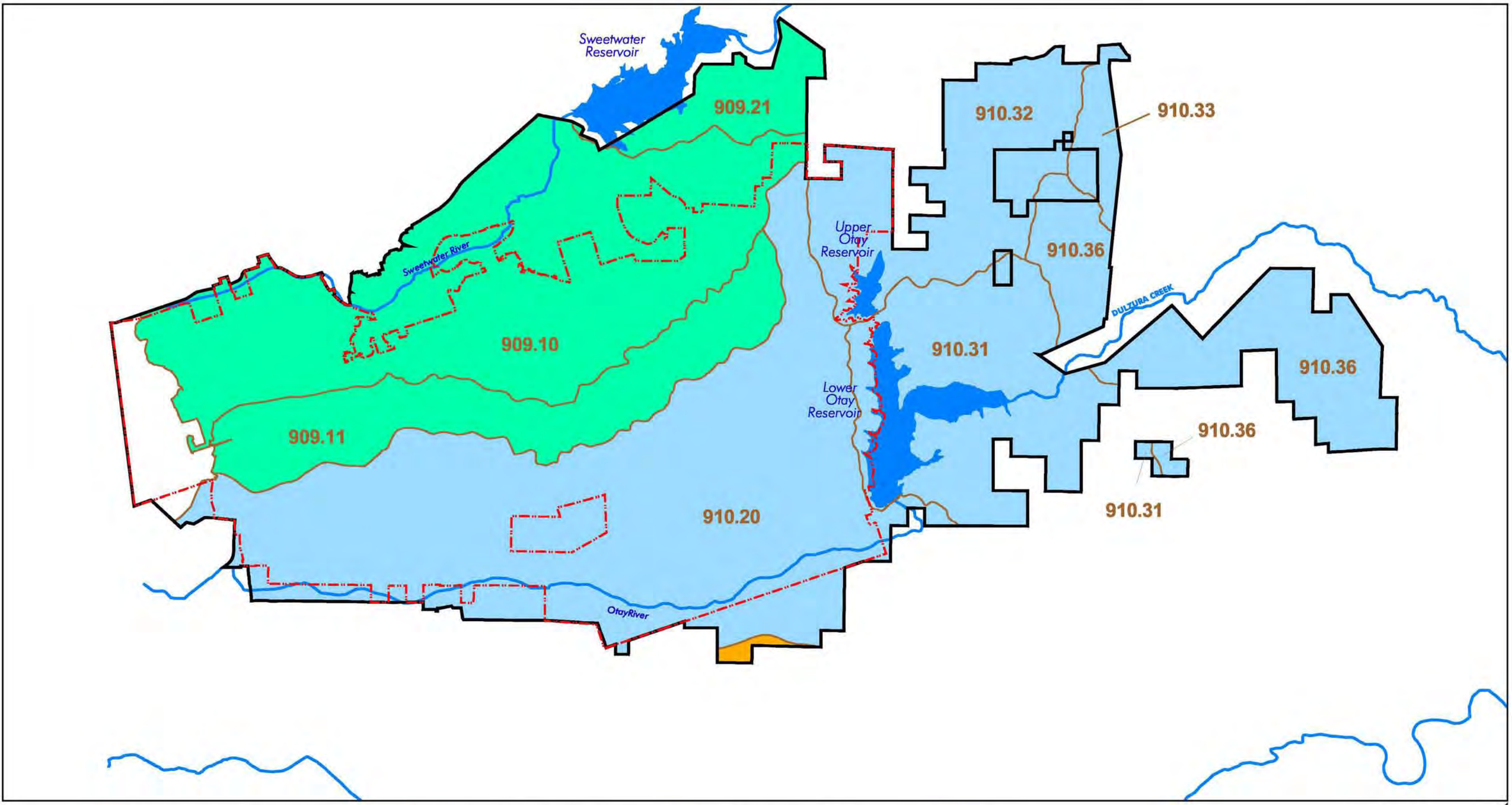
The Sweetwater hydrologic unit contains a variety of habitat types including oak and pine woodlands, riparian forest, chaparral, coastal sage scrub, and coastal salt marsh. The urbanized lower portion of the Sweetwater watershed contains portions of Chula Vista, as well as several cities.

Otay Hydrologic Unit

The Otay hydrologic unit encompasses approximately 160 square miles in southwest San Diego County. The major waterbodies include the Upper and Lower Otay Reservoirs, Otay River, and the San Diego Bay. The Otay Reservoir is a drinking water source. The watershed consists largely of unincorporated area, but also includes portions of the city of Chula Vista, as well as other cities. The predominant land uses in the watershed are open space (67 percent) and urban/residential (20 percent). Serious water quality problems are limited to the presence of elevated coliform bacteria in the Pacific Ocean receiving waters near Coronado.

Drainage and Flood Control

The City of Chula Vista operates and maintains its own drainage and flood control facilities. This system is made up of, among various other facilities, improved and unimproved flood control channels, storm drains, bridge crossings, detention basins, and approximately 312



Chula Vista municipal boundary
Chula Vista General Plan area

Sweetwater hydrologic unit - 909
- Lower Sweetwater HA - 909.10
- Telegraph Canyon HSA HA - 909.11
- Jamacha HSA - 909.21

Tijuana River hydrologic unit - 911
- Tijuana Valley HA - 911.10

Otay hydrologic unit - 910
- Otay Valley HA - 910.20
- Dulzura HA - 910.30
- Savage HA - 910.31
- Proctor HSA - 910.32
- Jamul HSA - 910.33
- Hollenbeck HSA - 910.36

Lakes
Streams

0 Miles 1.4 N

FIGURE 5.9-1
Hydrologic Units, Areas and Sub-areas in the Study Area

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fig5.9-1 (hydrologic units) 09/14/05

TABLE 5.9-2
SWEETWATER HYDROLOGICAL UNIT BENEFICIAL USES
WITHIN THE STUDY AREA

Beneficial Uses	Hydrologic Area Number	Inland Surface Water	Reservoirs and Lakes	Coastal Waters	Ground Water
Municipal and Domestic Supply	909.11	+			•
	909.12	+			•
	909.21	•	•		
Agricultural Supply	909.11				•
	909.12				•
	909.21	•	•		
Industrial Service Supply	909.11	•			o
	909.21	•			•
	SD Bay		•	•	
Industrial Process Supply	909.12	•			
	909.21	•	•		
Navigation	SD Bay			•	
Contact Water Recreation	909.11	o			
	909.12	o			
	909.21	•	•		
	SD Bay			•	
Non-Contact Water Recreation	909.11	•			
	909.12	•			
	909.21	•	•		
	SD Bay			•	
Commercial and Sport Fishing	SD Bay			•	
Biological Habitats of Special Significance	909.21	•			
	SD Bay			•	
Warm Freshwater Habitat	909.11	•			
	909.12	•			
	909.21	•	•		
Cold Freshwater Habitat					
Wildlife Habitat	909.11	•			
	909.12	•			
	909.21	•	•		
	SD Bay			•	
Rare, Threatened, or Endangered	SD Bay			•	
Marine Habitat	SD Bay			•	
Migration of Aquatic Organisms					
Estuarine Habitat	SD Bay			•	
Shellfish Harvesting	SD Bay			•	

SOURCE: Water Quality Control Plan for the San Diego Basin 1994.
SD Bay = Includes the tidal prisms of the Otay and Sweetwater Rivers
• = Existing Beneficial Use
o = Potential Beneficial Use
+ = Exempted by SDRWQCB from Municipal Use

TABLE 5.9-3
OTAY HYDROLOGICAL UNIT BENEFICIAL USES WITHIN THE STUDY AREA

Beneficial Uses	Hydrologic Unit HA Number	Inland Surface Water	Coastal Waters	Reservoirs and Lakes	Ground Water
Municipal and Domestic Supply	910.20	+			•
	910.30			•	•
	910.31	•		•	
	910.32	•		•	
Agricultural Supply	910.20	•			•
	910.30				•
	910.31	•		•	
	910.32	•		•	
Industrial Process Supply	910.31			•	
	910.32			•	
Industrial Service Supply	910.20	o			•
	910.30		•		•
	910.31	•		•	
	910.32	•		•	
	SD Bay				
Navigation	SD Bay		•		
Contact Water Recreation	910.20	o			
	910.31	•	•	•*	
	910.32	•		•	
	SD Bay				
Non-Contact Water Recreation	910.20	•			
	910.31	•	•	•	
	910.32	•		•	
	SD Bay				
Commercial and Sport Fishing	SD Bay		•		
Biological Habitats of Special Significance	SD Bay		•		
Warm Freshwater Habitat	910.20	•			
	910.31	•		•	
	910.32	•		•	
Cold Freshwater Habitat	910.31			•	
	910.32			•	
Wildlife Habitat	910.20	•			
	910.31	•	•	•	
	910.32	•		•	
	SD Bay				
Rare, Threatened, or Endangered	910.20	•			
	910.31	•	•		
	SD Bay				
Marine Habitat	SD Bay		•		
Estuarine Habitat	SD Bay		•		
Shellfish Harvesting	SD Bay		•		

SOURCE: Water Quality Control Plan for the San Diego Basin, 1994. and www.projectcleanwater.com.
SD Bay = Includes the tidal prisms of the Otay and Sweetwater Rivers
• = Existing Beneficial Use
o = Potential Beneficial Use
+ = Exempted by SDRWQCB from Municipal Use
* Fishing from shore or boat permitted, but other contact water recreational uses are prohibited.

miles of existing storm drain pipelines of various sizes. Table 5.9-4 quantifies approximate miles of primary collection systems.

TABLE 5.9-4
CHULA VISTA STORMWATER
COLLECTION SYSTEM STATISTICS

Type of Collection System	Miles (approximate)
Underground	160
River	14
Stream	137
Canal	16
Ditch	68

The major drainage courses within the city include Palm Road Basin, Poggi Canyon, the Otay River, Telegraph Canyon, Central Area Basin, the Lower Sweetwater River, Long Canyon, Salt Creek, Wolf Canyon, Judson Basin, and Rice Canyon. There are many other minor drainage courses throughout the city. The City must maintain these drainages to keep them free of invasive vegetation and other debris which can cause stream blockage and remote flooding if left unattended.

The condition of the overall drainage system is continually monitored for any major deficiencies or problems. Of primary concern in the present system is the Montgomery Subarea of the Southwest Planning area, generally bound by L Street to the north and Hilltop Drive to the east. Missing street and drainage improvements, such as curb, gutter, and sidewalks, are scattered throughout the area. As a result, both drainage and pavement-related problems occur. Missing improvements should be constructed prior to or coincident with any pavement rehabilitation in order to preserve pavement life. Completion of the Drainage Facilities Master Plan would enable the City to determine the extent of drainage inadequacies and costs associated with improvements and repairs.

At the eastern end of the Otay River valley are two reservoirs used for flood control and municipal water storage by the City of San Diego, the Upper and Lower Otay Reservoirs. The reservoirs are fed by Proctor Valley Creek, Jamul (Dulzura) Creek, and a number of smaller drainages in the San Miguel and Jamul Mountains, as well as imported water. The use of pesticides, herbicides, irrigation water, and fertilizers are strictly controlled adjacent to the Otay Reservoir. Additional water quality monitoring would be required if herbicides or pesticides are used.

During severe rain seasons, low-lying areas along the floodplains of the Sweetwater and Otay Rivers, as well as their tributaries, may experience flooding. The portions of the plan area potentially subject to these hazards are presented on Figure 5.9-2. Dams, levees, reservoirs, and drainage channels have been constructed to control the drainage of much of the plan area. Due to these flood control measures, the potential for hazardous flooding of developed portions of the plan area is relatively low.

The Federal Emergency Management Agency (FEMA) has mapped zones of anticipated flooding based on base flood elevations for 100- and 500-year flood events, as presented on their Flood Insurance Rate Maps (FIRM). Areas within the 100-year flood zone are presented on Figure 5.9-2.

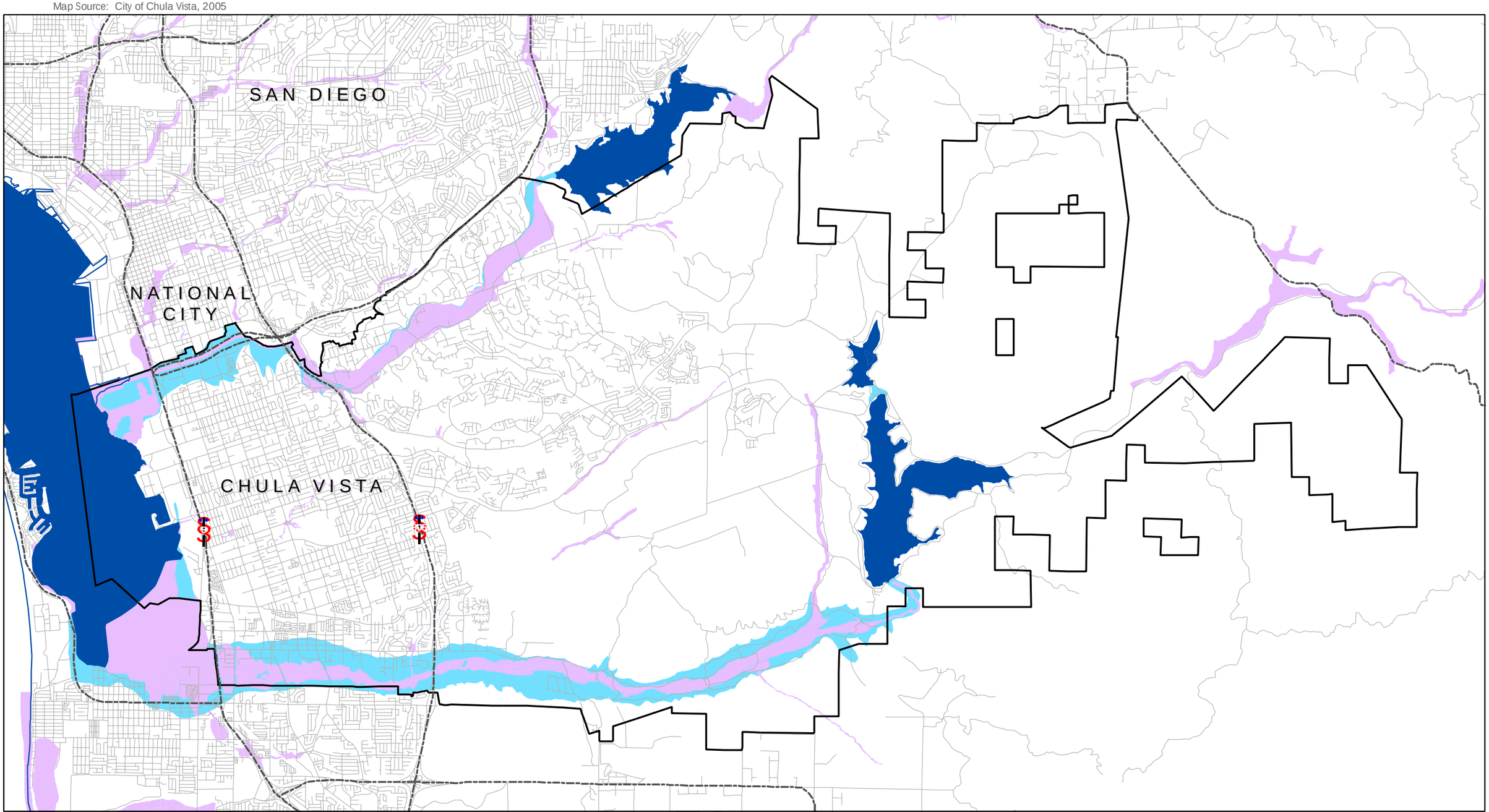
Groundwater

All the major drainage basins in the San Diego region contain groundwater basins. Nearly all of the local groundwaters of the region have been intensely developed for municipal and agricultural supply purposes. The direction of groundwater flow is generally toward the west, with significant local variations. Groundwater depths vary throughout the plan area depending upon topography and range from just beneath the ground surface near the bay, to hundreds of feet below ground in hilly areas. Perched water conditions due to irrigation and runoff may also be present. The majority of the plan area, other than those areas described above, is not expected to be affected by shallow groundwater. Groundwater has historically been used for drinking water and agriculture; however, due to decreased water quality, groundwater is used in limited cases.

Water service is provided to the General Plan Area by the Otay Water District, the Sweetwater Authority, and Cal-American. A map of the Sweetwater and Otay Water District service boundaries is provided in Figure 5.14-1 in the Utilities sections of this EIR. Of these three water service providers, Sweetwater Authority is currently the only provider that pumps groundwater for distribution within their boundaries. The Sweetwater Authority pumps groundwater throughout their service boundary from two sources, the Sweetwater Alluvium and the San Diego Groundwater Formation. The Sweetwater Valley Ground Water Basin has two water-bearing formations. The Quaternary alluvium has a storage capacity of 13,000 acre-feet and the San Diego Formation has a storage capacity of 960,000 acre-feet.

The Sweetwater Authority distributes approximately 5,000 acre-feet of groundwater per year out of the 25,000 acre-feet total water distribution per year. In 2004, they produced 3,637 acre-feet. At its Richard A. Reynolds Groundwater Desalination Facility in Chula Vista, the Authority extracts brackish water from the alluvium of the Sweetwater River, and from the San Diego Formation. The Richard A. Reynolds Groundwater Desalination Facility, which began operations in January 2000, uses reverse-osmosis treatment to remove dissolved salts and microscopic particles, such as bacteria and other contaminants which could be found in

Map Source: City of Chula Vista, 2005



General Plan Area

Water bodies

Flood hazard areas

Areas potentially subject to hazards associated with flooding as defined by the Federal Emergency Management Act (FEMA) Flood Insurance maps as Special Flood Hazard Areas (SFHA) inundated by a 100-year flood.

Dam inundation areas

Potential zones of inundation due to failure of the Sweetwater Dam, Upper Otay Dam, and Savage Dam as presented in maps obtained from the Governor's Office of Emergeny Services website.

0 Feet 6,000 N

Figure 5.9-2

Flood and Dam Inundation Hazards Map

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the alluvial groundwater. Brackish water contains high levels of dissolved solids, which are removed at the facility with advanced reverse osmosis membrane treatment. The water is then treated to prevent corrosion, and chlorine and ammonia are added to further assure disinfection.

Surface Water

The location of surface waters within the General Plan area is provided in the San Diego Bay, Otay, and Sweetwater watershed discussions above. The major inland water bodies, Upper and Lower Otay Reservoirs~~Lakes~~, are two reservoirs that supply drinking water to more than 200,000 people. The Otay Reservoir is part of the City of San Diego municipal drinking water supply system and is kept approximately 75 to 85 percent full in order to meet emergency water storage requirements. These reservoirs also provide important habitat and recreational opportunities.

Dam Inundation

Portions of the plan area are subject to potential hazards associated with inundation in the event of the failure of several dams in the area. Figure 5.9-2 shows the limits of the maximum probable dam inundation in the plan area. The areas of potential dam inundation are generally along the Sweetwater and Otay River valleys, portions of tributary stream channels, and the low-lying areas near the coastal portions of the plan area along the San Diego Bay. Based on historical data and the high level of development in portions of the dam inundation hazard zones, the potential for serious hazards in the event of a dam failure is significant.

5.9.1.3 Update Areas

The entire Northwest planning area and a small, northern portion of the Southwest planning area are located within the Sweetwater hydrologic unit. Portions of the San Diego Bay, which is west of these update areas, are listed as a Section 303(d) impaired water body for coliform bacteria, trace metals, and other toxics. Predominant sources of water quality degradation are from agricultural and urban runoff. Additionally, the northern portion of the Northwest planning area is potentially subject to hazards associated with the 100-year flood.

The majority of the Southwest planning area and the entire East planning area are located in the Otay hydrologic unit. Samples from the Otay River Valley, which is along the southern boundary of these update areas, did not meet federal secondary drinking water standards (Otay Ranch GDP EIR 1992). The southern portion of the Southwest and East planning areas are potentially subject to hazards associated with the 100-year flood. Additionally, portions of the update areas within the Southwest planning area are located in dam inundation areas; update areas within the East Planning area are just north of potential dam inundation areas.

5.9.2 Thresholds of Significance

The proposed project would result in a significant impact to water quality if it would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater resources or aquifer recharge areas or divert existing groundwater flows.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or flooding.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam or place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

5.9.3 Impacts

5.9.3.1 Threshold 1: Water Quality Standards

Threshold 1 states that the proposed General Plan Update would result in a significant impact to water quality if it would violate any water quality standards or waste discharge requirements.

The proposed General Plan Update would facilitate the development of additional residential, commercial, and industrial uses. Direct runoff to drainage basins, municipal storm sewer systems, and eventual drainage to surface waters and/or the ocean, would be increased and would contain typical urban runoff pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients, and trash. In addition, grading and construction activities could also generate sediments as well as oil and grease which could enter surface waters. This could incrementally decrease water quality and impair the beneficial uses of surface waters, which would result in a significant impact.

As discussed previously, the City of Chula Vista has prepared several water quality management plans in accordance with the Municipal Permit. The City has produced a JURMP that outlines the specific measures the City would take to meet permit requirements including construction, commercial, and industrial site inspections, public education and outreach efforts, dry weather field screening, and enforcement of local stormwater ordinance. A SUSMP has been prepared by the City to reduce pollutants and runoff flows from all new development and significant redevelopment projects. Additionally, the copermittees in the San Diego Bay Watershed have developed a WURMP for the San Diego

Bay Watershed to identify and prioritize local water quality problems that can be attributed to urban runoff and provide solutions to mitigate these problems. The WURMP looks at land use as one component of watershed management and identifies impervious surfaces as a major contributor to water quality degradation.

The San Diego Bay WURMP outlines several activities the San Diego Bay Copermittees have been implementing and will continue to implement over the remaining life of the Municipal Permit. In an effort to meet the Municipal Permit requirements, four primary objectives were developed to guide watershed management decisions: (1) develop and expand methods to assess and improve water quality within the watershed; (2) integrate watershed principles into land use planning; (3) enhance public understanding of sources of water pollution within the watershed; and (4) encourage and enhance stakeholder involvement within the watershed. A variety of activities and/or programs were conducted to achieve these objectives. These include developing and conducting monitoring programs, enhancing data management, developing education programs aimed at targeting priority pollutants and emphasizing the overall watershed concept, and developing strategies for enhancing inter-jurisdictional planning.

Construction and industrial activities would be subject to specific conformance requirements of the State Water Resources Control Board's General Construction and Industrial NPDES Permits, including the implementation of an approved SWPPP and monitoring/testing program, with pollution control measures involving the use of best available technology, best conventional pollutant control technology, and/or best management practices pursuant to direction by the SWRCB and the applicable RWQCB office.

The proposed Environmental Element of the General Plan Update identifies the following objective and associated policies addressing water quality:

Objective EE 2

Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista.

Policies

EE 2.1: Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.

EE 2.2: Pursue safe alternatives to traditional pest management methods whenever feasible in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands).

EE 2.3: Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm drainage system.

EE 2.4: Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.

EE 2.5: Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.

EE 2.6: Maximize the protection of potable water supply resources from pollutants.

EE 2.7: Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans that will provide a balance between watershed protection, regional economic growth, and development of public infrastructure and services consistent with the goals and objectives of the General Plan.

Preferred Plan

Development of the proposed land uses and circulation improvements under the Preferred Plan would degrade water quality, and have a significant impact. Short-term water quality impacts would occur during individual site construction, and long-term impacts would be experienced after completion of development. Development of the Preferred Plan would increase the residential, commercial, and industrial uses within the city compared to both the adopted General Plan and existing conditions, which would result in an increase in the amount of impervious surfaces and ornamental landscaping, and therefore an increase in runoff. During a storm event, runoff water would pick up contaminants on those surfaces, including sediment, nitrogen and phosphate compounds from fertilizers, pesticides, herbicides and fungicides used in plant and pest control, and oils, fuel residues, trash, and trace metals from products used in urban developments. The addition of these urban pollutants to the drainages within the city would contribute to the water quality degradation of sensitive water bodies, thus resulting in an increase in the cumulative amounts of urban pollutants over existing conditions.

To reduce the impacts to water quality, all construction activities disturbing one acre of land or more would have to comply with all applicable regulations established by the U.S. Environmental Protection Agency as set forth in the National Pollutant Discharge Elimination System (NPDES) permit requirements for urban runoff and storm water discharge. Compliance with NPDES includes meeting the requirements of the General

Permit for Stormwater Discharges Associated with Construction Activity (General Construction Permit). In order to be covered under the General Construction Permit, a Notice of Intent must be filed with the RWQCB. Compliance with the permit requires that a SWPPP be prepared and implemented for the project. Best management practices, design, treatment, and monitoring for storm water quality must be addressed with respect to municipal and construction permits.

Compliance with the policies associated with proposed Objective EE 2 would minimize the potential for adverse impacts to surface water and groundwater quality because the policies require the compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy. Additionally, the policies include construction and land development techniques to minimize water quality impacts by the preparation and implementation of an approved SWPPP and monitoring/testing program, with pollution control measures involving the use of best available technology, best conventional pollutant control technology, and/or best management practices pursuant to direction by the SWRCB and the applicable RWQCB office. Conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant.

Scenarios 1, 2, and 3

As with the Preferred Plan, Scenarios 1, 2, and 3 represent an increase in the development of additional residential, commercial, and industrial uses compared to existing conditions. Direct runoff to drainage basins would increase and would contain pollutants such as sediment, pathogens, heavy metals, petroleum products, nutrients, and trash. Grading and construction activities could also generate sediments as well as oil and grease which could enter surface waters. Conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant.

5.9.3.2 Threshold 2: Groundwater Resources

Threshold 2 states that the General Plan Update would result in a significant impact to water quality if it would substantially deplete groundwater resources or aquifer recharge areas or divert existing groundwater flows.

The Sweetwater Authority pumps potable groundwater from two sources, the Sweetwater Alluvium and the San Diego Groundwater Formation. The Richard A. Reynolds Groundwater Desalination Facility, uses reverse-osmosis treatment to remove dissolved salts and microscopic particles, such as bacteria and other contaminants which could be found in the alluvial groundwater. The Sweetwater Authority extracts brackish water from the alluvium of the Sweetwater River, and from the San Diego Formation. Brackish water

contains high levels of dissolved solids, which are removed at the facility with advanced reverse osmosis membrane treatment. The water is then treated to prevent corrosion, and chlorine and ammonia are added to further assure disinfection. The Sweetwater Authority distributes approximately 5,000 acre-feet of groundwater per year within their supply boundary.

Groundwater exists in the area in an alluvial aquifer and in the San Diego Formation. The Sweetwater Authority has four wells in the alluvial aquifer and six wells in the San Diego Formation, which provide potable water to customers throughout the Authority's supply boundary (see Figure 5.14-1). There have been no contaminants detected in the San Diego Formation Wells supply. However, the source is considered most vulnerable to the following activities located near the drinking water source: golf courses and freeways/state highways. The golf courses are a potential concern because of the pesticides, herbicides, and fertilizers that may be used. Freeways and state highways may contribute particulate matter, gasoline, motor oils, and other potential contaminants. Sweetwater Authority monitors the wells on a regular basis for these contaminants. All monitoring tests have been negative for contamination to Sweetwater Authority's wellfield. Sweetwater Authority operates three wells in National City. There have been no contaminants detected in the National City Wells supply. The source is considered most vulnerable to the following activities located near the drinking water source: confirmed leaking tanks, a repair shop, photo processing/finishing, dry cleaners, non-regulated tanks, freeway/state highways, and a parking lot/mall.

Although the increased exposure to urban pollutants could affect the quality of water recharging groundwater, filtering would occur during percolation. In any event, urban runoff has not been identified as a source of significant groundwater recharge. Therefore, no significant impacts to groundwater resources would result from buildout of the Preferred Plan or any of the three scenarios.

5.9.3.3 Threshold 3: Drainage

Threshold 3 states that the General Plan Update would result in a significant impact to water quality if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or flooding.

Future growth under the proposed General Plan Update would result in an increase in impermeable surfaces, alteration of the hydrology of local streams and drainage, and grading and clearing of vegetation. All of these actions have the potential to cause erosion and sedimentation that would degrade the quality of local and regional surface waters. Irrigation and cultivation on steep slopes and/or on erosive soils would potentially have erosion and sedimentation impacts. The creation of roads, especially dirt roads that are not properly engineered to accommodate surface runoff, and the abandonment of roads, would potentially cause erosion and sedimentation impacts.

The proposed Public Facilities and Services Element of the General Plan Update contains two objectives and associated policies that address drainage facilities and are listed below.

Objective PFS 1

Ensure adequate and reliable water, sewer and drainage service and facilities.

Policies

PFS 1.3: Plan and design drainage facilities, and upgrade existing facilities as necessary to meet current needs, accommodate growth and to satisfy state and federal requirements.

PFS 1.4: For new development, require on-site detention of storm water flows such that, where practical, existing downstream structures will not be overloaded. Slow runoff and maximize on-site infiltration of runoff.

PFS 1.5: Accelerate infrastructure upgrades throughout the city, especially in older portions of western Chula Vista as growth places additional demands on existing, sometimes sub-standard facilities.

PFS 1.7: Identify ways to obtain timely funding for public facility and service needs. Upon request by community representatives, facilitate the possible formation of assessment districts to finance public infrastructure, upgrades and maintenance.

Objective PFS 2

Increase efficiencies in water use, wastewater generation and its re-use, and handling of stormwater runoff throughout the city through use of alternative technologies.

Policies:

PFS 2.2: As part of project construction and design, assure that drainage facilities in new development incorporate stormwater runoff and sediment control, including state-of-the-art technologies where appropriate.

PFS 2.3: In designing water, wastewater and drainage facilities, limit the disruption of natural landforms and water bodies. Encourage the use of natural channels that simulate natural drainage ways while protecting property.

Impacts to drainage infrastructure resulting from the three scenarios and the Preferred Plan, are focused on four areas: western Chula Vista, defined for this study as areas westerly of Interstate 805, Poggi Canyon, Rolling Hills Basin Area, and southeasterly Chula Vista, defined for this study as undeveloped areas in the southeasterly portion of the city. The location of these drainage basins is shown on Figure 5.9-3. From a drainage perspective, the remainder of the city can be considered as built-out, and for this reason, there are no considerable differences between the existing condition and the Preferred Plan.

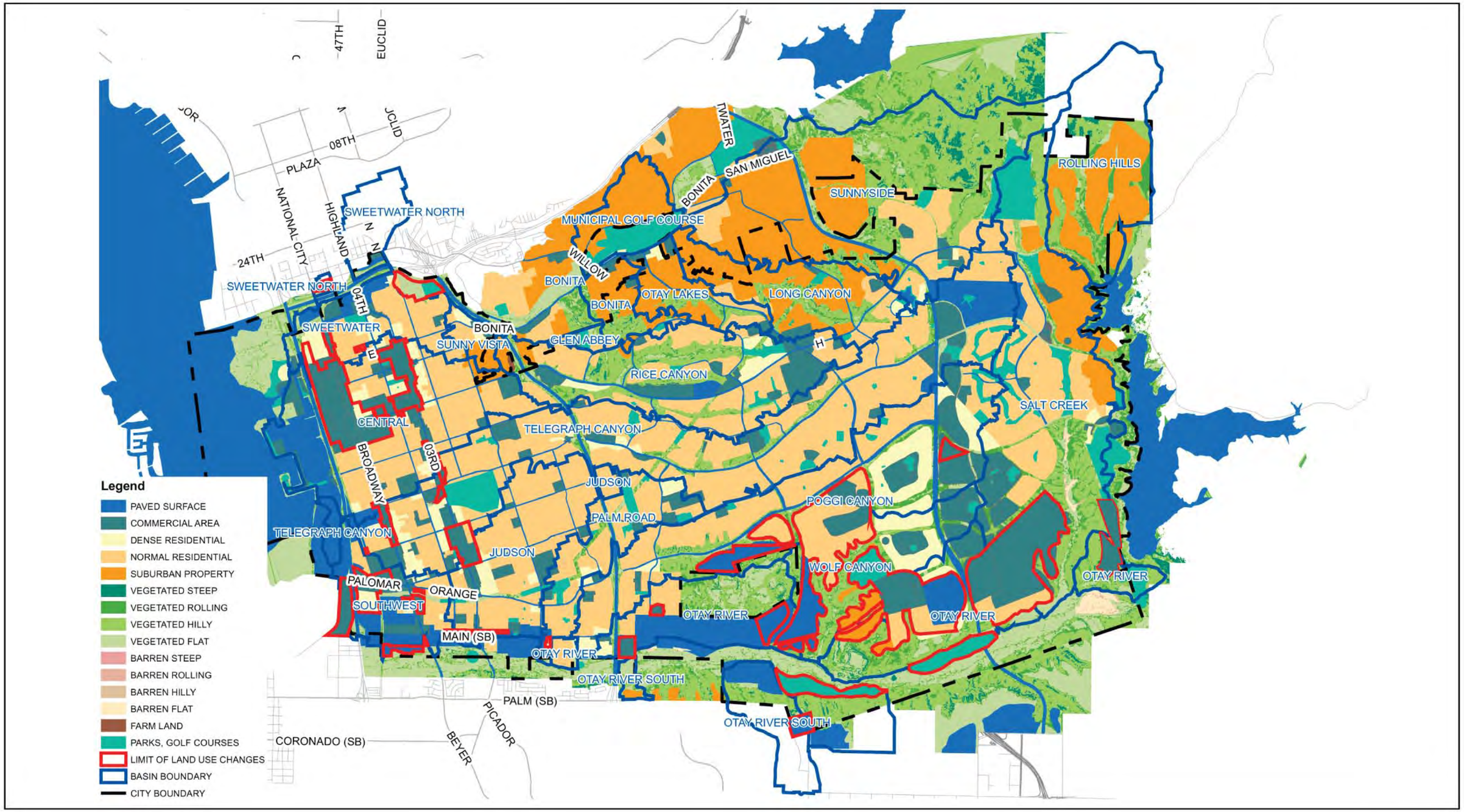
Preferred Plan

As referenced above, a hydrology study was prepared by PBS&J for the proposed General Plan Update that evaluated the Preferred Plan and each of the three scenarios. The impacts to drainage infrastructure was focused on four areas: the Western Chula Vista area, containing the Northwest and Southwest Planning Areas; and Poggi Canyon, Rolling Hills, and Southeasterly Chula Vista areas, which all contain portions of the East Planning Area. The impacts to these areas are analyzed below.

WESTERN CHULA VISTA

Impacts to drainage infrastructure west of Interstate 805, which includes the Northwest and Southwest Planning Areas, resulting from implementation of the Preferred Plan would primarily result from redevelopment. The drainage basins impacted by redevelopment include: Sweetwater Basins 1, 2/3 and 7, Southwest Basins 1, 2, 4, 5/6 and 7, Central Basin 1/3/4/5 and 2, Judson Basin 1, and Telegraph Canyon Basin 1. Table 1 of Appendix D presents a comparison of peak runoff rates for the existing conditions versus the Preferred Plan. Inspection of the comparison shows negligible impacts to most of the drainage basins affected by redevelopment. However, several increases are noted: Sweetwater Basin 7 shows a 10 percent increase in peak runoff for the 50-year storm event, and Southwest Basins 4, 5/6 and 7 show 6 percent, 9 percent, and 16 percent increases in peak runoff, respectively for the 50-year storm event. These increases in peak runoff may result in impacts to drainage infrastructure within each of these drainage basins. Prior to or in conjunction with redevelopment in these areas, drainage infrastructure improvements should be made to accommodate this increase in runoff.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that the Preferred Plan would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.



NO SCALE N

FIGURE 5.9-3
Drainage Basins

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POGGI CANYON

Impacts to drainage infrastructure within the Poggi Canyon watershed resulting from implementation of the Preferred Plan would primarily result from changes in land use for areas currently undeveloped. The majority of the Poggi Canyon watershed is currently built out. Table 1 of Appendix D presents a comparison of peak runoff rates for the existing conditions versus the Preferred Plan. In the existing condition, the majority of the portion of Poggi Canyon located southerly of Olympic Parkway, easterly of Brandywine Avenue and westerly of La Media Road is undeveloped. Development of this land in accordance with the Preferred Plan results in approximately a 3 percent increase in peak storm runoff rate as calculated at the downstream end of the Poggi Canyon watershed.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that the Preferred Plan would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

ROLLING HILLS BASIN AREA

In the existing condition, the Rolling Hills basin area is primarily undeveloped. The Preferred Plan proposes residential development for portions of the Rolling Hills basin area. Increases in peak storm runoff when compared to the existing condition are anticipated and range approximately 1 to 22 percent for the eight watersheds within the Rolling Hills basin area.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that the Preferred Plan would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

SOUTHEASTERLY CHULA VISTA

In the existing condition, much of this portion of the city is undeveloped, and subsequently, increases in peak runoff are expected with implementation of the Preferred Plan. When compared to the existing condition, substantial increases in 50-year storm event peak runoff occur for the following basins: Otay River Basin 4, 7, 8, 9, 11, 12, 13, 15, 16, 17, 18, 21, 22, 24; Otay River South Basin 2, and Wolf Canyon Basin 1.

Increases in peak runoff for the watersheds adjacent to the Otay River valley typically occur in areas which have little or no existing drainage infrastructure. Therefore, the increases in runoff can be accounted for during the engineering design phase of projects within each of

these watersheds. Construction of required drainage facilities within each watershed can be performed by developers as a condition of development or the projects can be funded and built as deemed appropriate by the City of Chula Vista.

Development of the Preferred Plan would transform large amounts of undeveloped land in eastern Chula Vista to developed land. Therefore, the amount of storm water collected and entering drainage channels would significantly increase and the velocity created by this increase would place additional stress and wear on system components. Redevelopment of portions of the Northwest and Southwest Planning Areas would have a less significant impact as the amount of added impervious surface is often marginal and the quality of runoff may actually improve due to replacement of components of the existing drainage system with new components which function at a higher standard. Development within the East Planning Area would alter the existing drainage pattern of the area due to the existing rural nature of the area. Compliance with policies associated with Objectives PFS 1 and 2 would ensure that the Preferred Plan would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged off-site, and infiltration would filter pollutants.

Scenarios 1, 2, and 3

WESTERN CHULA VISTA

Impacts to drainage infrastructure west of Interstate 805, which includes the Northwest and Southwest Planning Areas, resulting from implementation of the Preferred Plan would primarily result from redevelopment. Based on the review of existing land use in the proposed redevelopment areas and a qualitative comparison with land use as outlined in Scenarios 1 through 3, there would be minimal impacts to publicly owned drainage infrastructure resulting from implementation of these scenarios. When compared to existing conditions, land use associated with redevelopment according to these scenarios is generally similar in nature from a perspective of hydrologic response. That is, the typical percentage of imperviousness for a given parcel of land is similar between the existing and redeveloped condition.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that Scenarios 1 through 3 would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

POGGI CANYON

Scenario 1 includes similar industrial land use as that presented in the adopted General Plan, but substitutes a large area of low-medium residential for what is shown as high density residential and commercial in the adopted plan. The runoff potential for low-medium residential is typically lower than that for commercial and high-density residential and therefore, alternative one appears to have less impacts to drainage infrastructure than the adopted General Plan.

Scenario 2 substitutes high and low-medium residential land use for areas projected in the adopted General Plan to be used for industrial facilities. Furthermore, similar to alternative one, alternative two substitutes a large area of low-medium residential for what is shown as high density residential and commercial in the General Plan. These differences from the adopted General Plan would likely result in a decrease in storm runoff and therefore, have less impacts to drainage infrastructure than the adopted General Plan.

Scenario 3 appears to contain a higher percentage of industrial land use than the adopted General Plan, substituting industrial for medium residential for the tract of land located southwesterly of the intersection of Paseo Ranchero and Olympic Parkway. Industrial land use is typically associated with higher runoff potential than residential. However, countering this increase, the region located southeasterly of the intersection is presented as low-medium residential in alternative three, whereas the adopted General Plan includes this area as commercial and high density residential land use. Low-medium residential land use is typically associated with a lower runoff potential than commercial and high density residential. Based on visual inspection of this land use scenario, it appears that the runoff potential for alternative three is similar to that of the currently adopted General Plan.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that Scenarios 1 through 3 would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

ROLLING HILLS BASIN AREA

The Rolling Hills basin area is located in the northeasterly corner of the General Plan area. The land is currently primarily undeveloped but is scheduled for construction of residential development in the near future. In the existing condition, storm runoff from this area drains southerly to the Upper Otay Reservoir across undeveloped areas, containing little to no drainage infrastructure. Therefore development associated with implementation of any land use scenario would have minimal impacts to existing drainage infrastructure. In addition, Scenarios 1 through 3 would not present land use scenarios that differ from the adopted General Plan for the Rolling Hills basin area.

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that Scenarios 1 through 3 would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

SOUTHEASTERLY CHULA VISTA

Southeasterly Chula Vista consists of Wolf Canyon, southerly Salt Creek and portions of the Otay River Valley. These areas all drain southerly to the Otay River and similar to the Rolling Hills basin area, currently drain through undeveloped areas. Although the three scenarios described above present differing land uses for southeasterly Chula Vista, there is minimal existing drainage infrastructure in this region and therefore minimal impacts to existing drainage infrastructure resulting from implementation of any of the alternatives.

As with the Preferred Plan, development under all three scenarios would increase the amount of impermeable surfaces due to the grading and clearing of vegetation. Redevelopment of portions of the Northwest and Southwest Planning Areas would have a less significant impact as the amount of added impervious surface is often marginal and the quality of runoff may actually improve due to replacement of components of the existing drainage system with new components which function at a higher standard. Development within the East Planning Area would alter the existing drainage pattern of the area due to the existing rural nature of the area. Development of Scenario 2 has the highest percentage of development and grading relative to the other scenarios; this scenario proposes to fill in a portion of Wolf Canyon for development within Village Two. Compliance with policies associated with Objectives PFS 1 and 2 would ensure that Scenarios 1 through 3 would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged off-site, and infiltration would filter pollutants.

5.9.3.4 Threshold 4: Flood Hazard

Threshold 4 states that the General Plan Update would result in a significant impact to water quality if it would expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, or place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Growth of the City requires that technology be upgraded and expanded to provide for better management and planning of the City's infrastructure. The Public Works Operations Department continually monitors and reviews both existing facilities and proposed projects to ensure that established thresholds are being met and will continue to be met. The existing

Drainage Master Plan and General Plan Public Facilities Element include an analysis of drainage facilities based on growth estimates. As discussed above, the analysis concluded that the system would need improvements to accommodate the predicted drainage conditions at General Plan buildout. It can be assumed that the demand for drainage facilities would continue to increase as development of previously undeveloped areas in the city increases. Needed drainage improvement projects are addressed through the City's Capital Improvement Program and Development Impact Fee (DIF) Programs. Developers in areas not covered by DIFs may be required to construct drainage improvements as a condition of project approval.

Areas that have a one percent or greater chance of flooding in any given year are designated Special Flood Hazard Areas (SFHAs) on FIRM maps. Developers in floodplains will need to construct in accordance with FEMA and obtain a Letter of Map Amendment (LOMA) or a Letter of Map Revision-Based on Fill (LOMR-F) with the City's approval. LOMAs and LOMR-Fs are documents issued by FEMA that officially remove a property and/or structure from the SFHA designation. To obtain a LOMA or LOMR-F, the applicant must submit mapping and survey data for the property.

The proposed Environmental Element of the General Plan Update identifies an objective and associated policies that address drainage facilities and are listed below.

Objective EE 15

Minimize the risk of injury and property damage associated with flood hazards.

Policies

EE 15.1: Prohibit the subdivision, grading or development of lands subject to potential flood hazards in the absence of adequate evidence demonstrating that such proposals would not be adversely affected by such hazards and that such proposals would not adversely affect surrounding properties. Require site-specific hydrological investigations for proposals within areas subject to potential flood hazards and ensure that all measures deemed necessary by the City Engineer to avoid or adequately mitigate such hazards will be implemented.

EE 15.2: Wherever feasible, land uses, buildings, and other structures determined to be unsafe from flood hazards shall be discontinued, removed, or relocated.

Preferred Plan

The northern portion of the Northwest planning area and the southern portion of the Southwest and East planning areas are potentially subject to hazards associated with the 100-year flood. Additionally, portions of the Southwest planning area are located in dam inundation areas; update areas within the East planning area are just north of potential dam inundation areas. Implementation of the Preferred Plan would not put structures at risk of flooding or inundation; therefore, impacts would be less than significant. However, project-level mitigation measures would be required for project level development within the 100-year flood zone.

Scenarios 1, 2, and 3

As with the Preferred Plan, development under Scenarios 1, 2, and 3 would not put structures at risk of flooding or inundation; therefore, impacts would be less than significant. However, project-level mitigation measures would be required for project level development within the 100-year flood zone.

5.9.4 Level of Significance Prior to Mitigation

5.9.4.1 Threshold 1: Water Quality

Compliance with policies associated with proposed Objective EE 2 would minimize the potential for adverse impacts to surface water and groundwater quality resulting from development completed in compliance with the proposed General Plan Update. Conformance with policy EE 2.4 would ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy. Policy EE 2.5 would include construction and land development techniques to minimize water quality impacts. This would be achieved by the preparation and implementation of an approved SWPPP and monitoring/testing program, with pollution control measures involving the use of best available technology, best conventional pollutant control technology, and/or best management practices pursuant to direction by the SWRCB and the applicable RWQCB office. The conformance to Policies EE 2.2 through EE 2.7 and to all federal, state, and regional water quality objectives would ensure that impacts to surface water and groundwater quality from specific developments would not be significant. The General Plan Update is self-mitigated.

When compared to the existing condition, there are increases in peak runoff within many of the undeveloped and partially undeveloped watersheds in eastern Chula Vista. Compared to existing conditions there are minor increases in peak runoff within the developed watersheds throughout the General Plan area. In undeveloped areas there is very little existing drainage infrastructure and thus minimal impacts. For those areas where impacts are anticipated, infrastructure upgrades would be made prior to or coincidentally with construction of projects within these areas. There may exist areas within each basin where individual site

development can adversely impact downstream drainage facilities, although when looked at as a whole, the overall drainage basin is not significantly impacted.

5.9.4.2 Threshold 2: Groundwater Resources

Although the increased exposure to urban pollutants could affect the quality of water recharging groundwater, filtering would occur during percolation. In any event, urban runoff has not been identified as a source of significant groundwater recharge. Therefore, no significant impacts to groundwater resources would result from buildout of the Preferred Plan or any of the three scenarios.

5.9.4.3 Threshold 3: Drainage

Compliance with policies associated with Objectives PFS 1 and 2 would ensure that the Preferred Plan and Scenarios 1 through 3 would not result in a significant impact to the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation or flooding by retaining stormwater on-site so that pollutants could settle out of any runoff discharged offsite, and infiltration would filter pollutants.

5.9.4.4 Threshold 4: Flood Hazard

Compliance with policies associated with proposed Objective EE 15 ensure that the Preferred Plan and Scenarios 1 through 3 would not result in a significant impact from the risk of injury and property damage associated with flood hazards because the policies prohibit subdivision, grading, or development of lands subject to potential flood hazards and require site-specific hydrological investigations for proposals within areas subject to potential flood hazards and ensure the implementation of all measures to avoid or adequately mitigate such hazards.

5.9.5 Mitigation Measures

Since no adverse impacts to water resources would result, no mitigation is necessary.

5.9.6 Level of Significance After Mitigation

No significant water resources impacts have been identified.

5.10 Transportation

The traffic analysis for the General Plan Update was conducted by Kimley-Horn and Associates. The results of that analysis are attached to this report as Appendix E. The information provided in this section of the EIR is based upon that analysis.

5.10.1 Existing Conditions

5.10.1.1 Regulatory Plans and Policies

The adopted General Plan Circulation Element includes the following components:

- Thirty-three objectives grouped under the following goals:

    1. Accommodate Future Traffic Increases
    2. Mitigate External Traffic Impacts
    3. Provide for Pedestrian Safety/Mobility
    4. Reduce Traffic Congestion
    5. Transportation Phasing
    6. Public Participation

- Ten Bicycle Plan objectives

- Six Public Transit Plan objectives

As part of the EIR process, the goals, policies, and objectives of the adopted General Plan were evaluated for relevance and applicability to the new policies of the proposed General Plan Land Use and Transportation Element. Some policies would remain unchanged, while others have been updated. Objectives 2 and 8 of the adopted General Plan identify level of service (LOS) C as the operational goal for city streets and intersections. Other objectives address applying sound engineering practices in the city; limiting through traffic impacts on residential streets; promoting interagency cooperation; accommodating non single-occupancy vehicle modes of travel; implementing Transportation Systems Management (TSM) measures; and others. Objective 29 provides the basis for the Growth Management Traffic Monitoring Program. Objective 27 promotes the development of well-planned communities which would tend to be self-supportive and thus reduce the length of the vehicular trip, reduce dependency on the automobile, and encourage the use of other modes of travel. Public transit objectives primarily address encouraging local (rather than regional) transit service.

Growth Management: In accordance with the City's Growth Management Program and Growth Management Ordinance (Chapter 19.09 of the City of Chula Vista Municipal Code), Chula Vista monitors the traffic-related impacts of new development on an

ongoing basis. The City's Growth Management Program requires the City Council to hold a public hearing to consider a development moratorium if the observed average travel speed on a designated arterial falls below the performance standard (i.e., LOS C, with no more than two hours of LOS D during peak hours).

Section 19.09.030 of the City's Municipal Code specifies that the purpose of the Growth Management Program is to implement the general plan and provide that development does not occur unless facilities and improvements are available to support that development. The program requires identification of all facilities and improvements necessary to accommodate land uses specified in the general plan; specify size, capacity, service level, and threshold standards for each identified facility; project total buildout development levels and identify projected facility and improvement needs; provide a policy for timing the construction of each facility and improvement; and identify the financing method or methods for each facility and improvement.

The traffic section of Section 19.09.040 specifies the Growth Management requirements for traffic. These criteria are used to assess traffic short-term impacts for projects implemented in conformance to the General Plan. This section states:

I. Traffic.

1. City-wide. Maintain LOS "C" or better as measured by observed average travel speed on all signalized arterial segments; except, that during peak hours a LOS "D" can occur for no more than two hours of the day.

2. West of Interstate 805. Those signalized intersections which do not meet the standard above may continue to operate at their current (year 1991) LOS, but shall not worsen.

3. Notes to Standards.

   a. Arterial segment LOS measurements shall be for the average weekday peak hours, excluding seasonal and special circumstance variations.

   b. Urban and suburban arterials are defined as surface highways having signal spacing of less than two miles with average weekday traffic volumes greater than 10,000 vehicles per day.

   c. Arterial segments are stratified into three classifications:

19-29 (Revised 2/03)

Chula Vista Municipal Code 19.09.040

i. Class I arterials are roadways where free-flow traffic speeds range between 35 mph and 45 mph and the number of signalized intersections per mile is less than four. There is no parking and there is generally no access to abutting property.

ii. Class II arterials are roadways where free-flow traffic speeds range between 30 mph and 35 mph, and the number of signalized intersections per mile ranges between four and eight. There is some parking and access to abutting properties is limited.

iii. Class III arterials are roadways where free-flow traffic speeds range between 25 mph and 35 mph, and the number of signalized intersections per mile is closely spaced. There is substantial parking and access to abutting property is unrestricted.

d. The LOS measurement of arterial segments and freeway ramps shall be a growth management consideration in situations where proposed developments have a significant impact at interchanges.

e. Circulation improvements should be implemented prior to anticipated deterioration of LOS below established standards.

f. The criteria for calculating arterial LOS and defining arterial lengths and classifications shall follow the procedures detailed in Chapter 11 of the 1985 Highway Capacity Manual (HCM) and shall be confirmed by the city traffic engineer.

g. During the conduct of future traffic monitoring program field surveys, intersections experiencing significant delays would be identified. The information generated by the field surveys would be used to determine possible signal timing changes and geometric and/or traffic operational improvements for the purpose of reducing intersection delay.

h. Level of service values for arterial segments shall be based on the following table:

Table I

Level of Service	Average Travel Speed (mph)		
	Class 1	Class 2	Class 3
A	>35	30>	25>
B	>28	24>	19>
C	>22	18>	13>
D	>17	>14	>9
E	>13	>10	>7
F	<13	<10	<7

SANDAG RTP: The San Diego Association of Governments (SANDAG) adopted the Regional Transportation Plan (RTP) Mobility 2030 in November 2003. Improved transit service is a major theme of Mobility 2030, and the Regional Transit Vision (RTV) described in the RTP emphasizes integration of transit service within communities and neighborhoods; makes use of high-occupancy vehicle lanes and/or managed lanes, incorporates signal priority or transit-only lanes on arterials, increases transit competitiveness with automobile trips, and improves transit customer service.

SANDAG RCP: In July 2004, SANDAG adopted the Regional Comprehensive Plan (RCP) for the San Diego region. The RCP is the strategic planning framework for the San Diego region and establishes a regional vision. One of the key principles of the RCP is the concept of "smart growth." From a transportation planning perspective, smart growth involves identifying appropriate land patterns and a complementary multi-modal[1] transportation system so as to improve the viability of public transit and other alternative travel modes (such as walking or bicycling) for the whole range of trip types, including commuting, shopping, school, etc. Smart growth has many advantages, including improved accessibility within a community; encouraging investment in already developed areas; and limiting expansion into outlying undeveloped areas, along with associated traffic and air quality benefits. As discussed in the proposed Land Use and Transportation Element, smart growth concepts would guide land use and transportation planning efforts throughout the city.

The South Bay Transit First – Tier One Plan was prepared by SANDAG (formerly the Metropolitan Transit Development Board) in May 2003. The Transit First concept (also described as Bus Rapid Transit [BRT]), involves the implementation of enhanced transit service strategies designed to improve the attractiveness and viability of transit to capture trips that typically travel by single-occupancy passenger cars. The overall intent is to use improved buses that emulate light rail service by increasing vehicle speeds and rider

[1]That is, public transit, passenger cars, pedestrians, and bicycling.

comfort and convenience. Vehicle speeds are increased due to fewer stops along a give route through the application of a variety of traffic engineering methods (such as traffic signal priority and queue jumper lanes) to assign priority to a transit vehicle in the traffic stream. The South Bay Transit First Plan provides a feasibility analysis of alternative route alignments and station designs throughout the city of Chula Vista.

As part of transit and mobility improvements, SANDAG manages the TransNet program. The City is working with SANDAG to obtain TransNet funding for circulation and mobility improvements. A TransNet extension was approved by San Diego County residents allowing the continuation of transportation funding for 40 years starting at the expiration of the current program in 2008 and continuing until 2048. One third of the entire TransNet revenues are allocated to local jurisdictions. Another third is allocated to regional freeways. TransNet revenues allocated to Chula Vista will increase at a higher rate than the region average due to population growth in Chula Vista. These local revenues are allocated by the City Council for local roadways in Chula Vista. In addition, TransNet will finance freeway improvements on I-805 and I-5 as planned in the RTIP from revenues allocated to regional freeways.

5.10.1.2 Existing and Citywide Conditions

Overview of Existing Transportation Facilities

The city of Chula Vista shares borders with the city of National City, the city of San Diego, and the county of San Diego. As the second-largest city in the county, Chula Vista's west side is largely developed, while the east side is experiencing a sustained period of growth. Some adjacent areas in neighboring jurisdictions (National City and Coronado) are largely built out; however, some areas (such as Otay Mesa in the city and county of San Diego) are growing. County land to the east of Chula Vista is generally vacant and undeveloped, although planned uses in these areas would generate some degree of traffic.

Roadway classifications under the adopted General Plan, existing traffic volumes, and level of service (LOS) is provided in Table 5.10-1. The existing system has freeways, six-lane Prime Arterials, six-lane Major Streets, four-lane Major Streets, and three- and four-lane Collectors.

I-5 and I-805 are major regional north/south freeways that link the U.S.–Mexico border area to the city of San Diego and other areas to the north. State Route 54 is an east/west freeway located generally along Chula Vista's northern boundary. East/west travel within the city is accommodated by a network of arterials, including E Street/Bonita Road; H Street/East H Street; Telegraph Canyon Road/Otay Lakes Road; Palomar Street; Orange Avenue/Olympic Parkway; and Main Street. State Route 125, a north/south tollway, is currently under construction in the eastern portion of the city.

TABLE 5.10-1
ANALYZED EXISTING ROADWAY SEGMENTS – EXISTING CONDITIONS

Segment			Adopted	Existing
Street	From	To	Plan	Volume
E Street	Marina Parkway	I-5	4-Lane Major	14,520
E Street	I-5	Woodlawn Avenue	4-Lane Major	26,924
E Street	Woodlawn Avenue	Broadway	4-Lane Major	21,997
E Street	Broadway	First Avenue	4-Lane Class I Collector	17,493
E Street	First Avenue	I-805	4-Lane Class I Collector	17,966
F Street	Bay Boulevard	Broadway	4-Lane Class I Collector	3,255
F Street	Broadway	Third Avenue	4-Lane Class I Collector	9,514
H Street	I-5	Broadway	4-Lane Major	33,116
H Street	Broadway	Hilltop Drive	4-Lane Major	26,055
H Street	Hilltop Drive	I-805	4-Lane Major	40,184
H Street	I-805	Hidden Vista Drive	7 Lane Prime	66,700
H Street	Hidden Vista Drive	Paseo del Rey	6-Lane Prime	54,967
H Street	Paseo del Rey	Paseo Ranchero	6-Lane Prime	44,534
H Street	Paseo Ranchero	Otay Lakes Road	6-Lane Prime	35,518
H Street	Otay Lakes Road	SR-125	4-Lane Major	4,080
J Street	Marina Parkway	Bay Boulevard	4-Lane Major	5,347
J Street	Bay Boulevard	Broadway	4-Lane Major	19,024
J Street	Broadway	Hilltop	4-Lane Class I Collector	13,248
L Street	I-5	Broadway	4-Lane Class I Collector	15,450
L Street	Broadway	Hilltop Drive	4-Lane Class I Collector	15,641
L Street	Hilltop Drive	I-805	4-Lane Class I Collector	20,407
Palomar Street	I-5	Broadway	6-Lane Prime	34,579
Palomar Street	Broadway	Hilltop	6-Lane Prime	16,538
Palomar Street	Hilltop	I-805	4-Lane Class I Collector	5,538
Palomar Street	I-805	Heritage Road	4-Lane Major	9,590
Orange Avenue	Palomar Street	Hilltop Drive	4-Lane Major	11,574
Orange Avenue	Hilltop Drive	I-805	4-Lane Major	24,518
Main Street	I-5	Broadway	4-Lane Major	22,953
Main Street	Broadway	Hilltop Drive	4-Lane Major	19,850
Main Street	Hilltop Drive	I-805	4-Lane Major	21,165
Main Street	I-805	Heritage Road	6-Lane Prime	14,846
Sweetwater Road	Plaza Bonita Road	Plaza Bonita Center Rd.	4-Lane Major	19,900
Sweetwater Road	Plaza Bonita Center Rd.	Willow Road	4-Lane Major	12,700
Sweetwater Road	Willow Road	SR-54	4-Lane Class I Collector	12,700
Bonita Road	I-805	Plaza Bonita Road	4-Lane Major	42,691
Bonita Road	Plaza Bonita Road	Willow Street	4-Lane Major	31,088
Bonita Road	Willow Street	Central Avenue	4-Lane Major	33,617
Bonita Road	Central Avenue	Sweetwater Road	4-Lane Major	24,937
Central Avenue	Sweetwater Road	Bonita Road	4-Lane Class I Collector	11,800
Central Avenue	Bonita Road	Corral Canyon Road	4-Lane Class I Collector	11,000
Proctor Valley Rd.	Mount Miguel Road	Hunte Parkway	6-Lane Prime	6,968
Telegraph Canyon Rd.	I-805	Oleander Avenue	6-Lane Prime	64,060
Telegraph Canyon Rd.	Oleander Avenue	Paseo del Rey	6-Lane Prime	60,008
Telegraph Canyon Rd.	Paseo del Rey	Paseo Ranchero	6-Lane Prime	51,802
Telegraph Canyon Rd.	Paseo Ranchero	Otay Lakes Road	6-Lane Prime	41,814
Otay Lakes Road	Bonita Road	Avenida del Rey	4-Lane Major	33,443
Otay Lakes Road	Avenida del Rey	H Street	4-Lane Major	29,300
Otay Lakes Road	H Street	Telegraph Canyon Rd.	4-Lane Major	25,040
Otay Lakes Road	Telegraph Canyon Rd.	SR-125	6-Lane Prime	43,219
Otay Lakes Road	SR-125	Eastlake Parkway	6-Lane Prime	41,349
Otay Lakes Road	Eastlake Parkway	Lane Avenue	6-Lane Prime	19,400
Otay Lakes Road	Lane Avenue	Hunte Parkway	6-Lane Prime	12,800

TABLE 5.10-1
ANALYZED ROADWAY SEGMENTS – EXISTING CONDITIONS
(continued)

Segment			Adopted	Existing
Street	From	To	Plan	Volume
Olympic Parkway	I-805	Oleander Avenue	6-Lane Prime	39,878
Olympic Parkway	Oleander Avenue	Heritage Road	6-Lane Prime	27,223
Marina Parkway	E Street	H Street	4-Lane Class I Collector	3,600
Marina Parkway	H Street	J Street	4-Lane Class I Collector	3,600
Woodlawn	E Street	F Street	4-Lane Class I Collector	11,600
Woodlawn	G Street	H Street	4-Lane Class I Collector	9,300
Broadway	SR-54	C Street	4-Lane Major	16,100
Broadway	C Street	E Street	4-Lane Major	20,015
Broadway	E Street	H Street	4-Lane Major	24,713
Broadway	H Street	L Street	4-Lane Major	24,420
Broadway	L Street	Palomar Street	4-Lane Major	23,368
Broadway	Palomar Street	Main Street	4-Lane Major	15,750
Broadway	Main Street	Southern city limits	4-Lane Major	15,110
Fourth Avenue	SR-54	C Street	4-Lane Class I Collector	36,923
Fourth Avenue	C Street	E Street	4-Lane Class I Collector	17,812
Fourth Avenue	E Street	H Street	4-Lane Class I Collector	17,001
Fourth Avenue	H Street	L Street	4-Lane Class I Collector	16,101
Fourth Avenue	L Street	Palomar Street	4-Lane Class I Collector	14,069
Fourth Avenue	Palomar Street	Main Street	4-Lane Class I Collector	9,843
Fourth Avenue	Main Street	Southern city limits	4-Lane Class I Collector	4,620
Third Avenue	C Street	E Street	4-Lane Class I Collector	7,220
Third Avenue	E Street	H Street	4-Lane Class I Collector	15,632
Third Avenue	H Street	L Street	4-Lane Class I Collector	23,459
Third Avenue	L Street	Palomar Street	4-Lane Class I Collector	21,623
Third Avenue	Palomar Street	Main Street	4-Lane Class I Collector	18,214
Hilltop Drive	Palomar Street	Main Street	4-Lane Class I Collector	10,678
Medical Center Dr.	Telegraph Canyon Rd.	Palomar Street	4-Lane Class I Collector	12,238
Brandywine Drive	Palomar Street	Main Street	4-Lane Class I Collector	7,249
Paseo del Rey	East H Street	Telegraph Canyon Rd.	4-Lane Class I Collector	12,225
Paseo Ranchero	H Street	Telegraph Canyon Rd.	4-Lane Class I Collector	14,380
Heritage Road	Telegraph Canyon Rd.	Olympic Parkway	4-Lane Class I Collector	16,505
Heritage Road	Olympic Parkway	Main Street	4-Lane Class I Collector	15,400
La Media Road	Telegraph Canyon Rd.	Olympic Parkway	4-Lane Class I Collector	13,419
Eastlake Parkway	Otay Lakes Road	Trinidad Cove	4-Lane Class I Collector	3,684
Eastlake Parkway	Trindad Cove	Olympic Parkway	4-Lane Class I Collector	3,684
Eastlake Parkway	Olympic Parkway	Hunte Parkway	4-Lane Class I Collector	17,830
Eastlake Parkway	Hunte Parkway	Otay Valley Road	4-Lane Class I Collector	16,754
Lane Avenue	Proctor Valley Road	Otay Lakes Road	4-Lane Class I Collector	4,268
Hunte Parkway	Proctor Valley Road	Otay Lakes Road	4-Lane Class I Collector	1,400
Hunte Parkway	Otay Lakes Road	Olympic Parkway	4-Lane Class I Collector	5,905
Hunte Parkway	Olympic Parkway	Eastlake Parkway	4-Lane Class I Collector	4,216
Hunte Parkway	SR-125	Eastlake Parkway	4-Lane Class I Collector	61,100
Plaza Bonita Road	Sweetwater Road	Bonita Road	4-Lane Major	11,400

The San Diego Trolley's Blue Line extends through the city parallel to the east side of I-5, with stations at Bayfront/E Street, H Street, and Palomar Street. Park-and-ride lots are provided at each station. Local bus service is provided by Chula Vista Transit (CVT). A bus transfer facility is located at Southwestern College, west of Otay Lakes Road and south of East H Street.

Existing Level of Service

A roadway's capacity is primarily a function of the number of lanes and whether or not the roadway is divided with a median or center turn lane. Typically, the more lanes a roadway has, the greater the capacity would be.

Traffic LOS is a measure of the relative ease or difficulty of traffic movement along segments of roadways and at intersections. It relates to delay in traffic flow, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. LOS is used to describe a roadway's ability to handle the volume of traffic that it carries. There are six defined LOS, A through F, which describe conditions ranging from "ideal" to "worst" as summarized below.

One available method to determine the LOS of an existing roadway segment or to predict the LOS of a planned segment on a daily basis is to compare the actual or projected average daily traffic (ADT) volume of the segment to the established maximum volumes for each LOS grade for the corresponding roadway classification (arterial, collector, etc.). This planning method is most often utilized to predict the performance of existing and planned roadways as far as 20 to 30 or more years into the future. Pursuant to Chula Vista's Growth Management Program and Ordinance, the City monitors the actual performance of designated arterials to determine their LOS based upon observed average travel speed. Although this method is a highly accurate means to determine the current performance of a roadway, this method cannot be utilized to predict the performance of roadways under future conditions. For these reasons, the V/C method (i.e., comparing the predicted ADT to established maximum ADTs for each LOS grade) has been used to predict the performance of existing and planned roadways under the various General Plan Update scenarios analyzed in this EIR. Like all other predictive methods, there is no assurance that the predicted future LOS of a roadway using this method will be an accurate representation of actual future conditions; however, it is widely considered to be the most reliable method currently available for this purpose and, therefore, has been utilized in performing this analysis.

Level of Service (LOS)	Description of Operation
A	Traffic is typically free-flowing at average travel speeds, with very little delay. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delays at intersections are minimal.
B	Represents reasonably unimpeded operations at average travel speeds. The ability to maneuver in the traffic stream is slightly restricted but the majority of vehicles do not stop and it is not bothersome.
C	Represents stable operations with acceptable delays; if an intersection is signalized, a few drivers may have to wait through one signal cycle. The ability to change lanes and maneuver may be more restricted than LOS B.
D	Congestion occurs and a small change in volume increases delays substantially during short periods, but excessive backups do not occur.
E	Congestion occurs with extensive delays or one or more signal cycles and low travel speeds occur.
F	Arterial traffic flows at extremely low speeds, intersection congestion occurs with excessive delays; and back ups from other locations restrict or prevent movement.

The maximum acceptable volumes for all existing and proposed street classifications in Chula Vista is presented in Table 5.10-2.

TABLE 5.10-2
STREET SEGMENT PERFORMANCE STANDARDS AND VOLUMES

Street Classification	Acceptable LOS	Acceptable Volume
Prime Arterial	C	70,000
Prime Arterial	C	50,000
Major Street (six lanes)	C	40,000
Major Street (four lanes)	C	30,000
Town Center Arterial	C	50,000
Class I Collector	C	22,000
Gateway Street	D	61,200 (six lanes)
		43,200 (four lanes)
Urban Arterial	D	37,800
Commercial Boulevard	D	33,750
Downtown Promenade	D	33,750 (four lanes)
	D	14,400 (two lanes)

The majority of Circulation Element roadways in the city are currently operating at LOS C or better (see Appendix E). There are 12 roadway segments analyzed for this report that currently meet Growth Management travel speeds; however, these segments operate at LOS D, E, or F based upon the daily volume-to-capacity planning method described above. These include the following:

- H Street, from:
  - I-5 to Broadway (four-lane Major Street): LOS D
  - Hilltop Drive to I-805 (four-lane Major Street): LOS F
  - I-805 to Hidden Vista Drive (seven-lane Prime Arterial): LOS E
  - Hidden Vista Drive to Paseo del Rey (six-lane Prime Arterial): LOS D

- Bonita Road, from:
  - I-805 to Plaza Bonita Road (four-lane Major Street): LOS F
  - Plaza Bonita Road to Willow Street (four-lane Major Street): LOS D
  - Willow Street to Central Avenue (four-lane Major Street): LOS D

- Telegraph Canyon Road, from:
  - I-805 to Crest Drive/Oleander Avenue (seven-lane Prime Arterial): LOS D
  - Crest Drive/Oleander Avenue to Paseo del Rey (six-lane Prime Arterial): LOS F
  - Paseo del Rey to Paseo Ranchero (six-lane Prime Arterial): LOS D

- Otay Lakes Road, from Bonita Road to Avenida del Rey (four-lane Major Street): LOS D

- Third Avenue, from H Street to L Street (four-lane Class I Collector): LOS D

5.10.2 Thresholds of Significance

- Threshold 1: The adoption of the Urban Core Roadway Classifications contained in the proposed General Plan Update would result in a significant impact if adoption of an urban street system would not provide an adequate urban amenities program, and would not facilitate multimodal transportation systems sufficient to allow the City's Urban Core to achieve the mobility required to serve proposed land use densities.

- Threshold 2: A significant impact to circulation would occur if changes to the land use and the circulation plans would result in the following:

  A. For non-Urban Core circulation element roadways (Expressway, Prime Arterial, Major Street, Town Center Arterial, Class I Collector):

    A.1. A roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout is considered a significant impact.

A.2. A roadway segment that currently operates at LOS D or E and with the proposed changes would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

B. For Urban Core Circulation Element roadways (Gateway Street, Urban Arterial, Commercial Boulevard, Downtown Promenade):

B.1. A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout is considered a significant impact.

B.2. A roadway segment that currently operates at LOS E would operate at LOS F at General Plan buildout, or which operates at LOS E or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

C. For freeways:

C.1 A freeway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D, E, or F at General Plan buildout is considered a significant impact.

C.2 A freeway way segment that currently operates at LOS D or E would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

5.10.3 Impacts

The City is proposing to amend the circulation system as part of the adoption of the General Plan Update. These amendments include the creation of five new roadway classifications, the adoption of nine network changes, and the adoption of a designated transit system and map. These amendments are described below.

5.10.3.1 Threshold 1: Urban Street System Classifications

Threshold 1 states that the adoption of the Urban Core Roadway Classifications contained in the proposed General Plan Update would result in a significant impact if the adoption would not provide an adequate urban amenities program, and would not facilitate multimodal transportation systems in the Urban Core to achieve the mobility required to serve proposed land use densities.

The purpose for establishing Urban Core Roadway Classifications is to create an urban pedestrian-oriented environment, within which slower vehicular speeds are intended, and the ability to walk or use other non-vehicular modes of travel is supported by physical improvements, and mixed land uses which provide essential services in close proximity to residences. The concept of urban mobility and the related urban roadway system is presented in Sections 5.4 and 5.5 of the proposed Land Use and Transportation Element. Slower vehicular speeds result in lesser vehicular LOS which is reflected in the proposed use of LOS D as the long-range planning standard.

The General Plan Update proposes an LOS D for five roadways that are part of the Urban Core Roadway Classification system. Along with the standard of LOS D for Urban Core roadways, the General Plan Update would establish policies which require the provision of an urban amenities program within the Urban Core, to ensure an urban mobility context where pedestrian and transit modes are favored. In support of pedestrians and transit, the urban amenities program is proposed to include requirements for urban parks and plazas, mixed use development, and pedestrian and transit improvements, among others (see LUT Element Section 7.13). Use of this urban level of service standard would allow for a greater degree of vehicular traffic on urban system roadways than would be allowed on roadway segments outside the Urban Core.

The City of Chula Vista's Urban Core is located in the Northwest Planning Area, located south of SR-54, west of I-805, north of L Street, and east of I-5. Land uses within portions of the Urban Core are planned to have greater development intensities than currently exist. This proposed intensification would create a more urban context within the Urban Core. The proposed transportation network takes into account all modes of travel within this urban context—including public transit, bicycles, and pedestrians—as well as the automobile.

Section 9.4 of the proposed Land Use and Transportation Element presents the following vision of the Urban Core:

> The Urban Core Subarea has developed into a vibrant area, with housing, shops, restaurants, entertainment, and activities that attract from eastern Chula Vista and city-wide. Higher density housing, shopping, and job centers located near existing and planned transit stations give people transportation choices, encourage the use of mass transit, and help to reduce vehicular traffic. A network of linked urban parks and plazas creates pleasant pedestrian routes and provides areas for community activities. Increased population (residents and workers) in the Urban Core Subarea has created opportunities for more shops and a variety of restaurants. Entertainment and cultural arts are housed in new and renovated buildings, offering both day and evening activities. The streets

> are bustling with shoppers and people enjoying outdoor dining or heading to entertainment venues.
>
> A grade-separated trolley line at E and H Streets has improved the flow of east-west traffic, while a local shuttle provides frequent service between Urban Core Subarea activity centers. The Bus Rapid Transit (BRT) line allows residents in the East Planning Area convenient access to the Urban Core Subarea.
>
> F Street is a pedestrian-oriented promenade that links Third Avenue, the Civic Center, Broadway, the E Street transit center, and the Bayfront Planning Area with themed landscaping and public art. The freeway crossings of Interstate 5 have been widened to accommodate additional pedestrian use, and entryways into the Urban Core Subarea are enhanced and inviting. Chula Vista's Urban Core Subarea has matured into an urban, pedestrian-oriented, active area that continues to be the primary economic, governmental, and social focal point of the south San Diego County region.

The proposed General Plan Update also includes four primary objectives addressing urban mobility, namely Objectives LUT 26, 47, 48, and 49.

Objective LUT 47 states:

> Establish roadway classifications in the Urban Core that respond to the special operating characteristics of roadways within a more urbanized environment, accommodate slower speeds in pedestrian-oriented areas, and facilitate multi-modal design elements and amenities.

Objective LUT 49 and select associated policies advance urban mobility. Objective LUT 49 states:

> Encourage redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea that would provide a balance of land uses, reinforce its identity as Chula Vista's central core, and complement land uses in other planning areas, including the Bayfront and East Planning Areas.

Objective LUT 49 also establishes design policies to assure that Urban Core development follows specific standards. These design policies include:

> LUT 49.14: Conduct a special study to examine the potential for higher land use intensities and taller buildings along the H Street Transit Focus

Corridor between Interstate 5 and Third Avenue, and which will also address compatibility issues with adjacent stable neighborhoods. The precise boundaries will be established at the time of the study, and all land use policies contained in this General Plan shall apply until modified as a result of study findings and appropriate amendments to this Plan. (see also LUT 2.6).

LUT 49.15 Recognize that different portions of the Urban Core Subarea have a desirable character, and develop specific plans and programs to strengthen and reinforce their uniqueness. Develop land use, density, special design features, and building guidelines for appropriate Focus Areas.

LUT 49.16: Prepare urban form guidelines and standards for development as part of the Urban Core Specific Plan.

LUT 49.17: Establish policies, development standards and/or design guidelines in the Urban Core Specific Plan to address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design should respond to public view corridors.

LUT 49.18: With the adoption of the Urban Core Specific Plan, establish design standards for mixed-use development that achieves a high quality pedestrian-scaled environment and promotes side or rear located parking areas, streetfront windows and entries, and public and private open space.

LUT 49.19: With the adoption of the Urban Core Specific Plan, create a pedestrian-oriented realm by requiring retail or public uses at the ground floor of buildings.

LUT 49.20: Encourage the linkage and integration of new development with existing neighborhoods by means of open space areas, parks, and pathways as a means of enhancing pedestrian connections.

LUT 49.21: Where a park, natural open space, or urban open space exists adjacent to or near a transit-oriented development, these features should be incorporated into the development as open space amenities.

LUT 49.22: Require that the ground floor of parking structures located along primary street frontages in pedestrian-oriented districts be designed to promote pedestrian activity and, where appropriate, incorporate retail uses.

LUT 49.23: Specific Plans shall identify building and site design guidelines for commercial or mixed use areas to include the height above which buildings must step back; the location of the building's horizontal articulation, and other design elements.

LUT 49.24: Reinforce or encourage the establishment of a strong pedestrian orientation in designated districts, activity centers, and pedestrian-oriented Focus Areas, so that these areas may serve as a focus of activity for the surrounding community and a focus for investment in the community.

Mobility policies that are tied to this urban development are addressed in Objective LUT 48. Objective LUT 48 states, "Increase mobility for residents and visitors in the Urban Core Subarea." The policies to achieve this objective include:

LUT 48.1: Create safe and convenient pedestrian access to, from, and within the Urban Core Subarea.

LUT 48.2: Provide adequate sidewalk space on heavily traveled pedestrian corridors within the Urban Core Subarea.

LUT 48.3: Provide mid-block pedestrian crossings and sidewalk curb extensions, where feasible, to shorten pedestrian walking distances.

LUT 48.4: Locate secure bicycle parking facilities near transit centers and major public and private buildings.

LUT 48.5: Encourage the establishment of a transit shuttle system that connects the Downtown Third Avenue District to the City's Bayfront Planning Area. Connections with the Civic Center and transit stations on E and H Streets should be considered as priorities.

LUT 48.6: Design and implement a system of landscaped pedestrian paths that link important features within Downtown, especially an F Street Promenade that will link the Bayfront Planning Area with Broadway and Downtown Third Avenue.

The General Plan Update indicates that in order to help promote pedestrian friendliness, these streets would provide, in varying amounts, the following generalized amenities:

- Way finding maps, grated planters, trash receptacles, and benches strategically located throughout the Urban Core Subarea. Streetscapes should be designed with inviting sidewalks that should be passable without having to maneuver around hedges or other obstacles.

- On-street parking, limited driveway cuts, and landscaping or planting strips, which create a buffer between traffic and pedestrians and provide canopy shade. A well-designed streetscape makes people feel comfortable and invites and motivates residents to walk or bike to destinations, such as shopping or work. Urban Core Subarea street design should include mid-block crosswalks and neighborhood passthroughs to future open space areas and common areas. This helps to create a human scale.

- Behind the sidewalk, easily accessible building entrances with minimum building setbacks, windows at street level, and no blank walls on adjacent buildings.

- Distinctive public transit amenities to increase ease of use and attractiveness of neighborhoods. Transit amenities should include next bus information kiosks, bicycle facilities and interconnections to other routes and bikeways, bike racks, lockers and shower facilities. The objective of this design is to reinforce bikes as a mode of transportation connected to and coordinated with other modes and bus lines, to connect people and places through a complete street network that invites walking and bicycling, thereby providing convenient public access.

Finally, Objective LUT 26 stresses the intent of the City to "Establish an Urban Core Improvements Program for the Urban Core Subarea." Policies associated with this objective include:

LUT 26.1: Through the Urban Core Specific Plan, determine an urban framework for streets and gateways, transit accommodation, a network of parks and urban plazas, pedestrian-oriented streets, pedestrian and bicycle linkages, and activity nodes.

LUT 26.2: Establish an Urban Core Improvements Program that addresses the urban framework elements, implements Urban Mobility techniques and parking strategies, determines what is needed in various areas; and sets priorities for implementation.

LUT 26.3: Develop methods to finance the Urban Core Improvements Program, including but not limited to Developer Impact Fees, tax

increment financing (in redevelopment areas), and/or an incentives program.

As part of achieving improved mobility, the General Plan Update proposes to adopt a transit system that is compatible with the RTV established by SANDAG. The RTV includes BRT routes in the city of Chula Vista, as a priority in the Mobility 2030 RTP. The San Diego Trolley Blue Line passes through the western part of the city of Chula Vista along the east side of I-5, with stations at Bayfront/E Street, H Street, and Palomar Street.

Urban Core Circulation Element Context

Transportation planners and traffic engineers historically have been trained in the science of efficiently and safely moving automobiles. For the past 30 years one of the most widely used measures of efficient automobile travel is the concept of LOS. The Highway Capacity Manual[2] defines LOS as "a qualitative measure of operational conditions within a traffic stream, and their perception by motorists and/or passengers". The American Association of State Highway and Transportation Officials (AASHTO)[3] manual states that "highway agencies should provide the highest level of service possible". They suggest that LOS D should be used sparingly in metropolitan areas, with the goal of striving for a minimum of LOS C. Clearly the emphasis is on moving cars.

Increasingly, communities such as Chula Vista are questioning the sustainability of maintaining automobile levels of service in "transit corridors" and "town centers," major centers of economic, social and transportation activity. In fact, the California legislature recently enacted SB 1636 to exempt automobile levels of service standards for Congestion Management Program systems in "infill opportunity zones," areas of concentrated development around transit centers[4]. The Urban Core Circulation Element promotes the use of revised level of service standards for certain corridors and centers served by transit, alternative ways of measuring level of service for vehicles, and possibly establishing level of service criteria and performance measures for other modes of travel. The following steps were taken to develop the Urban Core Circulation Element in western Chula Vista:

[2]Highway Capacity Manual, Special Report 209, Transportation Research Board, 1985.

[3]"A Policy on Geometric Design of Highways and Streets", American Association of State Highway and Transportation Officials, 2001

[4]Consistent with SB 1636, the City of San Diego has established a performance standard of LOS E for streets in their Centre City district.

1. ***Identification of the following context-specific street classifications.*** The following roadway classifications are proposed within the Urban Core and its immediate environs:

   - ***Gateway Street:*** these roadways (segments of Broadway, Fourth Avenue, E Street, H Street, J Street, and L Street) connect the Urban Core to SR-54, I-805, and I-5. These facilities are analogous to six- or four-lane major roads in other parts of the city, but would provide special design features and amenities to encourage access for the full spectrum of travel modes. These streets would be the major entry points to and from the Urban Core, and special landscape and entry treatments would be incorporated into the design. The acceptable capacity for a six-lane Gateway Street is 61,200 ADT and for a four-lane Gateway Street is 43,200 ADT.

   - ***Urban Arterial:*** these roads include portions of E Street, H Street, and Fourth Avenue. In terms of cross section, urban arterials are similar to four-lane major roads in other areas of Chula Vista, but with special features to support multi-modal trip-making, such as wider sidewalks, transit station curb "bulb outs," and pedestrian amenities. The acceptable capacity for an Urban Arterial is 37,800 ADT.

   - ***Commercial Boulevard:*** these streets include segments of Broadway and Third Avenue (north of E Street and South of H Street) and would serve existing and future shopping districts. Design would be generally consistent with four-lane majors in other areas, but with special design features reflecting the multi-modal nature of streets in more urban areas. The acceptable capacity for a Commercial Boulevard is 33,750 ADT.

   - ***Downtown Promenade:*** these roads (including portions of F Street and Third Avenue) would provide access to retail establishments in the heart of the Urban Core. Street cross sections would be similar to a two-lane collector and four-lane collector, but with multi-modal features and amenities that accommodate the surrounding urban context. The acceptable capacity for a Downtown Promenade is 14,400.

   - ***Town Center Arterial:*** The Town Center Arterial is intended for use primarily in the East Planning Area's Otay Ranch Subarea. The Town Center Arterial provides a pair of one-way streets in order to ensure a more efficient traffic flow by eliminating wide arterials, with their inherent long signal cycle lengths and segregated left-turn lanes at major intersections, and it creates a more energized mixed use pedestrian-oriented community within an enlarged urban transit network. The acceptable capacity for a Town Center Arterial is 50,000 ADT.

2. ***Development of capacity standards for the Urban Core Circulation Element.*** The capacities for the Urban Core Circulation Element were developed based on Highway Capacity Manual (HCM) procedures. The capacities were obtained from the *Generalized Planning Analysis*[5] method, which provides a method for estimating 24-hour street segment capacity using *Highway Capacity Manual* (HCM) 2000 procedures[6]. Whereas ADT-based thresholds in the City of Chula Vista, and many other communities, have evolved over time, the Generalized Planning Analysis method provides a scientific method to relate peak hour HCM-calculated results to acceptable ADT volumes on certain classes of roads. The acceptable 24-hour volume is adjusted to account for design elements that move traffic efficiently. These include traffic signal spacing and timing. The results provided by the method were tailored to Urban Core streets to account for peak hour spreading. Because the Urban Core will become a destination rather than a waypoint, the 24-hour volume will be less concentrated in peak commuting hours. The maximum capacities shown in this table assume implementation of traffic and multi-modal improvements.

3. ***Identification of appropriate performance standards for the Urban Core Circulation Element.*** The Urban Core Circulation Element would accommodate all modes of travel (vehicular, transit, bicycling, and walking) and a variety of different trip types (shopping, entertainment, dining, as well as commuting). As discussed above, the existing capacities and performance standards used for streets throughout the City of Chula Vista emphasize vehicular commuting trips, and have the unintended effect of limiting the potential for a more urbanized downtown environment. Accordingly, within the Urban Core and its immediate environs (where the Urban Core Circulation Element is located), the minimum performance standard on the Urban Core Circulation Element is LOS D.

The acceptable capacities for these roadways assume implementation of traffic and multi-modal improvements to accommodate all modes of travel (vehicular, transit, bicycling, and walking) and a variety of different trip types (shopping, entertainment, dining, as well as commuting).

The approach of using a performance standard of LOS D for more urbanized areas is not unique to Chula Vista. Both the City and County of San Diego use LOS D as their performance standard in urbanized and built-out communities. The City of San Diego uses LOS C as the minimum performance standard in newly developing areas. The City of Chula Vista will have the same two-tiered performance standards that are tailored to the context of surrounding development. In addition, the City of San Diego has

[5]Florida Department of Transportation, Updated Jan. 7, 2003

[6]Chapter 15, Urban Streets

established a performance standard of LOS E for streets in their Centre City district. Appendix E of the Traffic Technical Study contains a summary of LOS performance standards for other jurisdictions in the San Diego region.

The adoption of the proposed Urban Core Roadway Classifications as specified in the General Plan Update would not result in a significant impact pursuant to Threshold No. 1 because the policies in the proposed General Plan Update provide for the establishment of an Urban Core Improvement Program (policies associated with Objective LUT 26), provide for adequate mobility (policies associated with Objective LUT 46), and ensure redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea that would provide a balance of land uses (policies associated with Objective LUT 47). The plan, as proposed, would provide an adequate urban amenities program, and facilitates multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.

Level of Service C is described as follows in previously referenced Table 5.10-2: "(r)epresents stable operations with acceptable delays; if an intersection is signalized, a few drivers may have to wait through one signal cycle. The ability to change lanes and maneuver may be more restricted than LOS B." Level of Service D is described as: "(c)ongestion occurs and a small change in volume increases delays substantially during short periods, but excessive backups do not occur." There are a number of reasons why LOS D is an acceptable performance standard for the Urban Core Circulation Element. Several are related to concepts of urban context and driver expectation. As discussed above, the City of San Diego applies a three-tiered approach, with LOS C in newly developing areas, LOS D in more urbanized locations, and LOS E in the Centre City area. As discussed in the San Diego memo (see Appendix D of the traffic report), drivers in a downtown environment do not expect to pass through built-up areas at high speed. Instead, given the type and intensity of uses, the ability to attract and accommodate visitors becomes a higher priority in the Urban Core or other downtown areas than moving cars. Adhering to an LOS C performance standard would likely require street widening to provide additional capacity, with associated impacts to urban character (e.g., wide, pedestrian-unfriendly streets), not to mention the public costs of acquiring right-of-way.

Level of Service D is widely used in numerous other cities in the region, many with a primarily suburban character. The San Diego Traffic Engineering Council/Institute of Transportation Engineers (SANTEC/ITE) Traffic Impact Study Guidelines have established LOS D as an acceptable performance standard, regardless of urban/suburban/rural locale. The cities of Coronado, El Cajon, Encinitas, Escondido, National City, Poway, San Marcos, Solana Beach, and Vista use this performance standard. Given that LOS D is widely used in the San Diego region as a minimum performance standard and given that the City's existing performance standard of LOS C

is not appropriate for a more urbanized context, the selection of the LOS D performance standard for the Urban Core is appropriate and is implemented in the General Plan.

5.10.3.2 Threshold 2: Circulation Impacts

The project's circulation impacts were determined based on a comparison of long-term future conditions to existing conditions (i.e., "plan-to-ground"). The traffic implications of proposed land use/transportation network alternatives were evaluated using the SANDAG TRANPLAN regional traffic model, which is based on Series 10 employment and population projections for the San Diego region. This computerized model takes land use and transportation network information as inputs and estimates the volumes of traffic on existing and future roadways under long-term future conditions using the four-step Urban Transportation Planning Process. Table 5.10-3 summarizes the land use and network assumptions for each alternative evaluated in the study. The planning "horizon year" for this study is the Year 2030. Regional transportation infrastructure was modeled using SANDAG's "reasonably expected" Mobility 2030 assumptions. The impact analysis assumed that the city was built out in 2030, but that the surrounding area was consistent with the SANDAG land use assumptions for the year 2030.

Threshold 2 states that a significant impact to circulation would occur if the changes in the land uses and the circulation plan for the city resulting from adoption of the proposed General Plan Update result in the following:

A. For non-Urban Core Circulation Element roadways (Expressway, Prime Arterial, Major Street, Town Center Arterial, Class I Collector):

A.1. A roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout is considered a significant impact.

A.2. A roadway segment that currently operates at LOS D or E and with the proposed changes would operate at LOS E or F at General Plan buildout, respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

B. For Urban Core Circulation Element roadways (Gateway Street, Urban Arterial, Commercial Boulevard, Downtown Promenade):

B.1. A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout is considered a significant impact.

TABLE 5.10-3
GENERAL PLAN UPDATE TRAFFIC MODEL ASSUMPTIONS

		Land Use Assumptions			Network Assumptions		
	Analysis Scenario	Chula Vista	Study Area	Region	Chula Vista	Study Area	Region
I	Adopted General Plan, Year 2030 (model run 50)	Adopted[1]	2030	2030	Adopted	Toll/4 lanes	Existing, with LRT in Otay Ranch
II	GPU Scenario 1, Year 2030 (model run 52A)	Alt. 1[1]	2030	2030	Proposed w/o La Media[2]	Toll/4 lanes	Existing only
III	GPU Scenario 2, Year 2030 (model run 52B)	Alt. 2[1]	2030	2030	Proposed w/o La Media	Toll/4 lanes	Existing only
IV	GPU Scenario 2, Year 2030 (model run 52C)	Alt. 3[1]	2030	2030	Proposed w/o La Media	Toll/4 lanes	Existing only
V	GPU Preferred Alt., Year 2030 (model run 52D)	Preferred[1]	2030	2030	Proposed w/o La Media	Toll/4 lanes	Existing only
VI	GPU Preferred Alt., Year 2030 (model run 52E)	Preferred[1]	2030	2030	Proposed	Toll/4 lanes	Existing only
VII	Regional Transit Vision, Year 2030 (model run 54)	Preferred[1]	2030	2030	Proposed w/o La Media	Toll/4 lanes	RTV[3]
VIII	GPU Preferred Alt., Buildout (model run 56B)	Preferred[1]	Buildout[4]	2030	Proposed w/o La Media	Freeway/6 and 8 lanes	RTV[3]
IX	GPU Preferred Alt., Buildout with La Media (model run 56C)	Preferred[1]	Buildout[4]	2030	Proposed[5]	Freeway/6 and 8 lanes	RTV[3]
X	GPU Preferred Alt., Buildout proposed uses in Otay Mesa (model run 58C)	Preferred[1]	Buildout[6]	2030	Proposed w/o La Media	Freeway/6 and 8 lanes	RTV[3]
XI	GPU Preferred Alt., Buildout with La Media (model run 56D)	Preferred[1]	Buildout[6]	2030	Proposed w/o La Media	Freeway/6 and 8 lanes	RTV[3]

SOURCE: Kimley-Horn and Associates 2005.

[1]All alternatives assumed 100 percent buildout of planned future land uses in Chula Vista.
[2]Refer to Figure 1.2-1 for proposed circulation element changes to the adopted General Plan.
[3]Refer to Figure 1.2-3 for Regional Transit Vision RTV routes.
[4]Adopted land uses in Otay Mesa.
[5]Proposed circulation element.
[6]Proposed land uses in Otay Mesa.

B.2. A roadway segment that currently operates at LOS E would operate at LOS F at General Plan buildout, or which operates at LOS E or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

C. For freeways:

C.1 A freeway segment that currently operates at LOS C and would operate at LOS D, E, or F at General Plan buildout is considered a significant impact.

C.2 A freeway way segment that currently operates at LOS D or E would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

The General Plan Update proposes the establishment of Urban Core roadways and includes revisions to the classification of certain non-Urban Core roadways. Figure 5.10-1 shows the proposed non-Urban Core roadway network changes. As depicted in this figure, there are a number of proposed changes that would alter the capacity of the city's roadway network. Figure 5.10-2 presents the proposed General Plan Update roadway classifications.

The following paragraphs summarize the non-Urban Core roadway network changes that have been proposed as part of the General Plan Update in addition to the adoption of the Urban Core roadway system. These are important for the analysis because they affect the capacity of the system and the predicted level of service.

- Removal of Main Street from Heritage Road to La Media Road: This segment has been removed due to the presence of a Multi-Habitat Planning Area of the Multiple Species Conservation Program. Access to the active recreation uses in the Otay Valley will be addressed as individual SPA plans are developed for the area.

- Realignment and reclassification of Rock Mountain Road to connect to Main Street at Heritage Road: This segment is designed and sized to replace the removal of Main Street between Heritage Road and La Media Road (please see Figure 5.10-1) in order to accommodate east/west travel in the southeastern portion of the city. It was classified as a four-lane Class I Collector in the adopted General Plan, but is proposed to be reclassified as a six-lane Prime Arterial from Heritage Road to SR-125, which would increase its LOS C volume from 22,000 to 50,000 ADT.

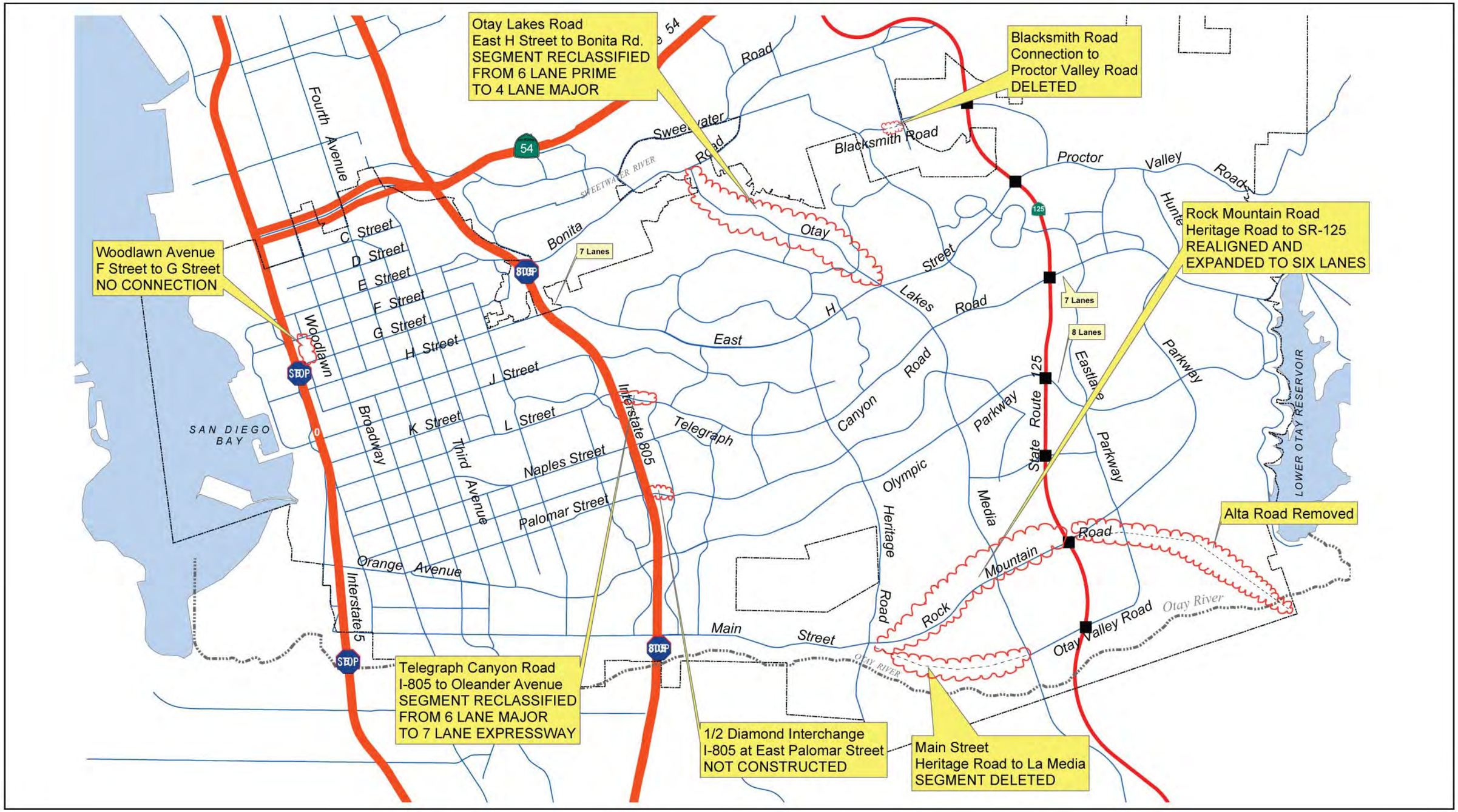

FIGURE 5.10-1
Transportation Network Changes

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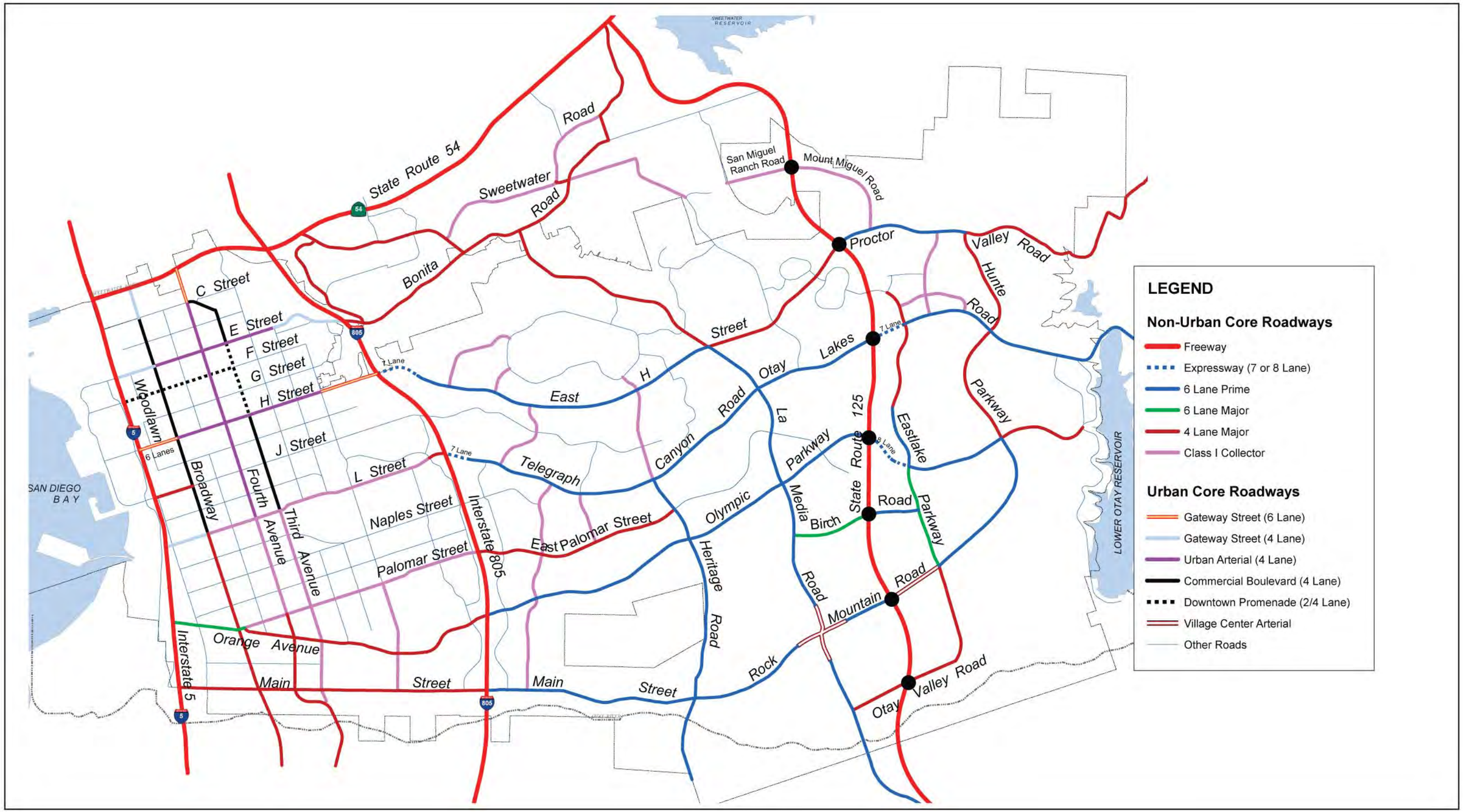

FIGURE 5.10-2
Proposed Roadway Classifications

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- Removal of Alta Road south and east of Eastlake Parkway: This segment has been removed to be consistent with the County of San Diego East Otay Mesa Specific Plan, which has removed the portion of the roadway in the unincorporated area.

- Reduction of travel lanes on H Street between Broadway and Hilltop Drive from six to four: This change is necessitated by existing land use patterns along this roadway, which preclude widening without significant property acquisition for right-of-way.

- Removal of East Palomar Street/I-805 interchange: This interchange would be located beneath a high voltage power line. The Public Utilities Commission restricts the operation of traffic signals underneath high power lines. Accordingly, this project has been removed from the Capital Improvement Program and Transportation Development Impact Fee Program. Given the proximity of the East Orange Avenue/Olympic Parkway interchange to this location, a new interchange at East Palomar Street could conflict with Caltrans' standards on interchange spacing and weaving distances.

- Removal of the Woodlawn Avenue connection between F and G Streets: This removal accounts for the construction of buildings in the path of this roadway between F and G Streets.

- Reduction of travel lanes on Otay Lakes Road, from Bonita Road to East H Street, from six to four: This reduction is necessary due to the engineering and environmental considerations. The Preferred Plan forecast volume on this segment is 30,400, or 400 ADT above the LOS C volume for a four-lane Major. Given the nature of fronting land uses, the absence of side friction (limited intersections, limited driveways, and no on-street parking), and improved traffic signal coordination, the additional 400 ADT of demand does not warrant the additional two travel lanes (see Appendix E).

  Pursuant to additional analysis of the buildout conditions, it is anticipated that there would be a reduced volume on this segment of Otay Lakes Road due to the change of SR-125 from a tollway to a freeway. SR-125 is expected to attract volumes from parallel north/south roadways, such as Otay Lakes Road.

- Removal of the Blacksmith Road connection to Proctor Valley Road: This roadway extension would bisect an existing Caltrans open space mitigation area that is to be preserved in perpetuity.

An assessment of the significance of impacts for this threshold involved comparing the predicted level of service for each scenario to the existing level of service on the roadway segment. To assess the significance of circulation impacts resulting from the changes in the land uses and the circulation plan for the city resulting from adoption of the General

Plan Update, 109 roadway segments were evaluated. Table 5.10-4~~3~~ provides the levels of service for these segments for the existing condition, the Preferred Plan, and the three Scenarios. It is the comparison of the Preferred Plan and each of the Scenarios to the existing condition that serves as the basis for the assessment of a potential impact in respect to Threshold 2.

As a result of this analysis, 15 non-Urban Core roadway segments that currently operate at LOS C or better are forecasted to operate at LOS D or worse with the adoption of the Preferred Plan. This is a significant impact. Scenarios 1, 2, and 3 are projected to result in 18, 18, and 19 segments, respectively, that currently operate at LOS C or better and are forecasted to operate at LOS D or worse. This is a significant impact. No Urban Core roadway segments were found to have a significant adverse impact under the Preferred Plan, but a single segment will experience a significant traffic impact under both Scenarios 1 and 2. The following detail provides the explanation for the results of the evaluation of Threshold 2.

A. NON-URBAN CORE ROADWAYS

As discussed above, existing and future levels of service were calculated for each roadway segment evaluated. The future condition was determined for the Preferred Plan and each of the scenarios was evaluated by comparing the existing level of service to the future levels of service by scenario (see Table 5.10-4~~3~~). In addition, all Year 2030 scenarios assume that SR-125 will operate as a tollway. The following results are organized by each component of Threshold 2.

A.1. A roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout is considered a significant impact.

Preferred Plan: The following 15 non-Urban Core roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Preferred Plan and would, therefore, represent a significant impact. Specific levels of service changes for each of the following segments are provided in Table 5.10-4~~3~~.

E Street between Marina Parkway and I-5
H Street between Marina Parkway and I-5
J Street between Marina Parkway and Bay Boulevard
L Street between Hilltop Drive and I-805
Main Street between I-5 and Broadway
Main Street from Broadway to Hilltop Drive
Main Street from Hilltop Drive to I-805
Otay Lakes Road between SR-125 and Eastlake Parkway

TABLE 5.10-4~~3~~
ANALYZED ROADWAY SEGMENTS LEVEL OF SERVICE

Segment				Preferred	Scenario		
Street	From	To	Existing	Plan	1	2	3
Urban Core							
E Street	I-5	Woodlawn Avenue	C	B	C	B	B
E Street	Woodlawn Avenue	Broadway	A	C	**E**	C	C
E Street	Broadway	First Avenue	B	A	A	A	A
E Street	First Avenue	I-805	B	A	A	A	A
F Street	Marina Parkway	Broadway	A	A	B	A	A
F Street	Broadway	Third Avenue	A	C	D	D	C
H Street	I-5	Broadway	D	C	C	C	B
H Street	Broadway	Hilltop Drive	B	D	D	D	C
H Street	Hilltop Drive	I-805	F	C	C	C	C
Broadway	SR-54	C Street	A	A	A	A	A
Broadway	C Street	E Street	A	C	D	**E**	D
Broadway	E Street	H Street	B	D	D	D	D
Broadway	H Street	L Street	B	C	D	C	D
Fourth Avenue	C Street	E Street	B	A	A	A	A
Fourth Avenue	E Street	H Street	B	A	A	A	A
Fourth Avenue	H Street	L Street	A	A	A	A	A
Third Avenue	C Street	E Street	A	A	A	A	A
Third Avenue	E Street	H Street	A	A	A	A	A
Third Avenue	H Street	L Street	D	B	B	B	B
Non-Urban Core							
E Street	Marina Parkway	I-5	A	**F**	**F**	**F**	**F**
H Street	Marina Parkway	I-5	n/a	**F**	**F**	**F**	**F**
H Street	I-805	Hidden Vista Drive	E	E	E	E	E
H Street	Hidden Vista Drive	Paseo del Rey	D	D	D	D	D
H Street	Paseo del Rey	Paseo Ranchero	C	C	C	C	C
H Street	Paseo Ranchero	Otay Lakes Road	A	A	A	A	A
H Street	Otay Lakes Road	SR-125	A	A	A	A	A
Birch Road	La Media	SR-125	n/a	B	B	B	B
Birch Road	SR-125	Eastlake Parkway	n/a	A	A	A	A
J Street	Marina Parkway	I-5	A	**F**	**F**	**F**	**F**
J Street	I-5	Broadway	A	B	C	C	C
L Street	I-5	Broadway	A	A	B	A	A
L Street	Broadway	Hilltop Drive	A	C	C	C	C
L Street	Hilltop Drive	I-805	C	**D**	**E**	**D**	**E**
Palomar Street	I-5	Broadway	B	C	**D**	**D**	**D**
Palomar Street	Broadway	Hilltop	A	B	C	C	C
Palomar Street	Hilltop	I-805	A	A	A	A	A
Palomar Street	I-805	Heritage Road	A	A	A	A	A
Orange Avenue	Palomar Street	Hilltop Drive	A	A	A	A	A
Orange Avenue	Hilltop Drive	I-805	B	B	C	B	C
Main Street	I-5	Broadway	B	**F**	**E**	**F**	**F**
Main Street	Broadway	Hilltop Drive	A	**D**	C	**D**	**E**
Main Street	Hilltop Drive	I-805	A	**E**	**E**	**E**	**F**
Main Street	I-805	Heritage Road	A	C	C	**D**	**D**
Otay Valley Road	La Media	SR-125	n/a	A	A	A	A
Otay Valley Road	SR-125	Eastlake Parkway	n/a	A	A	A	A
Sweetwater Road	Plaza Bonita Road	Plaza Bonita Center Rd.	A	B	C	B	B
Sweetwater Road	Plaza Bonita Center Rd.	Willow Road	A	A	A	A	A
Sweetwater Road	Willow Road	SR-54	A	A	A	A	A

TABLE 5.10-4~~3~~
ANALYZED ROADWAY SEGMENTS LEVEL OF SERVICE
(continued)

Segment				Preferred	Scenario		
Street	From	To	Existing	Plan	1	2	3
Bonita Road	I-805	Plaza Bonita Road	F	**F**	**F**	**F**	**F**
Bonita Road	Plaza Bonita Road	Willow Street	D	D	**D**	D	**D**
Bonita Road	Willow Street	Central Avenue	D	**E**	**E**	**E**	**E**
Bonita Road	Central Avenue	Sweetwater Road	B	A	A	A	A
Central Avenue	Sweetwater Road	Bonita Road	A	A	A	A	A
Central Avenue	Bonita Road	Corral Canyon Road	A	A	A	A	A
Proctor Valley Rd.	Mount Miguel Road	Hunte Parkway	A	A	A	A	A
Telegraph Canyon Rd.	I-805	Oleander Avenue	F	E	**F**	**F**	**F**
Telegraph Canyon Rd.	Oleander Avenue	Paseo del Rey	E	**F**	**F**	**F**	**F**
Telegraph Canyon Rd.	Paseo del Rey	Paseo Ranchero	D	**E**	**E**	**E**	**E**
Telegraph Canyon Rd.	Paseo Ranchero	Otay Lakes Road	B	A	B	B	B
Otay Lakes Road	Bonita Road	Avenida del Rey	D	D	C	C	C
Otay Lakes Road	Avenida del Rey	H Street	C	B	B	B	B
Otay Lakes Road	H Street	Telegraph Canyon Rd.	B	A	A	A	A
Otay Lakes Road	Telegraph Canyon Rd.	SR-125	B	C	C	C	C
Otay Lakes Road	SR-125	Eastlake Parkway	B	**D**	**E**	**E**	**E**
Otay Lakes Road	Eastlake Parkway	Lane Avenue	A	**D**	**D**	**D**	**D**
Otay Lakes Road	Lane Avenue	Hunte Parkway	A	A	A	A	A
Olympic Parkway	I-805	Oleander Avenue	B	**D**	**D**	**D**	**D**
Olympic Parkway	Oleander Avenue	Heritage Road	A	C	**D**	C	**D**
Olympic Parkway	Heritage Road	La Media	n/a	C	C	C	C
Olympic Parkway	La Media	SR-125	n/a	A	B	A	B
Olympic Parkway	SR-125	Eastlake Parkway	n/a	A	A	A	A
Olympic Parkway	Eastlake Parkway	Hunte Parkway	n/a	A	A	A	A
Rock Mountain Rd.	Heritage Road	La Media	n/a	B	B	B	B
Rock Mountain Rd.	La Media	SR-125	n/a	B	C	C	B
Marina Parkway	E Street	J Street	A	**E**	**E**	**E**	**E**
Broadway	L Street	Palomar Street	B	C	**D**	C	C
Broadway	Palomar Street	Main Street	A	C	C	C	C
Broadway	Main Street	Southern city limits	A	B	B	B	B
Fourth Avenue	SR-54	C Street	C	B	B	B	B
Fourth Avenue	L Street	Palomar Street	A	A	B	B	B
Fourth Avenue	Palomar Street	Main Street	A	A	A	A	A
Fourth Avenue	Main Street	Southern city limits	A	A	A	A	A
Third Avenue	L Street	Palomar Street	C	**D**	**D**	**D**	**D**
Third Avenue	Palomar Street	Main Street	B	C	C	C	**D**
Medical Center Dr.	Telegraph Canyon Rd.	Palomar Street	A	A	A	A	A
Brandywine Drive	Palomar Street	Main Street	A	A	A	A	A
Paseo del Rey	East H Street	Telegraph Canyon Rd.	A	A	A	A	A
Paseo Ranchero	H Street	Telegraph Canyon Rd.	A	C	**D**	**D**	**D**
Heritage Road	Telegraph Canyon Rd.	Olympic Parkway	B	B	B	B	B
Heritage Road	Olympic Parkway	Main Street	A	A	A	A	B
Heritage Road	Main Street	Southern city limits	n/a	A	A	A	A
La Media Road	Telegraph Canyon Rd.	Olympic Parkway	A	A	A	A	A
La Media Road	Olympic Parkway	Rock Mountain Road	n/a	A	A	A	A
La Media Road	Rock Mountain Road	Otay Valley Road	n/a	A	A	A	A
La Media Road	Otay Valley Road	Southern city limits	n/a	n/a	n/a	n/a	n/a
Eastlake Parkway	SR-125	Otay Lakes Road	n/a	A	A	A	A
Eastlake Parkway	Otay Lakes Road	Trinidad Cove	A	C	C	C	C

TABLE 5.10-4~~3~~
ANALYZED ROADWAY SEGMENTS LEVEL OF SERVICE
(continued)

Segment				Preferred	Scenario		
Street	From	To	Existing	Plan	1	2	3
Eastlake Parkway	Trindad Cove	Olympic Parkway	A	A	A	A	A
Eastlake Parkway	Olympic Parkway	Hunte Parkway	B	B	A	B	B
Eastlake Parkway	Hunte Parkway	Otay Valley Road	B	**D**	**D**	**D**	C
Lane Avenue	Proctor Valley Road	Otay Lakes Road	A	**D**	**D**	**D**	**D**
Hunte Parkway	Proctor Valley Road	Otay Lakes Road	A	A	A	A	A
Hunte Parkway	Otay Lakes Road	Olympic Parkway	A	A	A	A	A
Hunte Parkway	Olympic Parkway	Eastlake Parkway	A	A	A	A	A
Hunte Parkway	Eastlake Parkway	SR-125	-	**D**	**E**	**E**	**E**
Plaza Bonita Road	Sweetwater Road	Bonita Road	A	A	A	A	A

NOTE: Bold type and shaded areas represent a significant impact.

Otay Lakes Road between Eastlake Parkway and Lane Avenue
Olympic Parkway between I-805 and Oleander
Third Avenue between L Street and Palomar Street
Eastlake Parkway between Hunte Parkway and Otay Valley Road
Lane Avenue between Proctor Valley Road and Otay Lakes Road
Hunte Parkway from Eastlake Parkway to SR-125
Marina Parkway between E street and J Street

Scenario 1: The following 18 roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Scenario 1 and would, therefore, represent a significant adverse impact.

E Street between Marina Parkway and I-5
H Street between Marina Parkway and I-5
J Street between Marina Parkway and Bay Boulevard
L Street between Hilltop Drive and I-805
Palomar Street from I-5 to Broadway
Main Street from I-5 to Broadway
Main Street from Hilltop Drive to I-805
Otay Lakes Road between SR-125 and Eastlake Parkway
Otay Lakes Road between Eastlake Parkway and Lane Avenue
Olympic Parkway between I-805 and Oleander Avenue
Olympic Parkway between Oleander Avenue and Heritage Road
Broadway between L Street and Palomar Street
Third Avenue between L Street and Palomar Street
Paseo Ranchero between H Street and Telegraph Canyon Road
Eastlake Parkway between Hunte Parkway and Otay Valley Road
Lane Avenue between Proctor Valley Road and Otay Lakes Road
Hunte Parkway from SR-125 to Hunte Parkway
Marina Parkway between E Street and J Street

Scenario 2: The following 18 non-Urban Core roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Scenario 2 and would, therefore, represent a significant impact.

E Street between Marina Parkway and I-5
H Street between Marina Parkway and I-5
J Street between Marina Parkway and Bay Boulevard
L Street between Hilltop and I-805
Palomar Street from I-5 to Broadway
Main Street between I-5 and Broadway
Main Street from Broadway to Hilltop Drive
Main Street from Hilltop Drive to I-805

Main Street between I-805 and Heritage Road
Otay Lakes Road between SR-125 and Eastlake Parkway
Otay Lakes Road between Eastlake Parkway and Lane Avenue
Olympic Parkway between I-805 and Oleander Avenue
Third Avenue between L Street and Palomar Street
Paseo Ranchero between H Street and Telegraph Canyon Road
Eastlake Parkway between Hunte Parkway and Otay Valley Road
Lane Avenue between Proctor Valley Road and Otay Lakes Road
Hunte Parkway from SR-125 to Eastlake Parkway
Marina Parkway between E Street and J Street

Scenario 3: The following 19 non-Urban Core roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Scenario 3 and would, therefore, represent a significant impact.

E Street between Marina Parkway and I-5
H Street between Marina Parkway and I-5
J Street between Marina Parkway and Bay Boulevard
L Street between Hilltop Drive and I-805
Palomar Street from I-5 to Broadway
Main Street between I-5 and Broadway
Main Street from Broadway to Hilltop Drive
Main Street from Hilltop Drive to I-805
Main Street between I-805 and Heritage Road
Otay Lakes Road between SR-125 and Eastlake Parkway
Otay Lakes Road between Eastlake Parkway and Lane Avenue
Olympic Parkway between I-805 and Oleander Avenue
Olympic Parkway between Oleander Avenue and Heritage Road
Third Avenue between L Street and Palomar Street
Third Avenue between Palomar Street and Main Street
Paseo Ranchero between H Street and Telegraph Canyon Road
Lane Avenue between Proctor Valley Road and Otay Lakes Road
Hunte Parkway from SR-125 to Eastlake Parkway
Marina Parkway between E Street and J Street

A.2. A roadway segment that currently operates at LOS D or E and would operate at LOS E or F at General Plan buildout, respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

Preferred Plan: The following four non-Urban Core roadway segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more as a

result of the adoption of the Preferred Plan and would, therefore, represent a significant impact.

Bonita Road between I-805 and Plaza Bonita Road
Bonita Road between Willow Street and Central Avenue
Telegraph Canyon Road between Paseo del Rey and Paseo Ranchero
Telegraph Canyon Road between Paseo Ranchero and Otay Lakes Road

Scenario 1: The following six non-Urban Core roadway segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more as a result of the adoption of the Scenario 1 and would, therefore, represent a significant impact.

Bonita Road between I-805 and Plaza Bonita Road
Bonita Road between Plaza Bonita Road and Willow Street
Bonita Road between Willow Street and Central Avenue
Telegraph Canyon Road between I-805 and Oleander Avenue
Telegraph Canyon Road between Paseo del Rey and Paseo Ranchero
Telegraph Canyon Road between Paseo Ranchero and Otay Lakes Road

Scenario 2: The following five non-Urban Core roadway segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more as a result of the adoption of the Scenario 2 and would, therefore, represent a significant impact.

Bonita Road between I-805 and Plaza Bonita Road
Bonita Road between Willow Street and Central Avenue
Telegraph Canyon Road between I-805 and Oleander Avenue
Telegraph Canyon Road between Paseo del Rey and Paseo Ranchero
Telegraph Canyon Road between Paseo Ranchero and Otay Lakes Road

Scenario 3: The following six non-Urban Core roadway segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more as a result of the adoption of the Scenario 3 and would, therefore, represent a significant impact.

Bonita Road between I-805 and Plaza Bonita Road
Bonita Road between Willow Street and Central Avenue
Bonita Road between Willow Street and Central Avenue
Telegraph Canyon Road between I-805 and Oleander
Telegraph Canyon Road between Paseo del Rey and Paseo Ranchero
Telegraph Canyon Road between Paseo Ranchero and Otay Lakes Road

B. URBAN CORE ROADWAYS

B.1. A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout is considered a significant impact. Specific levels of service changes for each of the following segments are provided in Table 5.10-4~~3~~.

Preferred Plan: All segments operate at LOS D or better.

Scenario 1: The following roadway segment currently operates at LOS D or better, but would decline to LOS E or worse:

E Street from Woodlawn Avenue to Broadway

Scenario 2: The following roadway segment currently operates at LOS D or better, but would decline to LOS E or worse:

Broadway from C Street to E Street

Scenario 3: All segments operate at LOS D or better.

B.2. A roadway segment that currently operates at LOS E would operate at LOS F at General Plan buildout, or which operates at LOS E or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

The only segments operating at LOS E or worse are described as impacts under criterion B1 above. There are no impacts under this criterion.

C. FREEWAYS

The following freeways were considered in the traffic analysis: I-5 and I-805 and State Routes 125 and 54. These highways were divided into 24 segments and levels of service were calculated for each segment. Table 5.10-5~~4~~ presents the levels of service by scenario for these segments. Under the Preferred Plan, all but five segments represent a significant traffic impact. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways.

C.1. A freeway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D, E, or F at General Plan buildout is considered a significant impact.

TABLE 5.10-54
FREEWAY SEGMENTS WITH SIGNIFICANT CIRCULATION IMPACTS

Street	From	To	Existing	Preferred Plan	Scenario 1	Scenario 2	Scenario 3
I-5	SR-54	E Street	C	**F**	**F**	**F**	**F**
I-5	E Street	H Street	D	**F**	**F**	**F**	**F**
I-5	H Street	J Street	D	**F**	**F**	**F**	**F**
I-5	J Street	L Street	D	**F**	**F**	**F**	**F**
I-5	L Street	Palomar Street	D	**F**	**F**	**F**	**F**
I-5	Palomar	Main Street	D	**F**	**F**	**F**	**F**
I-805	SR-54	Bonita Road	F	**F**	**F**	**F**	**F**
I-805	Bonita Road	H Street	F	**F**	**E**	**E**	**E**
I-805	H Street	Telegraph Canyon Rd	C	**D**	**D**	**D**	**D**
I-805	Telegraph Canyon Road	Orange Avenue	C	**D**	C	**D**	C
I-805	Orange Avenue	Main Street	B	**E**	**D**	**D**	**D**
SR-125	SR-54	Mount Miguel Road	NA	**F**	**F**	**F**	**F**
SR-125	Mount Miguel	H Street	NA	**F**	**F**	**F**	**F**
SR-125	H Street	Otay Lakes Road	NA	C	**D**	**D**	**D**
SR-125	Otay Lakes Road	Olympic Parkway	NA	C	B	B	B
SR-125	Olympic Parkway	Birch Road	NA	B	B	B	B
SR-125	Birch Road	Rock Mountain Road	NA	B	B	B	B
SR-125	Rock Mountain Road	Otay Valley Road	NA	C	B	B	B
SR-54	I-5	National City Blvd.	C	**E**	**F**	**F**	**F**
SR-54	National City Blvd.	Highland Avenue	D	**F**	**F**	**F**	**F**
SR-54	Highland Avenue	I-805	D	**F**	**F**	**F**	**F**
SR-54	I-805	Plaza Bonita Center Way	F	**F**	**F**	**F**	**F**
SR-54	Plaza Bonita Center Way	Woodman Street	F	**F**	**F**	**F**	**F**
SR-54	Woodman Street	Briarwood Road	F	**F**	**F**	**F**	**F**

NOTE: Bold type and shaded areas represent a significant impact.

Preferred Plan: The following freeway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Preferred Plan and would, therefore, represent a significant impact:

I-5 between SR-54 and E Street
I-805 between H Street and Telegraph Canyon Road
I-805 between Telegraph Canyon Road and Orange Avenue
I-805 between Orange Avenue and Main Street
SR-125 between SR-54 and Mount Miguel Road
SR-125 between Mount Miguel Road and H Street
SR-54 between I-5 and National City Boulevard

Scenario 1: The following freeway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of Scenario 1 and would, therefore, represent a significant impact.

I-5 between SR-54 and E Street
I-805 between H Street and Telegraph Canyon Road
I-805 between Orange Avenue and Main Street
SR-125 between SR-54 and Mount Miguel Road
SR-125 between Mount Miguel Road and H Street
SR-125 between H Street and Otay Lakes Road
SR-54 between I-5 and National City Boulevard

Scenario 2: The following freeway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of Scenario 2 and would, therefore, represent a significant impact.

I-5 between SR-54 and E Street
I-805 between H Street and Telegraph Canyon Road
I-805 between Orange Avenue and Main Street
I-805 between Telegraph Canyon Road and Orange Avenue
SR-125 between SR-54 and Mount Miguel Road
SR-125 between Mount Miguel Road and H Street
SR-125 between H Street and Otay Lakes Road
SR-54 between I-5 and National City Boulevard

Scenario 3: The following freeway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse as a result of the adoption of the Scenario 3 and would, therefore, represent a significant impact.

I-5 between SR-54 and E Street
I-805 between H Street and Telegraph Canyon Road
I-805 between Orange Avenue and Main Street

SR-125 between SR-54 and Mount Miguel Road
SR-125 between Mount Miguel Road and H Street
SR-125 between H Street and Otay Lakes Road
SR-54 between I-5 and National City Boulevard

C.2. A freeway segment that currently operates at LOS D or E would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by 5 percent or more at General Plan buildout is considered a significant impact.

Preferred Plan, Scenario 1, Scenario 2, and Scenario 3: The following freeway segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more as a result of the adoption of the Preferred Plan or any of the Scenarios and would, therefore, represent a significant impact.

I-5 between E Street and H Street
I-5 between H Street and J Street
I-5 between J Street and L Street
I-5 between L Street and Palomar Street
I-5 between Palomar Street and Main Street
I-805 between SR-54 and Bonita Road
SR-54 between National City Boulevard and Highland Avenue
SR-54 between Highland Avenue and I-805
SR-54 between I-805 and Plaza Bonita Center Way
SR-54 between Plaza Bonita Center Way and Woodman Street
SR-54 between Woodman Street and Briarwood Road

In addition, the Preferred Plan (only) will have a significant impact on the following freeway segment:

I-805 between Bonita Road and H Street

5.10.4 Level of Significance Prior to Mitigation

5.10.4.1 Threshold 1: Urban Core Roadways

Threshold 1 states that the adoption of the Urban Core Roadway Classifications specified in the General Plan Update would result in a significant impact if adoption of an urban roadway system would not provide an adequate urban amenities program, and would not facilitate multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.

The adoption of the urban roadway system is considered to be self-mitigating because the policies in the proposed General Plan Update provide for the establishment of an Urban

Core Improvement Program (policies associated with Objective LUT 26), provide for adequate mobility (policies associated with Objective LUT 47), and ensure redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea would provide a balance of land uses. The adoption of the Urban Core Roadway Classifications (policies associated with Objective LUT 46) as specified in the General Plan Update would not result in a significant impact because the plan, as proposed, would provide an adequate urban amenities program, and would facilitate multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.

Specifically, Policy LUT 49.15 would require the preparation of urban form guidelines and standards for development as part of the Urban Core Specific Plan, and Policy LUT 49.16 would require the establishment of policies, development standards, and/or design guidelines in the Urban Core Specific Plan to address where high-rise buildings should be concentrated, how to establish and/or reinforce pedestrian-scaled development, and how site and building design should respond to public view corridors. Policy LUT 49.17 would ensure the establishment of design standards for mixed-use development that achieves a high-quality pedestrian-scaled environment and promotes side or rear located parking areas, street-front windows and entries, and public and private open space, and Policy LUT 49.18 would create a pedestrian-oriented realm by requiring ground-floor retail or public uses as a requirement of the adoption of the Urban Core Specific Plan.

Mobility is assured through compliance with the policies associated with Objective LUT 48 with the development and implementation of the Urban Core Specific Plan. Policy LUT 48.2 would require the provision of adequate sidewalk space on heavily traveled pedestrian corridors within the Urban Core Subarea. Policy LUT 48.3 would provide for mid-block pedestrian crossings and sidewalk curb extensions, where feasible, to shorten pedestrian walking distances, and Policy LUT 48.4 would require the location of secure bicycle parking facilities near transit centers and major public and private buildings.

Finally, Objective LUT 26 stresses the intent of the City to "Establish an Urban Core Improvements Program for the Urban Core Subarea." Policies associated with this objective include:

LUT 26.1: Through the Urban Core Specific Plan, determine an urban framework for streets and gateways, transit accommodation, a network of parks and urban plazas, pedestrian-oriented streets, pedestrian and bicycle linkages, and activity nodes.

LUT 26.2: Establish an Urban Core Improvements Program that addresses the urban framework elements, implements Urban Mobility techniques

and parking strategies, determines what is needed in various areas, and sets priorities for implementation.

LUT 26.3: Develop methods to finance the Urban Core Improvements Program, including but not limited to Developer Impact Fees, tax increment financing (in redevelopment areas), and/or an incentives program.

These policies, that are to be implemented with the establishment and development of the Urban Core Specific Plan, would provide an adequate urban amenities program, and would facilitate multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.

5.10.4.2 Threshold 2: Circulation Impacts

Threshold 2 indicates that a significant impact to circulation would occur if the changes in the land uses and the circulation plan for the city resulting from adoption of the General Plan Update would cause non-Urban Core Circulation Element roadways that currently operate at LOS C or better to operate at LOS D or worse or would cause a non-Urban Core roadways that currently operate at LOS D or E to operate at LOS E or F, or which operates at LOS D, E, or F and would worsen by 5 percent.

Threshold 2 also states that for Urban Core Circulation Element roadways, a roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout is considered a significant impact, as is a roadway segment that currently operates at LOS E or F and would worsen by 5 percent or more, or a segment currently at LOS E declining to LOS F.

A. NON-URBAN CORE ROADWAYS

The Preferred Plan and each of the Scenarios represent a significant impact to non-Urban Core Circulation Element roadways because several roadway segments that currently operate at LOS C or better are predicted to operate at LOS D or worse, and other segments that currently operate at LOS D, E, or F are predicted to worsen by 5 percent or more with the proposed changes. For the Preferred Plan, 15 non-Urban Core roadway segments were determined to have a significant impact with respect to Threshold 2. Scenario 1, Scenario 2, and Scenario 3 are predicted to result in significant impacts to the 18, 18, and 19 segments, respectively.

B. URBAN CORE ROADWAYS

Scenarios 1 and 2 will have a significant impact on one Urban Core roadway segment.

C. FREEWAYS

Under the Preferred Plan, all but five freeway segments would be significantly impacted. These include segments of Interstates 5 and 805 and State Routes 125 and 54. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways.

5.10.5 Mitigation Measures

5.10.5.1 Threshold 1: Urban Core Roadways

The GPU does not result in significant impacts on Urban Core Roadways pursuant to Threshold 1 because the policies set forth in the proposed General Plan Update provide for the establishment of an Urban Core Improvement Program (policies associated with Objective 26), provide for adequate mobility (policies associated with Objective 48), and ensure redevelopment, infill, and new development activities within the Northwest's Urban Core Subarea that would provide a balance of land uses (policies associated with Objective 49). The plan, as proposed, would provide an adequate urban amenities program, and facilitates multimodal transportation systems sufficient to allow the Urban Core of the City of Chula Vista to achieve the mobility required to serve proposed land use densities.

5.10.5.2 Threshold 2: Circulation Impacts to Urban and Non-Urban Core Roadways.

Table 5.10-6~~5~~ provides a list of measures or operational improvements that would lessen the Circulation Element impacts identified in this report associated with Threshold 2, but because the circulation impacts are defined based on roadway capacity, only measures that increase capacity are available to avoid those effects. The adoption of the following measures provides a means to ensure that roadway improvements are provided in accordance with need. Because the measures specified in Table 5.10-6~~5~~ are operational and would not increase 24-hour roadway capacity, they are insufficient to avoid the impacts identified above.

5.10-1 Prior to issuance of building permits, individual projects shall either contribute to the existing Traffic Signal Fee Program for applicable projects in Chula Vista or secure and construct the improvements specified in Table 5.10-~~5~~6 that are within the area of benefit to the satisfaction of the City Engineer.

For projects in eastern Chula Vista, the existing Transportation Development Impact Fee (TDIF) program and the Traffic Signal Fee Program collects fees from proposed developments on an Equivalent Dwelling Unit (EDU) basis and allocates the funds to construct needed transportation infrastructure in eastern Chula Vista. The Growth Management Program monitors traffic flow on key

TABLE 5.10-6~~5~~
MITIGATION FOR SIGNIFICANT CIRCULATION IMPACTS

Street	From	To	Mitigation	Mitigation Required For:			
				Preferred Plan	Scenario 1	Scenario 2	Scenario 3
E Street	Marina	I-5	Given the short length of this segment and its proximity to a freeway interchange, no feasible mitigation has been identified. Impact is significant and unmitigated.	**X**	**X**	**X**	**X**
E Street	Woodlawn	Broadway	Given the short length of this segment and its proximity to a freeway interchange, no feasible mitigation has been identified. Impact is significant and unmitigated.		**X**		
H Street	Marina	I-5	Given the short length of this segment and its proximity to a freeway interchange, no feasible mitigation has been identified. Impact is significant and unmitigated.	**X**	**X**	**X**	**X**
J Street	Marina	I-5	Given the short length of this segment and its proximity to a freeway interchange, no feasible mitigation has been identified. Impact is significant and unmitigated.	**X**	**X**	**X**	**X**
Marina Parkway	E	J	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment	**X**	**X**	**X**	**X**
L Street	Hilltop	I-805	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Palomar Street	I-5	Broadway	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment		**X**	**X**	**X**

TABLE 5.10-6~~5~~
MITIGATION FOR SIGNIFICANT CIRCULATION IMPACTS
(continued)

Street	From	To	Mitigation	Mitigation Required For:			
				Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Main Street	I-5	Broadway	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Main Street	Broadway	Hilltop	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	X		**X**	**X**
Main Street	Hilltop	I-805	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	X	**X**	**X**	**X**
Main Street	I-805	Heritage	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment			**X**	**X**
Otay Lakes Road	SR-125	Eastlake Parkway	This segment is classified as a seven-lane facility; no feasible improvements are available. Impact is significant and unmitigated	**X**	**X**	**X**	**X**
Otay Lakes Road	Eastlake Parkway	Lane Avenue	This segment is classified as a six-lane facility; no feasible improvements are available. Impact is significant and unmitigated.	**X**	**X**	**X**	**X**
Olympic Parkway	I-805	Oleander	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Olympic Parkway	Oleander	Heritage	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment		**X**		**X**
Broadway	L Street	Palomar	Provide operational improvements (e.g., traffic		**X**		

TABLE 5.10-6~~5~~
MITIGATION FOR SIGNIFICANT CIRCULATION IMPACTS
(continued)

Street	From	To	Mitigation	Mitigation Required For:			
				Preferred Plan	Scenario 1	Scenario 2	Scenario 3
			signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment.				
Broadway	C	E	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment.			X	
Third Avenue	L Street	Palomar	Provide operational improvements (i.e., traffic signal coordination) to improve north/south progression on this segment	**X**	X	X	**X**
Third Avenue	Palomar	Main	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment				**X**
Paseo Ranchero	H Street	Telegraph Canyon	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment		**X**	**X**	**X**
Eastlake Parkway	Hunte Parkway	Otay Valley Road	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve north/south progression on this segment	**X**	**X**	**X**	
Lane Avenue	Proctor Valley	Otay Lakes Road	Provide intersection improvements at the Lane Avenue intersections with Proctor Valley Road and Otay Lakes Road to improve north/south traffic flow on this link	**X**	**X**	**X**	**X**

TABLE 5.10-6~~5~~
MITIGATION FOR SIGNIFICANT CIRCULATION IMPACTS
(continued)

Street	From	To	Mitigation	Mitigation Required For:			
				Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Bonita Road	I-805	Plaza Bonita Road	This segment is classified as a four-lane facility; no feasible improvements are available. Impact is significant and unmitigated.	**X**	**X**	**X**	**X**
Bonita Road	Plaza Bonita Road	Willow Street	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment		**X**		**X**
Bonita Road	Willow Street	Central Avenue	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Telegraph Canyon Road	I-805	Crest/ Oleander	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment		**X**	**X**	**X**
Telegraph Canyon Road	Crest/ Oleander	Paseo del Rey	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Telegraph Canyon Road	Paseo del Rey	Paseo Ranchero	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**
Hunte Parkway	Eastlake Parkway	SR-125	Provide operational improvements (e.g., traffic signal coordination, parking and driveway limitations, intersection geometric improvements) to improve east/west progression on this segment	**X**	**X**	**X**	**X**

NOTE: Bold type and shaded areas represent a significant impact.

arterial streets, and provides a means to "meter" the rate of development in order to limit traffic congestion. All three of these existing programs are in place to ensure that the direct traffic impacts of individual projects or the cumulative impacts associated with planned growth are disclosed and mitigated or avoided in accordance with CEQA.

5.10.2 For impacts to the freeway segments listed in Table 5.10-5~~4~~, in order to mitigate impacts of the General Plan Update, the freeways will need to be widened to provide between one and three additional general purpose lanes (or the equivalent capacity in HOV and/or managed lanes), depending on the segment. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways, as such, mitigation is not within the authority of the City of Chula Vista sufficient to avoid the cumulative contribution to traffic on these roadways and the impact remains significant.

Improvement to Mitigate Impacts*

Freeway	Scenario 1	Scenario 2	Scenario 3	Scenario 4
I-5	2	2	2	2
I-805	2	2	2	3
SR-125	1	1	1	1
SR-54	1	1	1	1

*Number of additional general purpose lanes or equivalent capacity in HOV or managed lanes

5.10.6 Level of Significance After Mitigation

Threshold 1: The adoption of the urban street system does not result in a significant impact on mobility. No mitigation is proposed.

Threshold 2: Many of the above-described improvements are operational in nature, and will improve arterial progression during the peak commuting hours. This is likely to translate into higher vehicles speeds and possibly an improvement in LOS on certain segments. While operational improvements will not increase the 24-hour capacity of a segment, which is based on the number of lanes, they will improve traffic flow and reduce peak hour congestion. Operational improvements would reduce impacts but not to a level less than significant. All roadway segments identified in Tables 5.10-~~3~~4 ~~-~~and 5.10-4 as having a significant impact before mitigation will have a significant impact after mitigation, although the intensity of this impact will in most cases be reduced.

5.11 Air Quality

5.11.1 Existing Conditions

5.11.1.1 Regulatory Plans and Policies

Federal Regulations

Ambient Air Quality Standards (AAQS) represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 U.S.C. 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the Clean Air Act [42 U.S.C. 7409], the U.S. Environmental Protection Agency (EPA) developed primary and secondary national ambient air quality standards (NAAQS).

Six pollutants of primary concern are designated: ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and suspended particulates (PM_{10}). The primary NAAQS must "…in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health…." and the secondary standards must "…protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" (42 U.S.C. 7409(b)(2)). The primary standards were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The current state and federal ambient air quality standards are presented in Table 5.11-1. Table 5.11-2 presents a brief summary of the principal sources of each criteria pollutant. Also shown in Table 5.11-2 are the potential health effects associated with exposure to elevated concentrations of the original six criteria pollutants. It is in consideration of these potential health effects that the pollutant concentration thresholds identified in the AAQS were established. Project conformance to the AAQS is discussed in section 5.11.3.3 of this report and health risks due to specific emitters are presented in section 5.11.3.4.

While emission-control programs have created a substantial improvement in regional air quality within the last several decades, clean air standards are still often exceeded in parts of the San Diego Air Basin (SDAB). If an air basin is not in federal attainment for a particular pollutant, the basin is classified as marginal, moderate, serious, severe, or extreme.

In order to meet federal air quality standards in California, the California Air Resources Board (CARB) required each air district to develop its own strategy for achieving the NAAQS. The San Diego Air Pollution Control District (San Diego APCD) prepared the 1991/1992 Regional Air Quality Strategy (RAQS) in response to the requirements set forth

TABLE 5.11-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	0.12 ppm (235 µg/m^3)[8]	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	–		0.08 ppm (157 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	20 µg/m^3		50 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Non-dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	–
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	–	Gas Phase Chemilumine-scence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m^3)		–		
Lead	30 days average	1.5 µg/m^3	AIHL Method 54 (12/74) Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3	Same as Primary Standard	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Fluorescence	0.030 ppm (80 µg/m^3)	–	Pararosoaniline
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	–	
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	1 Hour	0.25 ppm (665 µg/m^3)		–	–	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer –visibility of 10 miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography*	No Federal Standards		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence	No Federal Standards		
Vinyl Chloride[9]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography	No Federal Standards		
See also footnotes on next page.						

TABLE 5.11-1
AMBIENT AIR QUALITY STANDARDS
(continued)

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

[1]California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standrads in Section 70200 of Title 17 of the California Code of Regulations.

[2]National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

[3]Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25º C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25º C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4]Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

[5]National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[6]National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7]Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

[8]New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.

[9]The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

TABLE 5.11-2
CRITERIA POLLUTANTS - SOURCES AND HEALTH EFFECTS

Pollutant	Characteristics	Major Sources	Health Effects
Ozone (O_3)	A highly reactive photochemical pollutant that is formed at ground level from emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) in the presence of sunlight. Ozone is a major component of photochemical smog.	Combustion sources such as engines in automobiles and factories, and evaporation of solvents and fuels.	• Eye irritation • Respiratory function impairment
Carbon Monoxide (CO)	An odorless, colorless and poisonous gas. It is formed during the incomplete combustion of fuels.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.	• Increase of carboxyhemoglobin - Impairment of oxygen transport in the bloodstream • Aggravation of cardiovascular disease • Impairment of central nervous system function • Fatigue, headache, confusion, dizziness • Can be fatal in the case of very high concentrations in enclosed places
Sulfur Dioxide (SO_2)	A colorless gas with a pungent, irritating odor.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.	• Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease
Nitrogen Dioxide (NO_2)	Reddish-brown gas that discolors the air. It is formed during combustion.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants	• Increased risk of acute and chronic respiratory disease

TABLE 5.11-2
CRITERIA POLLUTANTS - SOURCES AND HEALTH EFFECTS
(continued)

Pollutant	Characteristics	Major Sources	Health Effects
Particulate Matter (PM_{10} & $PM_{2.5}$)	Solid and liquid particles of dust, soot, aerosols, and other matter that are small enough to remain suspended in the air for a long period of time.	Combustion, automobiles, field burning, factories, and unpaved roads. Diesel engines for $PM_{2.5}$.Also a result of photochemical processes.	• Aggravation of respiratory effects like asthma and emphysema • May cause heart and lung problems • May carry toxic materials deep into the respiratory system
Lead (Pb)	A toxic heavy metal found in dust and soils.	Lead gasoline additives, metal refineries, manufacture of lead storage batteries, paint	• Brain and other nervous system damage • Carcinogenic • Digestive and other health problems

in Assembly Bill (AB) 2595. The California Clean Air Act (CCAA) was signed into law on September 30, 1988, and became effective on January 1, 1989. The RAQS draft was adopted, with amendments, on June 30, 1992 (County of San Diego 1992). Attached as part of the RAQS are the transportation control measures (TCM) prepared by SANDAG in accordance with the CCAA and adopted by SANDAG on March 27, 1992. The required triennial updates of the RAQS and corresponding TCM were adopted in 1995, 1998, 2001, and 2004. The RAQS and TCM plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The San Diego APCD has also established a set of rules and regulations initially adopted on January 1, 1969, which are periodically reviewed and updated. The rules and regulations define requirements regarding stationary sources of air pollutants and fugitive dust. These rules and regulations are available for review on the agency's website (www.sdapcd.co.san-diego.ca.us).

Local agencies can control neither the source nor the transportation of pollutants from outside the SDAB. The San Diego APCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. Through the use of air pollution control measures outlined in the RAQS, the San Diego APCD has effectively reduced air pollutant levels in the SDAB.

State Regulations

The U.S. EPA allows states the option to develop different (stricter) standards. The state of California generally has set more stringent limits on the six pollutants of national concern (see Table 5.11-1).

The CCAA requires that districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. As a state serious ozone non-attainment area, San Diego is subject to various requirements including the following (County of San Diego 1998):

- Five percent annual reduction in hydrocarbons and oxides of nitrogen emissions from 1987 until standards are attained. If this reduction cannot be obtained, all feasible measures must be implemented.

- Air quality permitting program requiring: (1) Best Available Control Technology (BACT) on new and modified equipment that emits 10 or more pounds per day of nonattainment pollutants or precursors, and (2) emission offsets for all increases in emissions of nonattainment pollutants or precursors at sources with emissions of nonattainment pollutants or precursors of 15 or more tons per year.

TOXIC AIR CONTAMINANTS - DIESEL EMISSIONS

In 1983, the California Legislature enacted a program to identify the health effects of Toxic Air Contaminants (TACs) and to reduce exposure to these contaminants to protect the public health (AB 1807: Health and Safety Code sections 39650-39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

Diesel-exhaust particulate matter emissions have since been established as TACs. Diesel emissions generated within the city and surrounding areas pose a potential hazard to residents and visitors. Following the identification of diesel particulate matter as an air toxic in 1998, the CARB has worked on developing strategies and regulations aimed at reducing the risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (State of California 2000a). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter 75 percent by 2010 and 85 percent by 2020. A number of programs and strategies to reduce diesel particulate matter that have been or are in the process of being developed include (State of California 2005):

The Carl Moyer Program: This program, administered by the CARB, was initially approved in February 1999 and was revised in November 2000. It provides grants to private companies, public agencies, or individuals operating heavy-duty diesel engines to cover an incremental portion of the cost of cleaner on-road, off-road, marine, locomotive, and agricultural irrigation pump engines.

California Diesel Fuel Regulations: The California Diesel Fuel Regulations (13 CCR 2281-2285 and 17 CCR 93114) set limits on the aromatic hydrocarbon and sulfur content for diesel fuel marketed in California. Under these rules, starting in June 2006 in accordance with the phase-in schedule, vehicular diesel fuel must not have a sulfur content that exceeds 15 parts per million by weight. The regulations also specify that on or after October 1, 1993, the aromatic hydrocarbon content of vehicular diesel fuel must not exceed 10 percent by volume.

On-Road Heavy-Duty Diesel New Engine Program: This program develops strategies and regulations to reduce diesel emissions from new on-road diesel powered equipment. Emission control regulations have been coordinated with the U.S. EPA and require that new engines manufactured in and subsequent to 2004 meet new emissions requirements for particulates and other pollutants.

Heavy-Duty Diesel In-Use Strategies Program: The goal of this program is to develop and implement strategies for reducing diesel emissions from existing on- and

off-road diesel engines. The Retrofit Assessment section is responsible for the development and implementation of procedures for assessing, recommending, and approving emission control devices. The Retrofit Implementation section is responsible for developing plans for retrofitting on- and off-road engines with emission reducing technologies. To date plans being developed or implemented have targeted solid waste collection vehicles, on-road heavy-duty public fleet vehicles, and fuel delivery trucks. Generally these plans require that a percentage of the fleet, based on age of the vehicles, be retrofitted on a predetermined schedule.

Other programs include:

Off-Road Mobile Sources Emission Reduction Program: The goal of this program is to develop regulations to control emissions from diesel, gasoline, and alternative-fueled off-road mobile engines. These sources include a range of equipment from lawn mowers to construction equipment to locomotives.

Heavy-Duty Vehicle Inspection and Periodic Smoke Inspection Program: This program provides periodic inspections to ensure that truck and bus fleets do not emit excessive amounts of smoke.

Lower-Emission School Bus Program: Under this program, and in coordination with the California Energy Commission, the CARB is developing guidelines to provide criteria for the purchase of new school buses and the retro-fit of existing school buses to reduce particulate matter emissions.

As an ongoing process, the CARB will continue to establish new programs and regulations for the control of diesel particulate emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public exposure to diesel particulate matter will continue to decline.

STATE IMPLEMENTATION PLAN

The State Implementation Plan (SIP) is the document that sets forth the state's strategies for achieving air quality standards. The San Diego APCD is the agency that regulates air quality in the SDAB and is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. As indicated above, the RAQS and TCM plan developed by the San Diego APCD and SANDAG set forth the steps needed to accomplish attainment of state and federal ambient air quality standards. The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

Regional Transportation Plan/Regional Transportation Improvement Program

SANDAG serves as the region's transportation planning agency. SANDAG also carries out a portion of the air quality planning functions for the San Diego region. The CAA requires that federally supported transportation projects be consistent with the SIP. This requirement is referred to as transportation conformity [42 U.S.C. 7506(c)]. Conformity ensures that new transportation projects do not jeopardize air quality in non-attainment areas and that federal funding and approval are given to transportation activities that are consistent with air quality goals. SANDAG must show that the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) are in conformity with the SIP for meeting air quality standards. The most recent RTP, Mobility 2030 (SANDAG 2003), includes an air quality conformity analysis.

Local Regulations (Chula Vista)

The City of Chula Vista has developed a number of strategies and plans aimed at improving air quality. The City is a part of the Cities for Climate Protection Program headed by the International Council of Local Environmental Initiatives (ICLEI). In November 2002, Chula Vista adopted the Carbon Dioxide (CO_2) Reduction Plan in order to lower the community's major greenhouse gas emissions, strengthen the local economy, and improve the global environment. The CO_2 Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels (City of Chula Vista 2002b). A reduction in the usage of power generated by fossil fuels would result in a decrease in the total amount of air pollutants that are emitted into the atmosphere.

In addition, the City's Growth Management Ordinance and Growth Management Program require an Air Quality Improvement Plan (AQIP) to be prepared for all major development projects. A major development project is defined as a project that would develop 50 or more dwelling units. The purpose and role of the AQIPs is to reduce air emissions and energy use resulting from major development projects through improved project design and construction of structures that exceed mandated energy code requirements.

As future individual projects that would develop 50 or more dwelling units are brought forward under the proposed General Plan, those individual projects would be required to prepare an AQIP for their development. Preparation and implementation of an AQIP for each major development project ensures that the development will fulfill the requirements of the City's Growth Management Ordinance. The AQIP Guidelines establish the process for AQIP compliance.

AQIPs provide an analysis of air pollution impacts that would result from a project and to require the best available design to reduce vehicle trips, improve traffic flow, and other means of reducing emissions. To meet the AQIP requirement, developers must either

participate in the City's Greenstar Program or evaluate the project using the CO_2 INDEX model as outlined in the AQIP Guidelines.

5.11.1.2 Existing Citywide Conditions

Climate

Air quality is a function of both the rate and location of pollutant emissions and how meteorological conditions and topographic features influence these pollutants. Atmospheric conditions such as wind speed and direction and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

The climate of coastal southern California, including Chula Vista, is determined largely by an area of high pressure that is almost always present off the west coast of North America. High-pressure systems are characterized by an upper layer of dry air that warms as it descends. This warm, dry air acts as a lid, restricting the mobility of the cool, ocean-modified air located near the surface creating an inversion or a reversal of the typical decreasing temperature with height structure of the atmosphere.

Moisture trapped in the cool, lowest layer of the atmosphere forms clouds that make up what is referred to as the "marine layer." The marine layer is the prominent weather feature in the SDAB, an area that is defined roughly by the boundary of San Diego County. The temperature inversion associated with the marine layer also plays an important role in determining the quality of the air in the SDAB. During the summer and fall, emissions generated in the region combine with abundant sunshine under the restraining influences of topography and an inversion to create conditions that are conducive to the formation of photochemical pollutants, such as ozone, and secondary particulates, such as sulfates and nitrates. As a result, the quality of the air in the SDAB is often the poorest during the warm summer and fall months.

According to the Western Regional Climate Center, over 90 percent of the yearly total precipitation in Chula Vista occurs during the period of November through April. During these months, the area of high pressure in the eastern Pacific is occasionally displaced allowing for storms to spread unsettled weather including precipitation into southern California. The increase in the mixing of the atmosphere and the rainfall associated with these storms provides Chula Vista with better air quality than is experienced during the summer months.

The prevailing wind in Chula Vista is from the west. As a result, the temperature and moisture content of the air near the ground is strongly influenced by the cool waters of the Pacific Ocean to the west. Occasionally when high pressure is centered near the Great Basin, hot, dry winds called Santa Ana winds develop over southern California. These winds blow

from the east or offshore and can bring some of the warmest temperatures of the year to Chula Vista. Santa Ana wind events occur most often during winter months and can allow pollutant-laden air from the Los Angeles area to be drawn southward into the SDAB as the Santa Ana condition breaks down. Santa Ana conditions can also produce some of the poorest air quality days of the year in Chula Vista.

Air Pollutants

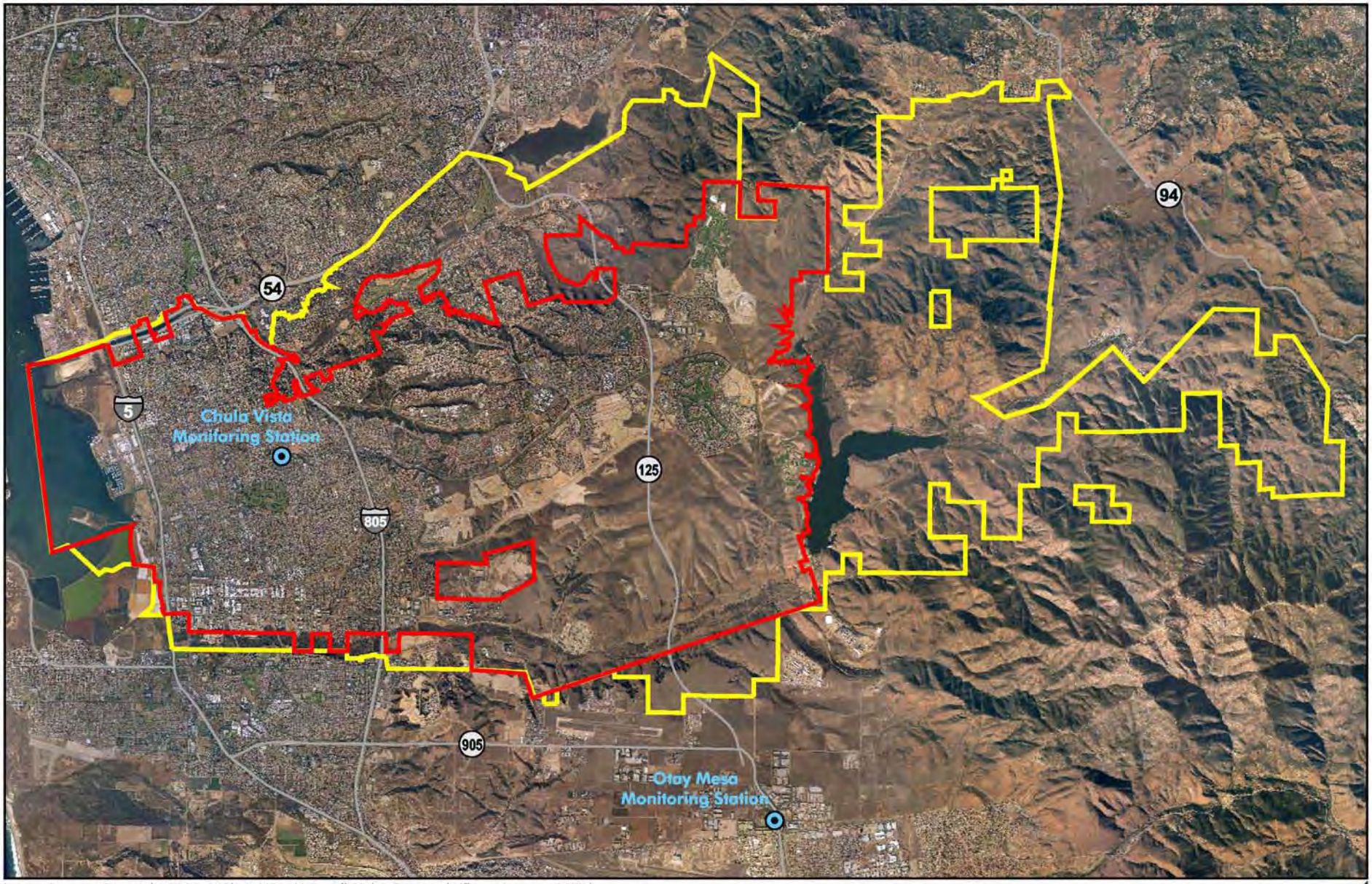
In response to the federal CAA of 1970, the U.S. EPA developed primary and secondary national ambient air quality standards (national standards) for six pollutants of primary concern (criteria pollutants): ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and suspended particulates of 10 microns or less in diameter (PM_{10}).

Criteria pollutants and other meteorological conditions are measured by the San Diego APCD at 10 monitoring stations within the SDAB. The Chula Vista monitoring station is located at 80 East J Street in Chula Vista and the Otay Mesa monitoring station is located at 1100 Paseo International in the city of San Diego. The Chula Vista monitoring station is located within the plan area and the Otay Mesa monitoring station is located near the western boundary of the East Otay Mesa Specific Plan Area outside the General Plan area (Figure 5.11-1).

Table 5.11-3 summarizes the number of days per year during which state and federal standards were exceeded in the SDAB overall during the years 2000 to 2004. Table 5.11-4 presents the attainment status of the SDAB with respect to both the state and primary national standards for each of the criteria pollutants. Table 5.11-5 provides a summary of measurements of ozone, carbon monoxide, 10-micron particulate matter (PM_{10}), and 2.5-micron particulate matter ($PM_{2.5}$) taken at the Chula Vista monitoring station. Table 5.11-6 provides a summary of measurements of ozone, carbon monoxide, and PM_{10} taken at the Otay Mesa monitoring station ($PM_{2.5}$ is not monitored at the Otay Mesa station).

OZONE

Ozone represents one of the primary air pollution problems in the SDAB. Ozone, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone. The SDAB is currently designated a state “serious” non-attainment area for ozone as well as a federal non-attainment area for the eight-hour ozone standard. Ozone concentration measurements recorded in the SDAB dating back to the late 1970s show a distinctive downward trend with occasional peaks due primarily to meteorological influences (County of San Diego 2001a).



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0 Miles 2 N

Chula Vista municipal boundary

Chula Vista General Plan area

Air monitoring stations

FIGURE 5.11-1
Air Monitoring Stations

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fig5.11-1 (aerial, air mon stations) 09/14/05

TABLE 5.11-3
AMBIENT AIR QUALITY SUMMARY – SAN DIEGO AIR BASIN

Pollutant	Average Time	California Ambient Air Quality Standards[a]	Attainment Status	National Ambient Air Quality Standards[b]	Attainment Status[c]	Maximum Concentration[d]					Number of Days Exceeding State Standard[d]					Number of Days Exceeding National Standard[d]				
						2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
O_3	1 hour	0.09 ppm	N	0.12 ppm	M	0.12	0.14	0.12	0.13	0.13	24	29	15	24	12	0	2	0	1	1
O_3	8 hours	N/A	N/A	0.08 ppm	**	0.11	0.12	0.10	0.10	0.10	N/A	N/A	N/A	N/A	N/A	16	17	13	6	8
CO	1 hour	20 ppm	A	35 ppm	A	9.3	8.5	Na	Na	Na	0	0	Na	Na	Na	0	0	Na	Na	Na
CO	8 hours	9.0 ppm	A	9 ppm	A	5.9	5.1	4.7	10.6	4.1	0	0	0	1	0	0	0	0	1	0
NO_2	1 hour	0.25 ppm	A	N/A	N/A	.117	.148	.126	.148	.125	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
NO_2	Annual	N/A	N/A	0.053 ppm	A	.020	.018	.018	.019	.017	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
SO_2	1 hour	25 pphm	A	N/A	N/A	5.8	6.0	Na	Na	Na	N/A	N/A	Na	Na	Na	0	0	Na	Na	Na
SO_2	24 hours	4 pphm	A	14 pphm	A	1.1	1.4	Na	Na	Na	0	0	Na	Na	Na	0	0	Na	Na	Na
SO_2	Annual	N/A	N/A	3 pphm	A	0.4	0.4	Na	Na	Na	N/A	N/A	Na	Na	Na	N/A	N/A	Na	Na	Na
PM_{10}	24 hours	50 $\mu g/m^3$	N	150 $\mu g/m^3$	U	139	107	130	280	79	111*	129*	173*	151*	Na	0	0	0	9	Na
PM_{10}	Annual	30 $\mu g/m^3$	N	50 $\mu g/m^3$	A	47	49	50	52	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
$PM_{2.5}$	24 hours	N/A	N/A	65 $\mu g/m^3$	**	66.3	60.0	Na	Na	Na	N/A	N/A	Na	Na	Na	1	0	Na	Na	Na
$PM_{2.5}$	Annual	N/A	N/A	15 $\mu g/m^3$	**	15.8	17.7	Na	Na	Na	N/A	N/A	Na	Na	Na	N/A	N/A	Na	Na	Na

SOURCES: State of California 2004a.

[a]California standards for ozone, carbon monoxide (except at Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, and PM_{10} are values that are not to be exceeded. Some measurements gathered for pollutants with air quality standards that are based upon 1-hour, 8-hour, or 24-hour averages, may be excluded if the CARB determines they would occur less than once per year on average.

[b]National standards other than for ozone and particulates, and those based on annual averages or annual arithmetic means are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one.

[c]A = attainment; M = maintenance; N = non-attainment; U = unclassifiable; N/A = not applicable; ** = Attainment status to be determined

[d]N/A = not applicable; Na = data not available

ppm = parts per million, pphm = parts per hundred million, $\mu g/m^3$ = micrograms per cubic meter

*Calculated days = Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

TABLE 5.11-4
SAN DIEGO COUNTY'S FEDERAL AND STATE DESIGNATIONS FOR EACH OF THE CRITERIA POLLUTANTS

Criteria Pollutant	Federal Designation	State Designation
Ozone (one hour)	Attainment	Nonattainment
Ozone (eight hour)	Nonattainment	No state standard
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
PM 10[1]	Unclassifiable	Nonattainment
PM 2.5[2]	Attainment	Nonattainment

SOURCE: County of San Diego Air Pollution Control District, February 2005 and US EPA 2005

[1]particulate matter of 10 microns or less in diameter.
[2]particulate matter of 2.5 microns or less in diameter.

TABLE 5.11-5
SUMMARY OF AIR QUALITY MEASUREMENTS RECORDED AT THE CHULA VISTA MONITORING STATION

Pollutant/Standard	2000	2001	2002	2003	2004
Ozone					
Days State Standard Exceeded (0.09 ppm)	0	2	1	0	1
Days National Standard Exceeded (0.12 ppm)*	0	0	0	0	0
Max. 1-hr (ppm)	0.091	0.102	0.115	0.075	0.097
Days Federal 8-hour Standard Exceeded (0.08 ppm)	0	0	0	0	1
Max. 8-hr (ppm)	0.077	0.079	0.073	0.056	0.087
Carbon Monoxide					
Days State 8-hour Standard Exceeded (9.0 ppm)	0	0	0	0	0
Days National 8-hour Standard Exceeded (9 ppm)*	0	0	0	0	0
State Max. 8-hr (ppm)	3.35	4.64	2.61	5.40	2.48
National Max. 8-hr (ppm)	3.14	4.65	2.61	5.40	2.48
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.25 ppm)	0	0	0	0	0
Max. 1-hr (ppm)	0.072	0.071	0.093	0.102	0.072
National Annual Average (0.053 ppm)	0.017	0.017	0.018	0.018	0.016
PM_{10}					
Days State Standard Exceeded ($\mu g/m^3$)†	6	6	6	12	N/A
Days National Standard Exceeded ($\mu g/m^3$)*	0	0	0	0	N/A
State Max. Daily ($\mu g/m^3$)	54.0	66.0	52.0	78.0	45.0
National Max. Daily ($\mu g/m^3$)	52.0	64.0	50.0	75.0	44.0
State Annual Average ($\mu g/m^3$)	N/A	28.6	27.1	27.6	N/A
National Annual Average ($\mu g/m^3$)	N/A	27.8	26.5	27.0	N/A
$PM_{2.5}$					
Days Federal 24-hour Standard Exceeded (65 $\mu g/m^3$)	0	0	0	1	0
State Max. Daily ($\mu g/m^3$)	40.5	41.0	41.0	239.2	32.7
National Max. Daily ($\mu g/m^3$)	40.5	41.0	41.0	239.2	32.7
State Annual Average ($\mu g/m^3$)	N/A	N/A	13.9	14.4	N/A
National Annual Average ($\mu g/m^3$)	13.1	15.5	13.9	14.4	N/A

SOURCE: State of California 2005: http://www.arb.ca.gov.

*National Standard refers to the primary federal standard. In the case of ozone and PM_{10}, the secondary federal standards are the same as the primary federal standards. There are no secondary federal standards for carbon monoxide.

†Calculated days - Measurements are typically collected every six days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Lead concentrations in the SDAB have not exceeded the state or federal standard during at least the past 10 years.

N/A – information not available.

TABLE 5.11-6
SUMMARY OF AIR QUALITY MEASUREMENTS RECORDED AT THE OTAY MESA MONITORING STATION

Pollutant/Standard	2000	2001	2002	2003	2004
Ozone					
Days State Standard Exceeded (0.09 ppm)	0	0	2	1	1
Days National Standard Exceeded (0.12 ppm)*	0	0	0	0	0
Max. 1-hr (ppm)	0.084	0.086	0.108	0.097	0.095
Days Federal 8-hour Standard Exceeded (0.08 ppm)	0	0	1	0	0
Max. 8-hr (ppm)	0.060	0.074	0.087	0.076	0.077
Carbon Monoxide					
Days State 8-hour Standard Exceeded (9.0 ppm)	0	0	0	0	0
Days National 8-hour Standard Exceeded (9 ppm ppm)†	0	0	0	0	0
State Max. 8-hr (ppm)	5.86	3.91	4.68	4.85	4.11
National Max. 8-hr (ppm)	5.86	3.91	4.68	4.85	4.11
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.25 ppm)	0	0	0	0	0
Max. 1-hr (ppm)	0.112	0.148	0.126	0.148	0.125
National Annual Average (0.053 ppm)	0.020	0.021	0.021	0.020	0.023
PM_{10}					
Days State Standard Exceeded (50 $\mu g/m^3$)†	109	129	173	151	N/A
Days National Standard Exceeded (150 $\mu g/m^3$)*	0	0	0	0	N/A
State Max. Daily ($\mu g/m^3$)	136	106	131	133	81
National Max. Daily ($\mu g/m^3$)	139.0	107.0	130	130	79
State Annual Average ($\mu g/m^3$)	44.5	47.4	52.4	52.6	N/A
National Annual Average ($\mu g/m^3$)	45.2	49.1	54.9	52.1	N/A

SOURCE: State of California 2005:http://www.arb.ca.gov.

*National Standard refers to the primary federal standard. In the case of ozone and PM_{10}, the secondary federal standards are the same as the primary federal standards. There are no secondary federal standards for carbon monoxide.

†Calculated days - Measurements are typically collected every six days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Lead concentrations in the SDAB have not exceeded the state or federal standard during at least the past 10 years.

$PM_{2.5}$ data not available for this monitoring station.

About half of smog-forming emissions in the SDAB are generated by motor vehicles. Population growth in the San Diego region has resulted in a large increase in the number of automobiles operating on area roadways. In addition, the occasional transport of smog-filled air from Los Angeles only adds to the SDAB's ozone problem. More strict automobile emission controls, including more efficient automobile engines, have played a large role in the steady decrease in ozone levels.

Ozone concentrations in the SDAB have generally declined as can be seen in the data recorded during the past five years as presented in Table 5.11-3. In fact, the criteria for attainment of the national one-hour ozone standard was satisfied at the end of 2001 when ozone levels exceeded the national ozone standard of 0.12 parts per million (ppm) only four times during the period of 2000 to 2004 (also see footnote "b" of Table 5.11-3). The SDAB was formally designated a federal attainment area for the one-hour ozone standard on July 28, 2003. The state ozone standard was exceeded on 24, 29, 15, 24, and 12 days, respectively, during the same time period. This also reveals a general downward trend in the ozone concentrations in the SDAB.

The national ozone standard was not exceeded at either the Chula Vista monitoring station or the Otay Mesa monitoring station during the five-year period of 2000 to 2004 (see Tables 5.11-5 and 5.11-6). The stricter state standard for ozone was exceeded at the Chula Vista monitoring station on 2 days in 2001, 1 day in 2002, and 1 day in 2004. The standard was not exceeded at the Chula Vista monitoring station in 2000 or 2003. The state standard for ozone was exceeded at the Otay Mesa monitoring station on 2 days in 2002, 1 day in 2003, and 1 day in 2004. The standard was not exceeded at the Otay Mesa monitoring station in 2000 or 2001 (State of California 2005).

As indicated, not all of the ozone within the SDAB is derived from local sources. Under certain meteorological conditions such as during Santa Ana wind events, ozone and other pollutants are transported from the Los Angeles Basin and combine with ozone formed from local emissions sources to produce elevated ozone levels in the SDAB. According to SANDAG, on average, approximately 42 percent of the days that ozone concentrations exceeded the state standard between 1987 and 1994 were attributable to pollution transported from Los Angeles (SANDAG 1994:249-250). More recent data suggests that this percentage is even higher. According to the San Diego APCD, ozone transported into the SDAB from the South Coast Air Basin (Los Angeles-San Bernardino-Riverside-Orange area) was the primary cause for the SDAB exceeding national ozone thresholds on 27 of a total of 33 days from 1994 to 1998 (County of San Diego 2000). The San Diego APCD further explains that the two days in which the national one-hour standard was exceeded in 2001 were both caused by ozone-rich air transported from the South Coast Air Basin (County of San Diego 2001a).

The national eight-hour ozone standard was exceeded in the SDAB on 16 days in 2000, 17 days in 2001, 13 days in 2002, 6 days in 2003, and 8 days in 2004 (see Table 5.11-3). At the

Chula Vista monitoring station for the period from 2000 through 2004 the national eight-hour ozone standard was exceeded only once in 2004, while for the same period the eight-hour ozone standard was exceeded only once in 2002 at the Otay Mesa station (see Tables 5.11-5 and 5.11-6).

On April 30, 2004, the U.S. EPA listed the final designations for the eight-hour ozone standard in the Federal Register (EPA 2004a), which became effective June 15, 2004. San Diego County is considered a non-attainment area for ozone based on this new standard. The San Diego APCD has three years (by 2007) to formulate a strategy for attaining the eight-hour standard. The strategy must then be approved by the EPA. Using the discretion provided by Section 172(a)(1) of the CAA, the EPA has chosen not to classify the basin (e.g., moderate, serious, etc.). For areas subject to Subpart 1, consistent with Section 172(a)(2)(A) of the CAA, the period of attainment will be no more than five years from the effective date of designation (U.S. EPA 2004b). Consequently, the SDAB must demonstrate attainment by June 15, 2009. If warranted, the EPA may grant an extension of the attainment date to no more than 10 years after designation, which would be June 15, 2014.

Actions that have been taken in the SDAB to reduce ozone concentrations include:

- **TCMs if vehicle travel and emissions exceed attainment demonstration levels.** TCMs are strategies that will reduce transportation-related emissions by reducing vehicle use or improving traffic flow.

- **Enhanced motor vehicle inspection and maintenance program.** The smog check program monitors the amount of pollutants automobiles produce. One focus of the program is identifying "gross polluters" or vehicles that exceed two times the allowable emissions for a particular model. Regular maintenance and tune-ups, changing the oil, and checking tire inflation can improve gas mileage and lower air pollutant emissions. It can also reduce traffic congestion due to preventable breakdowns, further lowering emissions.

- **Old car buy-back and retrofit programs.** The old car buy-back program is an incentive program offered by the San Diego APCD to purchase older, more polluting vehicles (1985 and older) and scrap them, thereby getting them off the road. Old car sellers are paid $600 for vehicles built prior to 1975 and $500 for 1975-1985 cars and trucks. There is also a retrofit program designed to retrofit 1975-1980 vehicles with a new technology upgrade kit that reduces smog-forming emissions.

- **Clean-fuel vehicle program.** Cleaner vehicles and fuels will result in continued reductions in vehicle pollutant emissions despite increases in travel.

CARBON MONOXIDE

The SDAB is classified as a state and federal attainment area for carbon monoxide (County of San Diego 1998). Until 2003 no violations of the state standard for CO had been recorded in the SDAB since 1991 and no violations of the national standard had been recorded in the SDAB since 1989. As seen in Table 5.11-3, both the federal and state eight-hour CO standards were exceeded in the county on one day in 2003. This exceedance occurred on October 28, 2003, at a time when major wildfires were raging throughout the county. Consequently, this exceedance was likely caused by the wildfires and would be considered beyond the control of the SDAPCD.

Small-scale, localized concentrations of carbon monoxide above the state and national standards have the potential to occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hot spots" and are a concern at congested intersections when automobile engines burn fuel less efficiently and their exhaust contains more CO.

PARTICULATES (PM_{10})

Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Sources of PM_{10} emissions in the SDAB consist mainly of urban activities, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Ten microns is about one-seventh the diameter of a human hair. In general, particulate concentrations near residential sources are typically greater during the coldest months of the year, when more fireplaces are in use and when meteorological conditions such as inversions prevent the dispersion of directly emitted contaminants.

Until 2003 the national standards for PM_{10} had never been exceeded in the SDAB since the standards were established. The EPA has designated the SDAB unclassifiable for PM_{10}. The unclassifiable designation is given to areas that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant (U.S. EPA 2002).

In 2003 the measured federal PM_{10} standard was exceeded twice. These two exceedances result in a calculated number of days that the federal standard was exceeded of approximately nine days for the year (see Table 5.11-3). The first exceedance occurred on October 29, 2003, at a time when major wildfires were raging throughout the county. The second exceedance occurred on November 23, 2003, during high winds, which caused large amounts of ash from the previous fires to be resuspended.

Consequently, these exceedances were likely caused by or were a subsequent result of the wildfires and would be beyond the control of the SDAPCD. As such, these events likely

would be covered under the U.S. EPA's Natural Events Policy that permits, under certain circumstances, the exclusion of air quality data attributable to uncontrollable natural events (e.g., volcanic activity, wildland fires, and high wind events).

State PM_{10} standards set by the CARB in 1983 were 50 $\mu g/m^3$ for a 24-hour average and 30 $\mu g/m^3$ for an annual average. In 2002, pursuant to the Children's Environmental Health Protection Act, the CARB revised the annual average standard for PM_{10} to 20 $\mu g/m^3$ (State of California 2003). The Children's Environmental Health Protection Act required a review of all of California's health-based ambient air quality standards to determine if they adequately protect public health, especially the health of infants and children. In addition to the two federal exceedances in 2003, the more strict state standards for PM_{10} historically have not been met. As a result, the SDAB is designated a state non-attainment area for PM_{10}.

Table 5.11-3 shows that the state PM_{10} standard was exceeded in the SDAB each year from 2000 through 2003 (data for 2004 are not currently available). The number of days that the state standard was exceeded increased slightly over the four-year period with the state standard being exceeded on a calculated 151 days in 2003. Calculated days of exceedance are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. At the Chula Vista monitoring station, the calculated number of days that the state PM_{10} standard was calculated to be exceeded on 6 days in 2000, 6 days in 2001, 6 days in 2002, and 12 days in 2003 (see Table 5.11-5). Data are not currently available for 2004. At the Otay Mesa monitoring station, the state PM_{10} standard was calculated to be exceeded on 109 days in 2000, 129 days in 2001, 173 days in 2002, and 151 days in 2003 (see Table 5.11-6). Data are also not currently available for 2004 at this station.

The large number of exceedences of the state PM_{10} standard at the Otay Mesa monitoring station is likely due to the proximity of the station to the U.S./Mexican border. According to Mahmood Hossain, Senior Chemist with the San Diego APCD, the Otay Mesa monitoring station is located in an area with a large amount of vehicular traffic associated with the border crossing (Hossain, pers. com. 2003). According to Mr. Hossain, there is a truck stop, intense construction, and several unpaved roads near the Otay Mesa monitoring station, all of which would tend to produce high, localized PM_{10} concentrations. For these reasons, the relocation of the Otay Mesa monitoring station is currently being considered by the San Diego APCD (Hossain, pers. com. 2003).

PARTICULATES ($PM_{2.5}$)

In 1997, the U.S. EPA established a new federal air quality standard for fine particulate matter, or $PM_{2.5}$. These standards include an annual arithmetic mean of 15 $\mu g/m^3$ and a 24-hour concentration of 65 $\mu g/m^3$. Although the state has not established a separate 24-hour standard for $PM_{2.5}$, it has established an annual arithmetic mean of 12 $\mu g/m^3$. $PM_{2.5}$ are particles that measure 2.5 microns or less in diameter. As a result of their small size, $PM_{2.5}$

particles can be inhaled deeply into the lungs. $PM_{2.5}$ is predominantly produced from combustion sources such as gasoline and diesel engines and industrial facilities. Emissions of organic gases, nitrogen oxides (NOx), sulfur oxides (SOx), and ammonia produced at these sources react in the atmosphere and form such tiny particles. $PM_{2.5}$ can remain suspended in the air for long periods and can travel great distances (County of San Diego 2001a).

Basinwide summaries for $PM_{2.5}$ are currently not available. At the Chula Vista monitoring station, for the period from 2000 through 2004 the federal $PM_{2.5}$ standard was exceeded on only one day in 2003 (see Table 5.11-5). As also seen in Table 5.11-5 the state annual arithmetic average standard has been routinely exceeded. $PM_{2.5}$ data are not collected at the Otay Mesa monitoring station.

A list of recommended designations was due to the EPA by February 15, 2004. The CARB supplied monitoring data for the years 2000 through 2002 to the EPA on February 11, 2004. The EPA reviewed the designation recommendations, made some modifications, and on January 5, 2005 listed the final designations in the Federal Register (EPA 2004c). These designations will become effective April 5, 2005. That portion of the SDAB containing the project site has been designated a attainment area for the federal $PM_{2.5}$ standard (U.S. EPA 2004c).

NITROGEN DIOXIDE, SULFUR DIOXIDE, AND LEAD

The national and state standards for NO_2, SO_2, and lead are being met in the SDAB, and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future.

ODORS

Odors are one of the most obvious forms of air pollution to the general public. While offensive odors seldom cause physical harm, they can present a significant problem for both the source and the surrounding community. Offensive odors may cause agitation, anger, and concern to the public about the possibility of health effects, especially in residential neighborhoods located near sources. Most people respond to offensive odors as objectionable if they are sensed over the duration of a single human breath, typically two to five seconds.

Sources

The San Diego APCD has permit authority over most types of stationary emission sources in the SDAB. The San Diego APCD exercises permit authority through its Rules and Regulations. Permits are the primary means for the APCD to assure that polluting operations are controlled to the maximum degree technically and economically feasible and do not interfere with the attainment and maintenance of healthful air quality.

Since 1990, the San Diego APCD has monitored air toxics at sampling sites in Chula Vista and El Cajon. These locations are considered to be the most appropriate in the San Diego region for toxic sampling because they are nearby and downwind of large, concentrated areas of industrial, transportation, and other air pollutant sources. Results from the monitoring show that overall emissions of air toxics have been declining, with a 75-percent reduction in estimated industrial air toxic emissions since the early 1990s (County of San Diego 2004).

Information about facilities in the San Diego region that release the largest amount of toxic air contaminants is available from the San Diego APCD. The San Diego APCD provides the information on their website and in an annual report titled "Air Toxics 'Hot Spots' Program Report for San Diego County." The CARB lists more than 700 compounds to be assessed under the Air Toxics "Hot Spots" program. The list includes potentially carcinogenic substances as well as compounds that may cause health problems such as respiratory irritation or central nervous system depression.

Figure 5.11-2 presents the location of facilities in Chula Vista that release the largest amount of toxic air contaminants and their proximity to residences, schools, and hospitals located in and near the plan area. Corresponding Table 5.11-7 shows the street address of each facility and a number that can be used to locate these facilities on Figure 5.11-2.

Update Areas

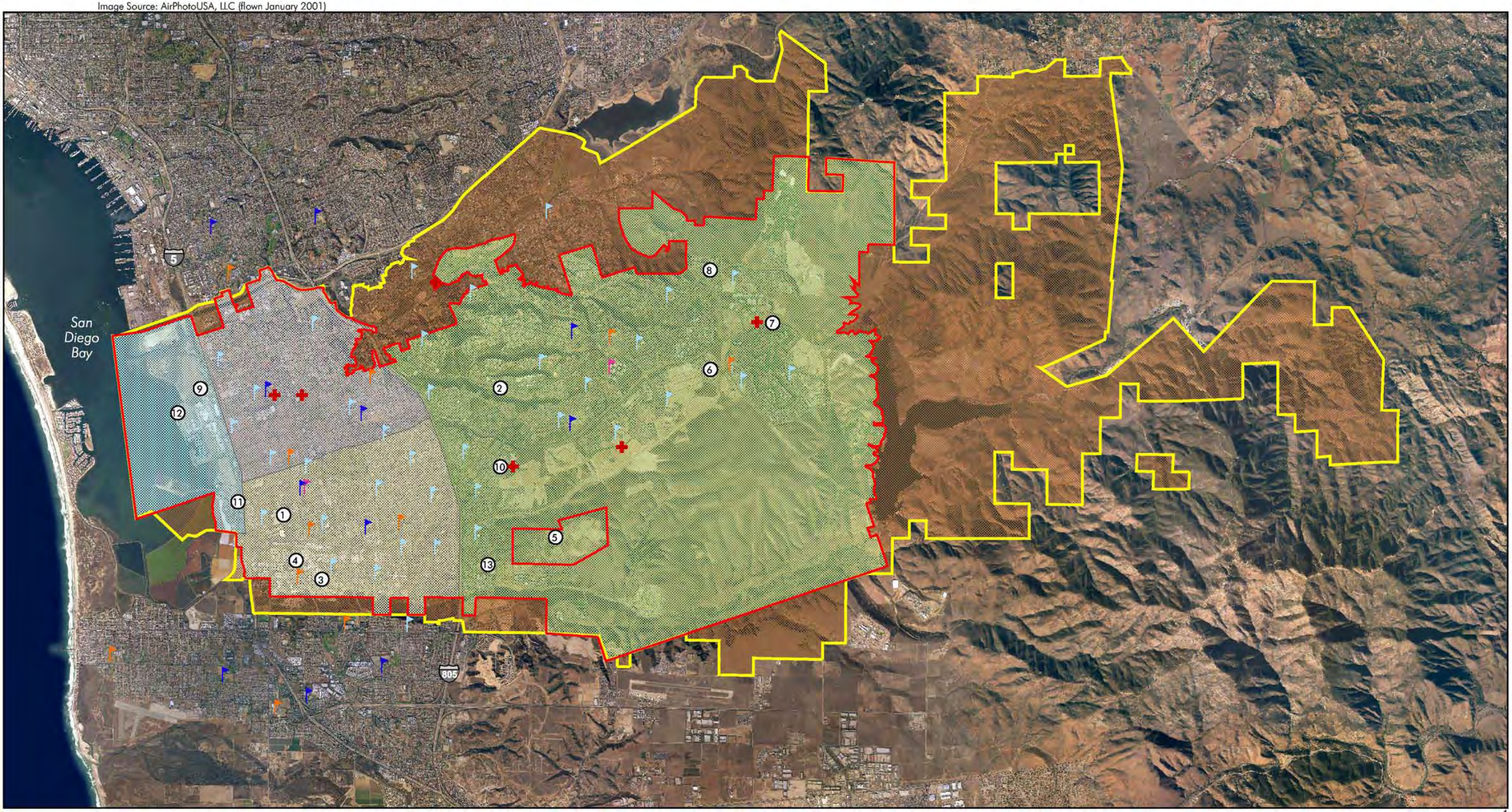
As shown on Figure 5.11-2, there are no large air emission sources located within the Northwest Planning Area. Two large air emission sources, Rohr Industries/BF Goodrich and Southbay Boat Yard, occur outside and west of the Northwest Planning Area. Three large air emission sources are situated within the Southwest Planning Area: Hanson Aggregates/Nelson & Sloan, Marine Service Commercial Diving Company, and Costco Gasoline Facility #405. The South Bay Power Plant, a large air emission source, is located outside and east of the Southwest Planning Area. One large air emission source, the Otay Landfill, is located within the East Planning Area.

5.11.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to air quality if it would:

- Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan.
- Threshold 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Image Source: AirPhotoUSA, LLC (flown January 2001)



0 Mile 1.4 N

Chula Vista municipal boundary
Chula Vista General Plan area

Elementary School
Junior High School
High School
College/Vocational School

Medical Facility/Hospital
① Large air emission sources

Planning Areas
Bayfront
Northwest
Southwest
East
Outside of city boundary

FIGURE 5.11-2
Pollution Sources, Schools, and Hospitals

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fig5.11-2 (pollution) 09/14/05

TABLE 5.11-7
FACILITIES IN CHULA VISTA MONITORED BY THE SAN DIEGO APCD FOR LARGE AMOUNTS OF TOXIC AIR CONTAMINANTS

Number	Facility	Location
1	Costco Gasoline Facility #405	1144 Broadway
2	Costco Wholesale	895 H Street East
3	Hanson Aggregates/Nelson & Sloan	7th & Main Streets
4	Marine Service Commercial Diving Company	609 Anita Street
5	Otay Landfill/Ogden Power Pacific, Inc.	Otay Landfill
6	Otay Water District	10391 Otay Lakes Road
7	Otay Water District	2406 Otay Lakes Road
8	Otay Water District	10770 Proctor Valley Road
9	Rohr Industries/BF Goodrich	850 Lagoon Drive
10	Sharp Chula Vista Medical Center	751 Medical Center Court
11	South Bay Power Plant	990 Bay Boulevard
12	Southbay Boat Yard	997 G Street
13	Wood Craft Company	1675 Brandywine Avenue

- Threshold 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

- Threshold 4: Expose sensitive receptors to substantial pollutant concentrations.

- Threshold 5: Create objectionable odors affecting a substantial number of people.

5.11.3 Impacts

5.11.3.1 Threshold 1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

As noted above, the SIP is the document that sets forth the state's strategies for achieving air quality standards. The San Diego APCD is the agency that regulates air quality in the SDAB and is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The RAQS and TCM plan developed by the San Diego APCD and SANDAG set forth the steps needed to accomplish attainment of state and federal ambient air quality standards. The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

In order to meet federal air quality standards in California, the CARB required each air district to develop its own strategy for achieving the NAAQS. The San Diego APCD prepared the 1991/1992 RAQS in response to the requirements set forth in the CCAA. Attached as part of the RAQS is the TCM plan prepared by SANDAG. The RAQS and TCM plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

Threshold 1 is assessed with respect to conformance with these plans. The basis for these plans is the distribution of population in the region as projected by SANDAG. Growth forecasting is based in part on the land uses established by the General Plan. Amending the General Plan to increase development potential would, necessarily, result in an inconsistency between the air quality strategy (that is based on the existing plan) and the amended plan.

The current RAQS are based on the adopted General Plan. Because the proposed land use changes would be inconsistent with the adopted General Plan upon which the RAQS was based, the General Plan Update would not conform to the current RAQS. If a project is inconsistent with the City's General Plan, it is not consistent with the growth assumptions in the RAQS. Consequently, the proposed General Plan Update would conflict with the adopted air plan.

The City has a CO_2 Reduction Plan that aims to reduce CO_2 emissions to 80 percent of 1990 levels by the year 2010. The plan established 20 action measures in order to achieve this goal. Several of those measures are directly supported by the proposed General Plan Update. These include:

- Enhanced pedestrian connections to transit
- Increased housing density near transit
- Site design with transit orientation
- Increased land use mix
- Bicycle lanes, paths, and routes
- Increased employment density near transit

By supporting these goals the proposed GPU promotes, and does not obstruct the CO_2 reduction plan.

5.11.3.2 Threshold 2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation

Several facilities in Chula Vista are monitored by San Diego APCD for large amounts of toxic air contaminants. As shown in Figure 5.11-2, there are no large air emission sources located within the Northwest Update Area. Two of these large air emission sources, Rohr Industries/BF Goodrich and Southbay Boat Yard, occur outside and to the west of the Northwest Update Area. Three of these air emission sources are within the Southwest Planning Area: Hanson Aggregates/Nelson & Sloan, Marine Service Commercial Diving Company, and Costco Gasoline Facility #405. The South Bay Power Plant, a large air emission source, is located outside, but immediately west of the Southwest Update area. One large air emission source, the Otay Landfill, is located to the west of the East Update Area.

The proposed amendments to the General Plan would not directly affect these emitters, and the scenarios would not differ in their effects. As such, the General Plan Update would not directly contribute to any existing air quality violations.

Each of the proposed scenarios would permit industrial development in the Montgomery Subarea and the Otay Ranch Subarea. It is possible that industries that generate air pollutants would be developed within these areas. Without appropriate controls, air emissions associated with planned industrial uses could represent a significant adverse air quality impact.

The potential for development under the Preferred Plan or any of the Scenarios to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating through the adoption and compliance with Policy EE 6.4. That policy states:

> Avoid siting new or re-powered energy generation facilities, and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.

Further, AB 2588 requires any new facility proposed that would have the potential to emit toxic air contaminants to assess air toxic problems that may result from their facility's emissions. The law requires larger industrial facilities to provide information regarding emission inventories and health risk assessments. If adverse health impacts exceeding public notification levels are identified, the facility must provide public notice, and if the facility poses a potentially significant public health risk, the facility must submit a risk reduction audit and plan to demonstrate how the facility will reduce health risks.

5.11.3.3 Threshold 3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Project Region is Non-Attainment under an Applicable Federal or State Ambient Air Quality Standard

The region is in attainment for all criteria pollutants except ozone, PM_{10}, and $PM_{2.5}$ (see Table 5.11-4). The SDAB is non-attainment for the 8-hour federal ozone standard. Because ozone is not emitted directly but forms in the atmosphere, it is more a regional concern than it is a direct effect of individual projects. As noted above, ozone pollution, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. For PM_{10}, the region has a federal designation of Unclassifiable and is non-attainment of the State standard, while the region is designated as attainment for the federal and non-attainment for the State $PM_{2.5}$ standards.

Construction

Air pollutants generated by the construction of projects that conform to the General Plan would vary depending upon the number of projects occurring simultaneously, and the size of each individual project. Pollutants result from dust raised during demolition and grading, emissions from construction vehicles, chemicals used during construction, and ultimately emissions generated during operation of approved uses.

Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in Regulation 4, Rules 52 and 54, of the San Diego APCD's rules and regulations.

The exact number and timing of all development projects that could occur under the proposed General Plan Update are unknown. However, given the predominantly developed nature of the western portion of the city of Chula Vista, it can be assumed that western Chula Vista would experience relatively small projects in terms of land area, most of which would involve the demolition of existing structures and improvements. Conversely, in the eastern portions of the city many development projects would be relatively large, involving undeveloped land and little, if any, demolition of existing structures and improvements. The range of these different types of projects is great.

To illustrate the range of potential air effects from projects that could occur in the city, two types of speculative projects were evaluated. These hypothetical projects include a one-acre multi-family residential project that may be typical in western Chula Vista and the development of a large scale SPA plan that could occur in the east. The one-acre multi-family development is assumed to consist of the demolition of an existing structure with a volume of approximately 50,000 cubic feet and the construction of a 20-unit multi-family structure. The large SPA plan type development is assumed to consist of the development of 2,500 single-family units, a 450-student elementary school, and a 1,200-student high school on undeveloped land.

Table 5.11-8 shows the anticipated emissions from each of these projects assuming that the duration of construction is 12 months.

TABLE 5.11-8
YEARLY CONSTRUCTION EMISSIONS
(pounds/year)

Pollutant	Small Multi-Family Project	Large SPA Plan Project
ROG	1,860	385,120
NO_x	8,400	1,176,360
CO	8,180	1,145,180
SO_2	0	20
PM_{10} – total	400	71,660
PM_{10} – exhaust	280	53,080
PM_{10} – fugitive dust	120	18,580

To estimate the effects of such projects over the 25-year horizon of the General Plan Update it was assumed that 10 SPA-sized projects could be implemented, and that an average of approximately five projects equivalent to the 20-unit multi-family project could occur yearly.

The City of Chula Vista uses the South Coast Air Quality Management District (SCAQMD) quarterly construction thresholds shown in Table 5.11-9 to assess the significance of air quality impacts. Table 5.11-9 shows the average quarterly emissions using the above assumptions.

TABLE 5.11-9
AVERAGE QUARTERLY EMISSIONS
(tons/quarter)

Pollutant	Small Multi-Family Project	Five Small Multi-Family Projects	Large SPA Plan Projects*	Total	Threshold†
ROG	0.23	1.16	16.05	17.21	2.5
NOx	1.05	5.25	49.02	54.27	2.5
CO	1.02	5.11	47.72	52.83	24.75
SO_2	0	0	0	0	6.75
PM_{10} – total	0.05	0.25	2.99	3.24	6.75
PM_{10} – exhaust	0.04	0.18	2.21	2.39	--
PM_{10} – fugitive dust	0.02	0.08	0.77	0.85	--

*Assumes 1 project every three years.
†Threshold for individual projects.

As seen from Table 5.11-9, small individual projects are not expected to exceed the thresholds of significance. The large SPA level project is anticipated to generate emissions during construction that are potentially significant, and if the smaller projects were considered as a single project, they too might exceed the quarterly thresholds.

These projects are illustrative only. Approval of the proposed General Plan Update would not permit the construction of any individual project, and no specific development details are available. The thresholds presented above are applied on a project-by-project basis and are not used for assessment of regional planning impacts. The information is presented to illustrate the potential scope of air impacts for projects that could be reviewed under the proposed plan.

The County is not in attainment for Ozone or the state PM_{10} and $PM_{2.5}$ standard and is unclassifiable for the federal PM_{10} standard. Clearly, there is the potential for future projects that would conform to the Preferred Plan or any of the Scenarios to contribute to cumulatively considerable emissions should multiple projects be implemented simultaneously. Should three small projects or one large SPA Plan project be initiated in any given year, it is anticipated that the construction of those projects would result in a potentially cumulatively considerable increase in criteria air pollutant emissions.

Operation

For comparative purposes, an assessment of the anticipated air emissions resulting from buildout of the preferred alternative in the year 2030 was prepared using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003). The URBEMIS2002 program is a tool used to estimate air emissions resulting from land development projects in the state of California. The model generates emissions from three basics sources: construction sources, area sources (e.g., fireplaces, natural gas heating, etc.), and operational sources (e.g., traffic).

Inputs to URBEMIS2002 include such parameters as the air basin containing the project, land uses, trip generation rates, trip lengths, vehicle fleet mix (i.e., percentage autos, medium truck, etc.), trip distribution (i.e., percent home to work, etc.), season, and ambient temperature, as well as other parameters. A detailed description of the URBEMIS2002 model and its use may be found in the URBEMIS2002 User's Guide that may be obtained from the CARB web site at http://www.arb.ca.gov/planning/urbemis/urbemis2002/urbemis2002.htm.

Using the land use designations for the Preferred Plan and each of the Scenarios, along with trip generation rates developed by SANDAG (SANDAG 2002), as well as URBEMIS2002 defaults for other parameters, average daily emissions were estimated using URBEMIS2002 assuming buildout of the Preferred Plan and Scenarios in the year 2030. The results of the modeling, which include both mobile and area source emissions, are shown in Table 5.11-10. As seen in Table 5.11-10, with the exception of PM_{10} and SO_X, emissions are anticipated to be less than those that would occur under existing conditions. (Compared to the adopted General Plan (see Chapter 10), these pollutants are projected to be reduced).

While construction activities may have relatively short-term air quality impacts, increases in multi-family residential use and improvements in reducing motor vehicle emissions are predicted to result in an improvement in air quality from non-construction daily operations in the year 2030 relative to existing conditions.

5.11.3.4 Threshold 4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

In December 2004, the SDAPCD published the 2003 Air Toxics "Hot Spots" Program Report for San Diego County. This report demonstrates SDAPCD's compliance with the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) that was enacted in 1987. The law requires larger industrial facilities to provide information regarding emission inventories and health risk assessments. If adverse health impacts exceeding public notification levels are identified, the facility must provide public notice, and if the facility poses a potentially significant public health risk, the facility must submit a risk reduction audit and plan to demonstrate how the facility will reduce health risks.

The following five facilities in the City of Chula Vista that have prepared health risk assessments in conformance with this program:

1. BF Goodrich/Rohr Industries
2. Hanson Aggregates at 7th and Main
3. Hanson Aggregates at Rock Mountain
4. Duke Energy, South Bay Power Plant (SBPP)
5. Ogden Power Pacific at the Otay Landfill

TABLE 5.11-10
AVERAGE DAILY EMISSIONS TO THE SAN DIEGO AIR BASIN
RESULTING FROM BUILDOUT OF THE GENERAL PLAN
(pounds per day)

	Existing Condition (2005)			Scenario 1 (2030)			Scenario 2 (2030)			Scenario 3 (2030)			Preferred Alternative (2030)		
Season/ Pollutant	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]
Summer															
CO	276,810	1,009	277,819	108,917	802	109,720	107,037	813	107,851	111,003	787	111,790	96,225	821	97,046
NOx	28,005	1,132	29,137	9,509	1,219	10,727	9,340	1,241	10,581	9,693	1,198	10,892	8,381	1,256	9,638
ROG	20,747	3,778	24,525	8,739	5,465	14,204	8,605	5,625	14,230	8,891	5,367	14,258	7,784	5,741	13,525
SO_X[2]	244	17	261	318	10	328	312	10	322	324	10	334	280	10	290
PM_{10}	23,872	3	23,875	55,604	3	55,607	54,622	3	54,625	56,686	3	56,688	49,028	3	49,031
Winter															
CO	307,557	8,216	315,773	112,588	11,913	124,502	110,619	12,258	122,877	114,748	11,698	126,446	99,340	12,510	111,850
NOx	42,538	1,204	43,742	14,243	1,329	15,572	13,991	1,355	15,345	14,519	1,307	15,826	12,555	1,373	13,928
ROG	25,033	10,739	35,773	10,036	15,773	25,809	9,860	16,238	26,097	10,229	15,489	25,718	8,852	16,576	25,428
SO_X[2]	243	12	255	312	18	330	306	19	325	318	18	336	275	19	294
PM_{10}	23,872	1,063	24,935	55,604	1,564	57,168	54,622	1,610	56,232	56,686	1,536	58,221	49,028	1,644	50,672

Table 5.11-11 provides the results of these health risk assessments. This table presents the maximum lifetime cancer risk, cancer burden, and chronic and acute Total Health Hazards Index (THI) for each facility. Public notification and risk reduction requirements are based on these levels. Public notification is required if the maximum incremental cancer risk is 10 in 1,000,000 or greater and a significant risk is defined as 100 in 1,000,000. In addition public notification is required and a significant risk is determined if the cancer burden, chronic THI or acute THI, is 1.0 or greater.

TABLE 5.11-11
HEALTH RISK ASSESSMENT RESULTS

Facility	Maximum Lifetime Cancer Risk (per million)	Lifetime Cancer Burden	Chronic THI*	Acute THI*
BF Goodrich/Rohr Industries	7.7	<0.1	<0.1	<0.1
Hanson Aggregates, 7th & Main	4.2	<0.1	<0.1	<0.1
Hanson Aggregates, Rock Mountain	2.1	<0.1	<0.1	0.1
Duke Energy, SBPP	2.1	<0.1	<0.1	0.34
Ogden Power Pacific, Otay Landfill	1.0	<0.1	0.92	0.21

*THI = total health hazards index

None of the Chula Vista facilities addressed in the Program Report are required to perform Public Notification or Risk Reduction. All are below the Public Notification and Risk Mitigation levels.

In addition to the facilities addressed in the Program Report, a health risk assessment was conducted for the Otay Landfill as part of the environmental review process for the proposed expansion of the landfill. The health risk assessment is included in the Technical Appendices for the Final Environmental Impact Report for the Otay Landfill Development and Expansion Plan, and has been incorporated by reference in Section 1.4 of this EIR. This health risk assessment indicated that the incremental excess cancer risk of 10 in 1,000,000 was limited to an area within 1,000 feet of the landfill. The County's environmental impact report for the landfill expansion indicated that:

> The project carcinogenic risk isopleth indicating a 10 in one million carcinogenic risk for a residential receptor does not extend beyond the 1,000-foot nuisance easement/buffer except to the southeast of the landfill. Since the area to the south of the facility is zoned for industrial use, no residential receptors will be located in this area (County of San Diego 2000:2-44).

Subsequent to that analysis a site specific analysis was conducted for a property to the north west of the landfill. The analysis, Health Risk and Nuisance Analyses, Two Land Parcels Adjacent to Otay Landfill, Chula Vista, California was performed by Environ in May, 2005, and has been incorporated by reference in Section 1.4 of this EIR. The analysis evaluated the potential human health risks as well as nuisance issues such as dust deposition and odor,

for two parcels of land adjacent to the Otay Landfill to the north assuming future potential uses as residential, industrial, and/or as a community park. The analysis indicated that for these limited properties no adverse health risk would occur. In these areas, the incremental excess cancer risk was below 10 in 1,000,000. In the remainder of the area adjacent to the landfill, the 1,000-foot nuisance easement/buffer still reflects the conclusion drawn in the County's environmental impact report.

In addition to pollutants from fixed sources, traffic on area roads emit TACs. Diesel-exhaust particulate matter emissions are TACs. These emissions pose a potential hazard to residents. As detailed above, a number of strategies have been developed and are being implemented to reduce diesel particulate matter and lower health risks. CARB reports that health risks can be as high as 1,700 cancers in a million at 20 meters from a high-volume freeway.

The Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles prepared by the California Air Resources Board estimated that the statewide outdoor population-weighted concentration of diesel PM would decrease by 50 percent from 1990 concentrations in the year 2010 and by 60 percent by the year 2020. Furthermore, programs are being implemented that have a stated goal to reduce the cancer risk statewide arising from exposure to diesel particulate matter 75 percent by 2010 and 85 percent by 2020. As a result, although health risks are substantial, future conditions under which the proposed General Plan Update would be developed would see a reduction in those effects. Placement of sensitive uses near high-volume freeways, however, represents a significant adverse air quality impact. Lessening this effect would require improvements in the control technologies for diesel engines as described in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, actions outside the control of the City of Chula Vista.

The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated because the adoption of Policies EE 6.4 and EE 6.10 will avoid the effect. Policy EE 6.4 states:

> Avoid siting new or re-powered energy generation facilities, and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.
>
> Policy EE 6.10 is as follows:
>
> The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the HRA shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

In addition to consideration of the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and the effects of diesel particulates, a carbon monoxide hot spot model was conducted for the Preferred Plan and all three scenarios for a select number of intersections in the city. This model was prepared in accordance with the Transportation Project-Level Carbon Monoxide Protocol established by Caltrans (1997). The procedure followed is detailed in Appendix B of that protocol.

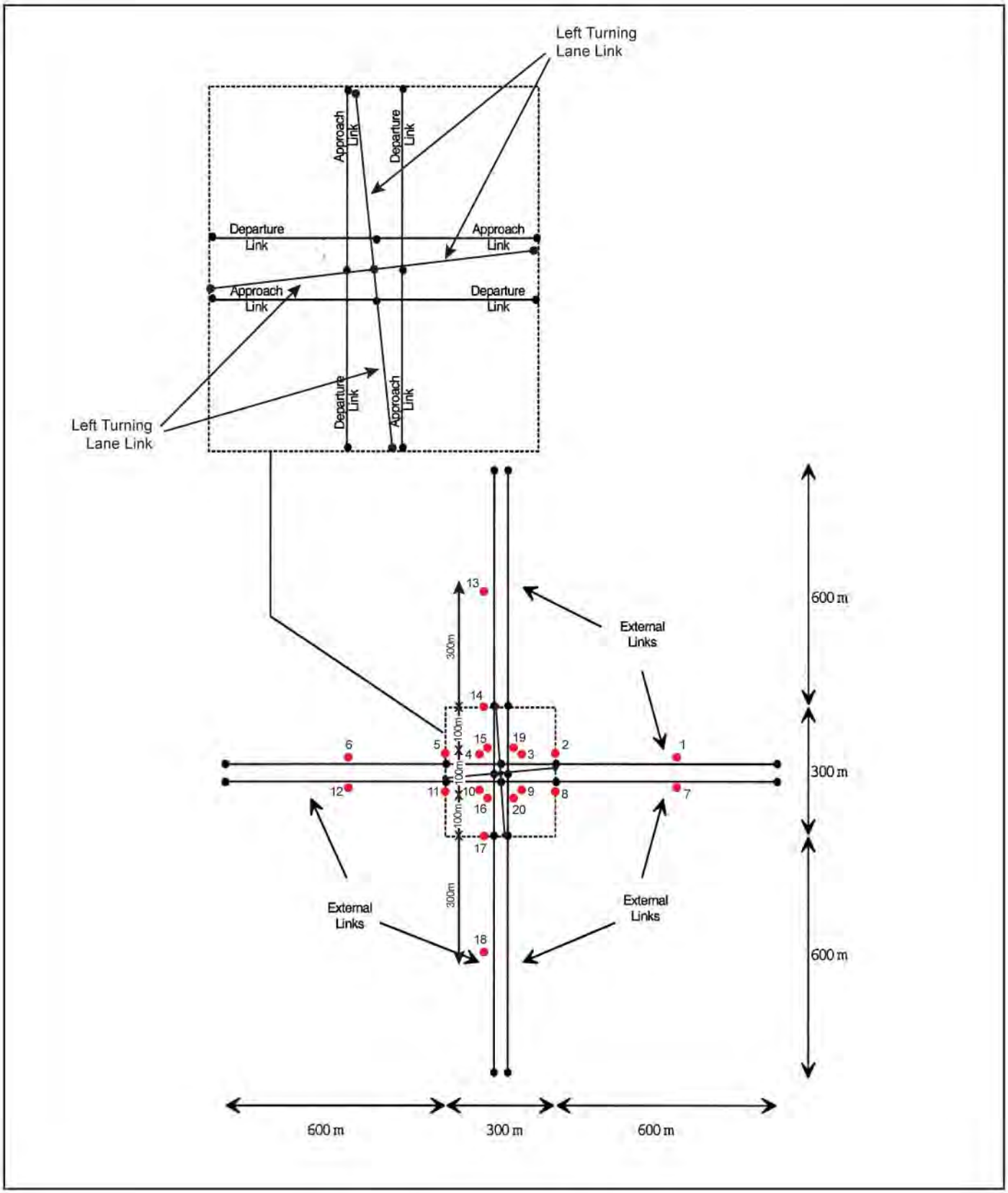
Five intersections were modeled. The intersections include:

- Willow Street and Bonita Road
- Broadway and H Street
- Melrose and Orange Avenue
- Otay Lakes Road and Eastlake Parkway
- Paseo del Rey and Telegraph Canyon Road

These intersections were selected as examples of intersections at different places in the city and represented a range of traffic volumes and configurations. The traffic volumes, intersection configuration, and cruise speeds were provided by the City of Chula Vista. Concentrations were calculated for 20 receptors for each intersection. The basic configuration of the intersections and the receptor locations for a typical intersection is illustrated in Figure 5.11-3.

The detailed modeling assumptions and results are provided in Appendix F. The results of the calculations for the Preferred Plan and all three Scenarios are presented in the following tables. Table 5.11-12 provides the combination of the maximum CO concentration from the intersections modeled and the maximum intersection contribution as measured at the Chula Vista monitoring station for a winter condition. The summer concentrations for these conditions are provided in Table 5.11-13.

For the Preferred Plan, the maximum predicted one-hour CO concentration is 6.6 ppm which occurred in the winter and the maximum predicted eight-hour CO concentration is 5.3 ppm and also occurs in the winter. All three Scenarios had the same maximum predicted one-hour CO concentration of 6.7 ppm and the same maximum predicted eight-hour concentration of 5.4 ppm, which both occur in the winter. These concentrations do not exceed the California or federal ambient air quality standards for carbon monoxide, and demonstrates that future traffic volumes can operate without exposing people to substantial CO concentrations. The hot spot analysis conducted for the Preferred Plan and all three Scenarios is based on traffic parameters projected for buildout conditions. The potential for hot spot impacts resulting from future conditions will depend upon the specific conditions at a given time. The actual future performance of an intersection will depend upon the timing of development and the timing of roadway and intersection improvements. Avoiding



● Receptors at 3m from edge of roadway and 1.8m high

● Link end point

FIGURE 5.11-3

Link and Receptor Network For a Single Intersection with Dedicated Left Turn Lanes

RECON

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TABLE 5.11-12
TOTAL WINTER CO CONCENTRATIONS AT MODELED RECEIVERS

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Parkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Preferred Plan										
1	6.2	5.0	6.3	5.0	6.1	4.9	6.3	5.0	6.3	5.0
2	6.3	5.0	6.6	5.3	6.2	5.0	6.5	5.2	6.5	5.2
3	6.2	5.0	6.6	5.3	6.2	5.0	6.6	5.3	6.5	5.2
4	6.3	5.0	6.6	5.3	6.2	5.0	6.5	5.2	6.5	5.2
5	6.3	5.0	6.6	5.3	6.2	5.0	6.6	5.3	6.5	5.2
6	6.2	5.0	6.4	5.1	6.1	4.9	6.4	5.1	6.3	5.0
7	6.3	5.0	6.4	5.1	6.2	5.0	6.4	5.1	6.4	5.1
8	6.4	5.1	6.6	5.3	6.3	5.0	6.6	5.3	6.6	5.3
9	6.3	5.0	6.6	5.3	6.3	5.0	6.6	5.3	6.5	5.2
10	6.4	5.1	6.6	5.3	6.3	5.0	6.5	5.2	6.5	5.2
11	6.4	5.1	6.6	5.3	6.3	5.0	6.6	5.3	6.6	5.3
12	6.2	5.0	6.3	5.0	6.2	5.0	6.3	5.0	6.4	5.1
13	6.0	4.8	6.3	5.0	6.1	4.9	6.2	5.0	6.0	4.8
14	6.1	4.9	6.6	5.3	6.3	5.0	6.3	5.0	6.1	4.9
15	6.1	4.9	6.6	5.3	6.3	5.0	6.4	5.1	6.2	5.0
16	6.1	4.9	6.6	5.3	6.3	5.0	6.4	5.1	6.2	5.0
17	6.0	4.8	6.6	5.3	6.3	5.0	6.3	5.0	6.0	4.8
18	5.9	4.7	6.3	5.0	6.1	4.9	6.1	4.9	5.9	4.7
19	6.1	4.9	6.6	5.3	6.4	5.1	6.4	5.1	6.2	5.0
20	6.1	4.9	6.5	5.2	6.3	5.0	6.4	5.1	6.2	5.0
Scenario 1										
1	6.2	5.0	6.3	5.0	6.1	4.9	6.3	5.0	6.3	5.0
2	6.3	5.0	6.6	5.3	6.2	5.0	6.6	5.3	6.5	5.2
3	6.2	5.0	6.6	5.3	6.2	5.0	6.6	5.3	6.5	5.2
4	6.3	5.0	6.6	5.3	6.2	5.0	6.6	5.3	6.5	5.2
5	6.3	5.0	6.6	5.3	6.2	5.0	6.7	5.4	6.5	5.2
6	6.2	5.0	6.3	5.0	6.1	4.9	6.4	5.1	6.3	5.0
7	6.3	5.0	6.3	5.0	6.2	5.0	6.4	5.1	6.4	5.1
8	6.5	5.2	6.6	5.3	6.3	5.0	6.6	5.3	6.6	5.3
9	6.4	5.1	6.6	5.3	6.3	5.0	6.6	5.3	6.5	5.2
10	6.4	5.1	6.6	5.3	6.3	5.0	6.6	5.3	6.5	5.2

TABLE 5.11-12
TOTAL WINTER CO CONCENTRATIONS AT MODELED RECEIVERS
(continued)

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Parkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Scenario 1 (cont.)										
11	6.4	5.1	6.6	5.3	6.3	5.0	6.6	5.3	6.6	5.3
12	6.2	5.0	6.3	5.0	6.2	5.0	6.4	5.1	6.4	5.1
13	6.0	4.8	6.3	5.0	6.1	4.9	6.2	5.0	6.0	4.8
14	6.1	4.9	6.6	5.3	6.3	5.0	6.4	5.1	6.2	5.0
15	6.1	4.9	6.6	5.3	6.3	5.0	6.4	5.1	6.2	5.0
16	6.1	4.9	6.6	5.3	6.3	5.0	6.4	5.1	6.2	5.0
17	6.0	4.8	6.6	5.3	6.3	5.0	6.3	5.0	6.0	4.8
18	5.9	4.7	6.3	5.0	6.1	4.9	6.2	5.0	5.9	4.7
19	6.1	4.9	6.6	5.3	6.4	5.1	6.4	5.1	6.2	5.0
20	6.1	4.9	6.5	5.2	6.4	5.1	6.4	5.1	6.2	5.0
Scenario 2										
1	0.4	0.32	0.5	0.4	0.3	0.24	0.5	0.4	0.5	0.4
2	0.5	0.4	0.8	0.64	0.4	0.32	0.8	0.64	0.7	0.56
3	0.4	0.32	0.8	0.64	0.4	0.32	0.8	0.64	0.7	0.56
4	0.5	0.4	0.8	0.64	0.4	0.32	0.8	0.64	0.7	0.56
5	0.5	0.4	0.8	0.64	0.4	0.32	0.9	0.72	0.7	0.56
6	0.4	0.32	0.6	0.48	0.3	0.24	0.6	0.48	0.5	0.4
7	0.5	0.4	0.6	0.48	0.4	0.32	0.6	0.48	0.6	0.48
8	0.7	0.56	0.8	0.64	0.5	0.4	0.8	0.64	0.8	0.64
9	0.6	0.48	0.8	0.64	0.5	0.4	0.8	0.64	0.7	0.56
10	0.6	0.48	0.8	0.64	0.5	0.4	0.8	0.64	0.7	0.56
11	0.6	0.48	0.8	0.64	0.5	0.4	0.8	0.64	0.8	0.64
12	0.4	0.32	0.5	0.4	0.4	0.32	0.6	0.48	0.6	0.48
13	0.2	0.16	0.5	0..4	0.3	0.24	0.4	0.32	0.2	0.16
14	0.3	0.24	0.8	0.64	0.5	0.4	0.6	0.48	0.3	0.24
15	0.3	0.24	0.8	0.64	0.5	0.4	0.6	0.48	0.4	0.32
16	0.3	0.24	0.8	0.64	0.5	0.4	0.6	0.48	0.4	0.32
17	0.2	0.16	0.8	0.64	0.5	0.4	0.5	0.4	0.2	0.16
18	0.1	0.08	0.6	0.48	0.3	0.24	0.4	0.32	0.1	0.08
19	0.3	0.24	0.8	0.64	0.6	0.48	0.6	0.48	0.4	0.32
20	0.3	0.24	0.7	0.56	0.6	0.48	0.6	0.48	0.4	0.32

TABLE 5.11-12
TOTAL WINTER CO CONCENTRATIONS AT MODELED RECEIVERS
(continued)

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Parkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Scenario 3										
1	6.2	5.0	6.3	5.0	6.1	4.9	6.3	5.0	6.3	5.0
2	6.3	5.0	6.5	5.2	6.2	5.0	6.6	5.3	6.5	5.2
3	6.2	5.0	6.5	5.2	6.2	5.0	6.6	5.3	6.5	5.2
4	6.3	5.0	6.5	5.2	6.2	5.0	6.6	5.3	6.5	5.2
5	6.2	5.0	6.5	5.2	6.2	5.0	6.7	5.4	6.5	5.2
6	6.2	5.0	6.3	5.0	6.1	4.9	6.4	5.1	6.3	5.0
7	6.3	5.0	6.3	5.0	6.2	5.0	6.4	5.1	6.4	5.1
8	6.4	5.1	6.5	5.2	6.3	5.0	6.6	5.3	6.6	5.3
9	6.3	5.0	6.5	5.2	6.3	5.0	6.6	5.3	6.5	5.2
10	6.4	5.1	6.5	5.2	6.3	5.0	6.6	5.3	6.5	5.2
11	6.4	5.1	6.5	5.2	6.3	5.0	6.6	5.3	6.6	5.3
12	6.2	5.0	6.3	5.0	6.2	5.0	6.4	5.1	6.4	5.1
13	6.0	4.8	6.2	5.0	6.1	4.9	6.2	5.0	6.0	4.8
14	6.1	4.9	6.5	5.2	6.3	5.0	6.4	5.1	6.2	5.0
15	6.1	4.9	6.5	5.2	6.3	5.0	6.4	5.1	6.2	5.0
16	6.1	4.9	6.5	5.2	6.3	5.0	6.4	5.1	6.2	5.0
17	6.0	4.8	6.5	5.2	6.3	5.0	6.3	5.0	6.0	4.8
18	5.9	4.7	6.3	5.0	6.1	4.9	6.2	5.0	5.9	4.7
19	6.1	4.9	6.5	5.2	6.4	5.1	6.4	5.1	6.2	5.0
20	6.1	4.9	6.5	5.2	6.4	5.1	6.4	5.1	6.2	5.0

NOTE: This table provides the combination of the maximum CO concentration from the intersections modeled and the maximum intersection contribution as measured at the Chula Vista monitoring station.

TABLE 5.11-13
TOTAL SUMMER CO CONCENTRATIONS AT MODELED RECEIVERS

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Pkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Preferred Plan										
1	3.2	2.3	3.4	2.5	3.1	2.3	3.3	2.4	3.4	2.5
2	3.3	2.4	3.7	2.7	3.2	2.3	3.6	2.5	3.6	2.7
3	3.2	2.3	3.7	2.7	3.2	2.3	3.6	2.5	3.5	2.6
4	3.3	2.4	3.7	2.7	3.2	2.3	3.6	2.5	3.5	2.6
5	3.3	2.4	3.7	2.7	3.2	2.3	3.7	2.7	3.6	2.7
6	3.2	2.3	3.4	2.5	3.1	2.3	3.4	2.5	3.4	2.5
7	3.3	2.4	3.4	2.5	3.2	2.3	3.4	2.5	3.5	2.6
8	3.5	2.6	3.7	2.7	3.3	2.4	3.7	2.7	3.7	2.7
9	3.4	2.5	3.7	2.7	3.3	2.4	3.7	2.7	3.6	2.7
10	3.4	2.5	3.7	2.7	3.3	2.4	3.6	2.7	3.6	2.7
11	3.4	2.5	3.7	2.7	3.3	2.4	3.7	2.7	3.7	2.7
12	3.2	2.3	3.4	2.5	3.2	2.3	3.4	2.5	3.4	2.5
13	3.0	2.2	3.3	2.4	3.1	2.3	3.1	2.3	3.0	2.2
14	3.1	2.3	3.7	2.7	3.3	2.4	3.4	2.5	3.1	2.3
15	3.1	2.3	3.7	2.7	3.3	2.4	3.4	2.5	3.1	2.3
16	3.1	2.3	3.7	2.7	3.3	2.4	3.4	2.5	3.2	2.3
17	2.9	2.1	3.7	2.7	3.4	2.5	3.3	2.4	3.0	2.2
18	2.8	2.0	3.4	2.5	3.1	2.3	3.1	2.3	2.9	2.1
19	3.0	2.2	3.7	2.7	3.4	2.5	3.4	2.5	3.1	2.3
20	3.0	2.2	3.6	2.5	3.4	2.5	3.4	2.5	3.2	2.3
Scenario 1										
1	3.2	2.6	3.3	2.6	3.1	2.5	3.3	2.6	3.4	2.7
2	3.3	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.6	2.9
3	3.2	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.5	2.8
4	3.3	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.6	2.9
5	3.3	2.6	3.7	3.0	3.2	2.6	3.8	3.0	3.6	2.9
6	3.2	2.6	3.4	2.7	3.1	2.5	3.4	2.7	3.4	2.7
7	3.3	2.6	3.4	2.7	3.2	2.6	3.4	2.7	3.5	2.8
8	3.5	2.8	3.7	3.0	3.3	2.6	3.7	3.0	3.7	3.0
9	3.4	2.7	3.7	3.0	3.3	2.6	3.7	3.0	3.6	2.9
10	3.4	2.7	3.7	3.0	3.3	2.6	3.6	2.9	3.6	2.9

TABLE 5.11-13
TOTAL SUMMER CO CONCENTRATIONS AT MODELED RECEIVERS
(continued)

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Pkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Scenario 1 (cont.)										
11	3.5	2.8	3.7	3.0	3.3	2.6	3.7	3.0	3.7	3.0
12	3.2	2.6	3.4	2.7	3.2	2.6	3.4	2.7	3.4	2.7
13	3.0	2.4	3.3	2.6	3.1	2.5	3.2	2.6	3.0	2.4
14	3.1	2.5	3.6	2.9	3.3	2.6	3.4	2.7	3.1	2.5
15	3.1	2.5	3.7	3.0	3.4	2.7	3.4	2.7	3.2	2.6
16	3.1	2.5	3.7	3.0	3.3	2.6	3.4	2.7	3.2	2.6
17	2.9	2.3	3.7	3.0	3.4	2.7	3.3	2.6	3.0	2.4
18	2.8	2.2	3.4	2.7	3.1	2.5	3.1	2.5	2.9	2.3
19	3.0	2.4	3.6	2.9	3.4	2.7	3.4	2.7	3.2	2.6
20	3.0	2.4	3.6	2.9	3.4	2.7	3.5	2.8	3.2	2.6
Scenario 2										
1	3.2	2.6	3.4	2.7	3.1	2.5	3.3	2.6	3.4	2.7
2	3.3	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.6	2.9
3	3.2	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.5	2.8
4	3.3	2.6	3.7	3.0	3.2	2.6	3.7	3.0	3.5	2.8
5	3.3	2.6	3.7	3.0	3.2	2.6	3.8	3.0	3.6	2.9
6	3.2	2.6	3.4	2.7	3.1	2.5	3.4	2.7	3.4	2.7
7	3.3	2.6	3.4	2.7	3.2	2.6	3.4	2.7	3.5	2.8
8	3.5	2.8	3.7	3.0	3.3	2.6	3.7	3.0	3.7	3.0
9	3.4	2.7	3.7	3.0	3.3	2.6	3.7	3.0	3.6	2.9
10	3.4	2.7	3.7	3.0	3.3	2.6	3.6	2.9	3.6	2.9
11	3.4	2.7	3.7	3.0	3.3	2.6	3.7	3.0	3.7	3.0
12	3.2	2.6	3.4	2.7	3.2	2.6	3.4	2.7	3.4	2.7
13	3.0	2.4	3.3	2.6	3.1	2.5	3.2	2.6	3.0	2.4
14	3.1	2.5	3.7	3.0	3.3	2.6	3.4	2.7	3.1	2.5
15	3.1	2.5	3.7	3.0	3.3	2.6	3.4	2.7	3.2	2.6
16	3.1	2.5	3.7	3.0	3.3	2.6	3.4	2.7	3.2	2.6
17	2.9	2.3	3.7	3.0	3.4	2.7	3.3	2.6	3.0	2.4
18	2.8	2.2	3.4	2.7	3.1	2.5	3.1	2.5	2.9	2.3
19	3.0	2.4	3.7	3.0	3.4	2.7	3.4	2.7	3.2	2.6
20	3.0	2.4	3.6	2.9	3.4	2.7	3.5	2.8	3.2	2.6

TABLE 5.11-13
TOTAL SUMMER CO CONCENTRATIONS AT MODELED RECEIVERS
(continued)

	Willow St./Bonita Rd.		Broadway Ave./H St.		Melrose Ave./Orange Ave.		Otay Lakes Rd./Eastlake Pkway		Paseo del Rey/Telegraph Canyon Rd.	
Receivers	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)	1-hour CO Concentration Due to Traffic (ppm)	8-hour CO Concentration Due to Traffic (ppm)
Scenario 3										
1	3.2	2.6	3.3	2.6	3.1	2.5	3.3	2.6	3.4	2.7
2	3.3	2.6	3.6	2.9	3.3	2.6	3.7	3.0	3.6	2.9
3	3.2	2.6	3.6	2.9	3.2	2.6	3.7	3.0	3.5	2.8
4	3.3	2.6	3.6	2.9	3.2	2.6	3.7	3.0	3.6	2.9
5	3.3	2.6	3.6	2.9	3.2	2.6	3.8	3.0	3.6	2.9
6	3.2	2.6	3.3	2.6	3.1	2.5	3.4	2.7	3.4	2.7
7	3.3	2.6	3.3	2.6	3.2	2.6	3.4	2.7	3.5	2.8
8	3.5	2.8	3.6	2.9	3.3	2.6	3.7	3.0	3.7	3.0
9	3.4	2.7	3.6	2.9	3.3	2.6	3.7	3.0	3.6	2.9
10	3.4	2.7	3.6	2.9	3.3	2.6	3.6	2.9	3.6	2.9
11	3.4	2.7	3.6	2.9	3.3	2.6	3.7	3.0	3.7	3.0
12	3.2	2.6	3.3	2.6	3.2	2.6	3.4	2.7	3.4	2.7
13	3.0	2.4	3.3	2.6	3.1	2.5	3.2	2.6	3.0	2.4
14	3.1	2.5	3.6	2.9	3.3	2.6	3.4	2.7	3.1	2.5
15	3.1	2.5	3.6	2.9	3.4	2.7	3.4	2.7	3.2	2.6
16	3.1	2.5	3.6	2.9	3.4	2.7	3.4	2.7	3.2	2.6
17	2.9	2.3	3.6	2.9	3.4	2.7	3.3	2.6	3.0	2.4
18	2.8	2.2	3.3	2.6	3.1	2.5	3.1	2.5	2.9	2.3
19	3.0	2.4	3.5	2.8	3.4	2.7	3.4	2.7	3.2	2.6
20	3.0	2.4	3.5	2.8	3.4	2.7	3.5	2.8	3.2	2.6

NOTE: This table provides the combination of the maximum CO concentration from the intersections modeled and the maximum intersection contribution as measured at the Chula Vista monitoring station.

impacts will depend upon the effective design and operation of each intersection. The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations resulting from CO hotspots is self-mitigated because the adoption of Policy LUT 14.2 will avoid the effect. Policy LUT 14.2 states:

> Optimize and maintain the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels.

5.11.3.5 Threshold 5: Create Objectionable Odors Affecting a Substantial Number of People

There are no specific policies contained in the proposed General Plan Update that address odors. Each of the scenarios is considered to have the same effect regarding the potential exposure of people to odor. There are no known odor generators in the Northwest or the Southwest Planning Areas. The Otay Landfill is an odor generator in the East Planning Area. While the proposed land use changes would not create objectionable odors, the proposed increase in residential density downwind of the landfill would expose more people to objectionable odors, particularly in Scenarios 2 and 3 due to proposed residential use adjacent to the landfill.

The Preferred Plan and Scenario 1 do not represent a significant odor impact because they do not place residential uses adjacent to the Otay Landfill. Scenarios 2 and 3 do present a significant odor impact because they place residential use within 1,000 feet of the landfill.

5.11.4 Level of Significance Prior to Mitigation

Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan

Threshold 1 represents a significant adverse impact. Although measures, such as pedestrian trails, on-street bicycle paths, and an emphasis on public transit, have been incorporated into the proposed General Plan Update to lessen air quality impacts, because the General Plan Update is not consistent with the growth assumptions used to develop the RAQS, there is a conflict with an applicable plan. It should be noted, however, that the nature of the General Plan Update's land use plan and policies could very well represent an improvement to air quality, in that it stresses walkable communities and transit oriented/mixed use development. Furthermore, it is likely that with the next regional growth forecasts conducted by SANDAG and the associated air quality management plan that air quality improvements will be forecast.

Each of the General Plan Update scenarios represent a potential increase in development and population in the plan area. By changing land use designations, the General Plan Update

would no longer be in conformance with the growth projections used by SANDAG as the basis for the adopted air quality management plan. As such, until revisions are made to the SANDAG plan that reflect the General Plan Update scenario that is ultimately approved, this is a significant adverse air quality impact.

Threshold 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Each of the proposed scenarios permits industrial development in the Montgomery Subarea and the Otay Ranch Subarea. It is possible that the ultimate use of these areas would include industries that generate air pollutants. Without appropriate controls, air emissions associated with planned industrial uses could represent a significant adverse air quality impact. In addition, the Southbay Power Plant and the Goodrich facility in the Bayfront Planning Area are also potential emitters: health risk assessments demonstrating compliance with air standards have been prepared for these facilities.

The potential for development under the Preferred Plan or any of the Scenarios to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating because Policy EE 6.4 avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters.

Threshold 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

The Preferred Plan and any of the Scenarios are anticipated to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. As shown on Table 5.11-10, the proportional increase in multi-family units to single-family units--and resulting decrease in number of vehicle trips per unit--and the anticipated improvement in motor vehicle emissions result in an expected decrease in pollutants over existing conditions for all pollutants except SO_2 and PM_{10}. Since the region is not in compliance with the PM_{10} standard, and because the average daily emission is anticipated to increase, impacts are significant, until the region is in compliance.

Threshold 4: Expose sensitive receptors to substantial pollutant concentrations.

The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because of Policy EE 6.4 of the proposed General Plan Update avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of a highway. In addition, pollutant concentrations resulting from CO hotspots is self-mitigated and not significant because the adoption of Policy LUT 14.2 requires the

optimization and maintenance the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels.

Threshold 5: Create objectionable odors affecting a substantial number of people.

The Preferred Plan and Scenario 1 do not represent a significant odor impact because they do not place residential uses adjacent to the Otay Landfill. Scenarios 2 and 3 do present a significant odor impact because they place residential use within 1,000 feet of the landfill.

5.11.5 Mitigation Measures

Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan.

Because the significant air impact stems from an inconsistency between the proposed General Plan Update and the adopted General Plan upon which the RAQS were based, the only measure that can lessen the Threshold 1 effect is the revision of the RAQS based on the updated General Plan. This effort is the responsibility of SANDAG and San Diego APCD and is outside the jurisdiction of the City. As such, no mitigation is available to the City.

Threshold 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

The potential for development under the Preferred Plan or any of the Scenarios to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating through adoption and compliance with Policy EE 6.4. No additional mitigation is required.

Threshold 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Since the region is not in compliance with the PM_{10} standard and because the average daily emission is anticipated to increase, impacts are significant. PM_{10} emissions result from construction of projects and from daily operations in the City. The latter is primarily a result of vehicle traffic on area roads. Mitigation is achievable for fugitive dust from construction activities, but the only measures that would reduce those emissions from daily operations are those that reduce miles traveled on area roads. As noted in the above analysis, the General Plan Update includes measures aimed at promoting pedestrian activity and reducing trip lengths.

5.11-1 Mitigation of PM_{10} impacts requires active dust control during construction. As a matter of standard practice, the City shall require the following standard construction measures during construction to the extent applicable:

1. All unpaved construction areas shall be sprinkled with water or other acceptable San Diego APCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable APCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.

2. Trucks hauling dirt and debris shall be properly covered to reduce windblown dust and spills.

3. A 20-mile-per-hour speed limit on unpaved surfaces shall be enforced.

4. On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.

5. On-site stockpiles of excavated material shall be covered or watered.

6. Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City and/or APCD to reduce dust generation.

7. To the maximum extent feasible:

   Heavy-duty construction equipment with modified combustion/fuel injection systems for emissions control shall be utilized during grading and construction activities.

   Catalytic reduction for gasoline-powered equipment shall be used.

8. Equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible.

9. Electrical construction equipment shall be used to the extent feasible.

10. The simultaneous operations of multiple construction equipment units shall be minimized (i.e., phase construction to minimize impacts).

With the application of these measures, significant impacts resulting from projected PM_{10} impacts from construction would be mitigated. Impacts resulting from daily operation would remain significant until the region is determined to be in compliance with the standard.

Threshold 4: Expose sensitive receptors to substantial pollutant concentrations.

The potential for development under the Preferred Plan or any of the Scenarios to expose sensitive receptors to substantial pollutant concentrations is self-mitigated and not significant because of Policy EE 6.4 of the proposed General Plan Update avoids the placement of a sensitive receiver within 1,000 feet of major toxic air emitters and Policy EE 6.10 requires analysis of health risk resulting from new development or redevelopment projects within 500 feet of a highway. In addition, pollutant concentrations resulting from CO hotspots is self-mitigated and not significant because the adoption of Policy LUT 14.2 requires the optimization and maintenance the performance of the traffic signal system and the street system, to facilitate traffic flow and to minimize vehicular pollutant emission levels. No additional mitigation is required.

~~The potential for development under the Preferred Plan or any of the Scenarios to result in a land use that would violate an air quality standard or contribute to an existing violation is self-mitigating through adoption and compliance with Policy EE 6.4. No additional mitigation is required.~~

Threshold 5: Create objectionable odors affecting a substantial number of people.

No odor impacts are anticipated as a result of the Preferred Plan or Scenario 1. Significant impacts would occur with the approval of Scenario 2 or 3 as a result of the placement of residential uses within the 1,000-foot buffer of the Otay Landfill.

5.11-2 No residential use shall be permitted or constructed within 1,000 feet of the Otay Landfill while the landfill is open and operating, unless a project specific analysis is completed demonstrating to the satisfaction of the Environmental Review Coordinator that odor effects are below the odor thresholds for common compounds emitted by the landfill for less than two percent of the time. One such compound would be hydrogen sulfide with an odor threshold of .0045 ppm.

5.11.6 Level of Significance After Mitigation

Because of the plan inconsistency and the timing of revisions to the RAQS, and until such time that the region is in attainment of the Ozone, PM_{10}, and $PM_{2.5}$ standards, the impact based on Threshold 1 would remain significant and unmitigated. Because operational impacts resulting from particulates for which the region is not in conformance, air impacts as addressed in Threshold 3 remain significant and not mitigated.

5.12 Noise

5.12.1 Existing Conditions

5.12.1.1 Fundamentals of Noise

Simply stated, noise is unwanted sound. Sound is caused by minute pressure variations in the air—above and below static atmospheric pressure—that are sensed by the human ear. The number of these minute pressure variations over time is referred to as the frequency of the sound.

Sound in the ambient environment is composed of a wide range of frequencies. Because the human ear is not equally sensitive at all frequencies, two different noises that have the same sound pressure level (SPL) may be perceived as having different levels of loudness. Therefore, the SPL is not a measure of the loudness of a sound. In order to obtain levels that more closely approximate the perceived loudness of noise by humans, *frequency-weighting* of the sound level is used.

The most common frequency-weighting used for assessment of noise in the ambient environment is *A-weighting*. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise.

The noise at any given location is a function of the noise produced by the source, the propagation path between the source and the receiver, and the sensitivity of the receiver. To reduce noise levels at a sensitive receiver, the only available techniques are to reduce the noise of the source, to interrupt the propagation path between the source and the receiver, or to increase the distance between the source and the receiver. The propagation path is simply the path that the sound travels between its source and the receiver.

The actual impact of noise is not a function of loudness alone. The time of day which noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, there are a variety of metrics used to discuss sound and noise levels. Sound varies from instant to instant. In describing sound, it is necessary to refer to the time over which it occurs. The L_{eq} is the equivalent steady state sound level which in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same period.

Other measures which will be important for this discussion include the community noise equivalent level (CNEL), the sound exposure level (SEL), the maximum noise level (L_{max}), and the level that is exceeded a given amount of time ($L_{(n)}$).

The evaluation of the effects of noise in Chula Vista must consider the sound pressure levels to which people will be exposed, the duration of those levels, and the time of day at which

they occur. While people respond differently to specific noise situations, overall response is primarily a factor of these three main elements.

The following metrics can be used to describe the potential annoyance that community residents might experience due to noise:

Equivalent-continuous sound level (average sound level [L_{eq}]): The L_{eq} is the level of a steady sound which, in a stated period of time, contains the same acoustical energy as the actual time-varying sound during the same stated period. Typically, the L_{eq} is reported for one-hour periods and is referenced as $L_{eq(h)}$.

Community noise equivalent level (CNEL): The CNEL is a 24-hour A-weighted decibel average sound level [dB(A) L_{eq}] from midnight to midnight obtained after the addition of 5 dB to sound levels occurring between 7:00 P.M. and 10:00 P.M. and 10 dB to the sound levels occurring between 10:00 P.M. and 7:00 A.M. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. Adding 5 dB and 10 dB to the evening and nighttime hours accounts for the added sensitivity of humans to noise during these time periods.

The CNEL is often used as a measure of the cumulative noise impact for various land uses because it correlates well with the results of surveys of annoyance. It also permits comparison with noise impacts from other community sources.

Sound exposure level (SEL): The sound exposure level is a measure of single noise events, such as aircraft flyovers. It is the A-weighted sound level integrated over the duration of the event and normalized to one second. Because the total energy of an event is normalized to a one-second period, regardless of the length of the event, it is useful for comparing single events. Louder events have a greater SEL than quieter ones and events that last longer in time have a greater SEL than do shorter ones.

Given the equal energy principal outlined above, the SEL can provide a basis for evaluating the relative effect of different noise events, factoring out the duration of the event. It should be noted, however, that the reported SEL is not a noise level that is heard, but the result of a calculation that places all the energy of the event into a one-second period.

Maximum noise level (L_{max}): The L_{max} is the greatest sound level measured on a sound level meter during a time interval or event. A sound level meter samples sound at a fixed rate, that is periodically at a regular interval. The maximum noise level measured by the meter depends upon the time constant that the meter is set for. When a meter is set to *slow* the time constant is one second, when the meter is set to *fast* the time constant is 0.125 second.

The most obvious factor affecting noise levels is the distance from a noise source to a receptor. The manner in which noise reduces with distance depends on the following factors:

- Geometric spreading from point and line sources
- Ground absorption
- Atmospheric effects and refraction
- Shielding by natural and man-made features, noise barriers, diffraction, and reflection

Sound from a small localized source (approximating a "point" source), such as a generator or piece of construction equipment, radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance (6 dB(A)/DD).

Traffic noise is not a single, stationary point source of sound. The movement of the vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval.

When the intervening ground between a line source and a receiver is reflective, such as parking lots or smooth bodies of water, changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the line source or 3 dB(A)/DD (6 dB(A)/DD for a point source). If there is an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees, an excess ground attenuation value of 1.5 dB(A)/DD is normally added to the hard site drop-off rate. When added to the hard site drop-off rate this results in an overall drop-off rate of 4.5 dB(A)/DD for a line source (7.5 dB(A)/DD for a point source).

In the outdoor environment, a change in noise level is perceived by the average person as follows:

3 dB(A) barely perceptible
5 dB(A) readily perceptible
10 dB(A) perceived as a doubling or halving of noise.

5.12.1.2 Regulatory Plans and Policies

Section 19.689 of the Chula Vista Municipal Code (Noise Control Ordinance) contains noise performance standards. These performance standards generally apply to stationary sources of noise (i.e., noise sources other than transportation related) and are stated as the maximum permissible sound level that can be produced by a noise generator at a receiving property

boundary. Table 5.12-1 shows the exterior noise limits of the Noise Control Ordinance. These levels are applied to both environmental and nuisance noise sources as defined by the ordinance.

TABLE 5.12-1
EXTERIOR NOISE LIMITS

	Noise Level [dB(A)]	
Receiving Land Use Category	10 P.M. to 7 A.M. (Weekdays) 10 P.M. to 8 A.M. (Weekends)	7 A.M. to 10 P.M. (Weekdays) 8 A.M. to 10 P.M. (Weekends)
All residential (except multiple dwelling)	45	55
Multiple dwelling residential	50	60
Commercial	60	65
Light industry – I-R and I-L zone	70	70
Heavy industry – I zone	80	80

NOTES:
Environmental Noise – L_{eq} in any hour.
Nuisance Noise – Not to be exceeded any time.

5.12.1.3 Existing Citywide Conditions

Noise levels within Chula Vista generally are dominated by traffic-generated noise. Other noise sources in the city include:

- The San Diego Trolley;
- Rail freight service provided by the San Diego & Imperial Valley Railroad (operates at night when trolley is not in service);
- Coors Amphitheater (operates on a periodic basis during the summer concert season);
- Aircraft operations associated with Brown Field and nearby military facilities (located outside the General Plan area limits);
- Operations at the Otay Landfill (located within the General Plan area but outside the city boundaries);
- The South Bay Power Plant;
- Chula Vista Generating Station (Chula Vista I); and
- Various commercial and industrial operations throughout the city.

In order to provide a qualitative assessment of the variability of existing noise levels throughout the plan area, a series of 23 daytime noise measurements ranging from 20 to 30 minutes in duration were made throughout the plan area. In addition to the 23 short-term measurements, two 24-hour measurements were also taken within the plan area. The measurement locations shown in Figure 5.12-1 were chosen to obtain existing noise levels in order to characterize the existing ambient noise conditions.

Table 5.12-2 presents the results of the noise measurements. As seen from Table 5.12-2, the measured short-term noise levels ranged from approximately 49 to 73 dB(A) L_{eq} with the loudest levels occurring in the more urbanized portions of the study area.

The two 24-hour noise measurements were taken to obtain the existing CNEL at two locations within the city. Measurement Location A is adjacent to residential uses near the junction of SR-54 and I-805. This location is approximately 760 feet west of the I-805 centerline and approximately 1,700 feet south of the SR-54 centerline. Table 5.12-3 contains the results of the measurements at this location. For the 24-hour period from 2:00 P.M. on January 15, 2003 to 2:00 P.M. on January 16, 2003, the measured CNEL at this location was 72. The second 24-hour measurement location (Location B) was between I-5 and the trolley tracks. At this location I-5 is depressed relative to the measurement location and the trolley tracks. Consequently, although background noise levels are primarily due to traffic on I-5, this location was used to estimate noise due to the trolley operations. The noise meter was placed approximately 29 feet to the west of the westernmost trolley track or approximately 45 feet back from the centerline between the two trolley tracks. Northbound trolleys generally use the eastern tracks while southbound trolleys generally use the western tracks. Table 5.12-3 contains the results of the measurements at this location.

As indicated, existing noise levels within the plan area are primarily due to traffic on area roadways but are also comprised of other sources. A brief discussion of each of these sources follows.

Traffic

Traffic noise occurs adjacent to every roadway and is directly related to the volume, speed, and mix of vehicles on a given roadway.

The Federal Highway Administration (FHWA) Noise Prediction Model (1979), with the California Vehicle Noise Emission Levels (Calveno) (California Department of Transportation 1983), was used to estimate roadway traffic noise within the plan area. The FHWA model takes into account the mix, speed, and volume of vehicles; roadway gradient; relative distances between sources, barriers, and receivers; and shielding provided by intervening terrain or structures.

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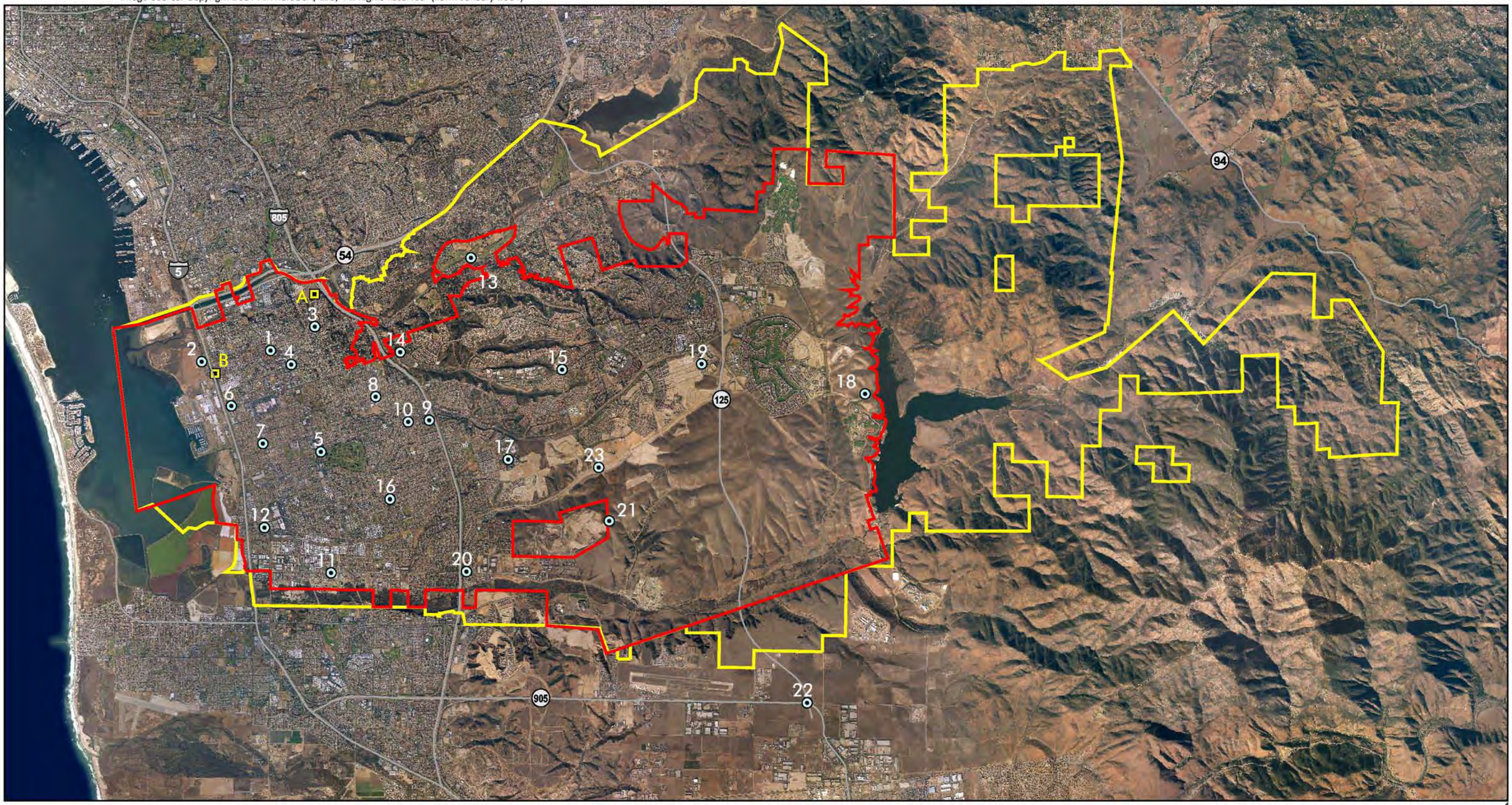

Chula Vista municipal boundary
Chula Vista General Plan area
24-Hour Measurement Locations
Short-term Measurement Locations

0 Miles 1.4 N

FIGURE 5.12-1
Noise Measurement Locations

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fig5.12-1 (noise measurement locations) 09/14/05

TABLE 5.12-2
SHORT-TERM NOISE MEASUREMENT RESULTS

Location	Date	Duration (Minutes)	Average Noise Level [dB(A)]	Traffic Noise Sources	Distance from Source	Noise Level at 50 Feet from Source [dB(A)]
1	12/30/2002	20	66.1	Fourth Avenue	50 feet from centerline	66.1
2	12/30/2002	30	60.6	I-5 on/off ramps	74 feet from centerline	62.3
3	12/30/2002	20	69.1	E Street	32.5 feet from centerline	67.2
4	12/30/2002	20	66.0	Third Avenue*	49 feet from centerline	65.9
				Park Way	50 feet from centerline	
5	12/30/2002	30	69.9	Third Avenue	48 feet from centerline	69.7
6	12/30/2002	30	69.6	H Street*	58 feet from centerline	70.2
				Woodlawn	42 feet from centerline	
7	12/30/2002	20	69.8	Broadway	57 feet from centerline	70.9
8	12/31/2002	20	63.4	J Street	50.5 feet from centerline	64.4
9	12/31/2002	20	68.5	Nacion	28 feet from centerline	N/a
				I-805*	440 feet from centerline	
10	12/31/2002	20	71.3	L Street	67.5 feet from centerline	72.6
11	12/31/2002	20	70.9	Main Street	42.5 feet from centerline	70.2
				Fourth Avenue	42.5 feet from centerline	
12	12/31/2002	30	64.7	Palomar Street*	83 feet from centerline	66.9
				Industrial Blvd	31 feet from centerline	
				Trolley	32 feet from center of near trolley tracks	
13	1/2/2003	30	54.2	Bonita Road	460 feet from centerline	63.8
14	1/2/2003	30	71.0	H Street	66 feet from centerline	72.2
15	1/2/2003	30	68.3	H Street	85.5 feet from centerline	72.2
				Paseo Ranchero	89.5 feet from centerline	
16	1/2/2003	20	67.5	Palomar Street	50 feet from centerline	65.3

TABLE 5.12-2
SHORT-TERM NOISE MEASUREMENT RESULTS
(continued)

Location	Date	Duration (Minutes)	Average Noise Level [dB(A)]	Traffic Noise Sources	Distance from Source	Noise Level at 50 Feet from Source [dB(A)]
				Hilltop	30 feet from centerline	
17	1/9/2003	20	60.7	Medical Center Court	50 feet from centerline	60.7
18	1/9/2003	30	59.6	Wueste Road	57 feet from centerline	60.2
19	1/9/2003	20	56.0	Santa Paula Drive	50 feet from centerline	56.0
20	1/9/2003	20	72.5	Otay Valley Road*	48.5 feet from centerline	72.4
				I-805	450 feet from centerline	
21	1/9/2003	20	48.9	N/A – landfill		
22	1/16/2003	30	73.3	I-905	64 feet from centerline	74.4
23	1/16/2003	20	68.4	Olympic Parkway	116.5 feet from centerline	72.7
				Heritage Road	68 feet from centerline	

*Indicates a dominant noise source.
N/A: Adjacent road is not dominant noise source.

TABLE 5.12-3
SUMMARY OF 24-HOUR NOISE MEASUREMENT RESULTS
(dB[A] L_{eq} for the stated period)

Location	January 15, 2003 2:00 P.M. to 7:00 P.M.	January 15, 2003 7:00 P.M. to 10:00 P.M.	January 15-16, 2003 10:00 P.M. to 7:00 A.M.	January 16, 2003 7:00 A.M. to 2:00 P.M.	CNEL
A	62	66	65	64	72
B	74	70	73	72	79

The analysis of the noise environment considered that the topography was flat with no intervening terrain or buildings between sensitive land uses and roadways. Because there are no obstructions assumed, in most cases predicted noise levels are higher than would actually be expected to occur. In actuality, buildings and other obstructions along roadways shield distant receivers from traffic noise to some degree.

Existing traffic noise levels were estimated for adopted General Plan Circulation Element roadways indicated by the City (Francis, pers. com. 2002). Figure 5.12-2 shows the Circulation Element roadways. Existing traffic volumes were obtained from a variety of sources. These include the Traffic Volume book maintained by the City of Chula Vista (Hellman, pers. com. 2002), traffic counts compiled by SANDAG (2003b), and traffic counts compiled by Caltrans (2003). Traffic speeds used in the analysis were those specified for the roads in the SANDAG traffic forecast model (SANDAG 2003c).

Traffic mix data chosen for this analysis were based on typical mix data for area roadways. Auto, medium truck, and heavy truck percentages were based on current area roadway performance. For Interstate 5, Interstate 805, and State Route 54, the average percentages of cars, medium trucks, and heavy trucks were 95.3 percent, 3.2 percent, and 1.5 percent, respectively. For this EIR, 95 percent, 3 percent, and 2 percent were used for all freeways. The traffic mix used for city streets was 97 percent cars, 2 percent medium trucks, and 1 percent heavy trucks. This mix was determined in consultation with the traffic engineer at the City of Chula Vista.

As part of this analysis prepared for the EIR, the City provided 15-minute interval traffic count data for a 24-hour period for seven roadway segments within the plan area. These data were used to estimate the traffic distribution on plan area roadways. The data summarized in Table 5.12-4 show an average of 77.7 percent daytime, 12.7 percent evening, and 9.6 percent nighttime traffic for these seven roadway segments. With this distribution, CNEL is approximately 1.4 decibels greater than the noise level for an average daytime hour.

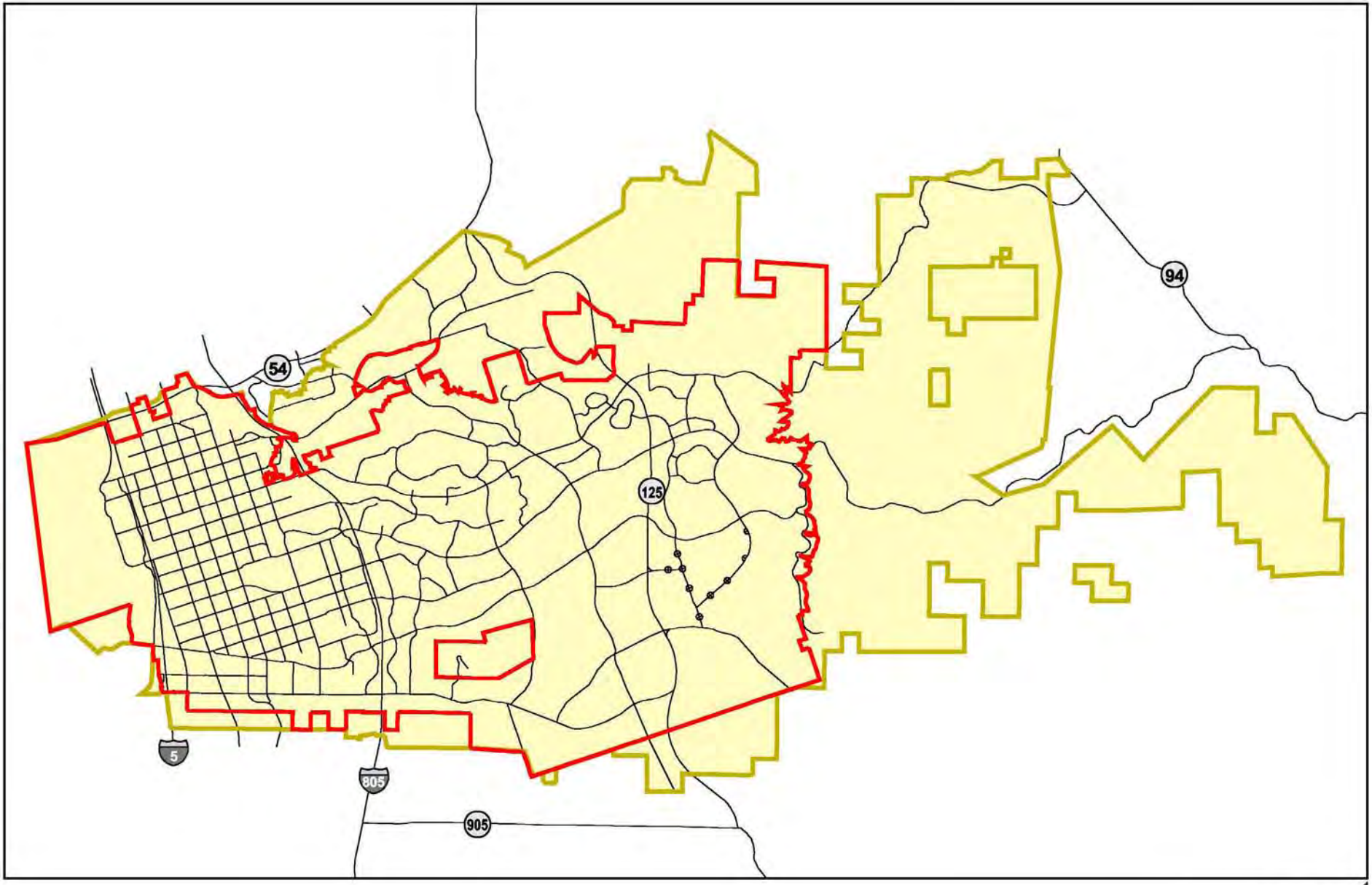

FIGURE 5.12-2
Circulation Element Roadways

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fig5.12-2 (circulation roadways) 09/14/05

TABLE 5.12-4
TRAFFIC DISTIBUTION DATA

Roadway	Percent Daytime	Percent Evening	Percent Nighttime
Main Street			
Between I-5 and Industrial Blvd.	80.7	8.8	10.5
Broadway			
Between G and H Streets	77.7	13.7	8.6
Between H and I Streets	78.3	14.0	7.7
East H Street			
Between Southwest College Entrance and Otay Lakes Road	77.2	13.3	9.5
Between Del Rey Blvd. and Paseo del Rey	75.8	13.7	10.5
Otay Lakes Road			
Between East H St. and Gotham St.	77.8	14.0	8.2
Between East H St. and Gotham St. (different day)	76.6	11.3	12.1
Average	77.7	12.7	9.6

However, as can be seen from Table 5.12-4, some roadways had more than 10 percent nighttime traffic with one segment showing over 12 percent nighttime traffic. The greater the amount of nighttime traffic, the greater the resulting CNEL generally will be. Since the traffic distribution data were collected for an extremely small sample of roadways within the plan area, a typical, conservative distribution of 77 percent daytime, 10 percent evening, and 13 percent nighttime traffic was assumed for projecting existing noise contours.

With this distribution, CNEL is approximately two decibels greater than the noise level for an average daytime hour.

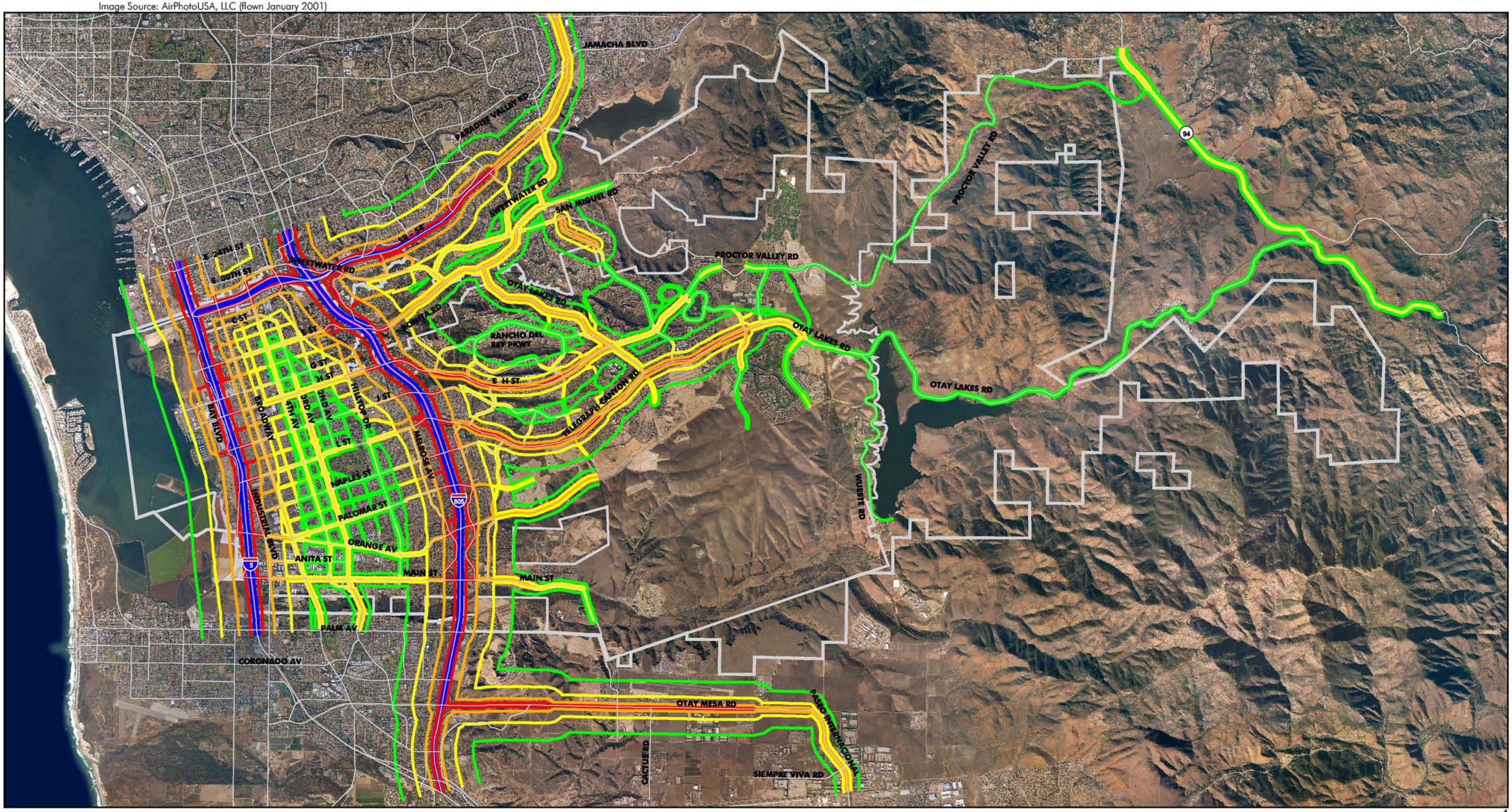
Figure 5.12-3 presents existing noise contours relative to the Circulation Element roadways throughout the plan area, which are based upon the conservative assumption of hard, flat site conditions.

It should be noted that at any specific location the actual existing noise level will depend upon not only the source noise, but the nature of the path from the source to the receiver. Buildings, walls, and other barriers will reduce direct line of sight noise levels. For existing noise contours, the first row of buildings (where they exist) will effectively reduce road noise to receivers situated behind those structures.

Railway and Trolley Operations

The primary railway operations in the plan area consist of trolley traffic. The current trolley schedule for the Blue Line indicates that there are 138 trolleys during the daytime hours, 20 trolleys during the evening hours, and 44 trolleys during the nighttime hours. For estimating

Image Source: AirPhotoUSA, LLC (flown January 2001)



Chula Vista General Plan area
Chula Vista municipal boundary
Circulation Element Roadways

Traffic Noise Contours (dBA)
60
65
70
75
80
85

0 Mile 1.4 N

FIGURE 5.12-3
Existing Traffic Noise Contours

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fig5.12-3 (existing traffic noise contours) 09/14/05

the noise due to trolley operations, the following formula provides the equivalent number of trolley operations for a 24-hour period (Swing and Pies 1973):

$$N_{total} = N_{day} + 3*N_{evening} + 10*N_{night}$$

This results in a total of 630 equivalent trolley operations. The CNEL due to trolley operations may be estimated from the SEL for a single trolley passby using the following formula (Swing and Pies 1973):

$$CNEL = SEL + 10*Log10(N_{total}) – 49.4$$

Using an SEL of approximately 94 dB(A) that was calculated from the 24-hour measurement data at Location B discussed above, the CNEL due to trolley operations is estimated to be approximately 72.5 CNEL at 45 feet from the centerline between the trolley tracks, or approximately 72 CNEL at a distance of 50 feet. Again, the maximum observed noise levels during the trolley passbys ranged from 86 to 101 dB(A). These maximum noise levels generally last for a few seconds during each passby. Table 5.12-5 provides the unobstructed distance from the centerline between the trolley tracks to noise contours resulting from trolley operations.

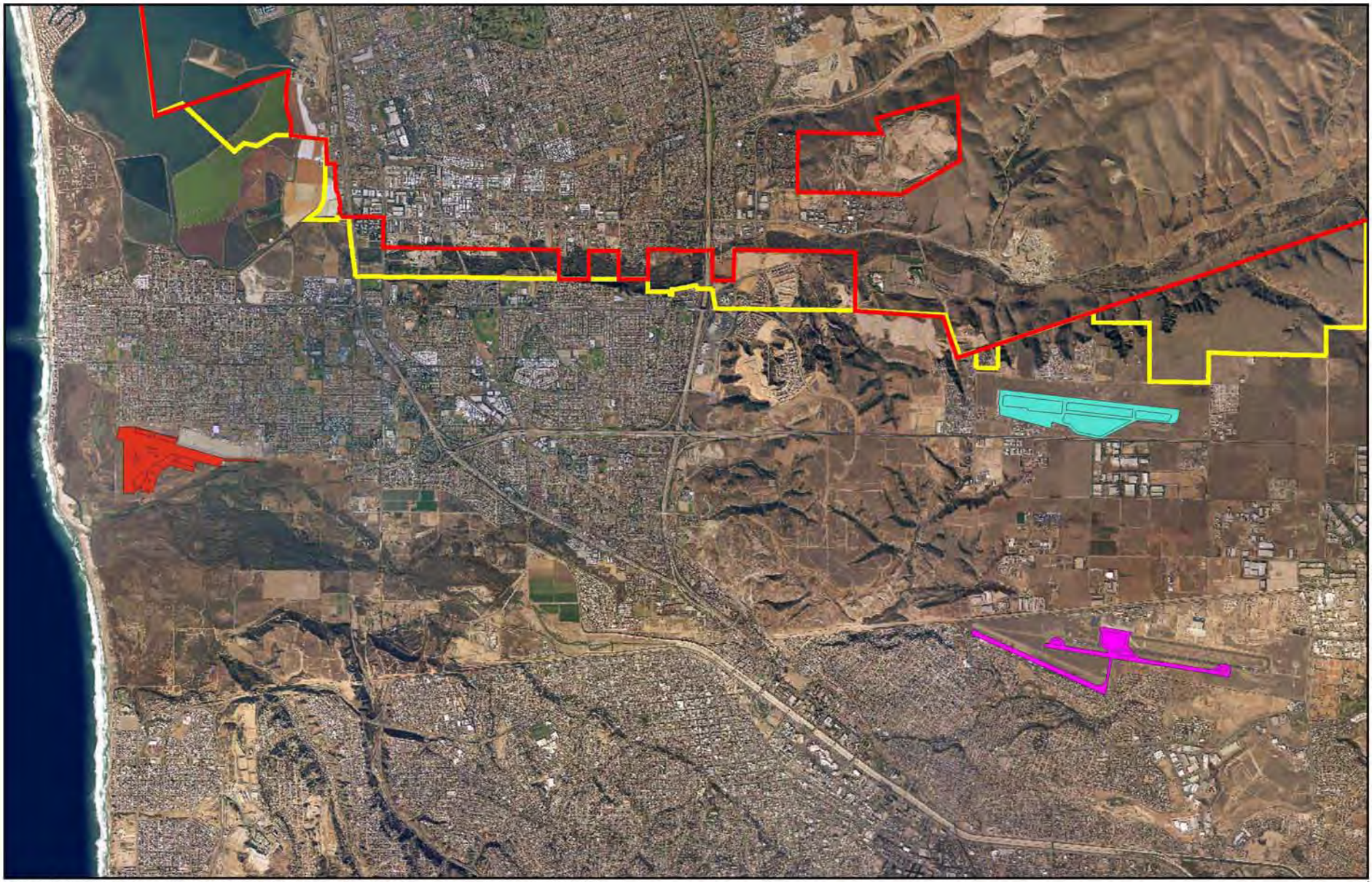
TABLE 5.12-5
DISTANCE FROM CENTERLINE BETWEEN TROLLEY TRACKS TO UNOBSTRUCTED NOISE CONTOURS

	CNEL			
	75	70	65	60
Distance	25 feet	80 feet	260 feet	810 feet

Maximum noise levels of up to 112 dB(A) were observed for the assumed freight operations. This is substantial given that these freight operations generally occur during the early morning hours (between 2:00 A.M. and 4:30 A.M.). As with the trolley passbys, maximum noise levels due to the freight operations are of relatively short duration (typically less than 30 seconds).

Aircraft Operations

There are several airfields in the immediate vicinity of the plan area as shown in Figure 5.12-4. The primary source of aircraft noise in the vicinity of the plan area is due to aircraft operations associated with Brown Field located within the city of San Diego immediately to the south. Noise levels due to operations at the other airfields generally do not impact the plan area. Figure 5.12-5 shows the existing noise contours associated with operations at Brown Field. As seen from this figure, a small portion of the plan area is



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0 Miles 1.2 N

Chula Vista municipal boundary
Chula Vista General Plan area
Rodriguez Airport
Imperial Beach Naval Auxiliary Landing
Brown Field

FIGURE 5.12-4
Airfields in the Project Vicinity

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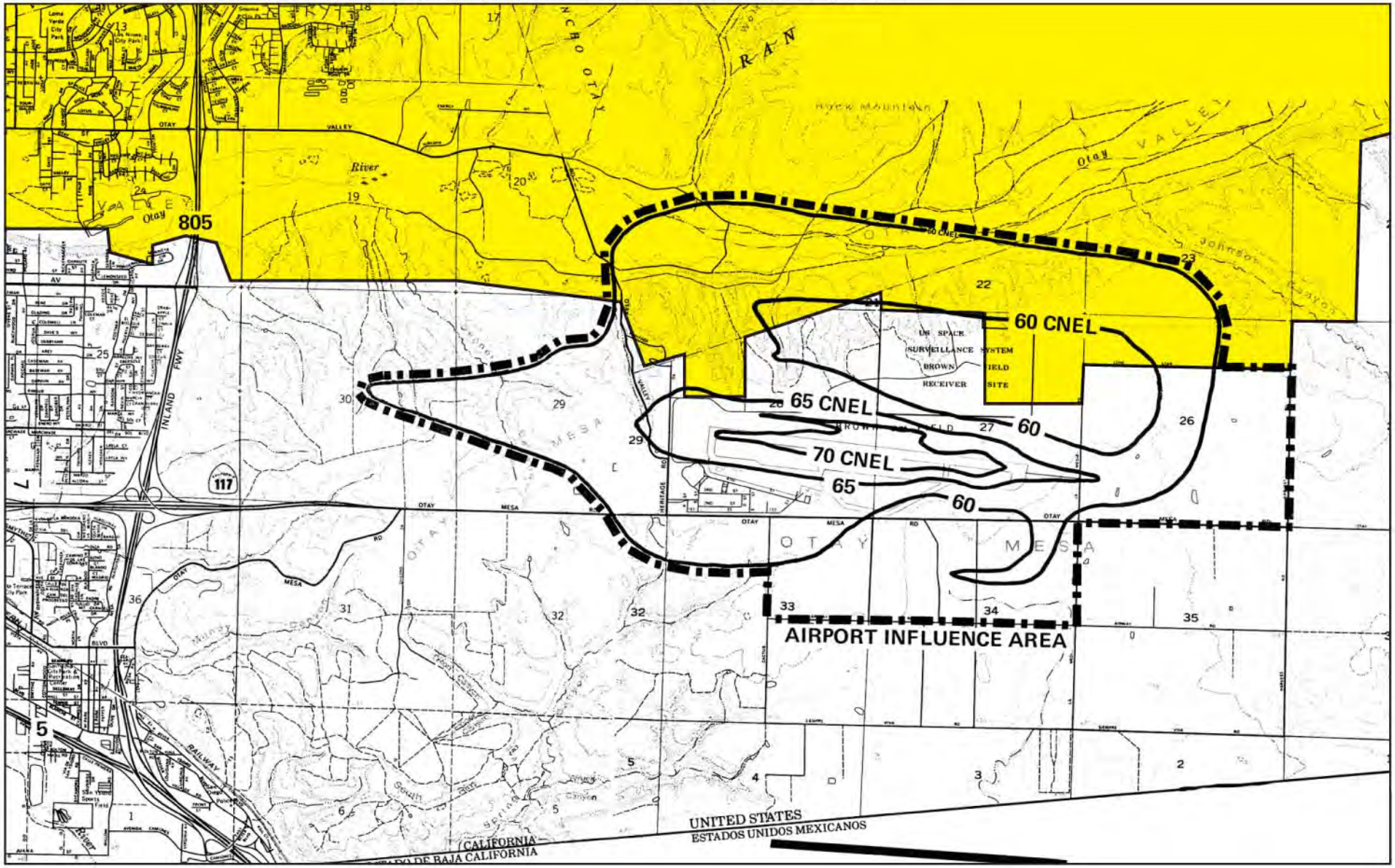
fig5.12-4 (airfields) 09/14/05

Map Source: San Diego Association of Governments, Comprehensive Land Use Plan, Brown Field, San Diego, CA, 1981



Chula Vista General Plan Area

N

FIGURE 5.12-5

Brown Field Projected Aircraft-Produced Community Noise Equivalent Level (CNEL) Contours

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within the Airport Influence Area, an even smaller portion is within the 60 CNEL contour, and a very small portion of the plan area is within the 65 CNEL contour.

Coors Amphitheater

The greatest noise impacts associated with Coors Amphitheater occur during concerts that use amplified music. A comprehensive evaluation of the potential impacts due to events at the amphitheater is contained in the environmental impact report that was prepared for the amphitheater in 1995 (Tetra Tech, Inc. 1995).

Figure 5.12-6 shows the projected noise contours resulting from the amphitheater during concert events. As seen in Figure 5.12-6, the contours are directional, with the greatest potential impacts occurring to the northeast of the facility.

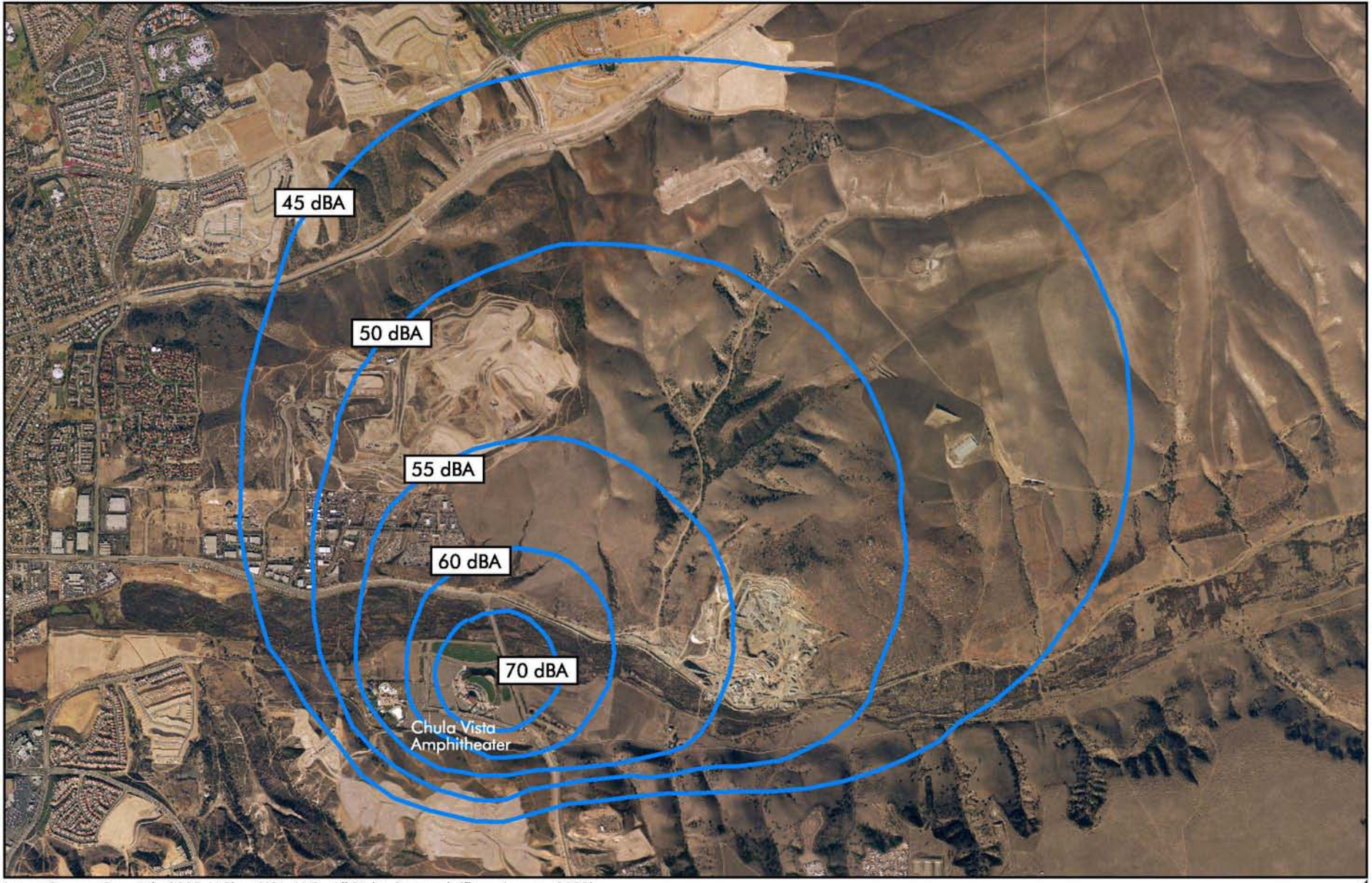
These contours represent the average A-weighted sound level resulting from the facility. They do not provide an indication of the noise content (frequency spectrum) of the resulting noise. Low frequency (bass) sounds tend to travel farther than high frequency sounds. As a result, receivers at a distance from the facility will primarily hear the low bass content of the music (typically perceived as a thump, thump, thump) while those closest to the facility will tend to hear the entire noise range. Additionally, at times crowd noise will be more apparent than the music.

Consequently, although noise levels at a distance from the facility will be relatively low, they may be perceived as annoying to certain individuals. Given that the concert events occur as late as approximately 11:00 P.M., careful consideration must be given to placing sensitive receivers in the vicinity of the amphitheater.

Otay Landfill

Noise levels associated with operation of a landfill generally are very low except in the immediate vicinity of the working face. Equipment operating at the working face of a landfill includes refuse hauling trucks, compactors, graders, water trucks, as well as private vehicles. As the refuse loads are dumped, the heavy equipment consolidates and compacts the refuse to appropriate standards.

As such, the noise generated near the Otay Landfill face is similar to that which occurs during construction grading operations. Average noise levels at a working landfill face have been measured to be approximately 80 dB(A) at 50 feet from the working equipment (RECON 1996). Noise levels from this type of operation will drop off at the rate of 6 to 7.5 decibels per doubling of distance. Assuming a drop-off rate of 6 decibels per doubling of distance the average noise levels from the working face operations would drop to 65 dB(A) in approximately 300 feet.



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0 Miles 0.5 N

Noise contours

FIGURE 5.12-6
Projected Noise Contours
at the Chula Vista Amphitheater

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fig5.12-6 (noise contours - amphitheater) 12/17/04

South Bay Power Plant

The South Bay Power Plant is located adjacent to San Diego Bay in a relatively undeveloped portion of the city. Field observations indicate that noise from the plant is generally not noticeable in the currently developed areas in the vicinity as traffic noise, particularly associated with I-5, dominates.

Chula Vista Generating Station (Chula Vista I)

The Chula Vista Generating Station (Chula Vista I) consists of one 44 megawatt (MW) natural gas-fired combustion turbine located at 3497 Main Street. Chula Vista I has been operational since May 2001. The noise study prepared for the Chula Vista I facility indicates that "unobstructed noise would dissipate to below 40 dB(A) L_{eq} at the nearest residence" with the noise control measures that were implemented for the facility (California Energy Commission [CEC] 2001). Furthermore, the facility is subject to a noise monitoring program to ensure that noise levels at the facility boundaries are maintained at acceptable levels (CEC 2001). Measurements at this facility conducted on December 13, 2001 in accordance with this requirement indicated that the facility operated at a range of between 53 and 59 decibels at the property line (Austin 2001).

Other Sources of Noise

Other sources of noise within the study area are due to the normal activities associated with a given land use. For example, within residential areas noise sources may include dogs, landscaping activities, parties, etc. Sources of noise in commercial areas may include car washes, drive-through fast food restaurants, auto repair facilities, etc. Sources of noise in industrial and manufacturing areas may include heavy machinery, truck loading/unloading, quarry operations, etc. Noises from these types of activities are considered normal environmental noises that are expected to be generated by these types of land uses. The noise control ordinance of the Chula Vista Municipal Code generally regulates excessive noises resulting from such activities.

5.12.2 Thresholds of Significance

The proposed General Plan Update would result in significant noise impacts if it would:

- Threshold 1: Result in exposure of people to excessive noise.
- Threshold 2: Result in the generation of excessive noise.
- Threshold 3: Expose people residing or working within an established Airport Influence Area to excessive noise levels.

5.12.3 Impacts

Noise impacts resulting from future development in accordance with the proposed General Plan Update can result from two conditions: (1) development of a sensitive use in a noisy condition, or (2) placement of a noise generator near a sensitive receiver. The most prevalent noise source that typically and widely occurs adjacent to sensitive receivers is traffic on area roadways, but other transportation noise sources can also result in adverse acoustical conditions.

5.12.3.1 Threshold 1: Result in Exposure of People to Excessive Noise

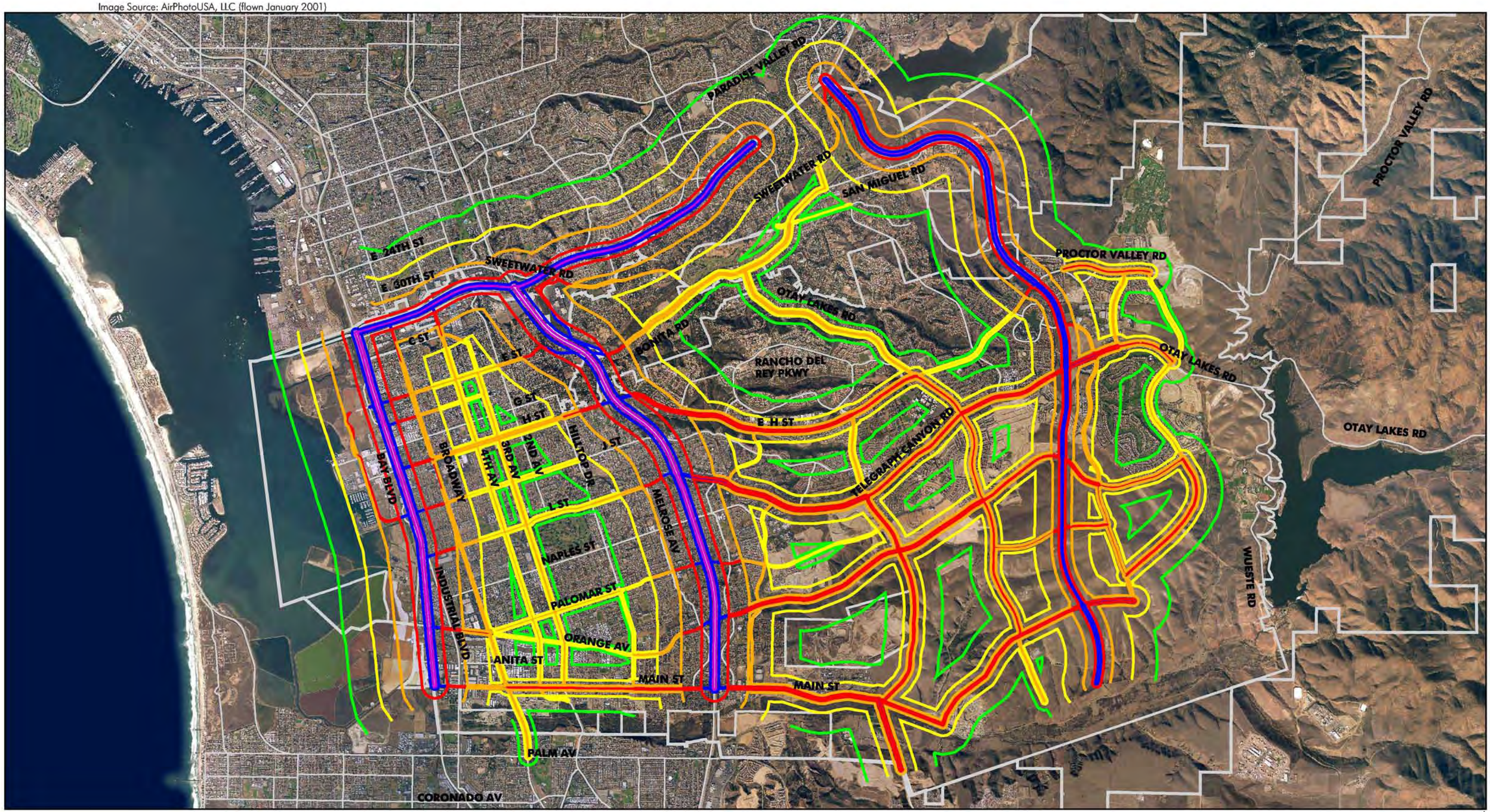
Threshold 1 indicates that a significant noise impact will occur if project approval will result in people being exposed to excessive noise. Excessive noise can be evaluated in two ways: (1) total noise and (2) increase in noise, and there are two categories of noise that could affect people in Chula Vista: (1) fixed sources such as the amphitheater, and (2) mobile sources, such traffic on area roads. Noise levels that may result in excessive noise include traffic, aircraft, the Coors Amphitheater, activities at the Otay Landfill, and rail traffic. The focus on the evaluation of this threshold addresses the potential for proposed sensitive land uses, such as residential use, in locations where excessive noise exists or is anticipated.

Figure 5.12-7 provides the traffic noise contours for the Preferred Plan. Roads included in the General Plan Update traffic analysis with a Class I Collector roadway designation or higher are included in Figure 5.12-7. The assumptions used in modeling these noise levels are listed in Appendix G. Figure 5.12-3 and Figure 5.12-7 illustrate the change in traffic noise levels between existing conditions and the proposed General Plan Update. The proposed plan would permit development that could expose residents to excessive noise. Table 5.12-6 compares traffic volumes of road segments where there is a three decibel or greater increase between existing conditions and either the Preferred Plan or Scenarios 1, 2, or 3. A three-decibel increase in noise is considered a perceptible change by the average observer and would be considered a significant impact. The impacted roadway segments listed in Table 5.12-6 make up approximately 16 percent of the existing road segments analyzed, and shows that, for every segment analyzed, there will be at least a three-decibel increase (ranging up to at least one 10-decibel increase).

In addition, there are existing roadways where the anticipated noise levels would experience traffic level changes that would result in a noise increase of three decibels or greater. This condition exists for roadways where traffic volumes are projected to at least double. Table 5.12-6 provides a list of the roadways that meet these criteria.

Based on noise measurements described above, trolley/train activity produces 65 decibel CNEL at about 260 feet from the centerline of the tracks. Noise from the amphitheater is not expected to change with time. Additional rail traffic could result in a change in the distance to the 65 decibels. Currently, there is no plan to expand freight service along the rail line

Image Source: AirPhotoUSA, LLC (flown January 2001)



Chula Vista General Plan area
Chula Vista municipal boundary
Circulation Element Roadways

Traffic Noise Contours (dBA)
60
65
70
75
80
85

0 Mile 1 N

FIGURE 5.12-7
Year 2030 Noise Contours

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fig5.12-7 (Year 2030 noise contours) 09/14/05

TABLE 5.12-6
CHANGE IN TRAFFIC NOISE LEVELS
(FOR ROADWAYS WITH 3 dB[A] INCREASE OR GREATER)

Road	Segment	Existing ADT	Compared Scenario	Scenario ADT	Change in Noise Level
E Street	Bay Blvd to I-5	14,520	Preferred	37,500	4
E Street	Bay Blvd to I-5	14,520	Scenario 1	38400	4
E Street	Bay Blvd to I-5	14,520	Scenario 2	38,400	4
E Street	Bay Blvd to I-5	14,520	Scenario 3	37,900	4
F Street	Bay Blvd to Broadway	3,255	Preferred	19,400	8
F Street	Bay Blvd to Broadway	3,255	Scenario 1	23,000	9
F Street	Bay Blvd to Broadway	3,255	Scenario 2	20,300	8
F Street	Bay Blvd to Broadway	3,255	Scenario 3	19,900	8
H Street	Otay Lakes Rd to SR-125	4,080	Preferred	10,120	5
H Street	Otay Lakes Rd to SR-125	4,080	Scenario 1	16,100	6
H Street	Otay Lakes Rd to SR-125	4,080	Scenario 2	15,800	6
H Street	Otay Lakes Rd to SR-125	4,080	Scenario 3	16,000	6
J Street	Marina Pkwy to Bay Blvd	5,347	Preferred	40,400	9
J Street	Marina Pkwy to Bay Blvd	5,347	Scenario 1	44,000	9
J Street	Marina Pkwy to Bay Blvd	5,347	Scenario 2	42,500	9
J Street	Marina Pkwy to Bay Blvd	5,347	Scenario 3	42,500	9
Main Street	I-805 to Heritage Road	14,846	Preferred	52,600	6
Main Street	I-805 to Heritage Road	14,846	Scenario 1	47,700	5
Main Street	I-805 to Heritage Road	14,846	Scenario 2	50,400	5
Main Street	I-805 to Heritage Road	14,846	Scenario 3	50,500	5
Proctor Valley Rd	Mount Miguel Rd to Hunte Pkwy	6,968	Preferred	28,600	6
Proctor Valley Rd	Mount Miguel Rd to Hunte Pkwy	6,968	Scenario 1	30,600	6
Proctor Valley Rd	Mount Miguel Rd to Hunte Pkwy	6,968	Scenario 2	30,900	7
Proctor Valley Rd	Mount Miguel Rd to Hunte Pkwy	6,968	Scenario 3	30,300	6
Otay Lakes Road	Eastlake Pkwy to Lane Ave	19,400	Preferred	50,700	4
Otay Lakes Road	Eastlake Pkwy to Lane Ave	19,400	Scenario 1	52,500	4
Otay Lakes Road	Eastlake Pkwy to Lane Ave	19,400	Scenario 2	52,100	4
Otay Lakes Road	Eastlake Pkwy to Lane Ave	19,400	Scenario 3	52,300	4
Otay Lakes Road	Lane Ave to Hunte Pkwy	12,800	Preferred	28,100	3
Otay Lakes Road	Lane Ave to Hunte Pkwy	12,800	Scenario 1	35,500	4
Otay Lakes Road	Lane Ave to Hunte Pkwy	12,800	Scenario 2	35,500	4
Otay Lakes Road	Lane Ave to Hunte Pkwy	12,800	Scenario 3	35,100	4
Olympic Pkwy	Heritage Rd to La Media Rd	16,000	Preferred	49,400	5
Olympic Pkwy	Heritage Rd to La Media Rd	16,000	Scenario 1	49,700	5
Olympic Pkwy	Heritage Rd to La Media Rd	16,000	Scenario 2	49,900	5

TABLE 5.12-6
CHANGE IN TRAFFIC NOISE LEVELS
(FOR ROADWAYS WITH 3 dB[A] INCREASE OR GREATER)
(continued)

Road	Segment	Existing ADT	Compared Scenario	Scenario ADT	Change in Noise Level
Olympic Pkwy	Heritage Rd to La Media Rd	16,000	Scenario 3	49,800	5
Fourth Avenue	Main Street to Southern City Limits	4,620	Preferred	11,100	4
Fourth Avenue	Main Street to Southern City Limits	4,620	Scenario 1	10,300	4
Fourth Avenue	Main Street to Southern City Limits	4,620	Scenario 2	9,700	3
Fourth Avenue	Main Street to Southern City Limits	4,620	Scenario 3	9,600	3
Heritage Road	Telegraph Canyon Rd to Olympic Pkwy	16,505	Preferred	42,300	4
Heritage Road	Telegraph Canyon Rd to Olympic Pkwy	16,505	Scenario 1	39,500	4
Heritage Road	Telegraph Canyon Rd to Olympic Pkwy	16,505	Scenario 2	39,300	4
Heritage Road	Telegraph Canyon Rd to Olympic Pkwy	16,505	Scenario 3	40,600	4
Heritage Road	Olympic Pkwy to Main Street	15,400	Preferred	70,700	4
Heritage Road	Olympic Pkwy to Main Street	15,400	Scenario 1	33,500	3
Heritage Road	Olympic Pkwy to Main Street	15,400	Scenario 2	35,100	4
Heritage Road	Olympic Pkwy to Main Street	15,400	Scenario 3	37,700	4
La Media Road	Telegraph Canyon Rd to Olympic Pkwy	13,419	Preferred	27,200	3
Eastlake Pkwy	Otay Lakes Rd to Olympic Pkwy	9,474	Preferred	34,000	6
Eastlake Pkwy	Otay Lakes Rd to Olympic Pkwy	9,474	Scenario 1	29,600	5
Eastlake Pkwy	Otay Lakes Rd to Olympic Pkwy	9,474	Scenario 2	29,300	5
Eastlake Pkwy	Otay Lakes Rd to Olympic Pkwy	9,474	Scenario 3	29,400	5
Eastlake Pkwy	Hunte Pkwy to Alta Road	16,754	Preferred	38,800	4
Lane Avenue	Proctor Valley Road to Otay Lakes Road	4,268	Preferred	27,800	8
Lane Avenue	Proctor Valley Road to Otay Lakes Road	4,268	Scenario 1	23,900	8
Lane Avenue	Proctor Valley Road to Otay Lakes Road	4,268	Scenario 2	23,900	8
Lane Avenue	Proctor Valley Road to Otay Lakes Road	4,268	Scenario 3	24,200	8
Hunte Parkway	Proctor Valley Road to Otay Lakes Road	1,400	Preferred	14,700	10

TABLE 5.12-6
CHANGE IN TRAFFIC NOISE LEVELS
(FOR ROADWAYS WITH 3 dB[A] INCREASE OR GREATER)
(continued)

Road	Segment	Existing ADT	Compared Scenario	Scenario ADT	Change in Noise Level
Hunte Parkway	Proctor Valley Road to Otay Lakes Road	1,400	Scenario 1	11,000	9
Hunte Parkway	Proctor Valley Road to Otay Lakes Road	1,400	Scenario 2	11,000	9
Hunte Parkway	Proctor Valley Road to Otay Lakes Road	1,400	Scenario 3	11,000	9
Hunte Parkway	Otay Lakes Rd to Olympic Pkwy	5,905	Preferred	20,500	5
Hunte Parkway	Otay Lakes Rd to Olympic Pkwy	5,905	Scenario 1	15,900	4
Hunte Parkway	Otay Lakes Rd to Olympic Pkwy	5,905	Scenario 2	15,700	4
Hunte Parkway	Otay Lakes Rd to Olympic Pkwy	5,905	Scenario 3	16,200	4
Hunte Parkway	Olympic Pkwy to Eastlake Pkwy	4,216	Preferred	35,800	9
Hunte Parkway	Olympic Pkwy to Eastlake Pkwy	4,216	Scenario 1	25,000	8
Hunte Parkway	Olympic Pkwy to Eastlake Pkwy	4,216	Scenario 2	25,500	8
Hunte Parkway	Olympic Pkwy to Eastlake Pkwy	4,216	Scenario 3	21,600	7

through Chula Vista, but trolley service could increase. Specific forecasts for the plan year 2030 are not available; however, a doubling of the number of daily trolley trips would result in an increase in CNEL by three decibels. This would place the 65 dB(A) CNEL contour at a distance about 500 feet from the tracks.

The Coors Amphitheater is also noise sources potentially effecting receivers in the City. Figure 5.12-6 shows the noise contours for the amphitheater. The noise levels illustrated for Coors Amphitheater occur only when there are noise-producing events at the facility and do not represent continuous noise levels.

A portion of the General Plan area is located within the Airport Influence Area for Brown Field. Figure 5.12-4 provides the noise contours for Brown Field. Although the airport itself is not within the boundaries of the plan area, the 60-decibel CNEL noise contour extends into the East Planning Area. The contour crosses the Otay River valley just east of the amphitheater and extends north to just above Rock Mountain. It extends eastward until just east of future State Route 125 (see Figure 5.12-5). There are no proposed uses within the 65 decibel contour of the airport.

Average noise levels at a working landfill face have been measured to be approximately 80 dB(A) at 50 feet from the working equipment (RECON 1996) and are expected to be similar to activities at the Otay Landfill. Assuming a drop-off rate of 6 decibels per doubling of distance, the average noise levels from the working face operations would drop to 65 dB(A) in approximately 300 feet. The CNEL associated with this average noise level would depend upon the hours of operation and numbers of simultaneous pieces of equipment operating.

Section 3.5 of the proposed Environmental Element addresses noise. That section recognizes that land uses that generate significant noise should be separated from land uses that are particularly sensitive to noise. To establish the compatibility of various land uses with exterior noise levels, the element specifies the use of CNEL to address potential adverse noise effects.

As detailed below, the Preferred Plan and each of the Scenarios place residential uses adjacent to Circulation Plan roadways that have the potential to expose receivers to noise levels in excess of 65 dB(A) CNEL. In addition, there are existing roadways where the anticipated noise levels would experience traffic volume changes that would result in a noise increase of three decibels or greater. As illustrated in Table 5.12-6, traffic increases on area roads would result in noise increases of between 3 and 9 decibels for receivers adjacent to these roadways. This increase is a significant adverse impact.

Preferred Plan

The potential for future sensitive receivers within the update areas to be exposed to adverse noise levels depends upon the number of people potentially placed in vicinity of a noise source. Primarily this equates to the proposed increase in allowable density along highways and major arterials, adjacent to rail, and within the airport influence area of Brown Field. In addition, traffic increases on area roadways shown in Table 5.12-6 resulting from the adoption of the Preferred Plan would cause the existing receivers to be exposed to increased noise levels. This increased exposure is a significant impact.

The Preferred Plan would increase population density in the Northwest and Southwest Planning Areas along Interstate 5. The potential for future uses to result in the generation of excess noise is primarily associated with industrial and commercial uses. The possibility that these uses would result in a significant adverse impact to sensitive receivers depends upon the placement of the noise generator relative to the receiver. The extent to which this threshold represents a significant impact, therefore, relates to the possible placement of noise generating industrial/commercial land uses near residential and other sensitive land uses. Since the Preferred Plan establishes land uses in areas near residential uses, this is a significant noise impact.

URBAN CORE SUBAREA

In the Interstate 5 Corridor District of the Urban Core Subarea, the Preferred Plan places multi-family residential at the west end of D Street, the current location of a mobile home park. The Preferred Plan also proposes residential uses between E and F Streets in the Interstate 5 Corridor District adjacent to the freeway. South of F Street, the Preferred Plan places Urban Core Residential uses next to the freeway with the potential for a neighborhood park. Residential uses in these locations have the potential to expose additional residents to noise levels in excess of 65 dB(A) CNEL resulting from freeway and rail traffic.

No industrial uses are proposed within the Urban Core Subarea under the Preferred Plan. There are a variety of commercial areas designated near residences and part of residential mixed uses. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

MONTGOMERY SUBAREA

The Preferred Plan places high residential and mixed use transit focus area in the area between Interstate 5 and the trolley and rail tracks within the Palomar Gateway District of the Montgomery Subarea. These land uses, in this area, have the potential to result in adverse noise impacts because noise levels adjacent to the freeway and the trolley/rail line are in

excess of 65 dB(A) CNEL. The Main Street District calls for industrial uses along Zenith Street, across the street from residential uses. These industrial uses have the potential to result in adverse noise effects on neighboring residential uses if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

OTAY RANCH SUBAREA

The Preferred Plan places low-medium residential adjacent to a future transit route in the Western District. Low residential is proposed adjacent to a future transit route in the Central District. The Eastern University District places low-medium residential, medium residential, and mixed use residential adjacent to SR-125 and a future transit route. Projected noise levels for these transportation facilities are in excess of the proposed 65 dB(A) CNEL standards, and, as such, residential uses in these locations have the potential to expose future residents to significant noise levels.

In the Western District of the Otay Ranch Subarea, the Preferred Plan places light industrial uses adjacent to residential low medium. As with industrial uses in other areas of the City, these industrial uses have the potential to result in adverse noise effects on neighboring residential uses. The Eastern University District proposes mixed use residential adjacent to retail commercial. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact on adjacent residential receivers.

EAST MAIN STREET SUBAREA

The Preferred Plan proposes a future transit route adjacent to an existing residential area. Residential uses in this area have the potential to be exposed to future high noise levels resulting from transit traffic.

In the East Main Street Subarea, retail commercial uses are proposed adjacent to existing residential. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact. These industrial uses have the potential to result in adverse noise effects on neighboring residential uses if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update

Scenario 1

As with the Preferred Plan, adoption of Scenario 1 would result in a significant noise impact. Traffic increases on area roadways shown in Table 5.12-6 resulting from the adoption of the Scenario 1 will cause the existing receivers to be exposed to increased noise levels. This increased exposure is a significant impact. Also, since Scenario 1 establishes commercial

and industrial land uses in areas near residential uses, there would be a significant noise impact from the adoption of the scenario.

URBAN CORE SUBAREA

In the Interstate 5 Corridor District of the Urban Core Subarea, Scenario 1 leaves a portion of this area with its current designation and places a transit focus area on the portion below D Street. As with the Preferred Scenario, Scenario 1 has the potential to expose additional residents to noise levels resulting from freeway and rail traffic in excess of the proposed 65 dB(A) CNEL standard.

Scenario 1 proposes residential uses between E and F Streets in the Interstate 5 Corridor District adjacent to the freeway. South of F Street, this scenario places Urban Core residential uses next to the freeway with the potential for a neighborhood park.

No industrial uses are proposed within the Urban Core Subarea under this scenario. There are a variety of commercial areas designated near residences and part of residential mixed uses. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

MONTGOMERY SUBAREA

Scenario 1 places a mixed use transit focus area in the Palomar Gateway District between the freeway and the rail line. As with the Preferred Plan, this increase in density has the potential to result in adverse noise impacts. This scenario leaves the existing planned condition along Zenith Street unchanged.

In the Main Street District of the Montgomery Subarea, Scenario 1 leaves the existing residential designation along Zenith Street. This area is currently adjacent to industrial uses. Depending upon the ultimate nature of the commercial uses, associated activities could create excessive noise resulting in an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

OTAY RANCH SUBAREA

Scenario 1 places medium-high residential adjacent to a future transit route in the Western District. In the Central District, low-medium residential is proposed adjacent to SR-125; and low residential, medium-high residential, and mixed use residential are proposed adjacent to a future transit route. The Eastern University District places mixed use residential and medium-high residential adjacent to SR-125 and a future transit route. Projected noise levels

for these transportation facilities are in excess of the proposed 65 dB(A) CNEL standards, and, as such, residential uses in these locations have the potential to expose future residents to high noise levels resulting from freeway and rail traffic.

In the Western District of the Otay Ranch Subarea, Scenario 1 places light industrial uses adjacent to low-medium residential. These industrial uses have the potential to result in adverse noise effects on neighboring residential uses.

EAST MAIN STREET SUBAREA

Scenario 1 proposes a future transit route adjacent to an existing residential area. Residential uses in this area have the potential to be exposed to future high noise levels resulting from transit traffic.

In the East Main Street Subarea, retail commercial uses are proposed adjacent to existing residential. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

Scenario 2

As with the adoption of the Preferred Plan and Scenario 1, the adoption of Scenario 2 would result in a significant noise impact. Traffic increases on area roadways shown in Table 5.12-6 resulting from the adoption of the Preferred Plan will cause the existing receivers to be exposed to increased noise levels. This increased exposure is a significant impact. Also, since Scenario 2 establishes commercial and industrial land uses in areas near residential uses, there would be a significant noise impact from the adoption of the scenario.

URBAN CORE SUBAREA

In the Interstate 5 Corridor District of the Urban Core Subarea, Scenario 2 designates the area at the west end of D Street as high residential, which has the potential to expose future residents to noise levels resulting from freeway and rail traffic in excess of the City's proposed 65 dB(A) CNEL standard.

Scenario 2 proposes transit focus area between E and F Streets in the Interstate 5 Corridor District adjacent to the freeway. South of F Street, this scenario places visitor commercial uses next to the freeway.

No industrial uses are proposed within the Urban Core Subarea under this scenario. There are a variety of commercial areas designated near residences and part of residential mixed uses. Depending upon the ultimate nature of the commercial uses, associated activities could

have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

MONTGOMERY SUBAREA

As with the Preferred Plan, Scenario 2 places high residential and mixed use with residential in the area between Interstate 5 and the trolley and rail tracks within the Palomar Gateway District of the Montgomery Subarea. These land uses, in this area, have the potential to result in adverse noise impacts.

The Main Street District calls for retail uses along Zenith Street, across the street from residential uses, and, depending upon the ultimate retail use, may reduce the potential for noise impacts at this location.

The Main Street District calls for retail uses along Zenith Street, across the street from residential uses, and, depending upon the ultimate retail use, may reduce the potential for noise impacts at this location. However, the potential would exist for development that creates excessive noise to be developed in this area, which could result in an adverse noise impact if it were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

OTAY RANCH SUBAREA

Scenario 2 places medium-high residential adjacent to a future transit route in the Western District. In the Central District, low-medium residential is proposed adjacent to SR-125; and low, low-medium, medium-high, and mixed use residential are proposed adjacent to a future transit route. The Eastern University District places low, medium, medium-high, and mixed use residential adjacent to SR-125 and a future transit route. Residential uses in these locations have the potential to expose future residents to high noise levels resulting from freeway and rail traffic.

In the Otay Ranch Subarea, the Western District places medium-high residential adjacent to the Otay Landfill. Depending on the location of the working face of the landfill, there is the potential for adverse noise effects on neighboring residential uses. The Eastern University District proposes mixed use residential adjacent to retail commercial. The Otay Valley District proposes high residential adjacent to open space-active recreation. Depending upon the ultimate nature of the commercial and active recreation uses, associated activities could have an adverse noise impact on adjacent residential receivers, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

EAST MAIN STREET SUBAREA

Scenario 2 proposes a future transit route adjacent to an existing residential area. Residential uses in this area have the potential to be exposed to future high noise levels resulting from transit traffic.

In the East Main Street Subarea, retail commercial uses are proposed adjacent to existing residential. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

Scenario 3

As with the adoption of the other scenarios, the adoption of Scenario 3 would result in a significant noise impact. Traffic increases on area roadways shown in Table 5.12-6 resulting from the adoption of the Preferred Plan will cause the existing receivers to be exposed to increased noise levels. This increased exposure is a significant impact. Also, since Scenario 3 establishes commercial and industrial land uses in areas near residential uses, there would be a significant noise impact from the adoption of the scenario.

URBAN CORE SUBAREA

Scenario 3 specifies the area at the end of D Street for visitor-serving uses. Visitor-serving uses in this location have less of a potential to result in adverse noise impacts, although, depending upon the ultimate use, an adverse noise impact could result.

Between E and F Streets in the Interstate 5 Corridor District adjacent to the freeway, Scenario 3 considers a mixed use residential designation. This scenario also places this designation for the area south of F Street and north of G Street. It does not place a potential neighborhood park in the area immediately adjacent to the freeway.

No industrial uses are proposed within the Urban Core Subarea under this scenario. There are a variety of commercial areas designated near residences and part of residential mixed uses. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact.

MONTGOMERY SUBAREA

Scenario 3 places high residential and mixed use residential in the area between I-5 and the trolley and rail tracks within the Palomar Gateway District of the Montgomery Subarea. It also designates the West Fairfield District for mixed use residential. These land uses, in these areas, have the potential to result in adverse noise impacts.

The Main Street District calls for retail uses for the area along Zenith Street, between Zenith and Main Street.

The Main Street District calls for retail uses for the area along Zenith Street, between Zenith and Main Street. Depending upon the ultimate nature of the commercial uses, associated activities could create excessive noise resulting in an adverse noise impact to the residents north of Zenith, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

OTAY RANCH SUBAREA

Scenario 3 places medium-high residential and mixed use residential adjacent to a future transit route in the Western District. In the Central District, Low Residential and Low-Medium Residential are proposed adjacent to a future transit route. The Eastern University District places medium-high residential and mixed use residential adjacent to SR-125 and a future transit route. Residential uses in these locations have the potential to expose future residents to high noise levels resulting from freeway and rail traffic.

In the Otay Ranch Subarea, the Western District places light industrial uses adjacent to residential low-medium. These industrial uses have the potential to result in adverse noise effects on neighboring residential uses.

EAST MAIN STREET SUBAREA

Scenario 3 proposes a future transit route adjacent to an existing residential area. Residential uses in this area have the potential to be exposed to future high noise levels resulting from transit traffic.

In the East Main Street Subarea, retail commercial uses are proposed adjacent to existing residential. Depending upon the ultimate nature of the commercial uses, associated activities could have an adverse noise impact, if they were to cause noise levels at the property line in excess of the standard in the City's noise control ordinance, or to exceed the standard set by the proposed General Plan Update.

GENERAL PLAN POLICIES

Threshold 1 indicates that a significant noise impact will occur if project approval will result in people being exposed to excessive noise Table 5.12-7 contains the proposed exterior land use-noise compatibility guidelines contained in Section 3.5 of the Environmental Element. These guidelines reflect the levels of noise exposure that are generally considered to be compatible with various types of land use. The element notes that these guidelines are to be

TABLE 5.12-7
EXTERIOR LAND USE-NOISE COMPATIBILITY GUIDELINES

	Acceptable CNEL in Decibels					
Land Use	50	55	60	65	70	75
Residential						
Schools, Libraries, Daycare Facilities, Convalescent Homes, Outdoor Use Areas, and Other Similar Uses Considered Noise Sensitive						
Neighborhood Parks, Playgrounds						
Community Parks, Athletic Fields						
Office and Professional						
Places of Worship (excluding outdoor use areas)						
Retail and Wholesale Commercial, Restaurants, Movie Theaters						
Industrial, Manufacturing						

used at the land use planning stage, for noise impact assessments, and to determine mitigation requirements for development proposals.

There are two objectives in the proposed Environmental Element that address noise. Both objectives contain specific policies to avoid adverse noise impacts. The policies that have the most important application to avoiding potential noise impacts include those that establish and enforce a noise threshold for future development.

Objective EE 21

Protect people from excessive noise through careful land use planning and the incorporation of appropriate mitigation techniques.

Policies

EE 21.1: Apply the exterior land use-noise compatibility guidelines contained in Table 9-1 (see Table 5.12-7 of this EIR) of the Environmental Element to new development where applicable and in light of project-specific considerations.

EE 21.2: Where applicable, the assessment and mitigation of interior noise levels shall adhere to the applicable California Building Code with local amendments and other applicable established City standards.

EE 21.3: Promote the use of available technologies in building construction to improve noise attenuation capacities.

EE 21.4: Continue to implement and enforce the City's noise control ordinance.

Objective EE 22

Protect the community from the effects of transportation noise.

Policies

EE 22.1: Work to stabilize traffic volumes in residential neighborhoods by limiting throughways and by facilitating the use of alternative routes around, rather than through, neighborhoods.

EE 22.2: Explore the feasibility of using new technologies to minimize traffic noise, such as use of rubberized asphalt in road surface materials.

EE 22.3: Employ traffic calming measures where appropriate, such as narrow roadways and on-street parking, in commercial and mixed use districts.

EE 22.4: Encourage walking, biking, carpooling, use of public transit, and other alternative modes of transportation to minimize vehicular use and associated traffic noise.

EE 22.5: Require projects to construct appropriate mitigation measures in order to attenuate existing and projected traffic noise levels in accordance with applicable standards, including the exterior land use-noise compatibility guidelines contained in Table 9-1 of this Environmental Element (see Table 5.12-7 of this EIR).

Both of the proposed objectives and associated policies identified above address the potential generation of excessive noise. For future development that occurs in conformance to the General Plan Update, the adoption of the Preferred Plan or any of the Scenarios will not expose people to excessive noise because the policies require future projects to comply with the exterior land use-noise compatibility guidelines contained in Table 5.12-7 of this EIR (EE 21.1), promote the use of available technologies in building construction to improve noise attenuation (EE 21.4), and assure the continued implementation the City's noise control ordinance (EE 21.5). They also work to stabilize traffic volumes (EE 22.1), provide for consideration of feasibility of using new technologies to minimize traffic noise (EE 22.2), employ traffic calming measures (EE 22.3), and encourage alternative modes of transportation to minimize traffic noise (EE 22.4). The Update also requires project developers to implement appropriate measures in order to attenuate existing and projected traffic noise levels in accordance with applicable standards (EE 22.5) and specifies those standards.

Traffic increases on area roads will result in noise increases of between 3 and 9 decibels for existing receivers adjacent to roadways listed in Table 5.12-6. This increase is a significant adverse impact resulting from the adoption of the Preferred Plan or any of the Scenarios.

5.12.3.2 Threshold 2: Result in the Generation of Excessive Noise

Threshold 2 states that there would be a significant noise impact if the adoption of the plan amendment were to result in the generation of excessive noise. Potential noise generators in the city are controlled under Section 19.689 of the Chula Vista Municipal Code (Noise Control Ordinance). This ordinance contains noise performance standards for allowable noise generation from stationary sources of noise (i.e., noise sources other than transportation related) and are stated as the maximum permissible sound level that can be produced by a noise generator at a receiving property boundary (see Table 5.12-1)

The Preferred Plan and the Scenarios do not propose any development that will violate these standards. In general, increased commercial and industrial land increases the potential that noise producing uses will be developed. Application of the policies proposed in the General Plan Update will avoid the potential for the establishment of uses that result in the generation

of excessive noise because Policy EE 21.1 requires future projects to comply with the exterior land use-noise compatibility guidelines contained in Table 9-1 of the General Plan and Table 5.12-7 of this EIR, Policy EE 21.3 promotes the use of available technologies in building construction to improve noise attenuation capacities, and Policy 21.4 assures the continued implementation of the City's noise control ordinance.

5.12.3.3 Threshold 3: Aircraft Noise

Threshold 3 indicates that a significant impact would occur if the project would expose people residing or working within an established Airport Influence Area to excessive noise levels. The adopted Brown Field Airport Land Use Compatibility Plan (ALUCP) established the Airport Influence Area for this airport, which encompasses a limited area of the East Planning Area.

As seen from Figure 5.12-5, a small portion of the plan area is within the Brown Field Airport Influence Area, an even smaller portion is within the 60 CNEL contour, and a very small portion of the plan area is within the 65 CNEL contour. The 65-decibel contour parallels the southern boundary of the planning area and is confined primarily to Otay Mesa. The 60-decibel contour for the airport crosses the Otay River valley just east of the amphitheater and extends north to just above Rock Mountain. It extends to the eastward until just east of future State Route 125 (see Figure 5.12-5).

Preferred Plan

The Preferred Plan designates a portion of the Otay Valley District area within the Airport Influence Area as Active Recreation and a limited portion for Light Industrial and Open Space. These uses are consistent with the land uses indicated in the Airport Land Use Compatibility Plan.

Scenario 1

Scenario 1 designates the same uses in the Airport Influence Area as does the Preferred Plan: active recreation and light industrial and open space. These uses are consistent with the land uses indicated in the Airport Land Use Compatibility Plan. Because these uses are outside of the 65-decibel CNEL contour, they will not expose people residing or working in the project area to excessive noise.

Scenario 2

Scenario 2 designates mixed use commercial, residential medium, residential high, light industrial, open space and active recreation uses in the Airport Influence Area. Because these uses are outside of the 65-decibel CNEL contour, they will not expose people residing or working in the project area to excessive noise.

Scenario 3

Scenario 3 designates mixed use commercial, light industrial, open space and active recreation uses in the Airport Influence Area. Because these uses are outside of the 65-decibel CNEL contour, they will not expose people residing or working in the project area to excessive noise.

5.12.4 Level of Significance Prior to Mitigation

5.12.4.1 Threshold 1: Result in Exposure of People to Excessive Noise

Compliance with the proposed General Plan Update objectives and policies would not expose people to excessive noise because the policies require future projects to comply with the exterior land use-noise compatibility guidelines contained in Table 5.12-7 of this EIR (EE 21.1), promote the use of available technologies in building construction to improve noise attenuation (EE 21.4), and assure the continued implementation the City's noise control ordinance (EE 21.5). They also work to stabilize traffic volumes (EE 22.1), provide for consideration of feasibility of using new technologies to minimize traffic noise (EE 22.2), employ traffic calming measures (EE 22.3), and encourage alternative modes of transportation to minimize traffic noise (EE 22.4). The Update also requires project developers to implement appropriate measures in order to attenuate existing and projected traffic noise levels in accordance with applicable standards (EE 22.5) and specifies those standards. Therefore, excessive noise impacts from the implementation of the Preferred Plan or any of the Scenarios would not be significant for new developments.

As illustrated in Table 5.12-6, traffic increases on area roads will result in noise increases of between 3 and 9 decibels for receivers adjacent to these roadways. This increase is a significant adverse impact.

5.12.4.2 Threshold 2: Result in the Generation of Excessive Noise

The Preferred Plan and the Scenarios do not propose any development that will violate the standards established by Policy EE 21.1 or noise levels set by the Noise Control Ordinance. In general, increased commercial and industrial land increases the potential that noise producing uses will be generated. Application of the policies proposed in the General Plan Update would avoid the potential for the establishment of uses that result in the generation of excessive noise because Policy EE 21.1 requires future projects to comply with the exterior land use-noise compatibility guidelines contained in Table 9-1 of the General Plan and Table 5.12-7 of this EIR, Policy EE 21.3 promotes the use of available technologies in building construction to improve noise attenuation capacities, and Policy 21.4 assures the continued implementation of the City's noise control ordinance

Threshold 3: Expose people residing or working within an established Airport Influence Area to excessive noise levels.

The Preferred Plan or any of the Scenarios will not expose people residing or working in the project area to excessive noise levels within the area that is designated as part of the Brown Field Airport Influence Area and Airport Land Use Compatibility Plan because the 65 dB(A) contour does impact the planning area.

5.12.5 Mitigation Measures

No significant noise impacts would result from new development completed in accordance with the proposed General Plan Update and no mitigation is necessary. A significant impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas through the construction of barriers or other measures, and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage impacts remain significant and not mitigated.

5.12.6 Level of Significance After Mitigation

Significant and not mitigable.

5.13 Public Services

Public services consist of fire protection, law enforcement, parks and recreation, schools, and libraries. The following discussion deals with the potential impacts that the proposed General Plan Update would have upon existing and planned public services.

The City Council adopted the Threshold Standards Policy for Chula Vista in November 1987, which established "quality of life" indicators for the five public service topics addressed in this section. Each topic was addressed in the Policy in terms of a goal, objective(s), a threshold, and implementation measures. These standards are intended to preserve and enhance the environment and city residents' quality of life as growth occurs.

5.13.1 Fire Protection

5.13.1.1 Existing Conditions

Regulatory Plans and Policies

Fire protection services are addressed in the City's Threshold Standards Policy, the Otay Ranch General Development Plan (GDP), and the adopted Fire Station Master Plan.

The Threshold Standard requires that 80 percent of emergency calls throughout the City shall be responded to within seven minutes.

Section E, Part 4 of the Otay Ranch GDP addresses fire protection and emergency services facilities. As part of the GDP, four additional fire stations were identified, two of which have subsequently been built, to serve the Otay Ranch project area at buildout. An objective in the GDP states "Provide sufficient fire and emergency medical service facilities to respond to call within the Otay Ranch urban communities with 7 minute response time in 85 percent of the cases."

The adopted Fire Station Master Plan contains six guidelines to assess alternative fire station needs and networks. These guidelines address travel time, response time, cost, and relative workloads among stations. The Fire Station Master Plan recommends 1.5-acre sites for all fire stations and calls for a total of nine fire stations in the city.

Existing Citywide Conditions

Fire protection for the City of Chula Vista is provided by the Chula Vista Fire Department. There are currently eight fire stations located throughout the City, one of which is a temporary facility. Two additional permanent stations are planned for future development, one of which would replace the existing temporary facility. The current Fire Station Master Plan, which calls for nine fire stations, is being updated to reflect changes to proposed

General Plan land uses and to respond to a revised set of performance criteria as proposed in the Fire Department Strategic Plan. Therefore, the number and locations of future fire stations along with how they are equipped may change. Table 5.13-1 and Figure 5.13-1 summarize existing and future fire station locations and facilities; the number and location of future fire stations may change pending adoption of an updated Fire Station Master Plan, which is currently being prepared.

The Chula Vista Fire Department maintains approximately 126.75 permanent full-time employees. The department currently serves a population of approximately 209,200 people within an area of over 50 square miles and responds to more than 12,000 calls annually. Approximately 85 percent of the Department's priority calls for service are in the emergency medical services area. As indicated on Table 5.13-2 below, 72.9 percent of emergency calls were responded to within seven minutes during the 2004 reporting period, compared with the 80 percent requirement in the threshold standard.

The Northwest Update Area contains one fire station located at 447 F Street. The Southwest Update Area contains one fire station located at 391 Oxford Street. There is one existing fire station in the East Update Area located at 1640 Santa Venetia and one planned in the Eastern Urban Center.

5.13.1.2 Thresholds of Significance

The proposed project would result in a significant impact to public services if it would:

Threshold 1: Result in the inability of the City to provide an adequate level of service in accordance with the adopted standards and thresholds.

5.13.1.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to fire protection services if the plan would result in the City's inability to provide an adequate level of service in accordance with adopted standards and thresholds.

Impacts to fire protection services resulting from development completed under the Preferred Plan or Scenarios 1, 2, or 3 would be similar. The Chula Vista Fire Department does not currently meet the threshold standards established for response time. Increased response time is attributable, in part, to increased travel time, which results from responding to freeway incidents; the lower density, hilly terrain; and the circuitous non-grid nature of many streets in new residential developments in eastern Chula Vista, and will only worsen as traffic density increases. In response to this condition, the City Council has taken recent steps in order to improve response times, including accelerating planned staffing increases and new fire station construction.

TABLE 5.13-1
EXISTING AND FUTURE FIRE STATIONS AND FACILITIES

Location	Service Area	Apparatus
Fire Station 1 447 F Street Chula Vista, CA 91910	Downtown, Bay Front, Northwest City, Interstates 5 & 805/North	Ladder Truck Fire Engine Command Vehicle
Fire Station 2 and Warehouse 80 East J Street Chula Vista, CA 91910	Central City, Interstate 805/Central, Hilltop, Terra Nova, Country Club	Fire Engine Rescue Vehicle
Fire Station 3 1410 Brandywine Ave. Chula Vista, CA 91911	Sunbow, Interstate 805 South, Otay Valley, Woodlawn Park, East/Main Street	Fire Engine Fire Engine (Reserve 1)
Fire Station 4 and Training Facility 850 Paseo Ranchero Chula Vista, CA 91910	Rancho Del Rey, Otay Ranch, Bonita Long Canyon	Fire Engine Brush Engine Reserve
Fire Station 5 391 Oxford Street Chula Vista, CA 91911	Montgomery, Harborside, Otay, Interstate 5/South Southwest City, West/Main Street	Fire Engine (Reserve 3)
Fire Station 6 605 Mt. Miguel Chula Vista, 91913	EastLake, Rolling Hills Estates, San Miguel Ranch, Bella Lago	Fire Engine
Fire Station 7 1640 Santa Venetia Chula Vista, 91913	Otay Ranch, Village of Heritage, Heritage Hills, Village of Countryside	Fire Engine Ladder Truck Reserve Engine
Fire Station 8 (temporary) 975 Lane Avenue Planned for Construction Chula Vista, CA	EastLake Woods, Vistas, Trails	TBD; minimum 1 Engine
Fire Station 8 (future) Planned for Construction	EastLake Woods, Vistas, Trails	TBD; minimum 1 Engine
Fire Station 9 (future) Planned for Construction	Eastern Urban Center	TBD; minimum 1 Engine

Map Source: Ninyo & Moore, 2003

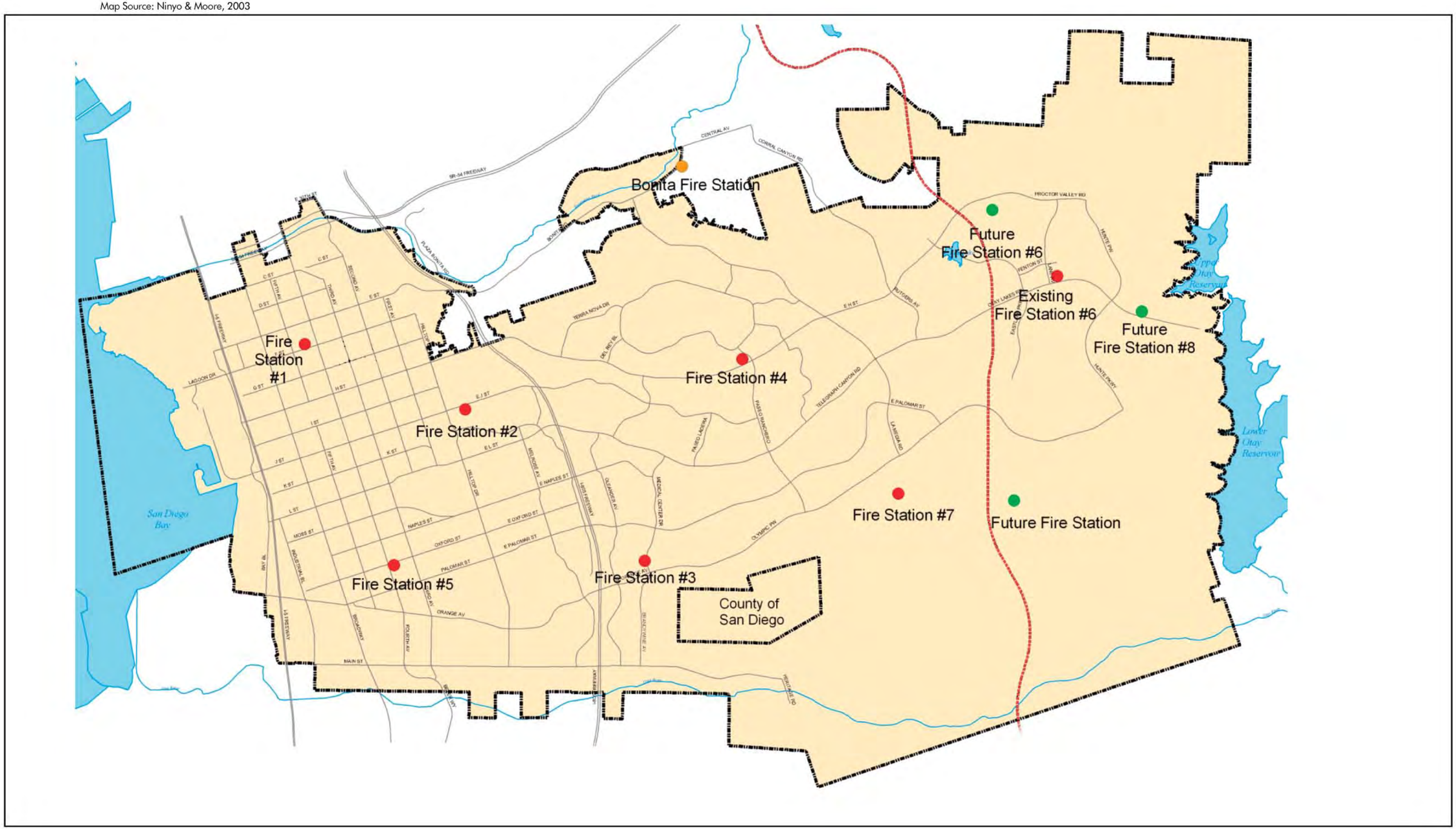

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FIGURE 5.13-1
Existing and Future Fire Stations and Locations

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TABLE 5.13-2
FIRE/EMS EMERGENCY RESPONSE TIMES

Year	Call Volume	Percent of Calls Responded to within Seven minutes
Emergency Response Threshold		80.0
FY 2004	8,420	72.9
FY 2002-03	8,088	75.5
FY 2001-02	7,626	69.7
FY 2000-01	7128	80.8
FY 1999-00	6654	79.7
CY 1999	6344	77.2
CY 1998	4119	81.9
CY 1997	6275	82.4
CY 1996	6103	79.4
CY 1995	5885	80.0
CY 1994	5701	81.7

The land uses proposed for the four scenarios would increase the demand for fire protection services by increasing development densities in the west and by converting vacant land in the east to urban uses. Because of the need to respond to these areas within the current seven-minute response threshold time, or other applicable threshold standard(s) which may be established in the future, regardless of land use, it is anticipated that additional fire stations beyond those which presently exist would be needed to maintain compliance with the applicable threshold standard(s). The actual extent of the need for future fire stations would be evaluated in accordance with Policies PFS 5.1 and PFS 5.7, which calls for this determination to be made based upon the existing or updated Fire Station Master Plan.

The adoption of the General Plan Update would not impact the City's ability to provide an adequate level of fire protection services in accordance with adopted standards and thresholds because the plan includes policies which ensure that fire protection facilities and services would be provided concurrent with need as additional development and population growth occurs.

The proposed Public Facilities and Services Element contains the following two objectives and associated policies that address fire protection:

Objective PFS 5

Sufficient levels of fire protection, emergency medical service and law enforcement service to protect public safety and property.

Policies

PFS 5.1: Continue to adequately equip and staff the Fire Department to ensure that established service standards for emergency calls are met.

PFS 5.2: Upgrade fire and emergency medical equipment as required to protect the public from hazards and to ensure the safety of fire fighters.

PFS 5.3: Support the provision of new fire stations as deemed necessary through the existing or updated Fire Station Master Plan.

PFS 5.4: Provide adequate law enforcement staff and equipment pursuant to Police Department strategic plans to meet established service standards.

PFS 5.7: Prior to approval of any discretionary projects, ensure that construction is phased with provision of police and fire protection services such that services are provided prior to or concurrent with need.

PFS 5.8: Require that the Police and Fire Departments maintain active participatory roles in the community.

Objective PFS 6

Provide adequate fire and police protection services to newly developing and redeveloping areas of the City.

Policies

PFS 6.1: Continue to require new development and redevelopment projects to demonstrate adequate access for fire and police vehicles.

PFS 6.2: Require new development and redevelopment projects to demonstrate adequate water pressure to new buildings.

The proposed Growth Management Element contains the following objective and associated policies to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs:

Objective GM 1

Concurrent public facilities and services.

Policies:

GM 1.1: Maintain a set of quantitative level-of-service measures (growth management "threshold standards"), as a tool to assess the relative impact of new facility and service demands created by growth, and apply those standards, as appropriate, to approval of discretionary projects.

GM 1.3: Prepare development forecasts and monitor development activity as it occurs in support of growth management program activities.

GM 1.4: Provide growth forecasts and related information to City departments and other local government entities and request annual responses regarding their ability to provide services and facilities consistent with the Threshold Standards.

GM 1.5: As part of the Growth Management Program, conduct an ongoing Development Monitoring Program focused on new development activity and related infrastructure and public facility construction to

determine compliance with Threshold Standards and other City policies and programs.

GM 1.6: Periodically review and revise the Threshold Standards to assure that they reflect current service delivery and measurement techniques and to assure their effectiveness at achieving quality of life goals.

GM 1.7: Create and periodically update a set of Facility Master Plans for major municipal infrastructure and public facilities.

GM 1.8: Adopt and periodically update Development Impact Fees that assures that new development contributes a proportional share of funding for necessary municipal infrastructure and public facilities.

GM 1.9: Require that all Major Development projects prepare a Public Facilities Financing Plan (PFFP) that articulates infrastructure and public facilities requirements and costs and funding mechanisms.

GM 1.11: Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with the applicable Threshold Standards.

GM 1.12: Establish the authority for the City Council to impose limits on the total amount of development when such development, in aggregate, has or is forecasted to exceed Threshold Standards or otherwise negatively affect quality of life and public health, safety, or welfare of the City.

GM 1.13: Establish the authority for the City Council to impose limits upon the rate of development as needed to assure that development occurs at an optimal rate that does not negatively affect quality of life and public health, safety or welfare of the City.

Impacts to the provision of fire protection services are avoided because the policies in the proposed General Plan Update ensure that the Fire Department is adequately equipped and staffed in order to meet established service standards for emergency services (PFS 5.1), requires that construction of large-scale development be phased with provision of fire protection services prior to or concurrent with need (PFS 5.7). The update also calls for the city to maintain a set of quantitative level of service measures (growth management threshold standards) as a tool to assess the relative impact of new facility and service demands created by growth (GM 1.1), and apply those standards, as appropriate, to approval of discretionary projects (GM 1.1), and establishes the authority of the City Council to withhold discretionary approval and subsequent building permits for projects out of

compliance with those standards (GM 1.11). Therefore, impacts to the provision of fire protection services are avoided by implementation of self-mitigating Policies PFS 5.1, PFS 5.7, GM 1.1, and GM 1.11.

5.13.1.4 Level of Significance Prior to Mitigation

The policies in the proposed General Plan Update ensure that the Fire Department is adequately equipped and staffed in order to meet established service standards for emergency services. The need for future fire stations would be evaluated in accordance with proposed Policies PFS 5.1 and 5.7, which call for this determination to be made based upon the existing or updated Fire Station Master Plan. The plan also includes Policy GM 1.1 which calls for the city to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth, and Policy GM 1.11 prohibits discretionary approval for projects out of compliance with those standards. Therefore, potential impacts to the provision of fire services are self-mitigating.

5.13.1.5 Mitigation Measures

Since no significant impacts to fire protection services would result based upon conformance to the applicable General Plan Update objectives and policies, no mitigation is required.

5.13.1.6 Level of Significance After Mitigation

No significant impacts to fire protection services have been identified as part of this EIR.

5.13.2 Law Enforcement

5.13.2.1 Existing Conditions

Regulatory Plans and Policies

Police response times are addressed in the City's Threshold Standards Policy and in the Otay Ranch GDP. With regards to police response times, the Threshold Standard requires that, among other considerations, 81 percent of Priority I emergency calls (i.e., life threatening) and 57 percent of Priority II urgent calls (i.e., misdemeanor in progress) throughout the city shall be responded to within seven minutes and shall maintain an average response time of 5.5 and 7.5 minutes, respectively.

The objective under Section E, Part 6, Law Enforcement Facilities, of the Otay Ranch GDP is to make provisions for criminal justice facilities, including jails, courts, and police facilities adequate to serve the Otay Ranch area.

Existing Citywide Conditions

Police protection for the City of Chula Vista is provided by the Chula Vista Police Department. There is one central police station within the city located at 315 Fourth Avenue, within the Northwest Update Area. All police operations are based out of this one central facility. The department currently maintains 1.17 sworn employees per 1,000 residents. Currently, the Chula Vista Police Department has 228 sworn officers and 112 civilian staff. The Department is recruiting new officers and has approximately 15 officers in training.

For the purposes of providing police services, the city is subdivided into three geographic sectors which correspond to the Northwest, Southwest, and East Planning areas. Each sector is further broken down into a beat configuration, as shown on Figure 5.13-2. Officers respond to calls citywide. The beat strength does not include traffic units, school resource officers, roving patrol officers, patrol sergeants, and investigative division units that service the city as needed. Beats within sectors take into account call volumes and natural geographic or manmade boundaries. As the city continues to grow, additional beats would be added to the eastern portion of Chula Vista.

Despite increasing population and traffic volumes, emergency response in the city has improved over the last year. During the most recent reporting period, 82.1 percent of emergency calls (Table 5.13-3) and 48.4 percent of urgent calls were responded to within seven minutes. Additionally, the city has experienced an 8 percent decline in crime rates over the last five years.

TABLE 5.13-3
RESPONSE TIMES EMERGENCY CALLS FOR SERVICE

Fiscal year	Call Volume	Percent of Call Response within 7 Minutes (percent)	Average Response Time
Emergency Response Threshold		81.0	5:30
2004	1,322 of 71,000	82.1	4:52
2002–3	1,424 of 71,268	80.8	4:55
2001–02	1,539 of 71,859	80.0	5:07
2000–01	1,734 of 73,977	79.7	5:13
1999–00	1,750 of 76,738	75.9	5:21
CY 1999*	1,890 of 74,405	70.9	5:50

*The 1998-99 Fiscal Year report used calendar year (CY) 1999 data due to implementation of new CAD system mid-1998.

Response time is just one measure of how police services are keeping pace with growth. The City has implemented measures to improve police response time. These measures range from maintaining full staffing to technological improvements.

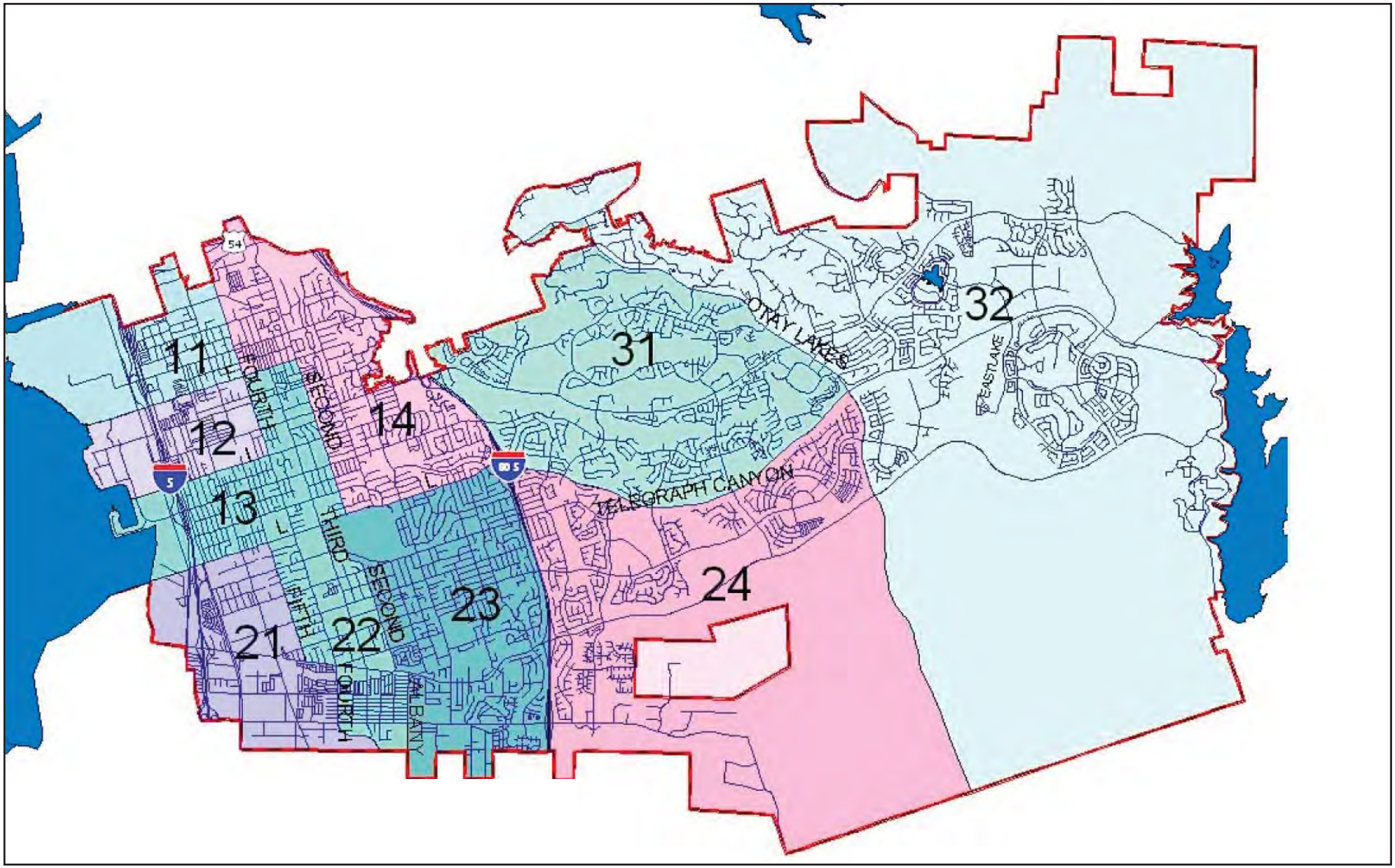

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FIGURE 5.13-2
Existing Police Beat Boundaries

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5.13.2.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to public services if it would:

Threshold 1: Result in the inability of the City to provide an adequate level of service in accordance with the adopted standards and thresholds.

5.13.2.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to law enforcement services if the plan would result in the City's inability to provide an adequate level of service in accordance with the adopted standards and thresholds.

Impacts to police protection services resulting from implementation of the Preferred Plan or Scenarios 1, 2, or 3 would be similar. The land uses proposed for the four scenarios would increase the demand for police protection services by increasing development densities in the west and by converting vacant land in the east to urban uses.

The Police Department currently responds to 82.1 percent of Priority I calls and 48.4 percent of Priority II calls within the seven-minute response threshold. The land uses proposed for any of the scenarios (Preferred Plan and Scenario 1, 2, or 3) would result in an increase in calls for service regardless of which is ultimately selected. Estimated increase for calls for police services beyond the anticipated 16,766 additional calls at buildout of the adopted General Plan for each of the scenarios is presented in Table 5.13-4.

TABLE 5.13-4
PROJECTED POLICE CALLS FOR SERVICE AT BUILDOUT ABOVE EXISTING CONDITIONS

Condition	Northwest Planning Area	Southwest Planning Area	East Planning Area	Total
Scenario 1	4,541	2,381	13,268	20,190
Scenario 2	7,078	2,644	13,343	23,065
Scenario 3	3,616	2,657	14,845	21,119
Preferred Plan	5,487	2,213	13,776	21,476

SOURCE: City of Chula Vista Police Department.

In the East Planning Area, design of newer subdivisions, including new streets, secured entries, and the overall number of new units, as well as the rapid pace of construction, would impact Police Department services. The design of new home construction may also be an issue due to the common feature of an alarm system on new homes that tends to increase false alarm calls and further consume Police Department resources. Additionally,

development in the East Planning Area would require officers to travel additional distances to respond to calls for service, increasing response time.

The central police station at Fourth Avenue and F Street is sufficient to meet the law enforcement needs created by the increased demand associated with the Preferred Plan, Scenario 1, Scenario 2, or Scenario 3. However, in order to maintain response times, more police officers would be needed. Additionally, adherence to police protection standards would be necessary to ensure that adequate levels of service are maintained.

The Police Department is anticipating meeting the challenges of overall growth in the city with technological upgrades to equipment. These upgrades could include a computer-aided dispatch system integrated with in-car global positioning system (GPS) systems, MDC mapping capabilities in every car, and the ongoing efforts to reduce false alarms. The department is also seeking support for research into alternative call management options to correctly prioritize calls and improve deployment tactics including revised beat configurations, bike patrol units, and a possible aerial component. Implementation of the objectives and policies contained in the proposed General Plan Update would avoid potential impacts to law enforcement services.

The proposed General Plan Update includes proposed Objectives PFS 5, PFS 6, and GM-1, which contain policies that address police protection. These policies are presented in the preceding section that addresses fire protection. In addition to those policies listed in the discussion of fire services, the following policies addressing police services are also included in Objective PFS 5:

PFS 5.4 Provide adequate law enforcement staff and equipment pursuant to Police Department strategic plans to meet established service standards.

PFS 5.5 Explore the need to establish local, community-based satellite or storefront police offices to enhance community wellbeing.

Impacts to police protection services would be avoided because the policies contained in the proposed General Plan require that the City provide adequate law enforcement staff and equipment equivalent to the existing ratio of police officers to population to meet established service standards (PFS 5.4) and calls for the City to maintain a set quantitative level of service measures (growth management threshold standards) as a tool to assess the relative impact of new facility and service demands created by growth (GM 1.1), and apply those standards, as appropriate, to approval of discretionary projects (GM 1.1), and establishes the authority of the City Council to withhold discretionary approval and subsequent building permits for projects out of compliance with those standards (GM 1.11). Therefore, impacts to law enforcement services are avoided because the plan includes self-mitigating Objectives PFS 5, 6, and GM 1 and associated policies.

Update Areas

Because Policy PFS 5.4 requires that the City provide adequate law enforcement staff and equipment equivalent to the existing ratio of police officers to population to meet established service standards and Policy GM 1.1 calls for the city to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the impact of new service demands.

5.13.2.4 Level of Significance Prior to Mitigation

The proposed GPU would not result in a significant impact resulting from the provision of new or expanded police facilities. It is not anticipated that future proposed growth would necessitate the construction of new or expanded police facilities. Existing physical facilities are adequate to handle police protection for the projected proposed General Plan buildout. Potential impacts to the provision of law enforcement services would be avoided by implementation of the proposed Policy PFS 5.4 which requires that the City provide adequate law enforcement staff and equipment equivalent to the existing ratio of police officers to population to meet established service standards, Policy GM 1.1 which calls for the city to maintain a set of quantitative level of service measures (growth management threshold standards) as a tool to assess the relative impact of new facility and service demands created by growth (GM 1.1), and apply those standards, as appropriate, to approval of discretionary projects (GM 1.1), and establishes the authority of the City Council to withhold discretionary approval and subsequent building permits for projects out of compliance with those standards (GM 1.11). As such, there would not be a significant impact resulting from the provision of law enforcement services.

As described above, impacts to the level of service for police are considered self-mitigating because of the requirements of the City to withhold discretionary approval for projects that do not comply with threshold standards.

5.13.2.5 Mitigation Measures

Since no adverse impacts to law enforcement services would result, no mitigation is necessary.

5.13.2.6 Level of Significance After Mitigation

No impacts to the provision of law enforcement services have been identified as part of this EIR.

5.13.3 Schools

5.13.3.1 Existing Conditions

Regulatory Plans and Policies

School services are addressed in the City's Threshold Standard and in the Otay Ranch GDP. The Threshold Standard states that the City shall provide the two local public school districts with an annual report which includes a 12- to 18-month growth forecast; and the District shall provide the City's Growth Management Oversight Commission with an evaluation of their ability to accommodate that growth.

The goal of Section E, Chapter 8, School Facilities, of the Otay Ranch GDP is to provide educational facilities for Otay Ranch residents by coordinated planning of school facilities with the appropriate districts. The GDP identifies seven elementary schools planned for future construction, two of which are currently under construction. Additionally, the GDP contains guidelines for the siting and acreage of school facilities.

Existing Citywide Conditions

There are two public school districts that provide all public primary and secondary school facilities and services in the city of Chula Vista: Chula Vista Elementary School District (CVESD) and Sweetwater Union High School District (SUHSD).

CVESD

CVESD operates kindergarten through sixth grade. There are 34 CVESD-operated schools in the city (Table 5.13-5). Established in 1892, CVESD is the largest kindergarten through sixth grade school district in California. CVESD serves approximately 25,600 students and employs approximately 2,600 people districtwide.

In addition to traditional instruction, Family Resource Centers are located on the sites of four schools. These centers offer services which include case management, counseling, emergency food, assistance with health insurance and other applications and forms, job search help, and employment internships. The District also has a Professional Development School, Model Technology Schools, Pre-service Bilingual Teacher Training Center, Dual Language Acquisition Program, State-funded Preschool Programs, and Extended Day Child Care.

SUHSD

SUHSD operates junior and senior high schools and ancillary programs. There are 18 SUHSD-operated schools in the city (Table 5.13-6). SUHSD, the largest secondary school system in California, serves approximately 36,000 students in junior and senior high schools

TABLE 5.13-5
CHULA VISTA ELEMENTARY SCHOOL DISTRICT SCHOOLS

School	Planning Area
Cook	Northwest
CV/LCC	Northwest
Feaster-Edison	Northwest
Hilltop	Northwest
Kellogg	Northwest
Mueller	Northwest
Vista Square	Northwest
Harborside	Southwest
Castle Park	Southwest
Lauderbach	Southwest
Loma Verde	Southwest
Montgomery	Southwest
Otay	Southwest
Palomar	Southwest
Rice	Southwest
Rohr	Southwest
Rosebank	Southwest
Allen	East
Arroyo Vista	East
Casillas	East
Chula Vista Hills	East
Clear View	East
Discovery	East
EastLake	East
Halecrest	East
Hedenkamp	East
Heritage	East
Marshall	East
McMillin	East
Olympic View	East
Parkview	East
Rogers	East
Tiffany	East
Valle Lindo	East

TABLE 5.13-6
SWEETWATER UNION HIGH SCHOOL DISTRICT SCHOOLS WITHIN THE CITY OF CHULA VISTA

School	Planning Area
Chula Vista HS	Northwest
Chula Vista MS	Northwest
Hilltop HS	Northwest
Hilltop MS	Northwest
Castle Park HS	Southwest
Castle Park MS	Southwest
Chula Vista AS	Southwest
Fifth Avenue Academy	Southwest
MAAC Community Charter	Southwest
Options Secondary	Southwest
Palomar HS	Southwest
Alta Vista Academy	East
Bonita Vista HS	East
Bonita Vista MS	East
EastLake HS	East
EastLake MS	East
Otay Ranch HS	East
Ranch Del Rey MS	East

AS = Adult School
HS = High School
MS = Middle School

combined and approximately 40,441 adult learners in south San Diego County, including Chula Vista.

In addition to traditional middle school and high school curriculum, adult education classes are available at over 70 locations throughout South County. These classes include U.S. citizenship and English as a Second Language (ESL) programs, vocational- and professional-skills development, as well as literacy and other general education courses that help students prepare for a high school diploma or General Education Development (GED) equivalency certificate. The District also provides parent education and personal development courses.

Update Areas

CVESD

Of the 17 CVESD operated schools located west of I-805, four are located within the Northwest Update Area and four within the Southwest Update Area. CV/LCC, Feaster-Edison, Mueller, and Vista Square are located in the Northwest Update Area and Harborside, Lauderbach, Montgomery, and Rice are located in the Southwest Update Area. Valle Lindo, a CVESD-operated school, is located just north of the portion of the Southwest Update Area north of Main Street and just east of I-805.

There are currently no CVESD operated schools in the East Update Area. CVESD currently operates 17 schools east of I-805. There are two CVESD operated schools located just outside the northeast portion of the East Update Area: Heritage and McMillin.

SUHSD

SUHSD operates two schools within the Northwest Update Area and four within the Southwest Update Area (see Table 5.13-6). Chula Vista High School and Chula Vista Middle School serve the junior and senior high school student population of the Northwest Update Area. The student population in the Southwest Update Area is served by Castle Park Middle School, Chula Vista Adult School, Palomar High School, and Fifth Avenue Academy.

Of the seven SUHSD operated schools east of I-805, the recently constructed Otay Ranch High School is located in the East Update Area. The current capacity of Otay Ranch High School is 2,400 students, with a current enrollment of 2,234 students.

5.13.3.2 Thresholds of Significance

Development in accordance with the proposed General Plan Update would result in a significant impact to public services if it would:

Threshold 1: Result in the inability for the public school system to provide adequate schools.

5.13.3.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to the provision of school services if the plan would result in the City's inability to provide adequate schools.

The proposed General Plan Update would result in increased population in each area of the city. Demand for schools would continue to increase as the population of the city increases. Increasing the number of elementary, middle school, and high school students would have a significant impact on existing schools since they are already at or near capacity.

Proposed development and the projected increase in the number of elementary, middle school, and high school students under any of the scenarios (Preferred Plan and Scenarios 1, 2, or 3) would have a substantial impact on the existing schools since they are already at or near capacity regardless of which is ultimately selected. Demand for schools would continue to increase as the population of the city increases.

The estimated number of students to be generated by any of the scenarios upon buildout was based on the current student generation factors used by each of the school districts. Additional student generation and school needs at buildout are presented in Tables 5.13-7 through 5.13-10.

TABLE 5.13-7
STUDENT GENERATION FOR K-6

Update Area	Existing Conditions	Adopted General Plan	Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Northwest	6,030	6,021	7,409	7,265	6,973	7,053
Southwest	5,730	5,533	6,258	6,118	6,260	6,343
East	12,660	18463	20,087	19,609	20,549	18,806
Bayfront	–	2,255	2,255	2,255	2,255	2,255
TOTAL	24,420	32,272	36,009	35,247	36,037	34,457

SOURCE: Chula Vista Elementary School District SNFA Report, February 2003
Generation Rate per unit: Single-family = 0.385
Multi-family = 0.2255

TABLE 5.13-8
STUDENT GENERATION FOR MIDDLE SCHOOL

Update Area	Existing Conditions	Adopted General Plan	Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Northwest	2,051	2,166	2,788	2,753	2,625	2,661
Southwest	1,920	1,944	2,276	2,232	2,294	2,332
East	3,882	6,012	6,723	6,443	6,810	6,160
Bayfront	–	98	98	98	98	98
TOTAL	7,845	10,220	11,885	11,526	11,827	11,153

SOURCE: Sweetwater Union High School District, 2003
Generation Rate per unit: Single-family = 0.11
Multi-family = 0.098

TABLE 5.13-9
STUDENT GENERATION FOR HIGH SCHOOL

Update Area	Existing Conditions	Adopted General Plan	Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Northwest	4,002	4254	5501	5435	5178	5251
Southwest	7,481	11672	13096	12,525	13251	11969
East	7,481	11672	13096	12,525	13,251	11969
Bayfront	–	196	196	196	196	196
TOTAL	18964	27,794	31889	30,681	31876	29385

SOURCE: Sweetwater Union High School District, 2003
Generation Rate per unit: Single-family = 0.221
Multi-family = 0.196

TABLE 5.13-10
ADDITIONAL SCHOOLS PER SCENARIO
CHULA VISTA ELEMENTARY SCHOOL DISTRICT

Planning Area	Existing	Preferred Plan	Scenario 1	Scenario 2	Scenario 3
Northwest	0.72	3.87	3.65	3.02	3.20
Southwest	–0.03	1.75	1.42	1.73	1.92
East*	0	2	1	3	0

*This total represents additional facilities needed in the East, beyond the seven elementary schools identified in the GDP.

Including current enrollment, the Preferred Plan is expected to generate approximately 79,783 elementary, middle, and high school students (see Tables 5.13-7 through 5.13-9

respectively). As seen in Table 5.13-10, ~~no additional~~ 5.6 elementary schools would be required in the west upon buildout of the Preferred Plan; two would be required in the east.

Estimated student generation for elementary, middle school, and high school students is shown on Tables 5.13-7 through 5.13-9, respectively. Implementation of Scenario 1 is expected to generate approximately 77,454 elementary, middle school, and high school students and Scenario 2 is expected to generate 79,740 students. Compared to the other scenarios, Scenario 3 would place the least demand on school services. Including the current student enrollment, Scenario 3 is expected to generate approximately 74,995 elementary, middle school, and high school students. Additional CVESD schools estimated upon buildout of each of the scenarios is presented in Table 5.13-10.

SUHSD has identified the need for one additional high school site in the west and expanded facilities of existing high schools and middle schools regardless of which scenario is ultimately selected. In the east, SUHSD has identified that the planned middle school and high school would be sufficient to accommodate additional student enrollment resulting from the Preferred Plan and any of the scenarios.

Specific sites for the CVESD and SUHSD schools have not yet been determined. Siting and construction of the facilities could have a potential environmental impact.

School sites in western Chula Vista have little capacity for facility expansion. The infill and redevelopment of western Chula Vista with a substantial amount of residential development would increase enrollments at these schools. A significant level of funding, which is not currently available, would be required to add the needed capacity and upgrade outdated classrooms. However, the demographics of households moving into downtown redevelopment areas may have a significantly lower student generation rate than the current household composition. In addition, changes in demographics throughout the city would also impact school facilities and educational program needs.

The proposed Public Facilities and Services Element contains the following two objectives and associated policies that address school services and facilities:

Objective PFS 9

Develop schools that cultivate and educate people of all ages, that meet the needs of the work force, and that serve as community centers.

Policies:

PFS 9.1: Coordinate with local school districts during review of applicable discretionary approvals to provide adequate school facilities, to meet needs generated by development and to avoid overcrowding in accordance with the guidelines and limitations of Government Code 65996(b).

PFS 9.2 Encourage the consideration of new approaches to accommodate student enrollments, including alternative campus locations and education programs.

PFS 9.3: Assist school districts in identifying and acquiring school sites for new construction in needed time frames.

PFS 9.4: Assist school districts in identifying sources of funding for the expansion of facilities in western Chula Vista as needed based on growth.

PFS 9.5: Work closely with the school districts to identify needs for public education facilities and programs, including developing and expanding extra-curricular recreation and educational programs, for primary, secondary and adult education, and providing state-of-the-art information services.

Objective PFS 10

Efficiently locate and design school facilities.

Policies:

PFS 10.1: Coordinate and make recommendations to the school districts, property owners and developers on the location, size and design of school facilities relative to their location in the community. Suggest to the school districts that they consider joint use and alternative structural design such as multi-story buildings where appropriate

PFS 10.2: Coordinate with the school districts to maximize student safety at school campuses and public library facilities.

PFS 10.3: Require that proposed land uses adjacent to a school site be planned in such a manner as to minimize noise impacts and maximize compatibility between the uses.

PFS 10.4: Encourage the central location of new schools within the neighborhoods or areas they serve so as to further community development and enhance the quality of life.

As discussed in the Fire Protection and Law Enforcement sections above, the proposed Growth Management Element contains Objective GM 1 and associated policies to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs. These policies pertain to schools as well as fire protection and law enforcement services. Unlike police and fire services, however, the City of Chula Vista is not responsible for the actual provision of schools. This responsibility falls to the CVESD and the SUHSD.

Impacts to the provision of school services would be avoided because policies in the General Plan Update require that school facilities are sufficient to accommodate projected student population generated by the proposed General Plan Update (PFS 10.1) in accordance with the guidelines and limitations of Government Code 65995(b) (Policy PFS 9.1) and calls for the City to maintain a set of set of quantitative level of service measures (growth management threshold standards) as a tool to assess the relative impact of new facility and service demands created by growth (GM 1.1), and apply those standards, as appropriate, to approval of discretionary projects (GM 1.1), and establishes the authority of the City Council to withhold discretionary approval and subsequent building permits for projects out of compliance with those standards (GM 1.11). Therefore, impacts to the provision of school services are avoided by the implementation of self-mitigating Policies PFS 9.1, PFS 10.1, GM 1.1, and GM 1.11.

5.13.3.4 Level of Significance Prior to Mitigation

The proposed General Plan Update would result in increased population in each of the Update areas of the city. Demand for schools will continue to increase as the population of the city increases. Increasing the number of elementary, middle school, and high school students will result in the need for additional schools.

As discussed above, school sites in western Chula Vista have little capacity for facility expansion. The infill and redevelopment of western Chula Vista with residential development would increase enrollments at these schools. A level of funding, which is not currently available, would be required to add the needed capacity and upgrade outdated classrooms. Changes in demographics throughout the city would also impact school facilities and educational program needs.

Provision of school facilities is the responsibility of the school district when additional demand warrants. The legislation provides that the statutory fees are the exclusive means of considering as well as mitigating for school impacts. It does not just limit the mitigation that may be required, but also limits the scope of review and the findings to be adopted for school

impacts. Once the statutory fee is imposed, the impact would be mitigated because of the provision that statutory fees constitute full and complete mitigation [Government Code 65995(b)].

When proposed as part of a development project, the environmental effects can be reviewed and controlled by the City of Chula Vista. When school construction or modification is completed by the school district it is outside of the authority of the City.

The proposed General Plan Update does not result in the inability of the public school system to provide adequate schools because Policies PFS 9.1, 10.1, and Objective GM 1 require the provision of adequate schools. Impacts resulting from development completed in conformance with the proposed General Plan are considered to be self-mitigating because policies in the General Plan Update require that school facilities are sufficient to accommodate projected student population generated by the proposed General Plan Update (PFS 10.1) in accordance with the guidelines and limitations of Government Code 65995(b) (Policy PFS 9.1). In addition, complying with Objective GM 1 would ensure that school services and facilities are concurrent with need. Policy GM 1.1 calls for the city to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth.

5.13.3.5 Mitigation Measures

Since no significant impacts to the provision of schools services would result, no mitigation is required.

5.13.3.6 Level of Significance After Mitigation

No significant impacts to the provision of school services were identified as part of this EIR.

5.13.4 Library Service

5.13.4.1 Existing Conditions

Regulatory Plans and Policies

Policies and guidelines regarding library services in the city of Chula Vista are contained within the Library Facilities Master Plan, the Library Strategic Plan, the Otay Ranch GDP, and the City's Threshold Standard.

The Chula Vista Library Strategic Plan provides a blueprint for library service over a five-year period. The Library Strategic Plan is designed to focus priorities and resources in order to ensure residents of Chula Vista receive the highest quality library services possible.

The Library Facilities Master Plan addresses the increasing demand for library services in response to the city's continuing growth.

Section E, Part 7, Library Facilities, of the Otay Ranch GDP requires that 500 gross square feet (GSF) per 1,000 residents of library facilities and services be provided to meet the information and education needs of Otay Ranch residents.

The Threshold Standard states that the City shall construct 60,000 GSF of library space, beyond the citywide June 30, 2000 GSF, in the area east of I-805 by buildout. Additionally, construction of these facilities shall occur in phases such that the City will not fall below the citywide ratio of 500 GSF per 1,000 residents.

Existing Citywide Conditions

There are currently three full-service libraries in the city of Chula Vista (Figure 5.13-3): the Civic Center Branch, the South Chula Vista Branch, and the EastLake Branch. The three facilities comprise a total of 102,000 square feet of library space, including 14,000 square feet of administrative facility space. In addition to the three full service libraries, the Chula Vista Heritage Museum is part of the Chula Vista Public Library System and a Chapter of the Friends of the Library. The Library Facilities Master Plan calls for the construction of a 30,000-square-foot full-service library in Rancho del Rey by summer 2007.

Update Areas

The Civic Center Branch Library, located in the Northwest Update Area, is 27 years old and considered the city's main library. The 41,000 square feet of library space is 54 percent of the existing library space. The library is crowded and frequently public passageways are congested. It should be noted that approximately 14,000 square feet at the Civic Center Library is used to house non-public service, system-wide administrative and support functions. The library has reached its capacity with regard to materials.

The Chula Vista Heritage Museum, located at 360 Third Avenue, is also in the Northwest Update Area. Although not formally counted as part of the library system, the Civic Center Branch oversees the operation of this approximately 500-square-foot museum. The mission of the museum is to locate, collect, display, preserve, and record materials of local historic interest to the South San Diego Bay communities. The museum collection has expanded beyond the current available square footage and uses the Civic Center Branch basement to store and process photos and memorabilia.

The South Chula Vista Branch Library is located in the Southwest Update Area. This 37,000-square-foot library opened in 1995 and comprises 36 percent of the current library space in the city. The branch has reached collection capacity as well as space and storage capacity.

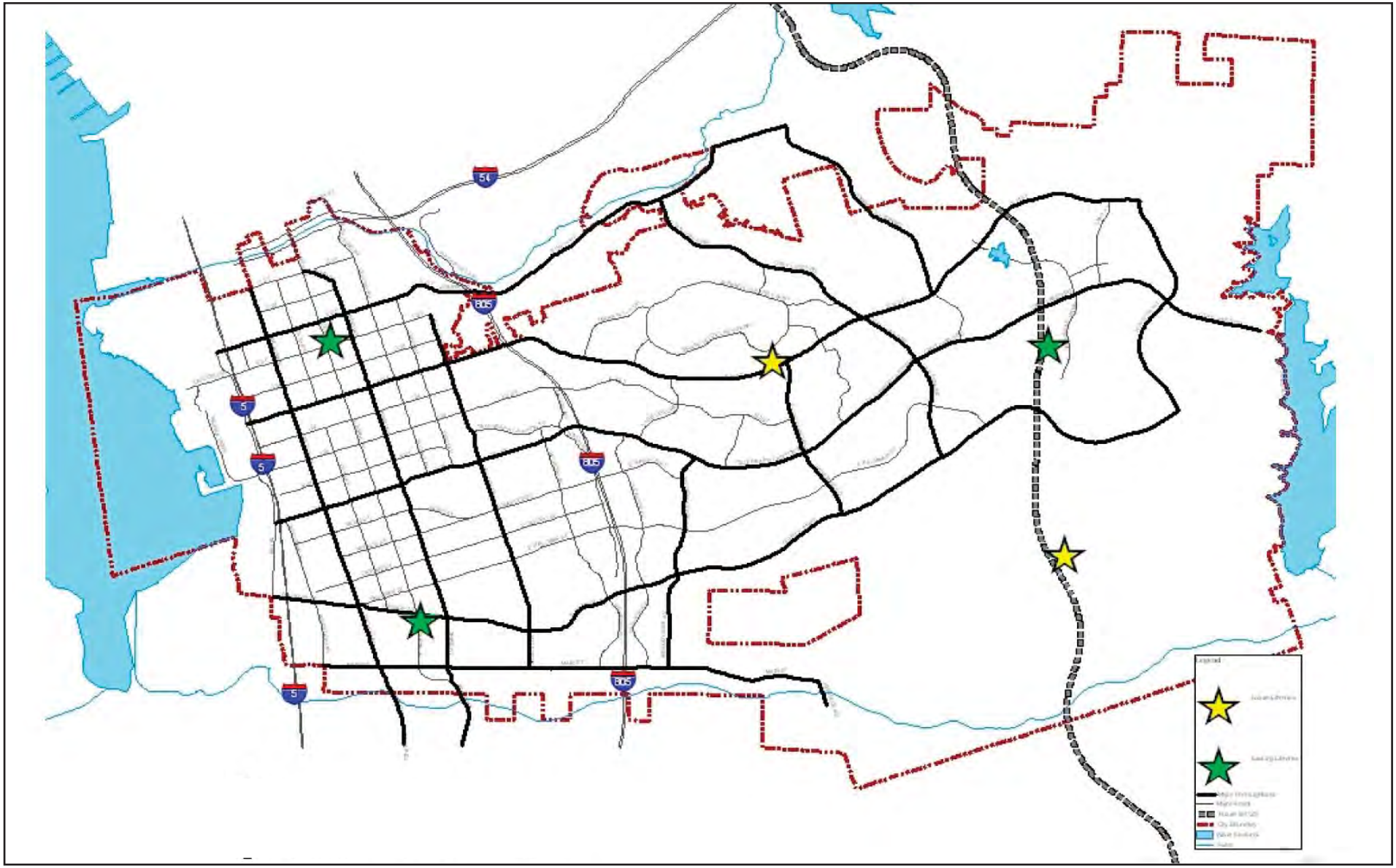

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FIGURE 5.13-3
Existing and Planned Public Libraries

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Due to the number of children served, this division has a large storage and assembling need and currently occupies space not originally planned for these activities.

The EastLake Branch Library, located in the East Update Area, is a joint-use facility between the Chula Vista Public Library and the Sweetwater Union High School District. This facility is located in a building in the rear area of the EastLake High School campus. The facility serves as the High School Library during the school day and as a public library during non-school hours. This 10,000-square-foot branch opened in 1993, and represents 10 percent of the existing library space in the city.

5.13.4.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to public services if it would:

Threshold 1: Result in the inability for the city to provide an adequate level of service in accordance with the adopted standards and thresholds, which currently requires the provision of 500 square feet of library facilities per 1,000 population for new development.

5.13.4.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to the provision of library services if the plan would result in the City's inability to provide an adequate level of service in accordance with the adopted standards and thresholds, which currently requires the provision of 500 square feet of library facilities per 1,000 population for new development.

Buildout of the Preferred Plan or Scenarios 1, 2, or 3 would increase the demand for library services throughout the city. Table 5.13-11 provides the calculation for library facilities demand under each Scenario. For the Preferred Plan, 44,500 square feet of additional library space would be required to meet the forecasted population growth. It should be noted that the library requirement is citywide and can be met anywhere in the city. While the change in population resulting from the proposed General Plan Update stems from land use changes in the Update Areas, the library need can be met in other areas of the city. Scenario 1 would require an additional 41,000 square feet of library space in order to meet newly created demand. Scenario 2 would require 45,500 square feet and Scenario 3 would require 38,000 square feet of library space.

TABLE 5.13-11
LIBRARY REQUIREMENT[1]

	Population	Existing Population	Change	1,000 Population	Library Requirement (square feet)
Preferred Plan	298,529	209,200	89,329	89	44,500
Scenario 1	291,546	209,200	82,346	82	41,000
Scenario 2	299,837	209,200	90,637	91	45,500
Scenario 3	285,656	209,200	76,456	76	38,000

[1]Population figures are for the incorporated area of the city.

The proposed Public Facilities and Services Element contains the following three objectives and associated policies that address library services:

Objective PFS 11

Provide a library system of facilities and programs that meets the needs of Chula Vista residents of all ages.

Policies

PFS 11.1: Coordinate with the Chula Vista Public Library during review of land use issues requiring discretionary approval to provide adequate library facilities that meet the needs generated by development.

PFS 11.2: Encourage an update to the Chula Vista Public Library Facilities Master Plan within five to eight years.

PFS 11.3: Assist the Chula Vista Public Library in identifying and acquiring library sites for new construction in needed time frames.

PFS 11.4: Assist the Chula Vista Public Library in identifying sources of funding for the expansion of facilities in western Chula Vista as needed based on growth.

PFS 11.5: Work closely with the Chula Vista Public Library to identify needs for public outreach programs, including developing and expanding extra-curricular recreation and educational programs and providing state-of-the-art information services.

Objective PFS 12

Efficiently locate and design of library facilities.

Policies

PFS 12.1: Coordinate and make recommendations to the Chula Vista Public Library and property owners/developers on the location, size and design of library facilities relative to their location in the community.

PFS 12.2: Maximize customer safety at public library facilities.

PFS 12.3: Require that proposed land uses adjacent to a library site be planned in such a manner as to minimize noise impacts and maximize compatibility between the uses.

Objective PFS 13

Use alternative site location and design methods, including joint use of facilities, to meet the school and public library needs of the City.

PFS 13.1: Consider and suggest joint use of school and public library facilities where feasible, especially at high schools and institutions of higher learning.

PFS 13.2: Ensure that operation of joint use facilities provides adequate and safe child supervision consistent with school district policies.

PFS 13.3: Encourage the maintenance of safe access, clear signage and sufficient parking for joint use school and public library facilities.

Policies contained in Objectives PFS 11, 12, and 13 demonstrate Chula Vista's commitment to ensuring adequate library facilities and services. Objective PFS 11 focuses on providing a library system that meets the needs of the City. It sets five policies that require the City to work with the Chula Vista Public Library to acquire sites, identify sources of funding for expansion of facilities, and ensuring the provision of libraries required as the result of new development are addressed through the discretionary approval process.

In addition, the strategic plan for the library sets a series of goals to help meet the demand for libraries and library services within the City. Goal 26 of the strategic plan addresses the Facilities Master Plan and the provision of additional libraries.

> Goal 26: Maintain consistent level of service to the community through the implementation of the CVPL "Facilities Master Plan".
>
> - Prepare a Library Bond Act application for construction of the Rancho del Rey Branch Library by June 14, 2002
> - Build an approximately 30,000 square foot branch library at Rancho del Rey by 2005/06
> - Revise the CVPL "Facilities Master Plan" (Year 5)

The construction of the 30,000-square-foot full-service library in Rancho del Rey is currently in the design build process and is slated for completion by summer 2007.

Potential impacts to the provision of library services would be avoided because, as discussed in the Fire Protection, Law Enforcement, and Schools sections above, the proposed plan contains policies associated with Objectives PFS 11, 12, and 13 and Objective GM 1 to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs. Complying with Objective GM 1 would ensure that the provision of library services and facilities are provided concurrent with need. Policy GM 1.1 calls for the city to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth. The application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if these facilities are inadequate. The application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if these facilities are inadequate. GM 1.11 states that the General Plan:

> Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with applicable Threshold Standards.

The requirement for provision of 500 square feet of library space per 1,000 people for new development would be ensured through the application of this policy. As such, there is no significant impact to libraries from the adoption of the Preferred Plan or any of the Scenarios; in essence, it is self-mitigating.

In addition, facilities are funded through development impact fees collected as part of the City's Public Facilities Development Impact Fee (PFDIF). Implementation of the Preferred Plan or Scenarios 1, 2, or 3 would require an amendment to the PFDIF recreation facilities component in order to expand the total number of facilities needed to meet new growth.

5.13.4.4 Level of Significance Prior to Mitigation

Impacts resulting from implementation of any of the scenarios would be the same regardless of which is ultimately selected. Currently, there are insufficient existing libraries in the city to meet the 500 square feet per 1,000 population standard. Adoption of the General Plan would generate increased demand for library facilities.

The proposed General Plan would not result in significant impacts to the provision of library services and facilities because the policies contained in the proposed General Plan require that library facilities are sufficient to accommodate increased demand generated by the proposed Preferred Plan or Scenarios 1, 2, or 3. The plan contains Objectives PFS 11, 12, and 13, which demonstrate Chula Vista's commitment to ensuring adequate library facilities and services. Implementation of these policies would reduce potential impacts but not to below a level of significance.

Complying with Objective GM 1 would ensure that the provision of library services and facilities are provided concurrent with need. Policy GM 1.1 calls for the city to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth. The application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if these facilities are inadequate. The threshold standard requiring the provision of 500 square feet per 1,000 people for new development would be ensured through the application of this policy. As such, there is no significant impact to libraries from the adoption of the Preferred Plan or any of the Scenarios; in essence, it is self-mitigating.

5.13.4.5 Mitigation Measures

Since there are no significant impacts for the provision of library facilities and no impacts would result from adoption of the proposed General Plan Update, no mitigation is necessary.

5.13.4.6 Level of Significance After Mitigation

No significant impacts to library services have been identified as part of this EIR.

5.13.5 Parks and Recreation

5.13.5.1 Existing Conditions

Regulatory Plans and Policies

Parks and recreation are addressed in the Parks and Recreation Master Plan, Otay Ranch GDP, Otay Valley Regional Park Concept Plan, Greenbelt Master Plan, and the City's Threshold Standard Policy.

The Parks and Recreation Master Plan is oriented to create a comprehensive parks and recreation system that uses public and quasi-public resources which strives to meet the needs of the city by effectively distributing park types and their associated recreation facilities and programs. In addition, the Plan contains several policies which address the siting and acreage of community and neighborhood parks.

Chapter 4 of the Otay Ranch GDP addresses parks and recreation. The intent of the GDP is to provide diverse park and recreational opportunities within Otay Ranch which meet the recreational, conservation, preservation, cultural, and aesthetic needs of the community.

The intent of the Otay Valley Regional Park Concept Plan is to provide recreation facilities, protect resources, and coordinate the park's development with adjacent land uses to ensure compatible development, buffering, and linkages with other regional resources. In addition, the Plan requires that a comprehensive management plan be implemented to address long-term management of the park, provide protection for park visitors and neighbors, develop recreational programs, and enhance park/open space activities and resources.

The Greenbelt Master Plan as it relates to parks and recreation ensures public access within the Greenbelt through an active and passive recreation park system with trails connecting each segment.

The Growth Management Threshold Standard requires that three acres of neighborhood and community parkland with appropriate facilities shall be provided per 1,000 residents in the area east of I-805. The three acres per 1,000 residents population threshold standard does not apply to portions of the city west of I-805. However, per the Park Development Ordinance, the three acres per 1,000 population standard does apply to the entire city, including western Chula Vista.

Existing Citywide Conditions

Under the adopted General Plan, the city is divided into five planning areas: Bayfront, Central, Montgomery, Sweetwater, and Eastern Territories. Existing and future parks and recreation facilities within the city are identified in Figure 5.13-4; the corresponding

numbered locations are summarized in Table 5.13-12. Table 5.13-12 summarizes the location, acreage, and amenities of the existing and future park recreation facilities in each planning area and includes additional park and/or recreation areas not identified in the adopted Parks and Recreation Master Plan. In eastern Chula Vista, the 3 acres per 1,000 population threshold standard is currently being met.

As seen in Table 5.13-12, the Montgomery area lacks an existing community park and the one that is planned for the area is not yet fully planned and approved. Additionally, the Bayfront lacks existing or planned neighborhood parks (see Table 5.13-12).

Chula Vista currently has 42 community parks, neighborhood parks, and mini-parks. Using the year 2000 census data, Chula Vista provided 2.19 acres of parkland per 1,000 residents. Table 5.13-13 below summarizes park acreage per population in each of the five community planning areas.

In addition to the park acreage shown in Table 5.13-13, Chula Vista contains over 9,433 acres of regional parks within its planning area. These incorporate substantial portions of the Sweetwater and Otay River valleys, as well as the Upper and Lower Otay Reservoirs, and make up a significant portion of the Chula Vista Greenbelt.

In addition to the above parks, Chula Vista also has golf courses. The City currently owns one golf course in the city of Chula Vista, leased to and managed by American Golf Corporation. The city also contains four other privately owned courses within the General Plan area: San Diego Country Club, Bonita Golf Course, EastLake Country Club, and The Auld Course.

Update Areas

The Northwest Update Area contains parks and recreational facilities (see Figure 5.13-4). There are three neighborhood parks in the Northwest Update Area: Chula Vista Memorial Park, Friendship Park, and Norman Park. Together these parks total approximately 13.32 acres and have a variety of amenities including open green space, play equipment, and picnic areas. This area also has the recreation complex, Parkway Gymnasium, Parkway Center, and Parkway Pool, and Norman Park Senior Center.

The Southwest Update Area contains one neighborhood park, Lauderbach Park, and no community park. Lauderbach Park is approximately four acres and includes ball fields, play equipment, open green space, picnic areas, and a Boys and Girls Club of Chula Vista facility. The Otay Valley Regional Park borders this update area to the south. No park and recreation facilities currently exist within this segment of the OVRP; however, several facilities are planned for the future.

Map Source: City of Chula Vista, 2004

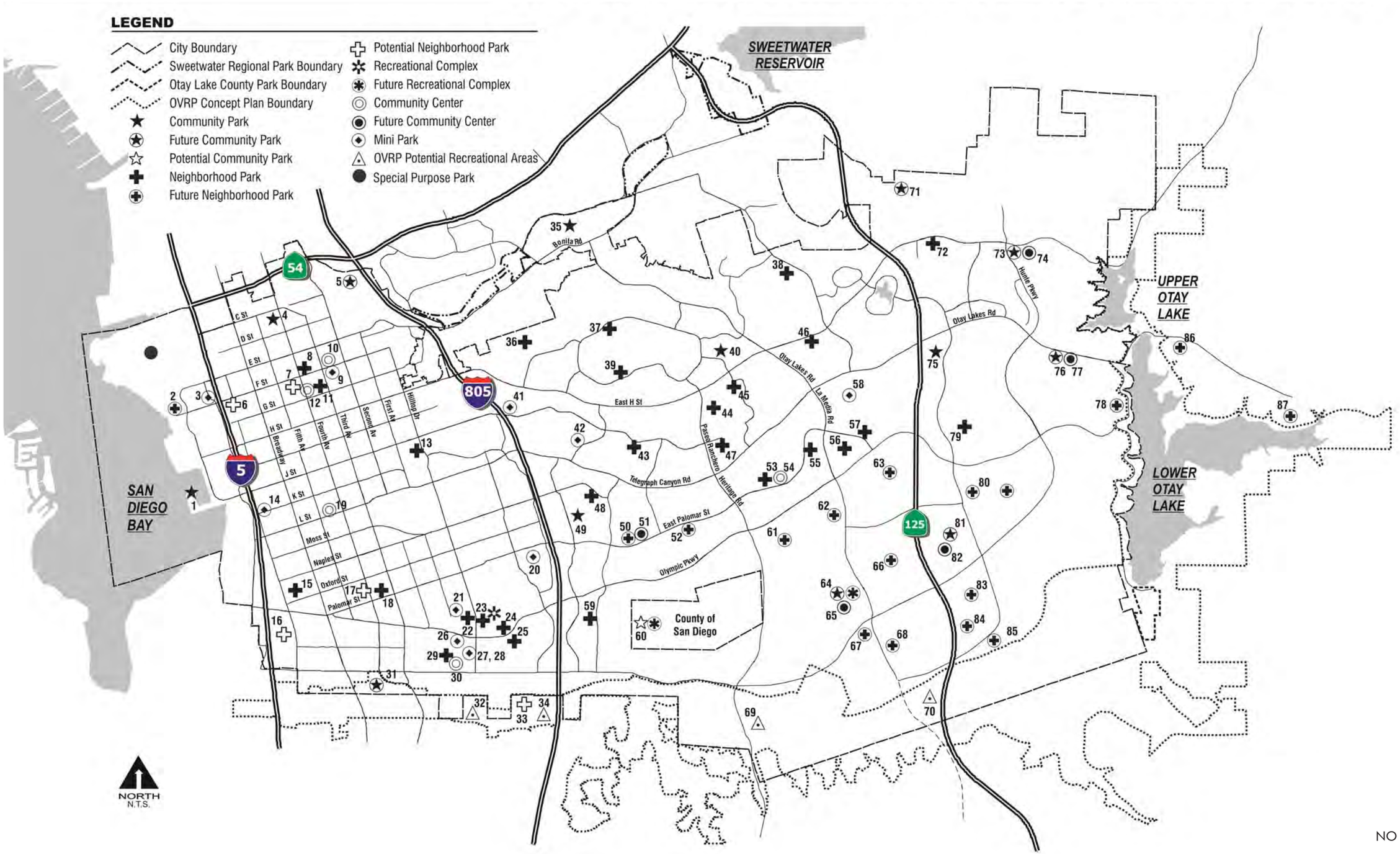

FIGURE 5.13-4
Existing and Future Park and Recreation Facilities

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TABLE 5.13-12
SUMMARY OF EXISTING AND FUTURE PARK AND RECREATION FACILITIES

	Community Parks		Neighborhood Parks		Mini Parks		Totals		
Community/ Planning Area	Existing # Acres	Planned # Acres	Existing # Acres	Planned # Acres	Existing # Acres	Planned # Acres	Existing # Acres	Planned # Acres	Total # Acres
Bayfront	2	1	–	–	1	–	3	1	4
	25.42	20[1]			1.35		26.77	20[1]	46.77[1]
Central	1	–	3	2	3	–	7	2	9
	19.8		15.77	28[2]	1.87		37.44	28[2]	65.44[2]
Montgomery	–	1	7	4	5	–	12	5	17
		20[3]	55.12	60[3]	2.8		57.92	80[3]	137.92[3]
Sweetwater	2	–	9	–	2	–	13	–	13
	79.83		83.61		12.11		175.55		175.55
Eastern Territories	2	8	8	15	1	1	11	24	35
	56.99	364.75[4]	45.72	116.88[5]	0.9	1.0	103.61	482.63[4]	586.24[4]
TOTAL	7	10	27	21	11	1	46	32	78
	182.04	404.75	200.22	204.88	19.03	1.0	401.29	610.63	1,011.92

NOTE: Future parks and recreation facilities include proposed parks that are not yet planned or programmed.

[1]Estimated future Bayfront Park acreage identified in the adopted Park & Recreation Master Plan. This acreage is subject to change based on the results of the joint City/Port District Bayfront Master Plan.

[2]Acreage includes two parks that are proposed but not yet planned or programmed – Woodlawn Avenue/F Street at 5 to 8 acres and Lower Sweetwater at 20 acres.

[3]Acreage includes five parks that are proposed but not yet fully planned and approved – an unnamed community park in the OVRP Recreation Area 4 at 10 to20 acres; two unnamed neighborhood parks, one at Oxford Street at 5 acres and one in the OVRP Recreation Area 6 at 10 to 20 acres; and two more "Potential Recreation Areas" in the OVRP, Area 5 at 10 acres and Area 7 at 25 acres (for a total of 80 potential future park Acres in the Montgomery area that are not yet fully planned and approved).

[4]Acreage includes four parks that are proposed but not yet fully planned and approved – two unnamed community parks, the Landfill park site at 35 acres and the OVRP Area 11 West site at 10 to 20 acres; and two more "Potential Recreation Areas" in the OVRP, Area 10 at 125 acres and Area 11 East at 45 acres.

[5]Acreage includes two future 9-acre neighborhood parks in Otay Ranch Village 13 which is outside of the City of Chula Vista municipal boundaries and current Sphere of Influence.

TABLE 5.13-13
PUBLIC PARK ACREAGE PER POPULATION (YEAR 2004)

Planning Area	Park Acres	Population	Park Acres/1,000 Population
Bayfront	26.77	0	-
Northwest	42.72	56,931	0.75
Southwest	57.92	53,562	1.08
East	279.95	98,707	2.84
TOTAL	407.36	209,200	1.95

There are currently no neighborhood or community parks or community centers within the East Update Area. The Park and Recreation Master Plan identifies several community and neighborhood parks planned for construction in the future within this update area. The OVRP, part of the Greenbelt system, runs along the southern boundary of this update area. This segment of the OVRP currently contains no recreation facilities; however, several are planned for future construction.

5.13.5.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to public services if it would:

Threshold 1: Result in the inability for the City to provide an adequate level of service in accordance with the adopted standards and thresholds, which currently requires the provision of 3 acres of dedicated parkland per 1,000 population for new development.

5.13.5.3 Impacts

Threshold 1 states that adoption of the General Plan Update would result in significant impacts to park and recreation services if the plan would result in the City's inability to provide an adequate level of service in accordance with the adopted standards and thresholds, which currently requires the provision of three acres of dedicated parkland per 1,000 population for new development.

Adoption of the Preferred Plan or Scenarios 1, 2, or 3 would result in an increase in the need for park and recreation facility improvements (i.e., sport fields and courts, picnic facilities, playground equipment, and all related support facilities including parking lots and walkways) by increasing residential density in the west and converting vacant land in the east to residential uses. Table 5.13-14 provides the calculation for park demand under each Scenario. For the Preferred Plan, 267 acres of additional parks would be required to meet the forecasted population growth resulting form new development. It should be noted that the park requirement is citywide and can be met anywhere in the city. While the change in population resulting from the proposed General Plan Update stems from land use changes in the Update Areas, the park need can be met in other areas of the city. Scenario 1 would require an additional 246 acres of developed parkland in order to meet newly created demand. Scenario 2 would require 273 acres of newly developed parkland and Scenario 3 would require 231 acres.

TABLE 5.13-14
PUBLIC PARK ACREAGE REQUIREMENT

	Population	Existing Population	Change	1,000 Population	Park Need (acres)
Preferred Plan	298,529	209,200	89,329	89	267
Scenario 1	291,546	209,200	82,346	82	246
Scenario 2	299,837	209,200	90,637	91	273
Scenario 3	285,656	209,200	76,456	76	228

NOTE: Population figures are for the incorporated area of the city.

Recreation facilities are funded through development impact fees collected as part of the City's PFDIF. Implementation of Preferred Plan would require an amendment to the PFDIF recreation facilities component in order to expand the total number of facilities needed to meet new growth.

Siting and construction of the facilities could result in potential environmental impacts. Sites have not been determined and are not part of the proposed General Plan Update. Siting of parks would take into account the minimization of environmental impacts at the time specific locations are determined.

Within eastern Chula Vista, the current three acres per 1,000 resident population threshold standard is being met.

The Parks and Recreation Master Plan states that at buildout of the adopted General Plan, with implementation of existing goals and policies, the city would have over 700 acres of parkland available for recreational use to meet the expressed needs of the community. The system is planned to be comprised of a minimum of nine community parks, 46 neighborhood parks, and several regional parks.

The Parks and Recreation Master Plan includes a demand analysis for parks and recreation facilities, which concludes that existing facilities fall short of current demand and that while future growth would result in additional parklands, there would continue to be a deficit in western Chula Vista due to the amount of parkland that can be required of new development.

The land uses identified in the Preferred Plan and Scenarios 1, 2, and 3 would increase demand for park and recreational services and facilities throughout the city. Potential impacts to the provision of park and recreational services are avoided because the plan contains policies which ensure adequate services are provided concurrent with need.

The proposed Public Facilities and Services Element contains the following objectives and associated policies that address park and recreation services and facilities:

Objective PFS 14

Provide parks and recreation facilities and programs citywide that are well maintained, safe, accessible to all residents and that offer opportunities for personal development and fitness in addition to recreation.

Policy

PFS 14.5: Work with proponents of new development projects and redevelopment projects at the earliest stages to ensure that parks, recreation, trails, and open space facilities are designed to meet City standards and are built in a timely manner to meet the needs of residents they will serve.

Objective PFS 15

Provide new park and recreation facilities for residents of new development citywide.

Policy

PFS 15.7: Work with proponents of new development projects and redevelopment projects at the earliest stages to ensure that parks, recreation, trails and open space facilities are designed to meet city standards and are built in a timely manner to meet the needs of residents they will serve.

As discussed in the Fire Protection, Law Enforcement, Schools, and the Library Service sections above, the proposed Growth Management Element contains Objective GM 1 and associated policies to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs.

Impacts to the provision of park and recreation services and facilities would be avoided because the policies contained in the proposed General Plan ensure that park and recreation facilities are designed to meet City standards and are sufficient to accommodate increased demand generated by the proposed General Plan Update (PFS 14.5 and PFS 15.7). In addition, complying with Objective GM 1 would ensure that park and recreation services and facilities are concurrent with need. The proposed General Plan Policy GM 1.1 calls for the City to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth. The application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if these facilities are inadequate. Therefore, impacts

to the provision of park and recreation services and facilities are avoided by the implementation of self-mitigating Policies PFS 14.5, 15.7, GM 1.9 and GM 1.11.

5.13.5.4 Level of Significance Prior to Mitigation

The Chula Vista Municipal Code, Section 17.10 (the Park Development Ordinance – PDO) applies a standard of 3 acres of park land for every 1,000 people to all new development. Since the park demand forecast as resulting from the adoption of the Plan or any of the Scenarios results from population associated with new development, compliance with the PDO assures provision of 3 acres of dedicated park land for every 1,000 people for all new development. As a result, there is no significant impact to parks as a result of the adoption of the proposed General Plan Update.

Impacts to the provision of park and recreation services and facilities are considered to be self-mitigating because the policies contained in the proposed General Plan ensure that park and recreation facilities are designed to meet City standards and are sufficient to accommodate increased demand generated by the proposed General Plan Update (PFS 14.5 and PFS 15.7), and calls for the City to maintain a set of threshold standards which are policy based quantitative level of service measures as a tool to assess the relative impact of new service demands expected or created by growth (GM 1.1). In addition, the application of Policies GM 1.9 and GM 1.11 would ensure that major development projects are not approved if park and recreation facilities and services are inadequate by prohibiting discretionary approval for projects out of compliance with those standards (GM 1.11).

5.13.5.5 Mitigation Measures

Since there are no significant impacts for the provision of park and recreation services and facilities would result from adoption of the proposed General Plan Update, no mitigation is necessary.

5.13.5.6 Level of Significance After Mitigation

No significant impacts to parks and recreation services have been identified as part of this EIR.

5.14 Public Utilities

Public utilities consist of the provision of water, sewer, and integrated waste management services and facilities. The following discussion deals with the potential impacts that adoption of the General Plan Update would have upon existing and planned public utilities.

The City Council adopted the Threshold Standards Policy for Chula Vista in November 1987, which established "quality of life" indicators for water and sewer services and facilities. These topics were addressed in the policy in terms of a goal, objective(s), threshold, and implementation measures. These standards are intended to preserve and enhance the environment and city residents' quality of life as growth occurs.

5.14.1 Water

The City of Chula Vista prepared a water technical report to describe the various components of the existing water supply and distribution system serving the city, the current condition of those components, and the standards used to maintain the quality of water service. This report was prepared in December 2004 and is included in this EIR as Appendix H.

5.14.1.1 Existing Citywide Conditions

Water imported to the San Diego region comes from two primary sources, the Colorado River through the 240-mile Colorado River Aqueduct, and the State Water Project from Northern California through the Sacramento-San Joaquin River Delta and the 444-mile-long California Aqueduct. These sources deliver water to The Metropolitan Water District of Southern California (MWD), which then distributes water supplies to water agencies throughout the Southern California region including the San Diego County Water Authority (SDCWA). The SDCWA is comprised of 23 member agencies and receives purchased water by gravity through two aqueducts containing five large-diameter pipelines. These pipelines then supply the member water agencies that serve Chula Vista.

The California Legislature created the SDCWA through special act legislation in 1944 to administer the region's Colorado River water rights, import water and take over the operation of the aqueduct from the Navy. The first imported water arrived in the county in November 1947. Providing a safe and reliable water supply to the people who live and work in the San Diego region is the mission of the SDCWA. Today, up to 90 percent of the region's water is imported from a single supplier. Over the past several years, the SDCWA has been actively pursuing programs and projects to enhance water reliability by diversifying its water supply portfolio. All imported water is currently obtained from MWD. The SDCWA is MWD's largest member agency, purchasing up to 30 percent of MWD's supplies annually.

On October 10, 2003, representatives from the SDCWA and three water agencies signed documents required to implement the Quantification Settlement Agreement (QSA), a landmark accord that fundamentally changed the way Colorado River water is distributed and used in California. The QSA provides California a transition period to implement water transfers and supply programs that will reduce California's over-dependence upon the Colorado River and reduce the state's draw to its 4.4 million acre-foot annual apportionment. Importantly for San Diego County, the QSA cleared the way for an agreement to transfer of up to 200,000 acre-feet of water annually from the Imperial Irrigation District to the SDCWA; the initial term of this agreement is 45 years, which can be renewed for an additional 30 years if both parties agree. Also included in the QSA is a project to conserve water through the concrete lining of the All-American and Coachella Canals to prevent seepage losses, which will yield 77,000 acre-feet of water annually to the SDCWA for 110 years. When deliveries of the water are fully ramped up, San Diego County will receive nearly 280,000 acre-feet of new, highly reliable water supplies.

The development of local water resources is a focus of the SDCWA. These include efforts to make the most of local resources include recycled water programs, use modern reverse osmosis technology for the desalination of brackish (salty) groundwater in several different part of the county, groundwater storage projects, and ongoing water conservation efforts that have saved more than 345,000 acre-feet of water since 1990. The SDCWA is exploring the development of the region's first large-scale seawater desalination project adjacent to the Encina Power Station in Carlsbad. If approved, it would be the largest seawater desalination project in the Western Hemisphere, producing 56,000 acre-feet per year.

San Diego County Water Authority 2000 Urban Water Management Plan

On November 16, 2000, the SDCWA Board of Directors approved its 2000 Urban Water Management Plan (2000 UWMP). The plan outlines how the SDCWA will meet future water demands. The 2000 UWMP looks at historic and current water demands for the San Diego region, compares water supplies with demands through 2020 and identifies potential new supplies to meet those demands. Currently, SDCWA's UWMP is undergoing its five-year update and is scheduled to be finished by December 31, 2005.

Water demand within the SDCWA's service area is expected to grow from about 695,000 acre-feet currently to 813,000 acre-feet by 2020. Since the current General Plan Update uses a 2030 buildout horizon year, until the Urban Water Management Plan is updated with any adopted changes to the General Plan and projects demand until 2030, the forecast will be out of conformance with the water plan. The Urban Water Management Plan identifies the imported and local water supplies expected to meet these future water demands and diversify the county's sources of water. Local water supplies discussed in the plan include future groundwater recovery and water recycling projects, a potential seawater desalination project by 2020, as well as water conservation measures being implemented by the water agencies within the SDCWA's service area. The plan also identifies increases expected in the

SDCWA's imported water supply. Water transfer agreements, such as the one the SDCWA has with the Imperial Irrigation District (IID), will add to the region's traditional source of imported water from the MWD.

San Diego County Water Authority 2004 Annual Water Supply Report

The SDCWA Administrative Code (Section 8.00.050) requires the SDCWA to provide its member agencies, the County of San Diego, and each city in the County of San Diego an annual statement regarding the Water Authority's water supplies, implementation of SDCWA plans, and programs to meet the future water supply requirements of its member agencies. The SDCWA 2004 Annual Water Supply Report (Report) satisfies the Administrative Code requirements.

The Report provides documentation on the existing and planned water supplies being developed by the Water Authority, including the Water Authority-Imperial Irrigation District water transfer, All American and Coachella Canal lining projects, and seawater desalination. This documentation may be used by the SDCWA's member agencies in preparation of the water supply assessments and written verifications required under state law [Reference Water Code Sections 10910 through 10914 and Government Code Sections 65867.5, 66455.3, and 66473.7 and (commonly referred to as SB 610 and SB 221)].

The Report contains information regarding imported water supplies from MWD's 2003 Water Supply Report. When preparing the assessments and verifications for projects within its respective service areas, the SDCWA member agencies should use the Report, MWD's March 2003 Report, and additional information developed by the individual member agencies, such as the Sweetwater Authority and the Otay Water District, on local demands and supplies.

The SDCWA's 2000 UWMP and Regional Water Facilities Master Plan (Master Plan) identify development of a diverse mix of resources to meet water supply reliability needs within the San Diego region. Development of a diverse supply provides for flexibility and adaptability in the resource mix to handle potential risks associated with managing and developing supplies. These risks could include environmental constraints, lack of political will, water supply contamination, and/or lack of funding.

Development of local supplies by the SDCWA's member agencies is a critical element to securing reliability. Therefore, the Report provides a brief discussion on the management and development of local supplies within the San Diego region compared with the supply targets included in the 2000 UWMP.

AVAILABILITY OF SUFFICIENT SUPPLIES AND PLANS FOR ACQUIRING ADDITIONAL SUPPLIES

The SDCWA currently obtains imported supplies from MWD and an increasing amount of conserved agricultural water from IID. Section 135 of MWD's Act defines the preferential right to water for each of its member agencies. As calculated by MWD, the SDCWA currently has a preferential right to about 15.54 percent of MWD's supply, but accounts for approximately 28 percent of MWD's water sales. Under preferential rights, MWD could allocate water without regard to historic water purchases or dependence on MWD. The SDCWA and its member agencies are taking measures to reduce its dependence upon MWD through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation. MWD has stated, consistent with Section 4202 of its Administrative Code, that it is prepared to provide the SDCWA's service area with adequate supplies of water to meet expanding and increasing needs. When and as additional water resources are required to meet increasing needs, MWD says it will be prepared to deliver such supplies. The SDCWA has made large investments in MWD's facilities and will continue to include imported supplies from MWD in the future resource mix. As discussed in the SDCWA's 2000 UWMP, the SDCWA is planning to diversify its supply portfolio and reduce purchases from MWD. It should be noted that SDCWA does not provide water to Chula Vista directly, but sells water to the Otay Water District and to the Sweetwater Water District, which in turn provides water to consumers in the City.

Section 6 of the SDCWA's 2000 UWMP contains a detailed shortage contingency analysis, which addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the SDCWA and its member agencies, through the Emergency Response Plan and Emergency Storage Project, are taking actions to prepare for and appropriately handle an interruption of water supplies. The analysis also describes actions being taken by the SDCWA to provide increased reliability in a drought to minimize shortages. Included in these measures is a plan to diversify supply and drought management including such items as furthering the acquisition of water from IID, expansion of recycling projects, and potential seawater desalinization. The SDCWA, in conjunction with its member agencies, plans to develop a new drought allocation methodology in connection with the SDCWA's next UWMP update, which will be completed in 2005.

Metropolitan Water District of Southern California 2003 Water Supply Report

In March 2003, MWD produced a document entitled, *Report on Metropolitan's Water Supplies, A Blueprint for Water Reliability* (March 2003 Report). The objective of the March 2003 Report is to provide the member agencies, retail water utilities, cities, and counties within its service area with water supply information for purposes of developing water supply assessments and written verifications. The March 2003 Report states the approach to evaluating water supplies and demands is consistent with MWD's 2000 Regional UWMP. As part of this process, MWD utilizes SANDAG's regional growth forecast in calculating

regional water demands for the SDCWA's service area. As noted above, since the current General Plan Update uses a 2030 buildout horizon year, until the Urban Water Management Plan is updated with any adopted changes to the General Plan and projects demand until 2030, the forecast will be out of conformance with the water plan.

MWD is a wholesale supplier of water to its member public agencies and obtains its supplies from two primary sources: the Colorado River, via the Colorado River Aqueduct (CRA), which it owns and operates, and Northern California, via the State Water Project (SWP). The purpose of the March 2003 Report is to document the availability of these existing supplies and additional supplies necessary to meet future demands. MWD has not yet updated the March 2003 Report.

Colorado River Aqueduct Deliveries

The March 2003 Report includes a description of MWD's 550,000 acre feet per year basic annual apportionment water (Priority 4) along with the Colorado River supply projects that are necessary to maintain a full CRA. One of the actions that were finalized following distribution of the March 2003 Report is approval of the QSA and other related agreements. Signing of the QSA and related agreements will now allow implementation of Colorado River supply projects identified in MWD's March 2003 Report. Information on these activities is discussed below.

MWD INTEGRATED WATER RESOURCES PLAN 2003 UPDATE

In July 2004, an updated water resource plan, the "Integrated Water Resources Plan, 2003 Update" (IRP) that provides the roadmap for maintaining Southern California's reliable supply future was adopted by MWD's Board of Directors. The 1996 IRP determined, through a comprehensive stakeholder process, what the guiding principles should be for building a long-term water resource plan, and the development targets under that plan. The 2003 IRP Update Report contains refinements to the development targets, and establishes two schedules for regular reporting and updating the IRP in the future. The first is an annual IRP Implementation Report that will provide regular reporting to the Board on the status and progress of resource implementation. The second is a regular five-year schedule for the future IRP Updates, coincident with MWD's filing of the Regional Urban Water Management Plan, as prescribed by the California Water Code. MWD's other planning processes build upon the resource development targets.

The IRP Update published by the Metropolitan Water District of Southern California stated that:

> The bottom line conclusion from the IRP Update is that the resource targets from the 1996 IRP, factored in with changed conditions, will continue to provide for 100 percent reliability through 2025. However, the region's

> reliability can be reinforced through continually maintaining contingency plans. (MWD 2004:7)

MWD indicates that this is possible because of the changed targets and conditions, including lower demands. As a result, the current resource goals were determined sufficient to extend the IRP through 2025. The IRP indicates that the most significant changed conditions are higher conservation savings and Member Agencies plans to increase local supply development. Together these changes cause projected Metropolitan demands to drop as much as 500,000 acre-feet in a dry year. Other major changed conditions include:

- Board-revised goals for the State Water Project
- Board-revised goals for the Colorado River Aqueduct
- More stringent water quality regulations
- Evolving resource implementation risk

Recently, two pieces of legislation were passed that address the supply of water, SB 610 and SB 221. Both of these bills place water supply requirements on individual projects, and require consideration whether there is an adequate supply of water to support the project. For the adoption of a General Plan, neither of these bills applies directly. Both apply, in certain situations, to subsequent projects developed in conformance with a General Plan.

SB 610 requires that a water supply assessment be included in the environmental review for projects specified in Water Code section 10912. These include, among others, residential projects of more than 500 units, shopping centers of more than 500,000 square feet, and industrial facilities of more than 650,000 square feet.

SB 221 requires the City to verify that there is a sufficient water supply as a condition of approval of projects specified in Water Code Section 10912. Proof of a sufficient supply is based on a written verification from the Otay Water District or the Sweetwater Authority, depending upon the location of the proposed project.

The projects that are covered by SB 610 and SB 221 could be developed in conformance to the land uses identified in the proposed General Plan Update. Conformance to these acts will be required as part of the CEQA review requirements for future proposed development projects.

In order to project and plan for future water needs, the SDCWA has entered into a Memorandum of Agreement with SANDAG to use the most recent regional growth forecast for planning purposes. The SDCWA uses the growth forecasts to develop demand projections that are used in supply and facility planning. Using the growth forecasts, the

SDCWA has developed the UWMP and updates it every five years. This plan describes and evaluates sources of supply, reasonable and practical efficient uses of water, reclamation and demand management. It considers the demands for population and water use through the next 20 years.

Because the UWMP is closely integrated with SANDAG's regional growth forecasts, the basis of those forecasts is critical to the supply and demand projections. SANDAG projects growth based in part on adopted general plans. The projections involve development of an estimate of regional population growth and the distribution of population within the region. Regional growth is, to a large extent, based on economic factors. Distribution of that population within the region is largely based on the land use decisions made by local agencies, specifically general plans and takes into consideration such aspects and housing capacity and density, employment capacity, and available land for development.

To the extent that development occurs in accordance with the adopted general plans used to prepare growth forecasts, their long-term impact on water supply and demand were included in the Authorities plans. To the extent that a project differs from the General Plan assumptions used in preparing the growth forecasts, it could vary from the SDCWA projection.

Update Areas

Water consumers within the City of Chula Vista are served by three water suppliers or districts (Otay Water District, Sweetwater Authority, and Cal-American) as described below. The service areas of these suppliers and districts are shown on Figure 5.14-1.

Otay Water District

Water service is provided to the majority of the area east of Interstate 805, including the newly developing areas of eastern Chula Vista, by the Otay Water District (OWD). OWD has developed an aggressive Capital Improvement Program (CIP) so that facilities and supplies remain in step with increasing demand. OWD receives the majority of its treated supply from SDCWA's Pipeline Number 4 of the Second San Diego Aqueduct treated by the Metropolitan Water District of Southern California. The remainder of their potable water comes from the First San Diego County Aqueduct treated by the Helix Water District.

OWD is actively pursuing development of the local water supply through the sharing of treatment plant capacity with agencies such as Helix Water District and the City of San Diego. An agreement with the City of San Diego for 10 million gallons per day (MGD) from their Otay Water Treatment Plant (WTP) has been executed and 8 MGD from the Helix Water District's Levy WTP is currently available to OWD; OWD is in the 90 percent design phase of the Lower Otay Pump Station to supply this 10 MGD from the Otay WTP and the recent construction of Flow Control Facility No. 14 has allowed for the use of the 8 MGD

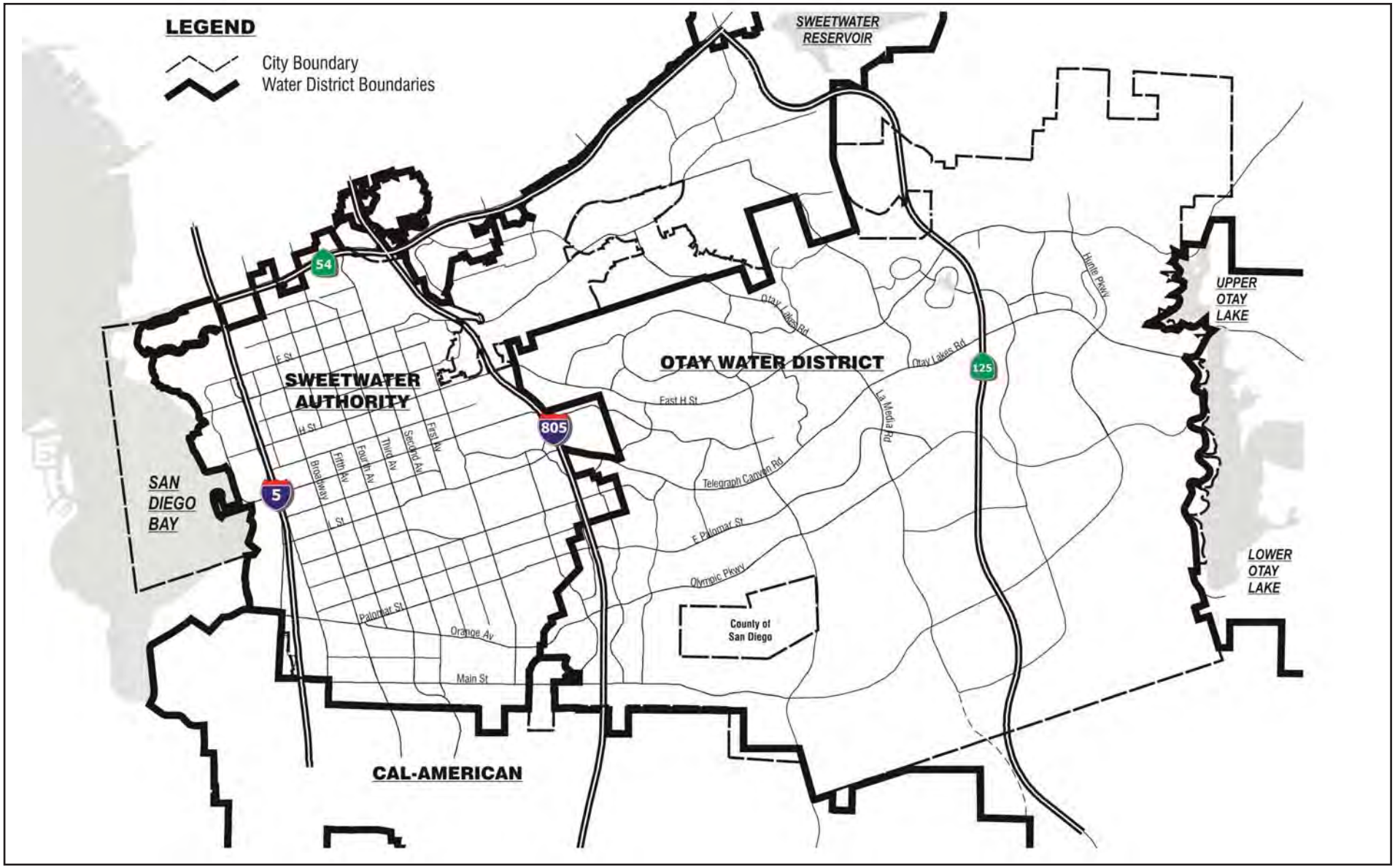

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FIGURE 5.14-1

Sweetwater and Otay Water District Service Boundaries

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from the Helix Water District. The Ralph W. Chapman Water Recycling Facility can now produce about 1.1 MGD or 1,232 acre-feet per year of recycled water and that the City of San Diego formally approved an agreement with OWD on October 20, 2003 to provide 6 MGD of recycled water from their South Bay Water Reclamation Plant (SBWRP) to OWD. Recycled water from the SBWRP is expected to be delivered to OWD in the Fall of 2006. Construction and completion of the transmission, storage, and pump station systems necessary to import and distribute this additional supply of recycled water is expected to be completed in the fall of 2006.

Otay Water District 2000 Urban Water Management Plan

The *Otay Water District 2000 Urban Water Management Plan* (Plan) assesses the OWD's water supply sources, water demands, water supply reliability, supply and demand comparison provisions, demand management, water shortage contingency plan, and water recycling through 2020. The Plan projects that the total number of connections and total demand within OWD's service area will increase from 35,870 connections and a demand for 27,145 acre-feet of water per year in 2000 to 64,782 connections and a demand for 49,022 acre-feet of water per year in 2020.

The Plan states that because OWD is completely dependent on imported water provided by the SDCWA, water supply reliability depends on the reliability of water supplied to SDCWA by MWD. The Plan describes measures to ensure a reliable water supply. These measures include water conservation measures, emergency and operational storage, and interagency agreements with neighboring water agencies. The Plan concludes that in average precipitation years, OWD has sufficient water to meet its customers' needs in the city of Chula Vista through 2020, based on continued commitment to conservation programs, which is frequently the lowest cost resource available to OWD. Water conservation is a critical part of the Plan and the long-term strategy for meeting the water needs of the district; the Plan outlines 14 best management practices for urban water conservation which OWD implements. The Plan indicates that OWD not only encourages the use of recycled water, but also requires its use for any and all appropriate and approved uses in areas where recycled water is allowed by the regulatory agencies.

Otay Water District Water Resources Master Plan – August 2002

The *Otay Water District Water Resources Master Plan* (Master Plan) identifies the capital facilities needed to provide an adequate, reliable, flexible, and cost effective potable and recycled water system for the delivery of OWD, City of San Diego, SDCWA, and/or MWD water supply to meet approved land use development plans and growth projections within the planning area consistent with SANDAG's forecasts. Proposed potable and recycled facilities, and expansions to existing facilities, are identified in the Master Plan with required capacity, phasing, and estimated probably capital costs. The Master Plan projects that the systemwide annual average day demand for potable water of approximately 22.44 MGD in

2002 will increase to 28.66 MGD by 2006, 40.31 MGD by 2016, and 56.29 MGD at buildout.

Sweetwater Authority

The majority of the established western portion of the City is supplied by the Sweetwater Authority. The Sweetwater Authority receives their water as a part of the Joint Powers Agency with the City of National City and the South Bay Irrigation District. They receive treated water from the SDCWA through Pipeline Number 4, and raw water from the SDCWA Pipeline Number 3, which is then treated at their own Perdue Water Treatment Plant. Additional sources of water are Sweetwater and Loveland Reservoirs, the Reynolds Desalination Facility and the National City Wells. These "local" sources can at times of wet weather provide up to 100 percent of the needed annual demand.

Sweetwater Authority Urban Water Management Plan 2000

The *Sweetwater Authority Urban Water Management Plan 2000* (Plan) assesses the Authority's water demands, conservation and public affairs program, water supply and management, water pricing and rate structures, and drought and emergency management through 2020. The Plan projects that the total number of connections and total demand within the Authority's service area will increase from 33,641 connections and a demand for 7,631 million gallons of water per year in 2000 to 34,462 connections and a demand for 7,840 million gallons of water per year in 2020.

The Plan identifies the following existing sources of water for the Authority: National City Wells #2 and #3 which draw from the San Diego Formation aquifer; Richard A. Reynolds Desalination Facility; Sweetwater and Loveland Reservoirs, which capture runoff during periods of wet weather with Sweetwater Reservoir also utilized to store water imported from the SDCWA. The Plan states that because there are no recycled water transmission mains in the Authority's service area, the capital costs provide recycled water is prohibitively high; however, the Plan states that the Authority will continue to work with the local agencies to review potential recycled water projects within their service area. Recently, due to an increase of projected recycled water requirements in the Authority's service area, the Authority has initiated a recycled water master plan. Because the timetable for implementation of recycled water is not yet determined, it is not considered in the current projections for Sweetwater Authority water supplies. This plan is intended to determine whether it is feasible to deliver recycled water to this area based on future needs. The Plan concludes that if projected imported and local supplies are available as indicated in the Plan, no shortages are anticipated within the Authority's service area in an average/normal year through 2020 and in the dry year scenarios analyzed in the Plan. The Plan acknowledges that during drought conditions, even with the Authority's reliance on imported water being reduced and the ability to store water in times of drought, there is always a vulnerability when you must rely on an external source to provide water supply. The Plan states that the

Authority plans to continue the implementation of conservation measures as referenced in the Authority's 2000 urban water conservation best management practices report, which is contained in the Plan.

Sweetwater Authority Water Distribution System Master Plan 2002

The *Sweetwater Authority Water Distribution System Master Plan 2002* (Master Plan) updated the 1979 and 1989 Water System Master Plans and the 1993 Water System Master Plan Update and addresses a comprehensive evaluation of the transmission, distribution, storage, pumping system, and water main life expectancy. The Master Plan identifies $23 million of remaining improvements to meet current standards and $30.6 million for continued effort to remove the older metallic pipelines within the Authority's system. In addition, the Master Plan identifies other essential improvements that were not identified in the previous master plans, estimated to cost $4 million. The Master Plan also addresses the replacement of the system's newer pipelines due to life expectancy. Based upon a life expectancy of 100 years for new pipelines (previous material life was 50-60 years), it was concluded that the Authority needs to escalate the replacement program to four miles per year from the then current two miles per year at a cost of almost $4 million per year compared to the then current cost of $1.8 million. The Master Plan also acknowledges that the Authority is also faced with the ever-changing requirements and escalating costs to treat water at its three sources of supply.

The conclusions and recommendations of the Master Plan include the following: 1) Based upon the projected maximum day demand of 35.4 MGD in 2020, no expansion of the Perdue Plant is recommended, unless arrangements with neighboring water agencies requesting alternative sources of supply are executed; 2) Construct remaining water storage tanks to comply with storage requirements based on maximum day plus fire flow demand for each individual system without added system redundancy; 3) The Authority should continue to prepare a new Water Distribution System Master Plan every 10 years, and an interim Master Plan Update every five years; 4) The Authority's comprehensive pipeline replacement and rehabilitation program should be continued until all aging and leaking water mains are replaced; 5) Eliminate nitrification and low disinfectant levels by strategically placing chemical injection points at selected water storage tanks; 6) Further economic analysis on pipeline replacement due to life expectancy is needed in order to plan for future budgets; 7) Continue with a minimum of $3.5 million annually (escalated for inflation) for Master Plan and metallic pipeline replacement projects.

Cal-American Water District

Small sections of the southern end of the city are provided water by Cal-American. Cal-American covers a limited area of the city under it's Coronado Division which contains a total of only 178 miles of water mains and receives their water supply from the City of San Diego through a 24-inch trans-bay pipeline.

Cal-American plays the smallest role in the Chula Vista water supply covering only small portions of the City's southern boundary. Cal-American does not disaggregate their system by political jurisdiction, so the exact amount of water distributed within Chula Vista is not estimated. The total size of the Coronado Division of Cal-American serves only 20,479 metered customers or roughly 80,000 people. However, only a small portion of this population is within Chula Vista.

The Cal-American Water District receives treated water via the City of San Diego.

City of Chula Vista

GROWTH MANAGEMENT PROGRAM/ORDINANCE

The goal of the City of Chula Vista's Growth Management Program is to ensure that the supply of water required by existing and future residents is available from suppliers and is at a level of quality necessary for its intended use. The Growth Management Program has two objectives regarding water supply and distribution: (1) Ensure that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth; and (2) Ensure that water quality standards are not jeopardized during growth and construction.

The Growth Management Ordinance threshold for water supply and distribution states:

The City shall annually provide the San Diego County Water Authority, the Sweetwater Authority and the Otay Municipal Water District with a 12- to 18-month development forecast and request and evaluation of their ability to accommodate the forecast and continuing growth. Districts' replies should address the following:

1. Water availability to the City and Planning Area, considering both short and long term perspectives;

2. Amount of current capacity, including storage capacity, now used or committed;

3. Ability of affected facilities to absorb forecast growth;

4. Evaluation of funding and site availability for projected new facilities; and

5. Other relevant information the District(s) desire(s) to communicate to the City and the Growth Management Oversight Commission.

The Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050C, requires a Water Conservation Plan (WCP) to be submitted with all Sectional Planning Area (SPA) Plans. If a SPA Plan is not required, a WCP is required to be submitted with

Tentative Subdivision Maps. The Growth Management Program further requires that a Water Conservation Plan be submitted for all major development projects, defined as residential projects consisting of 50 dwelling units or greater, or commercial and industrial projects with 50 Equivalent Dwelling Units (EDU's) of water demand or greater.

All residential units subject to the WCP requirements shall contain at least one outdoor water conservation measure and at least one additional conservation measure from either the indoor or outdoor categories. In addition, all residential units subject to the WCP requirements shall contain the following three indoor water measures:

- Hot Water Pipe Insulation: insulation of hot-water pipes, and separation of hot and cold water piping to avoid heat exchange.

- Pressure Reducing Valves: pressure reducing valves maintain the pressure below 60 psi reducing the volume of any leakage present and preventing excessive flow of water from all appliances and fixtures.

- Water-efficient Dishwashers: dishwashers with water saving features such as water level sensors instead of timed fillers.

All non-residential uses subject to the WCP requirements shall contain the following two indoor water conservation measures:

- Hot Water Pipe Insulation: install insulation on all hot water pipes in all common areas and all tenant-developed areas.

- Pressure Reducing Valves: provide pressure reducing valves at all meters, set to deliver water at no higher than 60 psi.

In accordance with the Growth Management Program, WCPs must provide an analysis of water usage requirements of the proposed project. This includes a detailed plan of proposed measures for water conservation, use of reclaimed water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance. WCPs have been adopted for the following developments:

- Otay Ranch SPA 1, Villages 1 and 5
- San Miguel Ranch
- EastLake Trails
- EastLake Business Center II
- EastLake Greens
- EastLake I
- Rolling Hills Ranch
- EastLake III

- Otay Ranch Village 6
- Otay Ranch Village 11
- Bella Lago
- Otay Ranch Village 7

The City of Chula Vista also ensures that an adequate supply and quality of water is provided to accommodate new master planned developments, prior to project approval, by implementing a set of project processing requirements for applicants to follow through each stage of development. Processing requirements for General Development Plans, Sectional Planning Area Plans/Public Facilities Finance Plans and Tentative Maps are described below:

A General Development Plan for an area shall identify:

- total water demands,
- storage requirements, and
- needed facilities to service all new projects.

A Sectional Planning Area Plan/Public Facilities Finance Plan shall identify:

- demands for street and sewer improvements,
- location of improvements in conformance with the concerned water districts master plan,
- cost estimates and financing responsibilities,
- financing methods, and
- Water Conservation Plan for all developments with 50 dwelling units/equivalent of water demand or greater.

At the Tentative Map stage, identification of the following improvements is required:

- distribution and storage facilities by phase of development,
- dedication of required easements,
- identification of financing for each development,

- letter from the concerned water district verifying their ability to serve the phased development, and

- if needed, conditions to comply with Metro II Program concepts.

At the Final Map stage, conditions are implemented and there is a confirmation of the water district's ability to service project demands prior to the issuance of building permits. Ultimately, with the issuance of Building Permits all water connection fees are to be paid. Water connections fees go to capital facilities for water service and new regional infrastructure.

CHULA VISTA LANDSCAPE MANUAL

The City of Chula Vista Landscape Manual includes requirements and standards for landscape areas throughout the City and identifies the need for water conservation practices to be implemented in the form of xeriscape landscaping and drought tolerant plant materials. The Landscape Manual states that water conserving methods of landscaping are a legal requirement of the State of California, as set forth in Government Code Section 65591 et seq. (AB325 1990) and the State Department of Water Resources Water Efficient Landscape Ordinance.

OTAY RANCH GENERAL DEVELOPMENT PLAN

The Otay Ranch General Development Plan (GDP) governs development of the 23,000-acre Otay Ranch. The demand for public services including police protection is discussed as part of the GDP.

5.14.1.2 Thresholds of Significance

The proposed General Plan Update would result in a significant impact to water supply and distribution if it would:

- Threshold 1: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Threshold 2: Require new or expanded supplies or facilities to meet projected needs.

- Threshold 3: Result in the proposed General Plan Update being inconsistent with the UWMP prepared by the San Diego County Water Authority.

5.14.1.3 Impacts

The proposed Public Facilities and Services Element contains three objectives and associated policies that pertain to the water supply and distribution, as well as wastewater: Objective PFS 1 relates to water, sewer, and drainage facilities, Objective PFS 2 addresses efficiency in water use, and Objective PFS 3 deals with long term water supply.

Objective PFS 1

Ensure adequate and reliable water, sewer and drainage service and facilities. For water, this objective is met through compliance with the following policies.

Policies

PFS 1.1: Coordinate with water districts by providing growth forecast information to allow the districts to plan and design water facilities and ensure adequate supply needed to accommodate anticipated growth.

PFS 1.5: Accelerate infrastructure upgrades throughout the city, especially in older portions of western Chula Vista as growth places additional demands on existing, sometimes sub-standard facilities.

PFS 1.6: To avoid recently improved streets from being torn up repeatedly, maintain a comprehensive facility phasing and capital improvement program. The program should be based on anticipated land development and be conducted in coordination with all utilities.

PFS 1.7: Identify ways to obtain timely funding for public facility and service needs. Upon request by community representatives, facilitate the possible formation of assessment districts to finance public infrastructure, upgrades and maintenance.

Objective PFS 2

Increase efficiencies in water use, wastewater generation and its re-use, and handling of stormwater runoff throughout the city through use of alternative technologies. Policies supporting this objective as they pertain to water include:

Policies

PFS 2.1: Promote and encourage local water resource development and explore all opportunities for viable water supplies, including

desalination. If appropriate, reserve land areas suitable to accommodate such potentially viable facilities and to protect groundwater sources and water-storage aquifers.

PFS 2.4: In designing water, wastewater and drainage facilities, limit the disruption of natural landforms and water bodies. Encourage the use of natural channels that simulate natural drainage ways while protecting property.

Objective PFS 3

Ensure a long-term water supply to meet the needs of existing and future uses in Chula Vista. Policies that are intended to achieve this objective include:

Policies

PFS 3.1: Assist the water agencies in preparing and maintaining Urban Water Management Plans that identify water demand anticipated by existing and new development.

PFS 3.2: Coordinate with water providers on long-range planning programs.

PFS 3.3: Participate in existing and future regional planning programs for water treatment, reclamation and distribution.

PFS 3.4: Encourage the development of new technologies and the use of new sources to meet the long-term water demands in Chula Vista.

As discussed in the Public Services section of this EIR, the proposed Growth Management Element contains Objective GM 1 and associated policies to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs.

Threshold 1 states that a significant impact would occur if the General Plan Update would require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Buildout of the General Plan under the Preferred Plan or any of the Scenarios would place demands on the water supply system, both in the need to improve and develop infrastructure and in the provision of an adequate supply. All four scenarios propose to increase development potential in each update area of the city. This increased demand for water would require corresponding improvements to treatment and distribution facilities. Both the Sweetwater Authority and OWD have capital improvement programs for completion of

required infrastructure. Since these capital improvement programs are based on the current Master Plans, which are based on the adopted General Plan, the adoption of any of the four scenarios proposed would require the capital improvement programs to be reevaluated. They would serve as the lead CEQA agency for their respective infrastructure improvements, and are responsible for assessing specific potential environmental impacts. Significant impacts could occur as a result of the completion of these projects. At this level of planning, the extent of those effects is speculative because the nature and location of those improvements has not been determined.

Threshold 2 indicates that a significant impact would occur if the proposed plan would require new or expanded supplies or facilities to meet projected needs.

Buildout of the General Plan area would place demands on the water supply, both in terms of the need to improve and develop infrastructure and in terms of the provision of an adequate supply. Currently the forecast requirements for the supply of water to member agencies of the SDCWA are presented in SDCWA's UWMP (2000). Based upon the SANDAG growth projections, which used adopted General Plans, the SDCWA projects that the agencies serving Chula Vista will require 102,200 acre-feet of water per year by 2030. Table 5.14-1 provides a breakdown of the forecast water demand at the 95 percent confidence level as presented in the Regional Water Facilities Master Plan prepared by the SDCWA.

TABLE 5.14-1
ANNUAL WATER DEMAND
(acre-feet)

	Year					
Agency	2005	2010	2015	2020	2025	2030
Sweetwater	24,600	25,600	27,100	29,100	32,200	34,200
OWD	36,400	41,500	48,700	56,400	63,300	68,000

NOTE: This table represents the total water demand of each agency which includes areas outside of city boundaries. The numbers are based on the adopted General Plan.

Because the above water supply forecasts are based on the regional growth forecasts conducted by SANDAG in accordance with adopted general plans, amending the general plan to increase development potential would, necessarily, result in an inconsistency between the water supply forecast and the newly adopted General Plan. This is considered a significant water supply impact.

Long-term water supply is not assured and contracts do not currently exist to serve Chula Vista through buildout of the proposed General Plan Update. As previously discussed, the SDCWA has developed the UWMP and updates it every five years using SANDAG's regional growth forecasts. The UWMP does not guarantee an adequate water supply.

In general, the net result of the land use revisions create the need for additional water supply caused by the increase in projected water demand resulting in direct impacts to the previously planned water system infrastructure. The Authority's ~~T~~transmission system pipelines in various locations will need to be increased in size to provide an adequate level of service. Also, the water storage reservoir volume needs and alternative water supply requirements must be increased.

Regional improvements anticipated to be needed as a result of the land use changes amount to a total of $5 million, comprised of $3 million for pipelines and $2 million for improvements to the Perdue Treatment Plant. This is above and beyond what the Authority has previously planned for systemwide improvements. Conditions to these estimated improvements are as follows:

1. The analysis was based on modeling only. No detailed analysis was performed.

2. The city of National City "densification" was not included. This does not have a direct impact to Chula Vista's General Plan Update, but may affect the Authority's overall regional infrastructure planning.

3. Site specific impacts to existing pipelines were not performed.

Project by project analysis needs to be performed that may require pipeline replacements due to fire and domestic flows, similar to what the Authority currently does through their review of proposed development projects within Chula Vista.

The small areas at the southern end of the city that are currently served by Cal-American are presently built-out and the company does not predict any significant growth. The water company is therefore upgrading their system incrementally as the need requires.

Table 5.14-2 contains projected water demand for the Update areas, for the Preferred Plan and Scenarios 1, 2, and 3 compared to existing conditions.

TABLE 5.14-2
PROJECTED WATER DEMAND – UPDATE AREAS ONLY

	Sweetwater Authority Service Area		Otay Water District Service Area		Combined Service Area	
Condition	Demand (MGD)	Demand Increase Above Existing (MGD)	Demand (MGD)	Demand Increase Above Existing (MGD)	Demand (MGD)	Demand Increase Above Existing (MGD)
Existing	3.22	NA	0.09	NA	3.31	NA
Scenario 1	7.87	4.65	7.51	7.42	22.55	19.24
Scenario 2	7.62	4.40	8.62	8.53	23.38	20.07
Scenario 3	7.91	4.69	6.81	6.72	23.57	20.26
Preferred Plan	7.83	4.61	8.01	7.92	23.92	20.61

SOURCE: Chula Vista General Plan Update Water Technical Report, December 2004.

MGD = million gallons per day

Because a long-term water supply is not assured, the increases in water demand shown in Table 5.14-2 are significant.

As noted above, large projects proposed in conformance with the Preferred Plan, Scenario 1, Scenario 2, or Scenario 3 would have to conform to the requirements of SB 610 and SB 221, requiring those projects to demonstrate adequate water availability.

Threshold 3 states that a significant impact would occur if the proposed GPU would result in the City of Chula Vista's General Plan being out of conformance with the UWMP prepared by the San Diego County Water Authority.

The UWMP is based on SANDAG's regional growth forecasts, which are in large part based on adopted General Plans. As discussed below, the proposed General Plan Update would increase development potential within the update areas of the city of Chula Vista. Since SANDAG's present 2030 Regional Growth Forecast is based on currently adopted General Plans within the region, Chula Vista's proposed General Plan capacities are not included in the current UWMP. These plan modifications would result in an inconsistency between UWMP forecasts and Chula Vista's General Plan. Because there will be an inconsistency, this is a significant short-term impact to the provision of water in the city until the SDCWA is able to amend its UWMP based upon the updated General Plan.

5.14.1.4 Level of Significance Prior to Mitigation

Threshold 1: Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

> All four scenarios propose to increase development potential in each update area of the city. This increased demand for water would require corresponding improvements to treatment and distribution facilities. Significant impacts could occur as a result of the construction of these projects. At this level of planning, the extent of those effects is speculative because the nature and location of those improvements have not been determined. This is a significant adverse impact.

Threshold 2: Require new or expanded supplies or facilities to meet projected needs.

> Impacts resulting from implementation of any of the scenarios (Preferred Plan and Scenarios 1, 2, or 3) would be similar. Table 5.14-2 provides a comparison of the increase in demands for water relative to the adopted General Plan in the year 2030 for each of the scenarios.

Although, for larger projects, future review would require conformance to SB 610 and SB 221, at this time it is not possible to state conclusively that sufficient water supplies would be available for individual projects facilitated by adoption of the Preferred Plan. Because contracts for water do not currently exist for the buildout condition of the City, the potential lack of an adequate water supply is a significant adverse impact.

Threshold 3: Result in the proposed General Plan Update being inconsistent with the UWMP prepared by the San Diego County Water Authority.

As previously discussed, the SDCWA has developed the UWMP and updates it every five years using SANDAG's regional growth forecasts. The UWMP does not ensure adequate supply.

Amending the general plan to increase population densities will, necessarily, result in the water supply forecast to be inconsistent with the adopted plan. Because the water supply forecasts are based on the regional growth forecasts conducted by SANDAG, and because the regional growth forecasts rely on the adopted general plans, this is a significant water supply impact.

5.14.1.5 Mitigation Measures

5.14-1 For any residential subdivision with 500 or more units or any commercial project of over 500,000 square feet, any CEQA compliance review shall include demonstration of compliance with the requirements of SB 610.

5.14-2 For any residential subdivision with 500 or more units, any CEQA compliance review shall include demonstration of compliance with the requirements of SB 221.

5.14.1.6 Level of Significance After Mitigation

Compliance with the policies associated with Objectives PFS 2 and 3 and implementation of the mitigation measures identified above would reduce the impact to water supply; however, because there is no assurance that water supply will be available to adequately serve the projected increase in population resulting from the proposed General Plan Update, the impact remains significant and unmitigated.

5.14.2 Wastewater

5.14.2.1 Existing Citywide Conditions

Sewer facilities are addressed in the City's Growth Management Threshold Standard Policy and in the Otay Ranch GDP. The Threshold Standard for wastewater facilities states:

a. Sewage flows and volumes shall not exceed City Engineering Standards.

b. The City shall annually provide the San Diego Metro with a 12-to 18-month development forecast and request confirmation that the projection is within the City's purchased capacity rights and an evaluation of their ability to accommodate the forecast and continuing growth, or the City Engineering Department staff shall gather the necessary data. The information provided to the GMOC shall include the following:

1. Amount of current capacity now used or committed

2. Ability of affected facilities to absorb forecast growth

3. Evaluation of funding and site availability for projected new facilities.

4. Other relevant information

The City's current Wastewater Master Plan was adopted in May 2005. The recently updated master plan addressed issues relating to the City's long-range land use plan as determined through the GPU process. This updated Master Plan also identified facility improvements needed to sustain development through buildout of the city.

Chula Vista relies on the City of San Diego Metro Sewage System for treating and disposing of the wastewater generated within the city. The Metropolitan Wastewater Department (Metro) adopted the Metropolitan Wastewater Plan in November 2003, which identifies future treatment facilities needed to meet anticipated demands within the Metro service area.

The City of Chula Vista currently operates and maintains a sanitary sewer collection system consisting of approximately 400 miles of sewer pipelines ranging in size from 6 inches to 48 inches in diameter. It also includes an extensive network of manholes, metering stations, and pump stations. In addition to maintaining the existing systems and replacing outdated or damaged components the City must also address upgrading and expanding the current

systems to accommodate new sewer connections, especially in the eastern portion of the city. Exiting facility data is summarized in Table 5.14-3.

Sewer Basins

The City of Chula Vista's wastewater collection system consists of eight major sewer basins: Sweetwater, G Street, Telegraph Canyon, Main Street and Date/Faivre, Bay Front, Salt Creek, Wolf Canyon Basin, and Poggi Canyon.

System Capacity

The City has completed the construction of the major facilities that will serve the Eastern portion of the city with the exception of the Wolf Canyon Trunk Sewers (Rock Mountain Road Trunk sewer and the Heritage Road Trunk Sewer). These Trunk lines are currently scheduled to be in place by 2008.

The major trunk lines in the collection system on the western portion of the city are adequate. The City has budgeted four Capital Improvement projects to address existing constraints in that portion of the collection system. These projects are currently in the design phase and should be completed within the next two years. With the completion of these improvements, no other major improvements will be required other than the annual maintenance projects.

At the regional level, the City of Chula Vista is part of the Metropolitan Wastewater District. The City entered into an agreement with the City of San Diego, and currently has purchased 19.843 MGD of capacity rights in the Metro Collection System. The city currently discharges approximately 16.6 MGD into the Metro Interceptor.

5.14.2.2 Update Areas

As mentioned above, there are eight major sewer basins in the city of Chula Vista. Six of the seven major sewer basins are located within the three update areas and are described below:

Northwest Planning Area

SWEETWATER SEWER BASIN

Wastewater from the Sweetwater Sewer Basin, located in the northern portion of the city, gravity flows via pipelines into the Spring Valley Sewer Interceptor. This pipeline is owned and operated by the Spring Valley Sanitation District. The city of Chula Vista currently has capacity rights within this line. This pipeline terminates at a connection to the City of San Diego Metro Interceptor near Sea Vale Street. Based on recent flow metering data, Chula

TABLE 5.14-3
WASTEWATER FACILITY DATA

Type of Facility	Quantity
6-inch Pipe	8.56 miles
8-inch pipe	286.54 miles
10-inch pipe	13.22 miles
12-inch pipe	17.77 miles
14-inch pipe	0.62 miles
15-inch pipe	13.64 miles
18-inch pipe	6.30 miles
20-inch pipe	0.12 miles
21-inch pipe	1.46 miles
24-inch pipe	0.20 miles
30-inch pipe	0.13 miles
36-inch pipe	1.6 miles
42-inch pipe	4.4 miles
48-inch pipe	1.78 miles
Other pipe	16.70 miles
Manholes	7,635
Drop Manholes	4
Manhole Dead-end/Cap-ends	552
Manhole Clean-outs	138
Force Main Clean-outs	54
Other Manhole facilities (miscellaneous)	162
Metering Stations	12
Pump Lifts and Lift Stations	12
Commercial/Industrial Sewer Laterals	2,300
Residential (SF, MF, and Mobile Home) Sewer Laterals	53,700

Vista discharges approximately 3.042 mgd of sewage into the Spring Valley Sewer Interceptor.

G STREET SEWER BASIN

Wastewater generated in the G Street Sewer Basin, located in the upper portion of central Chula Vista, is transported to the Metro Interceptor via the G Street Trunk Sewer. The G Street Trunk Sewer receives tributary sewage flows from the area bounded by D Street south to H Street. This trunk sewer terminates at a metered connection to the Metro Interceptor located on G Street just west of Bay Boulevard. Recent meter data indicate that approximately 2.2 mgd is being generated in this Basin.

Northwest Planning Area and Southwest Planning Area

TELEGRAPH CANYON SEWER BASIN

The Telegraph Canyon Sewer Basin serves lower central and eastern Chula Vista from H Street south to Naples Street. The Telegraph Canyon Trunk Sewer is located in J Street and Telegraph Canyon Road. The Telegraph Canyon Sewer Interceptor begins at the easterly end on Otay Lakes Road near Eastlake Drive and ends at a metered connection to the Metro Interceptor. Recent meter data indicate that approximately 5.3 mgd is being generated in this Basin.

Southwest Planning Area

MAIN STREET AND DATE/FAIVRE SEWER BASIN

The Main Street and Date/Faivre Sewer Basin is located in the southern portion of Chula Vista. Pipelines in this Basin (Main Street Trunk Sewer and Date/Faivre Trunk Sewer) generally parallel each other beginning on the easterly side of I-805 to where they connect in Hollister Street prior to the metering station. From the metering station, the trunk sewer connects to the Metro Interceptor at the end of Marian Avenue. Recent meter data indicate that approximately 2.0 mgd is being generated in this Basin.

In addition to the two trunk lines mentioned above, the City of Chula Vista signed an agreement with the City of San Diego to provide for the conveyance of flows from a small portion of the city along the southerly boundary, within this Basin, where the City of San Diego's Otay Valley Trunk Sewer Line (OVT) is in close proximity. This trunk line conveys the flows from these properties westerly to the Metro Interceptor. The OVT Line primary conveys flows from the Coors Amphitheater and Soak City USA Water Park. Current meter data indicate that these Chula Vista properties generate approximately 0.011 mgd.

East Planning Area

SALT CREEK SEWER BASIN

Major sewer improvements in this basin include the Salt Creek Gravity Sewer Interceptor and the Wolf Canyon Trunk Sewer, described below:

Salt Creek Gravity Sewer Interceptor: The City of Chula Vista has completed construction of the Salt Creek Gravity Sewer Interceptor. The Salt Creek Gravity Sewer Interceptor consists of more than 13.5 miles of sewer line ranging from 15 to 48 inches in diameter. It is divided into nine "reaches," or points of major slope changes and points where significant amounts of sewage flow would be contributed. This facility conveys wastewater flows from new developments in the Salt Creek, Poggi Canyon, and Wolf Canyon Basins and provides additional sewer capacity for existing wastewater collection systems in the southern side of the city. The interceptor will generally parallel Salt Creek, Otay Valley Road and Main Street. Based on current projections of development within the basin, the average daily flow generation of wastewater at build-out is estimated at 5.88 mgd.

WOLF CANYON BASIN

Wolf Canyon Trunk Sewers: Currently, the City of Chula Vista is in the process of preparing a preliminary design report for the Wolf Canyon Trunk Sewer project. The City of Chula Vista proposes to serve the properties within the Wolf Canyon Basin using two trunk sewer lines: one located along Heritage Road and the other located within the future Rock Mountain Road. It is anticipated that these trunk sewer lines will be operational by 2008.

POGGI CANYON SEWER BASIN

The Poggi Canyon Basin Sewer Interceptor is currently connected to the Salt Creek Trunk Sewer. The Poggi Canyon Interceptor varies in diameter size from 15 inches to 21 inches and is located mostly in Olympic Parkway and along the downstream portion of Poggi Canyon Drainage Basin. Based on current projections of development within the Basin, the average daily flow of wastewater at buildout from the Poggi Canyon Sewer Basin is estimated at 3.76 mgd. To increase capacity and to accommodate buildout of the basin (per the adopted General Plan), the City has started the planning and design required improvements to Reach 205 of the Poggi Canyon Sewer, which is located under I-805. The improvements are currently scheduled for completion by December 2005.

5.14.2.3 Thresholds of Significance

Threshold 1: The proposed General Plan Update would result in a significant wastewater impact if it would:

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate planned capacity to serve projected demand in addition to the provider's existing commitments.

5.14.2.4 Impacts

The City retained PBS&J to update the City's Wastewater Master Plan. PBS&J prepared a Wastewater Master Plan, contained as Appendix I of this EIR for the General Plan Update. Chapter 5 of this report provides the capacity evaluation for the General Plan Update. The details of this assessment are provided below in the discussion of trunk sewer improvements.

The City of Chula Vista continually monitors and reviews both existing facilities and proposed projects to consistently meet current and anticipated demand. Current improvements to the wastewater collection system include:

- Colorado Street Improvements between J & K - Currently under design, construction scheduled to be completed by the end of 2006

- Moss Street Improvements between Broadway and Woodlawn - Design Complete, construction scheduled to be completed by Dec. 2005

- "G" Street Pump Station Improvements - Project is currently in the Pre-Design Phase, construction is scheduled to begin in mid 2006, and completed by the end of 2007.

- Sewer Rehabilitation - On-going annual project to line existing pipes and replace portions of cracked lines.

- Upgrade of Reach 205 of the Poggi Canyon Trunk Sewer – Project is currently under construction and is scheduled to be completed by December 2005.

- Wolf Canyon Trunk Sewer – Scheduled for 2008

- Main Street at Fresno Street – Currently under design, construction to be completed by the end of 2006

These projects were identified through the analysis performed as part of the Wastewater Master Plan Update. The completion of these required improvements will facilitate the development of the City to buildout. City staff through the infrastructure flow monitoring and video monitoring programs will continue to monitor, maintain and operate the system, and initiate future improvements if needed.

At the time the agreement with Metro was signed, the 19.843 MGD capacity allocation seemed adequate to meet the city's needs for several years. Based on the recent flow analysis performed as part of the Wastewater Master Plan, the City will be generating approximately 23 MGD of sewage based on the findings of the Wastewater master Plan (PBS&J 2005) at buildout under the adopted plan. This information has been conveyed to Metro in order to initiate the process of acquiring additional capacity and to assist Metro in the planning process.

Metro is in the process of completing the system capacity re-rating process to distribute additional capacity rights to participating agencies. The additional capacity was created with the recent completion of the 15 MGD Southbay Treatment Plant. Through this process, the City is set to be allocated additional treatment capacity rights currently estimated to be 1.027 MGD, which would bring the City's total capacity rights to 20.870 MGD.

Additional capacity rights are allocated to each participating agency in proportion to their total Metro expenditure over a 5-year period (1996 through 2001). The exact amount would be determined upon completion of the audit process by City of San Diego staff. Furthermore, based on the technical analysis performed as part of the Wastewater Master Plan Update, there is sufficient capacity to serve the City until 2010. The City has already begun discussions with City of San Diego to identify a mechanism for the provision of additional capacity to the City of Chula Vista in accordance with the terms of the agreement between the City of San Diego, the City of Chula Vista and the other participating agencies. The primary focus at this time is the purchase or lease of additional capacity. Concurrent with that effort, staff is also exploring other options including the construction of a wastewater reclamation facility as an independently owned or joint facility (i.e., with a water agency) which will negate the need for the purchase of additional capacity rights.

The Wastewater Master Plan Update analyzed the impacts resulting from the four land use alternatives considered for the General Plan Update and the resulting capacity impacts are outlined in Table 5.14-4 below.

TABLE 5.14-4
ESTIMATED WASTEWATER GENERATION IMPACTS FROM GENERAL PLAN SCENARIOS

Condition	Average Daily Flow (MGD)	Increase Above Existing Flow (MGD)	Additional Capacity Needed (Above Existing Metro Capacity Rights) (MGD)
Existing Flow	16.3	NA	NA
Existing Metro Capacity Rights	19.9	NA	NA
Scenario 1	25.2	8.9	5.3
Scenario 2	25.5	9.2	5.6
Scenario 3	25.3	9.0	5.4
Preferred Plan	26.2	9.9	6.3

SOURCE: Wastewater Master Plan Technical Memorandum, General Plan Update Sewer Capacity Evaluation for the City of Chula Vista (PBS&J 2004).
MGD = million gallons per day.

As discussed above, Chula Vista owns capacity in the Metro System, which provides conveyance of City wastewater flows to the Point Loma Treatment Facility and the treatment and disposal of the wastewater at Metro facilities. The following discussion of impacts to the city's wastewater collection system is based on the Wastewater Master Plan Technical Memorandum completed by PBS&J.

To evaluate the proposed General Plan scenarios, the incremental additional wastewater generated in the update areas due to implementation of each alternative was determined by subtracting the projected buildout flows for each scenario from the projected flow based on buildout of the adopted General Plan. These flows were determined by applying the calibrated unit generation rates to projected residential unit counts and non-residential areas given in current TAZ data provided by the city. The incremental flow increase was then assigned to the corresponding tributary manholes in the Master Plan hydraulic model and simulated downstream flow depths were evaluated based on a maximum flow depth to pipe diameter ration (d/D) criteria of 0.85.

Simulated peak wet weather flows were simulated in existing mains generally 12-inch diameter or larger. The following reach locations can be found in Figures 1 through 3 of the attached technical report, which is included as Appendix I of this EIR.

MAIN STREET TRUNK SEWER SYSTEM

The City has a budgeted project that is currently included in the City's CIP Program for the construction of a diversion structure to facilitate the diversion of flows from the Main Street Trunk Sewer to the Salt Creek Trunk Sewer in order to relieve capacity constraints in the sewer. The completion of this diversion structure will negate the need for future improvements to the Main Street Trunk Sewer within the reaches identified in the

Wastewater Master Plan and listed below. The required improvements are currently under design and construction and should be completed by the end of 2006.

- Reach 6331 to 6328 showed an increased flow depth in the Preferred Plan and all three scenarios. Scenarios 1 and 2 marginally exceeded the d/D threshold in two of the four sections within the reach, while Scenario 3 exceeded the threshold in these two reaches by a greater amount. The Preferred Plan exceeded the threshold in all three segments of the reach. The constraint arises in this reach due to relatively shallow sewer slope.

- Reach 5129 to 5127 showed significant flow depth increases under the Preferred Plan and all three scenarios buildout conditions. This reach is located in Main Street just upstream of a constrained reach identified under current GDP buildout conditions.

- Reach 5053 to 5092 showed significant increases in flow depths under the Preferred Plan and all three scenarios buildout conditions. The reach is located on Fresno Avenue, north of and tributary to a constrained reach in Main Street identified under current GDP buildout conditions.

- Reach 5045 to 5079 showed significant flow depth increases under the Preferred Plan and all three scenarios buildout conditions. This reach is located in Industrial Avenue north of and tributary to a constrained reach in Main Street identified under current GDP buildout conditions. Scenario 3 impacts only a portion of this reach.

INDUSTRIAL AVENUE TRUNK SEWER SYSTEM

- Reach 4492 to 4328 was impacted under all three scenarios. Additional loading from Scenarios 2 and 3 and the Preferred Plan resulted in significant increases in flow depth within this reach. Minor impacts resulted from Scenario 1 loading. This reach is located just upstream of a constrained reach in Colorado Avenue identified under current General Plan buildout conditions. Scenario 2 would result in the greatest impact due to proposed increased commercial density along Broadway.

G STREET TRUNK SEWER SYSTEM

- Reach 5316 to 5299 showed peak flow depths that exceeded the d/D threshold under Scenario 3 and the Preferred Plan loading, and no impacts under Scenario 1 and 2. This reach is located between Third and Fourth Avenue north of Memorial Park just upstream of a constrained reach identified under current GDP buildout conditions.

- Reach 3001 to 3094 showed minor impacts under Scenarios 1 and 3 and no impacts under Scenario 2 and the Preferred Plan buildout loading conditions. This reach is located in Colorado Street just north of G Street.

COLLECTION SYSTEM

Because of the general nature of planned uses, an analysis of smaller collectors was not possible at this time primarily because of the fact that pipeline data needed to create a model of the City's Wastewater Collection system was not readily available. City staff is continuing the effort to populate the database and update the layers which would ultimately give the City the ability to run such an analysis in the future. Such an analysis should be performed after more detailed building or redevelopment plans have been developed. Depending on the proposed land use changes, 8-inch diameter sewers serving new development in the Northwest and Southwest Planning Areas may be impacted by the additional loading. This is a significant impact.

METRO CAPACITY

The City owns capacity in the City of San Diego's Metropolitan Wastewater System (METRO), which provides conveyance of City wastewater flows to the Point Loma Treatment Facility and treatment and disposal of the wastewater at METRO facilities. Projected future flows generated by buildout of the current General Plan will exceed the City's current capacity. The Wastewater Master Plan will recommend a phased approach to acquire additional capacity in METRO. As summarized in Table 5.14-4 above, the City's METRO capacity requirement would be increased by approximately 5.3 MGD, 5.6 MGD, and 5.4 MGD for Scenarios 1, 2, and 3, respectively, and 6.3 MGD for the Preferred Plan. These additional amounts would need to be purchased as part of future capacity acquisitions.

As discussed above, Metro is in the process of completing the system capacity re-rating process to distribute additional capacity rights to participating agencies, including the city of Chula Vista. This effort will bring the city's total capacity rights to 20.870 MGD.

The land uses for any of the proposed scenarios would require additional lineal footage of constrained sewer ranging from approximately 2,800 to 4,500 feet. The majority of the additional constrained reaches are an extension of proposed future improvements and could be constructed as part of these projects. Further, the identified improvements represent the minimum improvements to support each of the scenarios. Acquisition of additional Metro capacity will be required with implementation of the proposed land uses for any of the scenarios.

In the East, proposed land uses would impact 36-inch diameter and larger reaches of the Salt Creek Interceptor. It is anticipated that these reaches have adequate capacity to convey the estimated flows from each of the proposed scenarios.

The proposed Public Facilities and Services Element contains two objectives and associated policies that address wastewater services and facilities. Policy PFS 1.2 requires that the City "Plan for adequate systems and facilities to manage the city's wastewater generation, treatment and disposal." Policy PFS 1.5 requires that the City "Accelerate infrastructure upgrades throughout the city, especially in older portions of western Chula Vista as growth places additional demands on existing, sometimes sub-standard facilities."

In addition, and as discussed in the Public Services section of this EIR, the proposed Growth Management Element contains Objective GM 1 and associated policies to assure public facilities and services are available to residents and visitors of Chula Vista in a timely manner as development occurs. Policies associated with GM 1 that address the provision of wastewater treatment include:

GM 1.1: Maintain a set of quantitative level-of-service measures (growth management "threshold standards"), as a tool to assess the relative impact of new facility and service demands created by growth, and apply those standards, as appropriate, to approval of discretionary projects.

GM 1.5: As part of the Growth Management Program, conduct an ongoing Development Monitoring Program focused on new development activity and related infrastructure and public facility construction to determine compliance with Threshold Standards and other City policies and programs.

GM 1.9: Require that all Major Development projects prepare a Public Facilities Financing Plan (PFFP) that articulates infrastructure and public facilities requirements and costs and funding mechanisms.

GM 1.11: Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with applicable Threshold Standards.

5.14.2.5 Level of Significance Prior to Mitigation

Threshold 1: The proposed General Plan Update would result in a significant wastewater impact if it would result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate planned capacity to serve projected demand in addition to the provider's existing commitments.

Chula Vista owns capacity in the METRO, which provides conveyance of city wastewater flows. Projected future flows generated by buildout of the current General Plan will exceed the city's current capacity. The General Plan Update would accommodate an incremental increase in population throughout the city. Increasing population will place additional demand on sewer services.

Each of the Scenarios and the Preferred Plan will require improvements to the collection system. As detailed in Appendix I, the Main Street Sewer, Industrial Avenue Sewer and the G Street Sewer each have reaches with depth to diameter ratios of greater than 0.85 under the Preferred Plan and each of the Scenarios. Additionally, the Preferred Plan would generate the greatest incremental increase in wastewater flows and, consequently, may necessitate the largest acquisition of additional METRO capacity. While it is the intent of the city to ensure that services are provided concurrent with need, as specified in Objective GM 1, the provision of sewer services is not solely within their authority. Although the City is in the process of acquiring additional capacity from Metro, that acquisition has not yet been finalized.

Adoption of the Preferred Plan or Scenarios 1, 2, or 3 would not result in a significant impact because Policies PFS 1.1, PFS 1.5, GM 1.9, and GM 1.11 of the proposed General Plan Update require that major development projects prepare a public facilities financing plan that provides facilities and identifies funding mechanisms at the time of need. These policies also provide the authority to withhold discretionary approvals and subsequent building permits from projects that are out of compliance with threshold standards established by the City. Implementation of Policies GM 1.1, 1.5, 1.9 and GM 1.11, avoid impacts resulting from completion of infrastructure. Also, Chula Vista Municipal Code Sections 18.16 and 19.09.050 state that the provision of adequate facilities is required for all discretionary permits. As such impacts to wastewater are in essence self-mitigated and not significant.

5.14.2.6 Mitigation Measures

No mitigation is required because impacts are avoided.

5.14.2.7 Level of Significance After Mitigation

No significant wastewater impacts have been identified.

5.14.3 Integrated Waste Management

5.14.3.1 Existing Citywide Conditions

While control and siting of disposal sites falls under the jurisdiction of agencies other than Chula Vista, including the County of San Diego and State of California, the City has the ability to control waste production within its General Plan area. It is the goal of Chula Vista to take action appropriate to its population and resources to promote reductions in solid waste production and plan for adequate disposal.

Control of solid waste collection and disposal for the General Plan area fall under several jurisdictions. The County of San Diego Solid Waste Planning and Recycling Section of the Department of Public Works administers regional planning and management for San Diego

County's solid wastes. This agency with the assistance of the AB 939 Local Task Force (SANDAG) are responsible for revising and updating the Countywide Integrated Waste Management Plan (CIWMP) which reviews current solid waste collection and disposal practices, predicts future waste generation trends and reviews the possible means for accommodating future collection and disposal needs. This document is the major planning tool for the County and includes solid waste planning for the cities within the County.

Enacted by Assembly Bill 939 and signed into law in 1990, the California Integrated Waste Management Act (IWMA) established an integrated system of solid waste management in the state whereby each city and county is required to develop and implement plans consistent with the mandated diversion rates of 25 percent by 1995 and 50 percent by 2000. Under IWMA, the county has prepared a Countywide Siting Element and Summary Plan describing areas to be developed as disposal or waste management facilities (PRC §41700). The Act further requires each city to prepare and implement the following solid waste management elements:

- Source Reduction and Recycling Element (SRRE) (PRC §41000) to:
    - Identify the constituents of solid waste by volume, type of material and source;
    - Describe the methods, including recycling and composting, by which the city will reduce the amount of solid waste being generated;
    - Identify and describe projected costs, revenues, and revenue sources necessary to implement the element; and
    - Describe existing handling and disposal practices for special wastes such as asbestos and sewage sludge.
- Household Hazardous Waste Element (PRC §41500) to identify a program for the safe collection, treatment, and disposal of hazardous wastes generated by residences that should be separated from the rest of the solid waste stream.
- Non-Disposal Facility Element (NDFE) (PRC §41730) to describe any new solid waste facilities and expansions of existing solid waste facilities needed to implement the jurisdiction's source reduction and recycling element. Facilities that will recover or recycle at least five percent of the total volume of materials they receive need not be included in the element.

In 2003, approximately 182,148 tons of solid waste generated in Chula Vista required landfill disposal (Hellman 2004). Existing solid waste disposal facilities in the area include the Otay Landfill and several recycling facilities in proximity to the landfill. The Otay Landfill accepts approximately 98 percent of the non-hazardous municipal waste collected in the

city. The remaining two percent is delivered to the Sycamore and Miramar Landfills (Meacham 2003). The Otay Landfill is expected to be in operation until 2028 based upon current waste generation rates. The Otay Landfill is located adjacent to the East Update Area.

5.14.3.2 Thresholds of Significance

Threshold 1: The proposed General Plan Update would result in significant impacts to integrated waste management if it would:

- Be served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

5.14.3.3 Impacts

As stated above, significant impacts to integrated waste management would result if adoption of the proposed General Plan area were served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

The proposed General Plan Update would not be served by landfills with insufficient permitted capacity to accommodate the project's solid waste disposal needs. The General Plan area would continue to be served primarily by the Otay Landfill until its capacity is reached. Table 5.14-5 contains projected solid waste disposal quantities for the Preferred Plan and Scenarios 1, 2, and 3 compared to existing conditions.

TABLE 5.14-5
PROJECTED SOLID WASTE DISPOSAL QUANTITIES

Condition	Disposal Quantity (tons)	Remaining Landfill Capacity (tons)
Existing	180,907	30,806,172
Scenario 1	265,750	26,297,187
Scenario 2	273,168	26,220,410
Scenario 3	257,757	26,369,559
Preferred Plan	274,063	26,211,147

SOURCE: City of Chula Vista calculations based upon the 2003 Chula Vista landfill disposal quantity as reported in the *California Integrated Waste Management Board Disposal Reporting System, San Diego Landfill Division Jurisdictional Report* (Revised March 23, 2004).

The Otay Landfill currently accepts an average daily rate of disposal of 2,260 tons, with a permitted maximum disposal rate of 5,000 tons, and has a permitted remaining capacity of 31,336,166 tons. The Preferred Plan would generate an estimated population at buildout of approximately 326,900 people. Using the per person average rate of daily disposal of trash into the Otay Landfill, and assuming the additional development at buildout of Preferred Plan and no additional recycling programs are implemented, the Otay Landfill has sufficient capacity to accommodate the increased waste disposal. Population growth in Chula Vista was used to estimate the growth in deposit of trash in the landfill but does not assume that all

of that trash comes from Chula Vista residents. Since there is sufficient capacity to accommodate projected development at buildout of any of the scenarios, there is no significant impact to integrated waste management services.

The proposed Public Facilities and Services Element and Environmental Element contain two objectives and associated policies that address solid waste disposal in the city:

Objective PFS 25

Efficiently handle solid waste disposal throughout the city.

Policy

PFS 25.1: Plan for adequate systems and facilities to manage the city's solid waste generation, treatment, and disposal.

Objective EE 8

Minimize the amount of solid waste generated within the General Plan area that requires landfill disposal.

Policies

EE 8.1: Promote efforts to reduce waste, minimize the need for additional landfills, and provide economically and environmentally sound resource recovery, management, and disposal facilities.

EE 8.3: Implement source reduction strategies, including curbside recycling, use of small collection facilities for recycling, and composting.

EE 8.6: Permit recycling operations and businesses that utilize recyclable materials within industrial zones in close proximity to Otay Landfill, subject to conformance with applicable SPA Plan-level policies and zoning regulations.

As discussed in the Public Services section of this EIR, the proposed Growth Management Element contains Objective GM 1 and associated policies to assure public facilities and services, including integrated waste management, are available to residents and visitors of Chula Vista in a timely manner as development occurs.

The Solid Waste Local Enforcement Agency (LEA) is currently processing a revision to the permit for the landfill that modifies the closure date. Based on this information from the LEA, revisions to the permit will increase the maximum allowable daily disposal rate of

5,830 tons and therefore, the amount of available capacity will decrease (McNeil pers com 2005). While LEA is in the process of updating the permit for the landfill, this action has not yet been approved and therefore, the current permitted capacity is appropriate. The Otay Landfill has sufficient capacity to accommodate projected population at buildout of the Preferred Plan or Scenarios 1, 2, or 3, and no significant impact to integrated waste management services would occur.

5.14.3.4 Level of Significance Prior to Mitigation

The General Plan area is primarily served by the Otay Landfill. Using the average rate of daily disposal and assuming the additional population at buildout of the proposed General Plan and no additional recycling programs are implemented, the Otay Landfill has sufficient capacity for approximately 25 years. Since there is sufficient capacity to accommodate projected population at buildout of any of the alternatives, there is no significant impact to integrated waste management services.

5.14.3.5 Mitigation Measures

No mitigation is required.

5.14.3.6 Level of Significance After Mitigation

No significant impacts to integrated waste management services have been identified as part of this EIR.

5.15 Hazards/Risk of Upset

5.15.1 Existing Conditions

5.15.1.1 Regulatory Plans and Policies

In conformance with the Tanner Act (AB 2948), local governments are required to adopt "siting criteria" for evaluating hazardous waste facility proposals within previously established "general areas." Figure 5.15-1 shows the general areas designated within the adopted General Plan.

With regard to siting of facilities, the City of Chula Vista retains the right to designate suitable general areas and to make changes consistent with changes to local plans, policies, and conditions should significant concerns regarding the continued protection of public health, safety and welfare, and the environment be raised. Consequently, the adopted General Plan includes a number of specific hazardous waste siting and design requirements to enhance the mandatory requirements listed in the Countywide Siting Element.

As such, the adopted General Plan includes additional criteria to further ensure the structural stability of facilities; prevent their location in flood hazard areas including areas subject to tsunamis, seiches, or storm surges along areas bordering bodies of water should they be exposed to flooding; prevent siting within 200 feet from a known active or potentially active fault; and finally, to prevent location on potentially unstable slopes or lands that may be subject to subsidence, liquefaction, or within a mapped dam failure inundation area. Requirements are also included to protect surface water, ground water, air quality, environmentally sensitive areas such as wetlands, threatened or endangered species, natural, recreational, cultural and aesthetic resources, prime agricultural lands, or mineral deposits from hazardous waste contamination such that the resource would not be degraded. Transportation measures are included to ensure the safe transport of hazardous waste through and within the City and plan area.

Each City within the County is required to adopt necessary provisions to implement the San Diego County Hazardous Waste Management Plan (COHWMP). Its principal goal is to "establish a system for managing hazardous materials, including wastes, to protect pubic health, safety and welfare, and maintain the economic viability of San Diego County." The COHWMP serves as the primary planning document providing overall policy direction toward the effective management of hazardous waste within San Diego County, including that within the City's General Planning Area, through establishment of goals, policies, and implementation measures. Several objectives of the Public Facilities Element of the General Plan incorporate the COHWMP and prescribe more specific, or stringent, planning requirements and siting criteria reflective of local conditions which shall prevail over the more general provisions of the COHWMP in favor of ensuring the utmost protection of

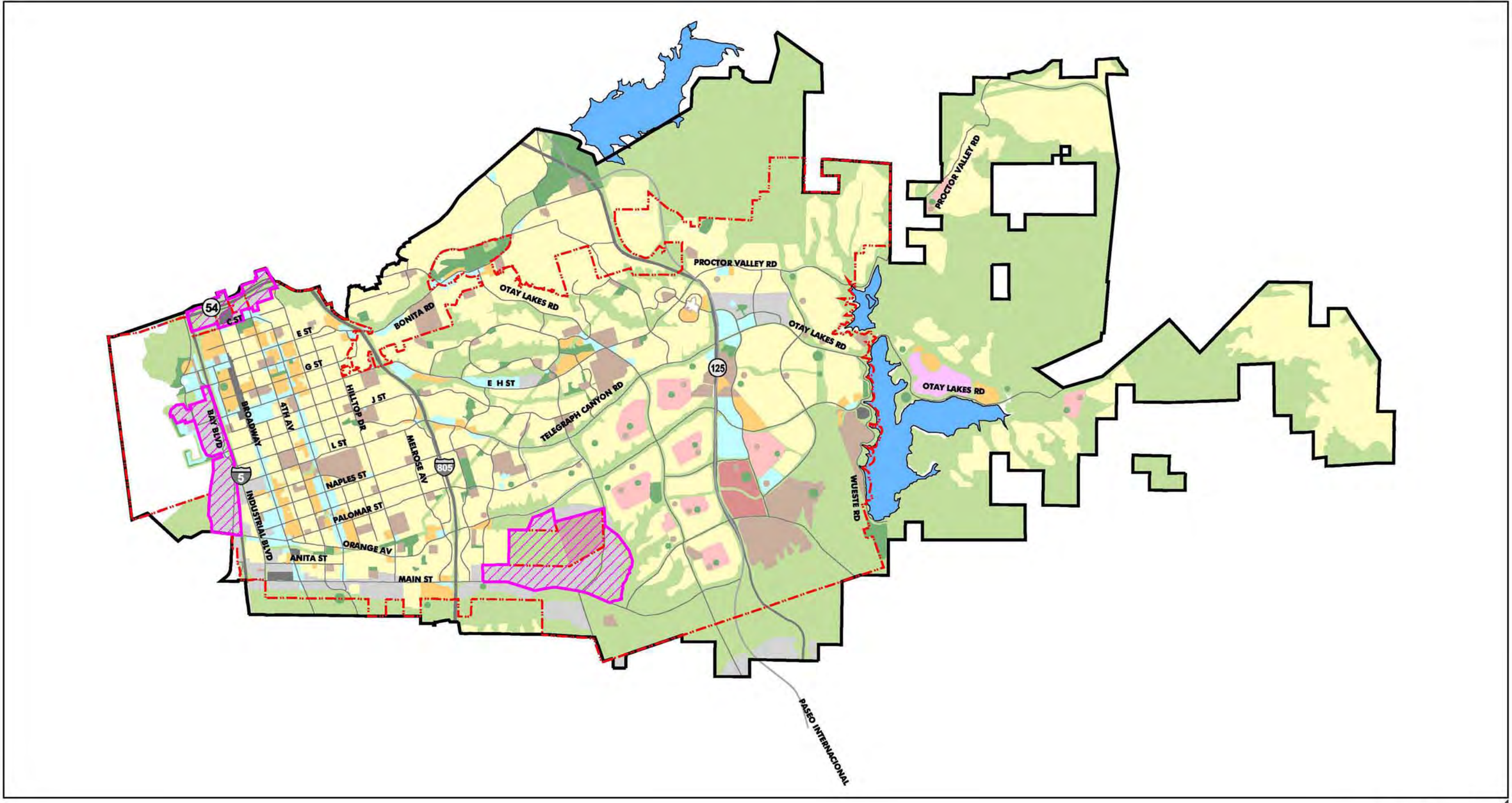

FIGURE 5.15-1
Designated General Areas for the Adopted General Plan

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fig5.15-1 (general_areas) 09/14/05

public health, safety and welfare, and environmental resources within the city of Chula Vista.

The Environmental Protection Agency has released Guidelines for Ground-Water Classification Under the EPA Ground-Water Protection Strategy (EPA 1986), defining protection policies for three classes of groundwater, based on their respective value and their vulnerability to contamination. Under these guidelines, facilities located in areas where existing groundwater quality is Class I, groundwater that is highly vulnerable to contamination and characterized by being irreplaceable or ecologically vital, or Class II, current or potential sources of drinking water and waters having other beneficial uses, shall conduct an appropriate groundwater impact study as part of the environmental review, and shall provide increased spill containment and inspection measures in addition to other identified mitigation.

Resource Conservation and Recovery Act (RCRA) of 1976 (40CFR 240-299) created a major new federal hazardous waste regulatory program that regulates the generation, transportation, treatment, storage, and disposal of hazardous wastes from “cradle to grave.” Pursuant to RCRA, California has implemented its own hazardous waste program, the Hazardous Waste Control Law (HWCL), which is administered by the California EPA Department of Toxic Substance Control. HWCL differs little from RCRA; both laws impose “cradle to grave” regulatory systems for handling hazardous wastes in a manner that protects human health and the environment.

The Emergency Planning and Community-Right-To-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act or SARA) impose similar requirements regulating the handling, storage, use, and disposal of hazardous materials to prevent or mitigate for potential injury to health or the environment in the event that such materials are accidentally released.

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a Business Plan, which must include details, including floor plans, of the facility and business conducted at the site, an inventory of hazardous materials that are handled or stored on the site, an emergency response plan, and a training program in safety procedures and emergency response for new employees, and an annual refresher course in the same topics for all employees.

The California Occupational Safety and Health Administration (Cal/OSHA) and the Federal Occupational Safety and Health Administration (Fed/OSHA) are the agencies responsible for assuring worker safety by developing and enforcing workplace safety regulations in the handling and use of chemicals in the workplace. These regulations concern the use of hazardous materials in the workplace including requirements for employee safety training,

availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.

The Medical Waste Management Act of 1990 created a classification for medical waste to be regulated by the Environmental Health Division of the Department of Health Services (DHS). These regulations require that infectious wastes be properly packaged and labeled. Steam sterilization units used to render infectious waste noninfectious must meet specific design and operating standards established by the DHS.

The Radiological Health Branch (RHB) of the Department of Health Services administers the Radiation Control Law, which governs the storage, use, transportation, and disposals of ionizing radiation (radioactive material). RHB regulations require registration for sources of ionizing radiation, licensing of radioactive material use, and protection against radiation exposure.

Pursuant to the Emergency Services Act and the Hazardous Materials Release Plans and Inventory Law of 1985 (the Business Plan Law), local agencies are required to develop plans for response to releases of hazardous materials and wastes. A plan must include pre-emergency planning of procedures for emergency response, notifications, and coordination of affected government agencies and responsible parties, training, and follow-up.

Signed into law in 1990, the California Integrated Waste Management Act (IWMA) established an integrated system of solid waste management. Under IWMA, the County has prepared a Countywide Siting Element and Summary Plan describing areas to be developed as disposal or waste management facilities (PRC §41700). It is in the goal of all jurisdictions within San Diego County that existing capacity be optimized through diverting materials in the most economically and environmentally safe way, using the IWMA hierarchy of reuse, source reduction, recycling, composting, and transformation.

5.15.1.2 Existing Citywide Conditions

Ninyo & Moore conducted limited site reconnaissance activities on January 25, 2003. The reconnaissance involved a “windshield” survey of properties of significant potential environmental concern (e.g., active and inactive landfills; large-quantity generators; treatment, storage, and disposal facilities) identified during the regulatory agency database review and through interviews with regulatory agency representatives.

Site reconnaissance activities were performed from public rights-of-way. Exteriors of individual properties were surveyed only to the extent that access was available to the general public. Interiors of individual facilities were not accessed. Pad-mounted and pole-mounted electrical transformers, owned and operated by SDG&E, were observed in the study area and are a potential source of PCBs. The transformers within the study area were not individually inspected at the time of the site reconnaissance. However, all known PCB

transformers were removed from the SDG&E system years ago. Additionally SDG&E has a mandated Corrective Maintenance Program which includes regular inspection of electric transformers located within the city of Chula Vista as well as its entire service territory. Based on the results of these inspections, each transformer is subject to maintenance, repair, replacement or removal as appropriate to avoid or minimize the release and/or exposure of workers or the public to potentially PCB-containing substances. In the event these substances are found or, in the rare event, released, they are properly handled and disposed of in accordance with all applicable federal, state, and local regulations.

The types of businesses in the plan area that are likely to store hazardous substances and petroleum products or generate waste include the following: power plants, gasoline service stations, automobile repair facilities, dry cleaning facilities, industrial facilities, chemical facilities, photograph developing facilities, medical and dental facilities, boat servicing businesses, and marinas.

A computerized environmental information database search of the subject site and areas located within a 500-foot radius of the plan area was performed by *Environmental FirstSearch*™ (*FirstSearch*) on December 19, 2002. The *FirstSearch* search included federal, state, and local databases including: the Multiple Agency, Leaking Underground Storage Tank (LUST) List; the Leaking Underground Storage Tanks Information System (LUSTIS); the United States Environmental Protection Agency, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List; the United States Environmental Protection Agency, Emergency Response Notification System (ERNS); the State Water Resources Control Board/s, SLIC (SPILLS) Lists; the United States Environmental Protection Agency, CORRACTS List; the United States Environmental Protection Agency, Toxic Release Inventory System (TRIS); the Department of Toxic Substances Control, State Sites List; Multiple Agency, State of California Solid Waste Landfill (SWL) List; the Multiple Agency, Underground Storage Tank (UST) Lists; and the County of San Diego Department of Environmental Health, HE17/58 (PERMITS). According to the environmental database search, 208 registered underground storage tank (UST) and aboveground storage tank (AST) facilities are located within the plan area. Due to the generalized nature of the technical study, a determination of the status of all documented unauthorized releases from USTs within the plan area was not possible.

Table 5.15-1 presents a summary of the number of properties of potential environmental concern in the plan area by database. Based on information contained in the environmental database report, Table 5.15-2 summarizes the properties of potential environmental concern within and in proximity to the plan area.

Figures 5.15-2 through 5.15-10 indicate approximate locations of properties that may pose environmental concerns. The majority of these properties are concentrated in western Chula Vista, as depicted in Figure 5.15-2. In addition, the database search identified 201 unmapped properties of potential environmental concern on various databases.

TABLE 5.15-1
POTENTIAL PROPERTIES OF ENVIRONMENTAL CONCERN
BY DATABASE CATEGORY

Environmental Database	Western Chula Vista	Eastern Chula Vista
LUST	238	28
CERCLIS	3	7
ERNS	27	9
SPILLS	3	0
RCRA CORRACTS	162	44
TRIS	4	2
STATE	3	5
SWL	15	10

SOURCE: Ninyo & Moore 2003.

NOTES:

LUST = Leaking Underground Storage Tank

CERCLIS = Comprehensive Environmental Response Compensation and Liability Information System

ERNS = Emergency Response Notification System

SPILLS = Spill Site

TRIS = Toxic Release Inventory System

STATE = State Hazardous Waste Site

SWL = Solid Waste Landfill

RCRA CORRACTS = Resource Conservation and Recovery Information System Corrective Action Sites

TABLE 5.15-2
HAZARDOUS MATERIAL/WASTE SITES
AND POTENTIAL RELEASE SITES

Category	Western Chula Vista	Eastern Chula Vista
Solid and hazardous waste generation sites within the study area[1]	165	49
Solid and hazardous waste disposal facilities within the study area[2]	177	58
Operational and closed waste disposal facilities within, and in the immediate vicinity of, the study area[3]	180	59
Use, storage, and transport of hazardous materials in the study area[4]	169	46
Potential releases of hazardous materials[5]	275	217
TOTAL	966	429

SOURCE: Ninyo & Moore 2003.

NOTES: (includes sites appearing on the following databases)

[1]CA, RC, ST

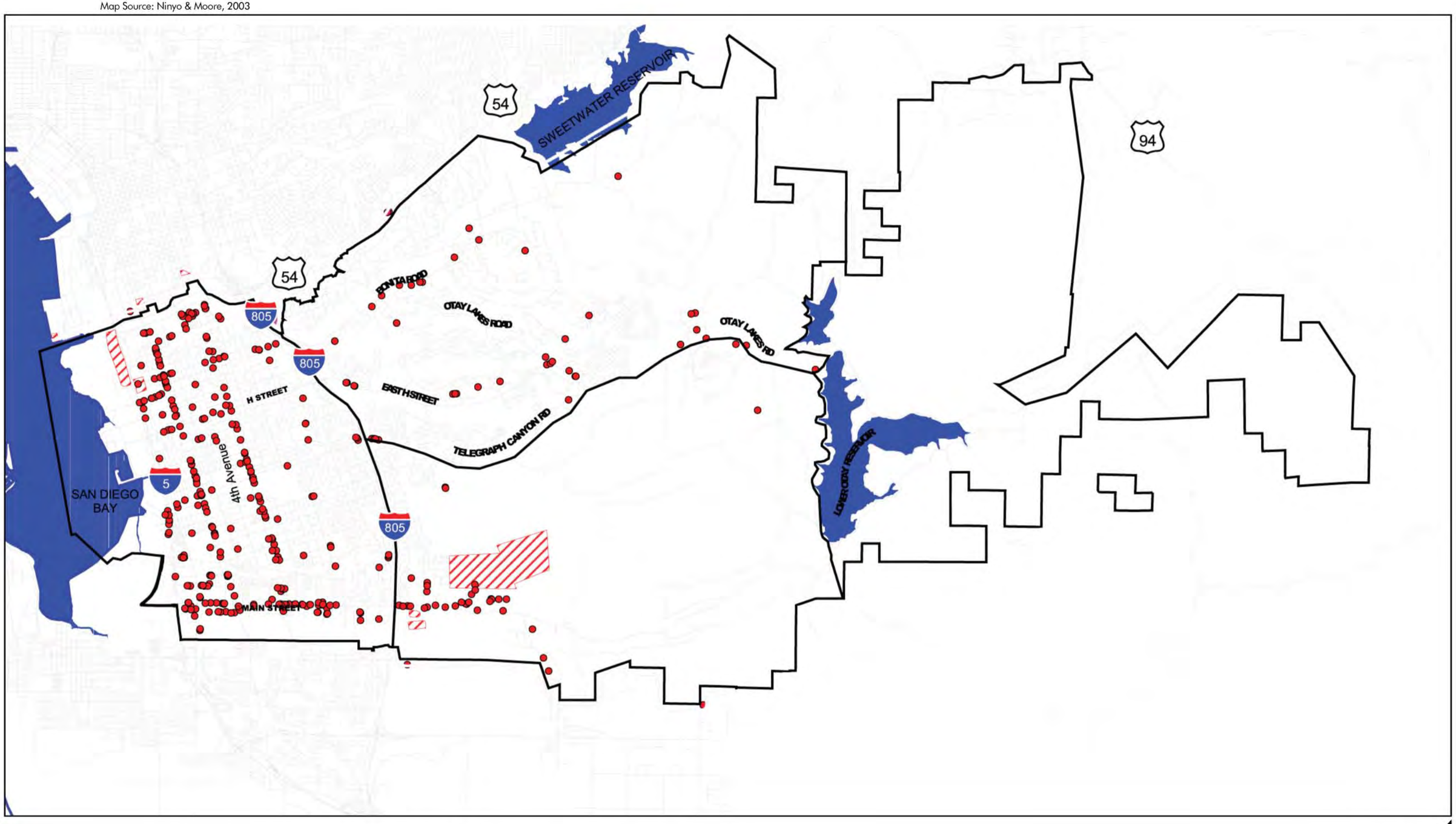
[2]CA, RC, ST, SW

[3]CA, RC, ST, SW

[4]CA, RC, ST, TR

[5]ER, CE, LU, SP, TR

Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area
Site of Potential Environmental Concern as Identified by an Environmental Database Search
Landfill Site of Potential Environmental Concern as Identified by an Environmental Regulatory Agency

0 Miles 0.8

N

FIGURE 5.15-2
Sites of Potential Environmental Concern within the General Plan Boundary

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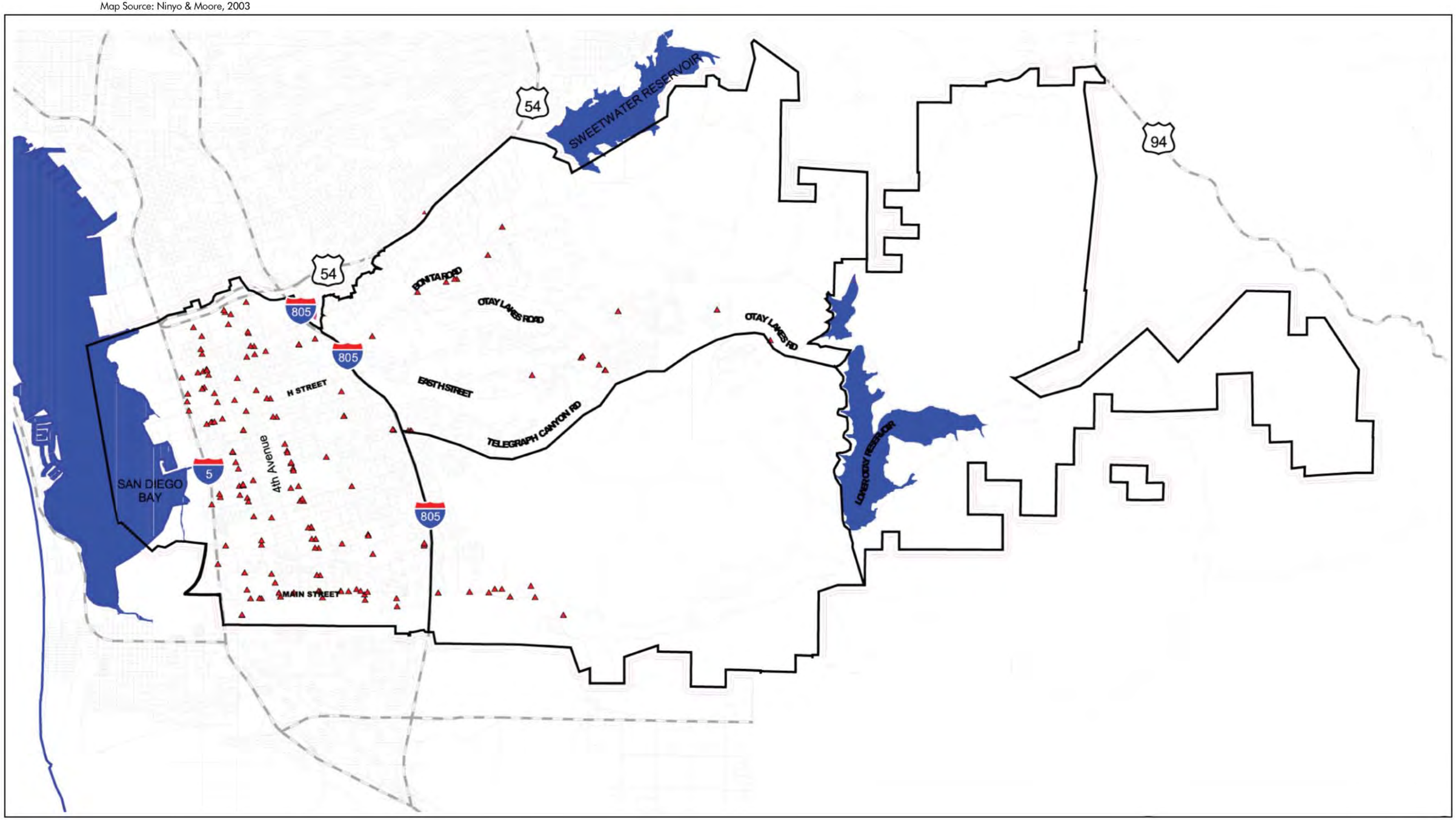
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

LUST (Leaking Underground Storage Tank) Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-3
Leaking Underground Storage Tank (LUST)
Sites Of Potential Environmental Concern

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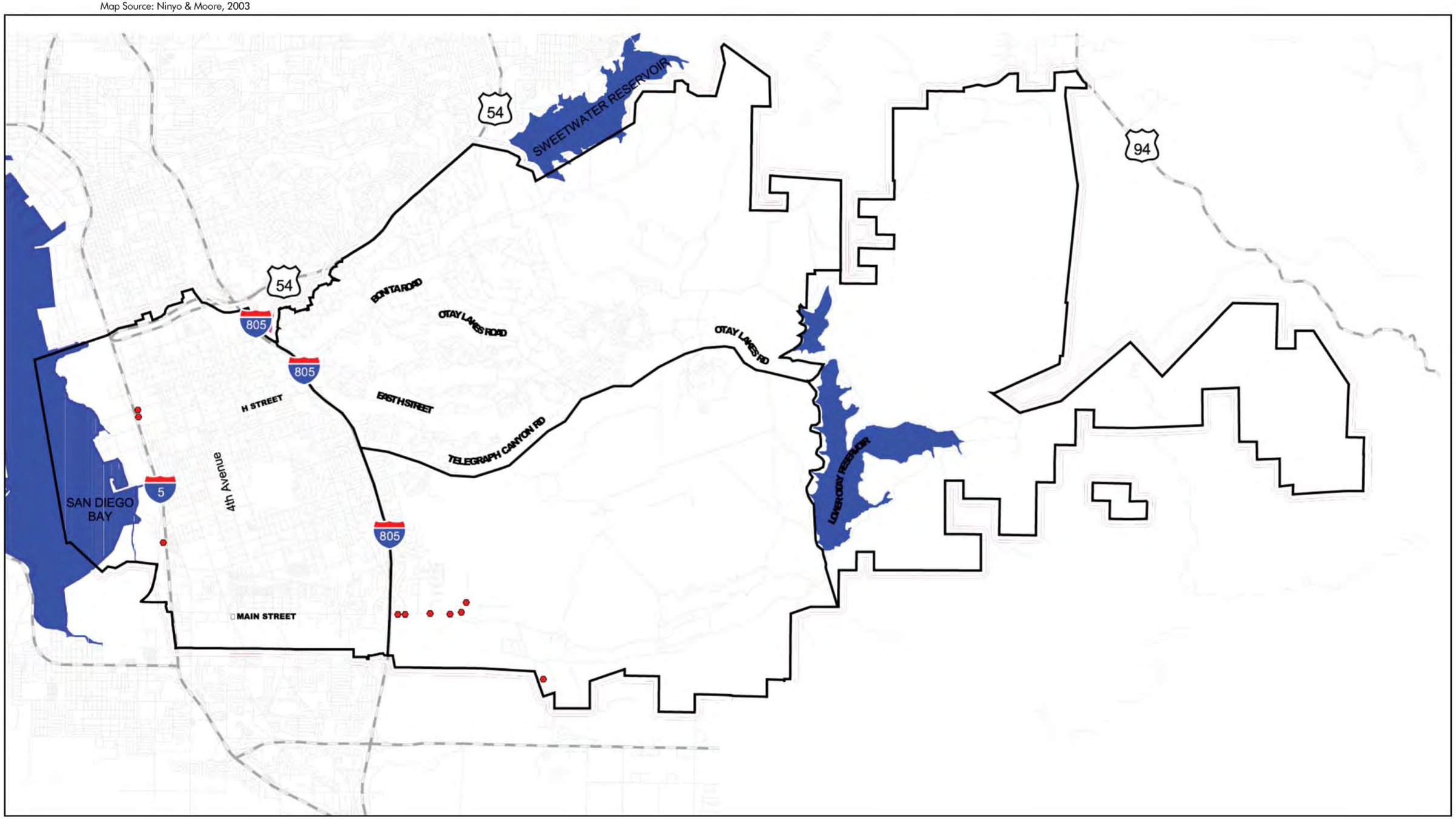
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

CERCLIS (Comprehensive Environmental Response Compensation and Liability Information System) Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-4
Compensation and Liability Information System (CERCLIS)
List Sites of Potential Environmental Concern

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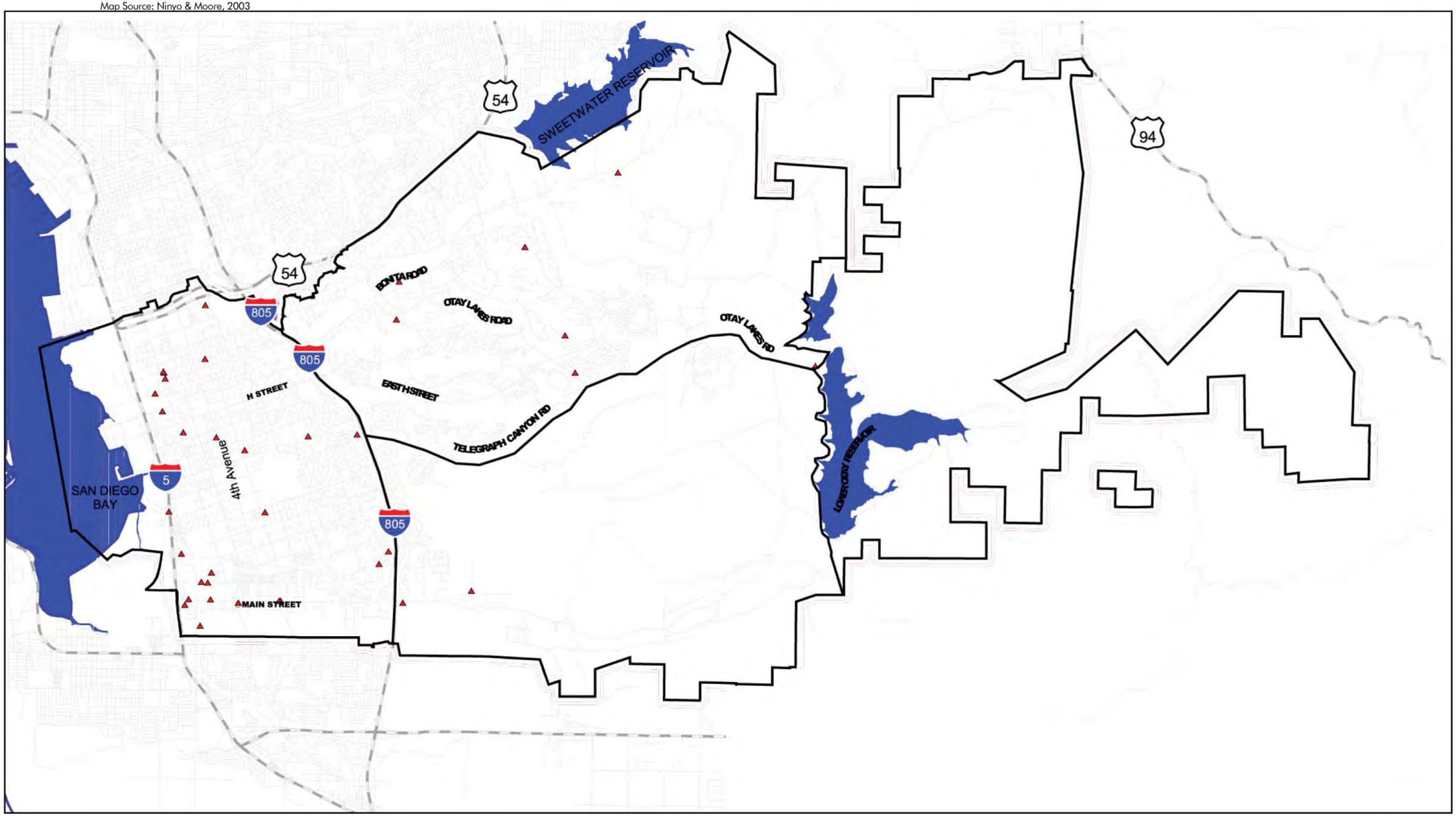
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

ERNS (Emergency Response Notification System) Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-5
United States Environmental Protection Agency, Emergency Response Notification System (ERNS) Sites of Potential Environmental Concern

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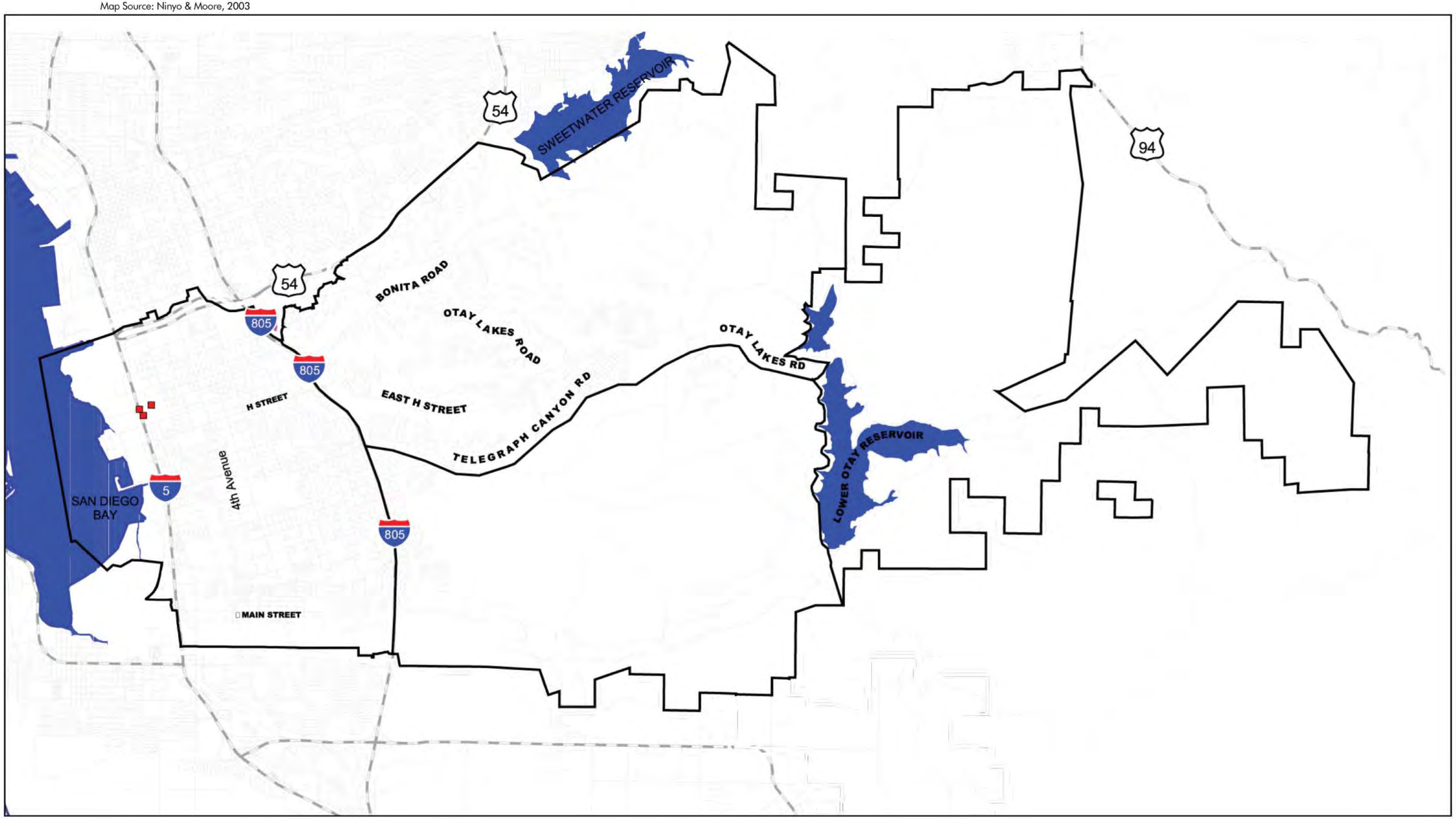
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

Spills Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-6
State Water Resources Control Board (SWRCB)
Spills, Leaks, Investigation, and Cleanups (SLIC)
(SPILLS) Lists Sites of Potential Environmental Concern

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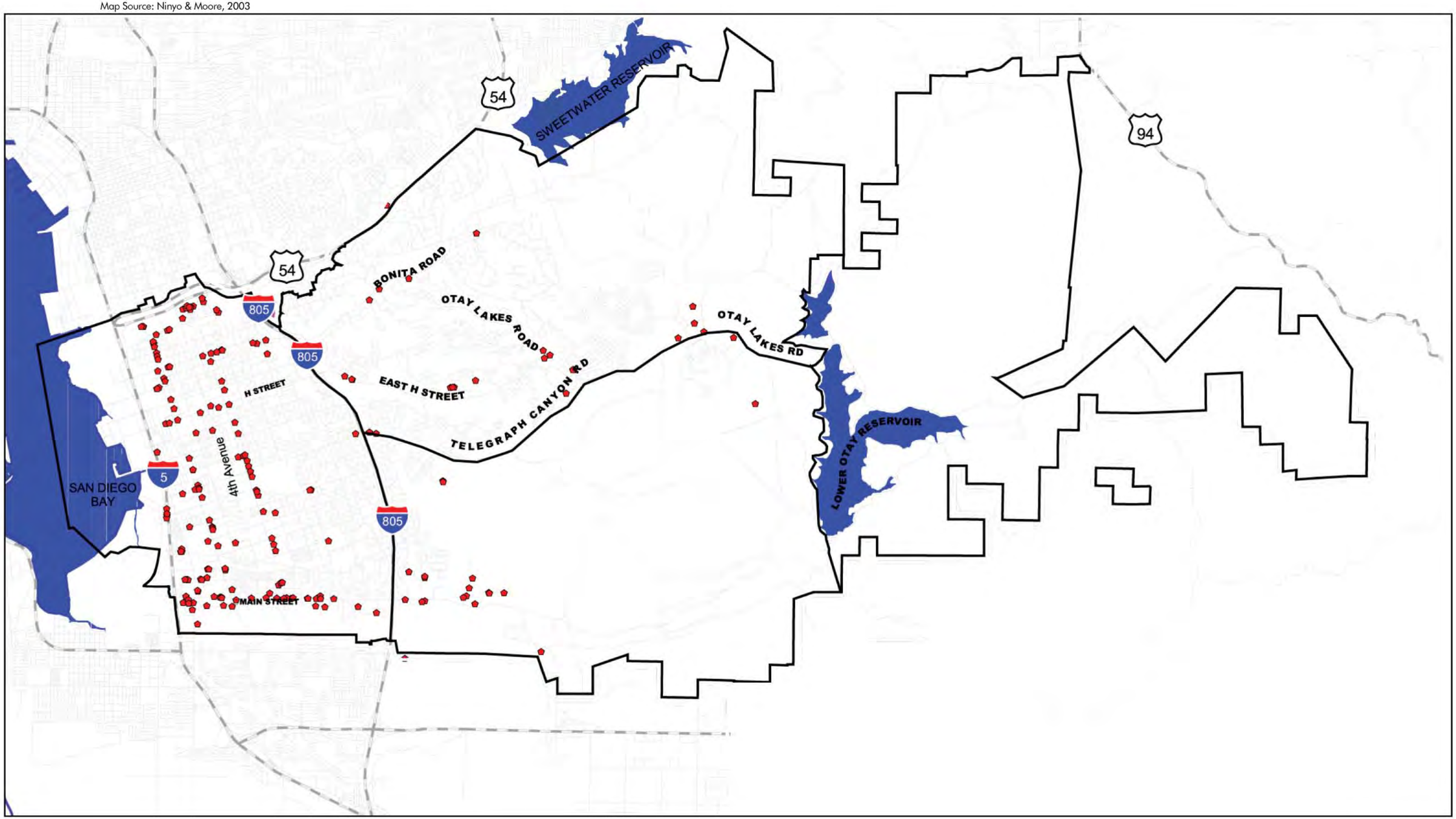
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

RCRA CORRACTS * Site of Potential Environmental Concern

* Resource Conservation and Recovery Information System Corrective Action Sites

0 Miles 0.8

N

FIGURE 5.15-7

United States Environmental Protection Agency,
Resource Conservation and Reclamation Act (RCRA)
(Corrective Action) CORRACTS List Sites of Potential Environmental Concern

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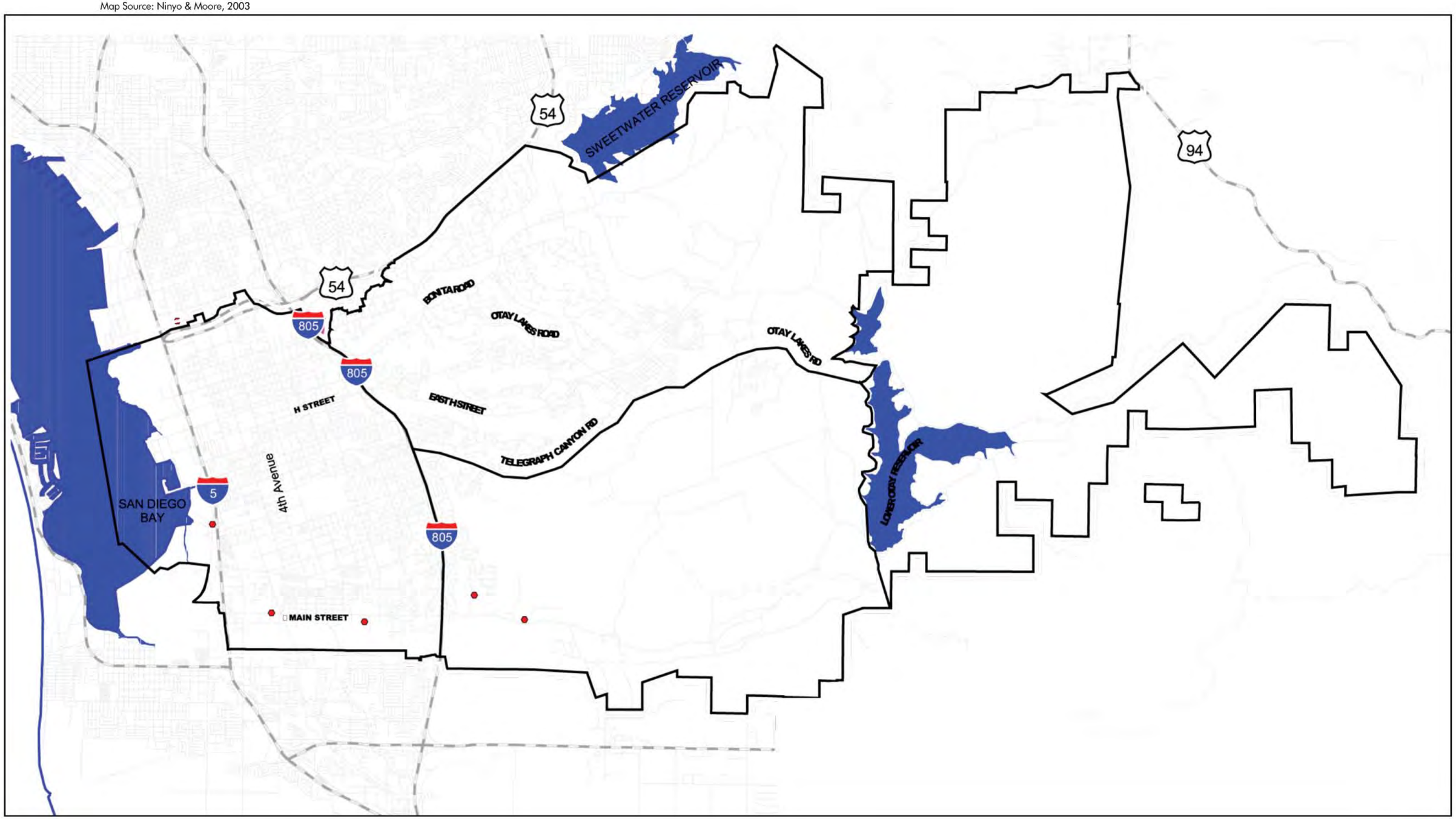
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

TRIS (Toxic Release Inventory System) Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-8
United States Environmental Protection Agency, Toxic Release Inventory System (TRIS)
Sites of Potential Environmental Concern

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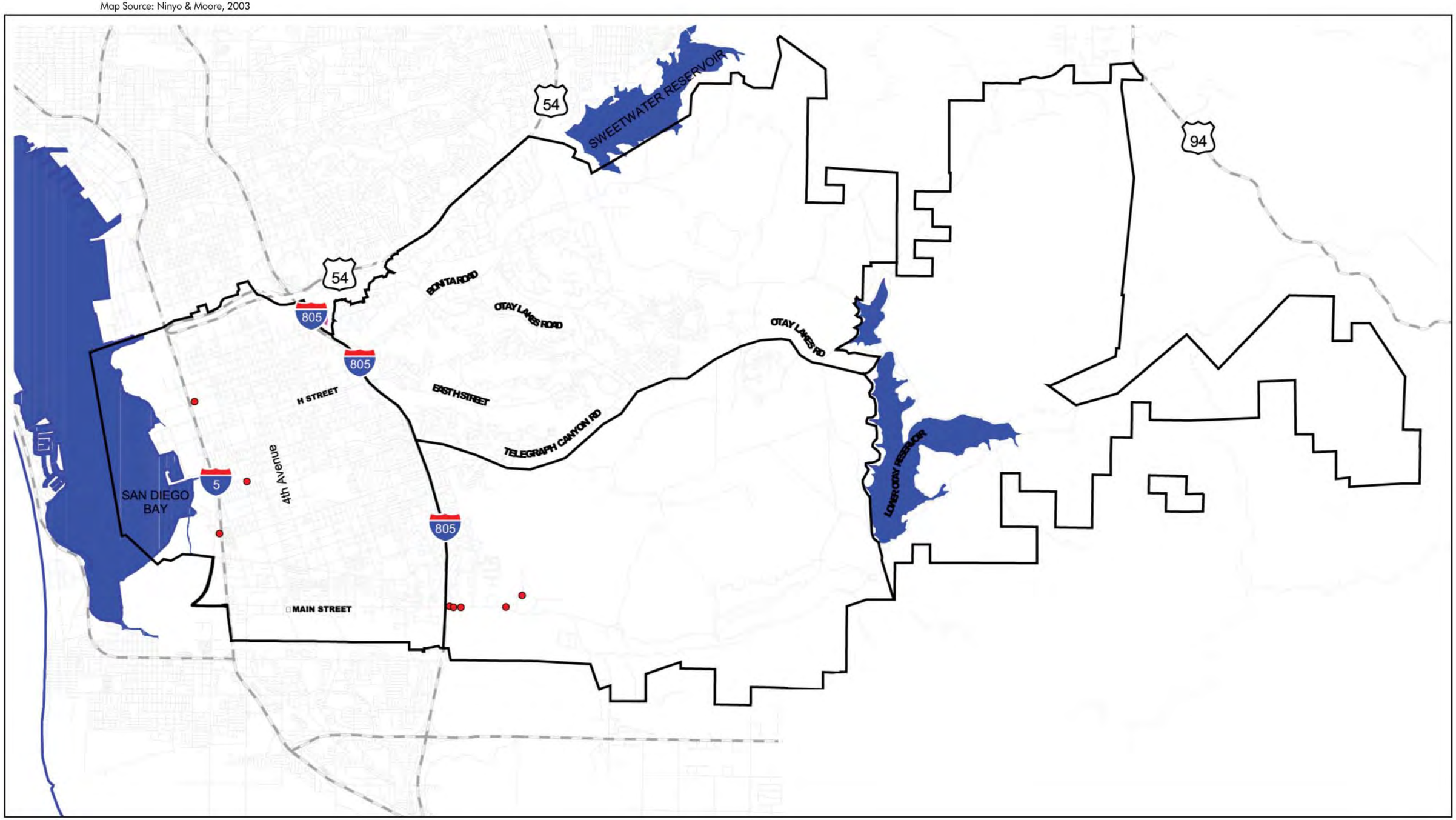
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

State Site of Potential Environmental Concern

0 Miles 0.8

N

FIGURE 5.15-9
California Department of Toxic Substances Control (DTSC)
List Sites of Potential Environmental Concern

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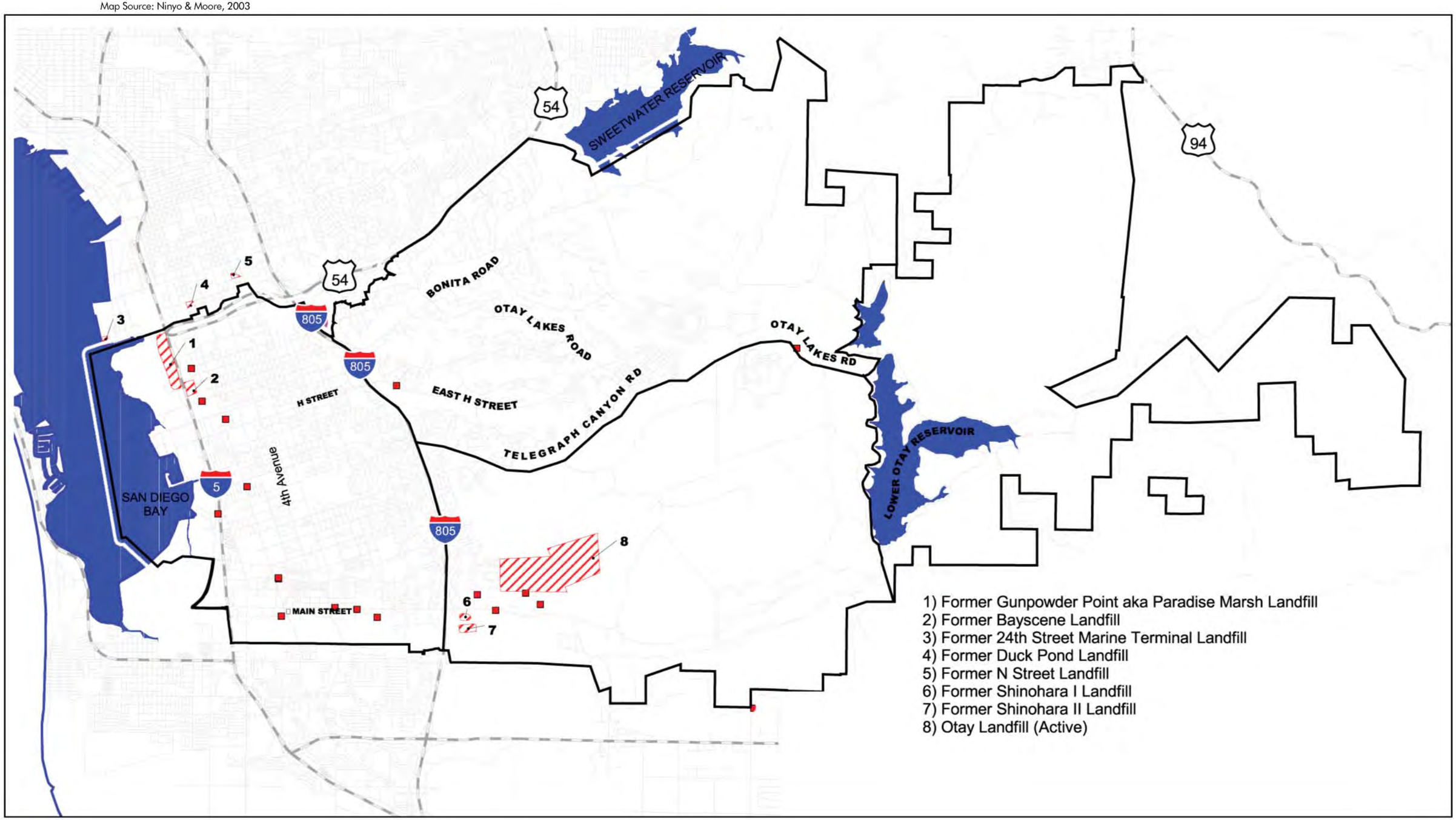
Map Source: Ninyo & Moore, 2003



Chula Vista General Plan Area

Landfill Site of Potential Environmental Concern as Identified by an Environmental Regulatory Agency

Landfill Site of Potential Environmental Concern as Identified by an Environmental Database Search

0 Miles 0.8

N

FIGURE 5.15-10

Multiple Agency, State of California Solid Waste Landfill (SWL)
List Sites of Potential Environmental Concern

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The Leaking Underground Storage Tanks (LUST) Information System is maintained by the California State Water Resources Control Board, pursuant to Section 25295 of the Health and Safety Code. In addition, there are facilities in San Diego County that fall under the jurisdiction of the Local Oversight Program for unauthorized releases by the County of San Diego, Department of Environmental Health (DEH) (County LUST). Approximately 289 properties reported to be in the plan area appear on the LUST list. Refer to Figure 5.15-3 for the approximate locations of these properties.

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database contains properties that are either proposed for listing or listed on the National Priorities List (NPL), and properties that are in the screening and assessment phase for possible inclusion on the NPL. Eleven properties reported to be in the plan area appear on the CERCLIS list. Refer to Figure 5.15-4 for the approximate locations of these properties.

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. Forty-three properties reported to be in the plan area appear on the ERNS list. Refer to Figure 5.15-5 for the approximate locations of these properties.

The state's nine Regional Water Quality Control Boards (RWQCBs) each maintain reports of sites that have records of spills, leaks, investigation, and cleanups for areas in their jurisdictions. Three properties reported to be in the plan area appear on the RWQCB, Region 9 Spills, Leaks, Investigation and Cleanup (SLIC) (SPILLS) list. Refer to Figure 5.15-6 for the approximate locations of these properties.

The CORRACTS List identifies facilities that are undergoing "corrective action" subject to the Resource Conservation and Recovery Act (RCRA). A "corrective action order" is issued pursuant to RCRA when there has been a release of hazardous waste into the environment from a RCRA facility. Approximately 216 properties reported to be in the plan area appear on the RCRA CORRACTS list. Refer to Figure 5.15-7 for the approximate locations of these properties.

The EPA Toxic Release Inventory System (TRIS) list identifies facilities that complete a Toxic Chemical Release Form (Form R) for specified chemicals. Fifteen properties reported to be in the plan area appear on the TRIS list. Refer to Figure 5.15-8 for the approximate locations of these properties.

The California EPA Department of Toxic Substances Control (DTSC) maintains a database of information on properties in California where hazardous substances have been released, or where the potential for such release exists. Eight properties reported to be in the plan area appear on the State Sites list. Refer to Figure 5.15-9 for the approximate locations of these properties.

As legislated under the Solid Waste Management and Resource Recovery Act of 1972, the California Integrated Waste Management Board (CIWMB) maintains the Solid Waste Information System (SWIS) that lists active solid waste disposal sites, inactive or closed solid waste disposal sites, and transfer facilities. Nineteen properties reported to be located in the plan area appear on the SWL list. Refer to Figure 5.15-10 for the approximate locations of these facilities.

The UST lists consist of properties that have registered tanks, and are not necessarily indicative of sites where a release of hazardous substances has occurred. Approximately 208 properties reported to be located within the plan area appear on the UST list. The properties listed in this database that have also experienced an unauthorized release of hazardous substances are shown on Figure 5.15-3 as LUST cases.

The DEH, HE17/58 (PERMITS) list tracks facilities that use hazardous materials or generate hazardous wastes in quantities that require regulation by the DEH. These properties are not necessarily indicative of facilities where a release of hazardous substances has occurred. Approximately 1,310 properties reported to be located in the plan area appear on the PERMITS list.

Wildfire Hazards

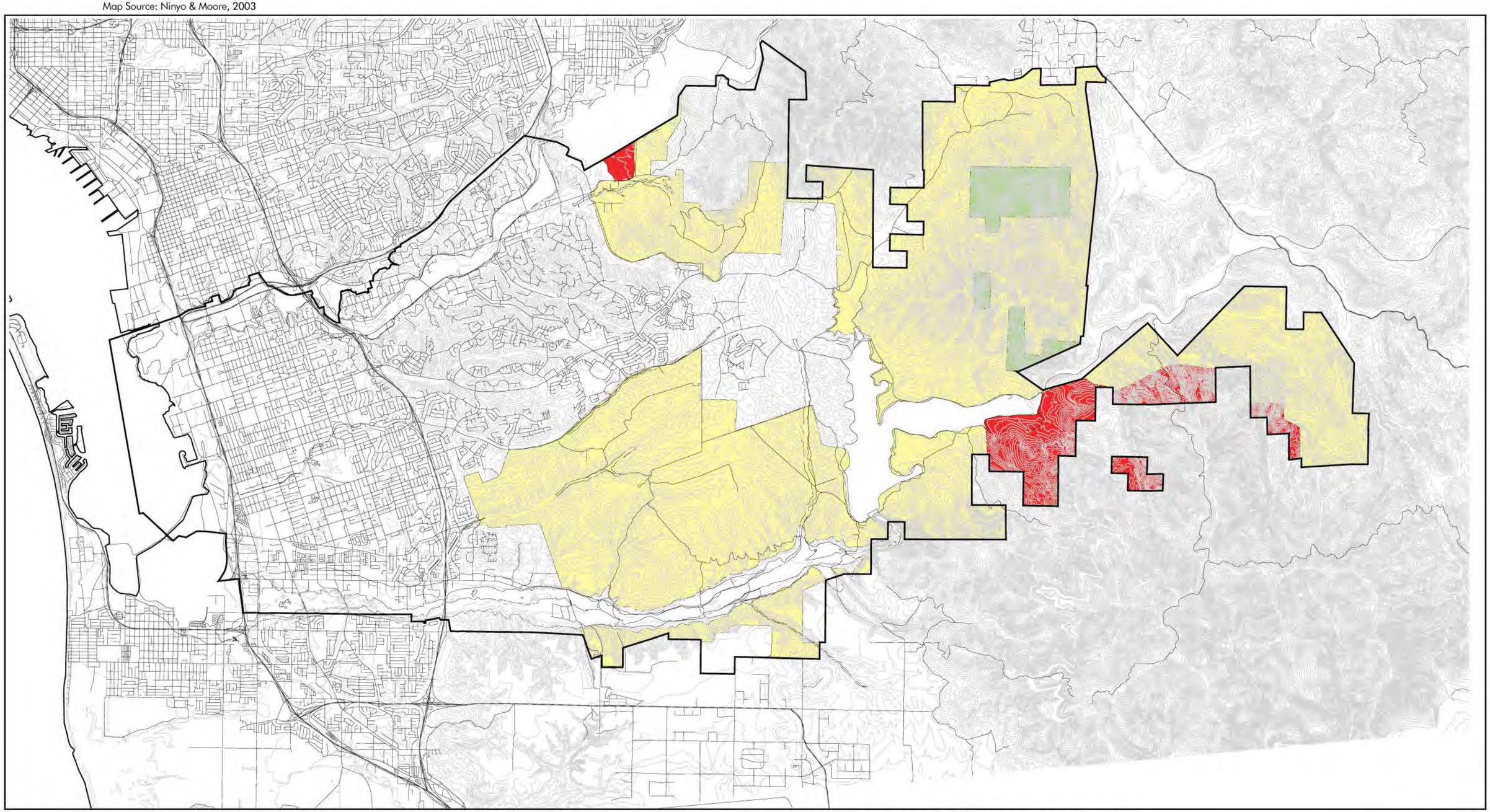
The potential wildfire risk zones are areas that have steep slopes, limited precipitation, and plenty of available fuel. As shown on Figure 5.15-11, large portions of eastern Chula Vista may be subject to high fire hazard severity. It should be noted that much of the area indicated as high wildfire hazard area has been developed. In these areas the map is out of date.

5.15.1.3 Update Areas

Northwest Update Area

The majority of sites of potential environmental concern are located in the western portion of the plan area. Several landfill sites of potential environmental concern are located in the Northwest Update Area (see Figure 5.15-2). There are several LUST and ERNS sites of potential concern within this Update Area (see Figures 5.15-3 and 5.15-5, respectively). As seen in Figure 5.15-4, there are two CERCLIS sites of potential concern located along the northwestern boundary. There are three SWRCB SLIC spill sites of potential concern along the western edge of this update area (see Figure 5.15-6). Several RCRA CORRACTS sites of potential concern are located within this Update Area (see Figure 5.15-7). No EPA TRIS sites of potential concern occur within the Update Area. There are two state DTSC sites of potential concern within the Northwest Update Area, and one located just outside and east of the southern planning boundary along I-5 (see Figure 5.15-9).

Map Source: Ninyo & Moore, 2003



General Plan Area

Wildfire hazard areas*

Very high hazard
Very high fire hazard severity zone.

High hazard
Wildland areas that may contain substantial forest fire risks and hazards.

Undetermined hazard
Wildland areas. that may contain substantial forest fire risks and hazards, however are not under the jurisdiction of the California Department of Forestry and Fire Prevention (1999).

*Areas potentially subject to risk of wildfires, as indicated and designated by California Department of Forestry and Fire Prevention (CDF, 1999).

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FIGURE 5.15-11
Wildfire Hazards Map

One area of possible incompatible land use in the vicinity of operational and closed waste disposal facilities was identified. This property is presently occupied by Bayscene Mobile Home Park, 100 Woodlawn Avenue. According to information obtained through the LEA, this mobile home park may be located on land that was used as a disposal area for burn ash excavated and hauled from a residential development project in Coronado. In addition, the properties adjacent to the mobile home park on the north, south, and east are occupied by residences, which may also represent an incompatible land use. No additional obvious incompatible land uses were observed in the immediate vicinity of the sites visited.

The Northwest Update Area is not located in a designated wildfire hazard area as defined by the California Department of Forestry and Fire Prevention.

The following facilities of potential environmental concern are located within this Update Area:

FORMER GUNPOWDER POINT (ALSO KNOWN AS PARADISE MARSH LANDFILL)

This former landfill reportedly is located to the west of I-5, adjacent to and south of the Sweetwater River, and approximately 850 feet north of Gunpowder Point Drive. Railroad tracks cross the central portion of the former landfill in a north-northwesterly to south-southeasterly direction. According to a representative of the LEA, this landfill is a former burn site. Known contaminants at this burn site include lead and other metals. During the site reconnaissance, soil stockpiles covered with plastic sheeting were observed on the southern portion of the burn site.

FORMER BAYSCENE LANDFILL

This former landfill reportedly is located in the vicinity of the western terminus of Flower Street, between Woodlawn Avenue to the east, I-5 to the west, and D Street to the north. Residences border the property to the north, south, and east. A steeply descending slope also borders the property to the west, followed by trolley tracks. Burn ash, reportedly from land on which the Coronado Cays project subsequently was constructed, was deposited at this location. (Reportedly, during construction of the Coronado Cays residential development project, burn ash was excavated and hauled to various locations throughout San Diego County.) Soil and groundwater sampling has not been performed to date at the Bayscene Landfill. However, lead and other metals are expected to be present in this area at elevated concentrations. In addition, based on previous burn dump investigations, low levels of total recoverable petroleum hydrocarbons or low to no detectable levels of semi-volatile organic compounds (SVOCs), PCBs, dioxins, and furans may also be present in burn ash. Bayscene Mobile Home Park, located at 100 Woodlawn Avenue, presently occupies the property.

Southwest Update Area

The Southwest Update Area contains several sites of potential environmental. As seen on Figure 5.15-2, several landfill sites of potential environmental concern are located in the Southwest Update Area. Additionally, the former Shinohara I Landfill is located along the southeastern boundary of this Update Area and described below. There are several LUST and ERNS sites of potential concern within these Update Areas (see Figures 5.15-3 and 5.15-5, respectively). One CERCLIS site of potential concern located just outside of and west of the northern portion of the Southwest Update Area (see Figure 5.15-4). No SWRCB SLIC spill sites of potential concern occur within the Southwest Update Area. Several RCRA CORRACTS sites of potential concern are located within the Southwest Update Area (see Figure 5.15-7). There are two EPA TRIS sites of potential concern in the south-central portion of the Southwest Update Area (see Figure 5.15-8). Although no state DTSC sites are located within the Southwest Update Area, there are three located just north of the planning boundary east of I-805 and two located to the northeast (see Figure 5.15-9).

The Southwest Update Area is not located in a designated wildfire hazard area as defined by the California Department of Forestry and Fire Prevention.

East Update Area

The East Update Area is directly adjacent to the Otay Landfill, which is a potential environmental concern. The Otay Landfill, described below, is an active landfill and reportedly accepts approximately 98 percent of the non-hazardous municipal waste collected in the City. No LUST sites are known to occur within this Update Area. Additionally, no CERCLIS, ERNS, SWRCB SLIC spill, RCRA CORRACTS, TRIS, or DTSC sites of potential concern are located within the East Update Area.

Several automobile salvage yards were observed primarily along Nirvana Avenue and Energy Way. Because automobiles use various hazardous materials and petroleum products (e.g., transmission fluid, motor oil, coolant, gasoline or diesel fuel, and acid batteries), and the automobiles in these facilities tend to be in poor condition, it is possible that the hazardous materials and petroleum products contained within the automobiles could pose a threat to the environmental integrity of these facilities.

This update area is within a High Wildfire hazard area as designated by California Department of Forestry and Fire Prevention, which means it may contain substantial forest fire risks and hazards (see Figure 5.15-11).

The following facilities of potential environmental concern are located within this Update Area:

FORMER SHINOHARA I LANDFILL

This former landfill reportedly is located to the south of Auto Park Drive and west of Brandywine Avenue. This former landfill is a burn site, most of which has been cleaned by excavating and hauling away the burn ash from the area and subsequently closed.

FORMER SHINOHARA II LANDFILL

This former landfill reportedly is located to the south of the former Shinohara I Landfill, and south of the Otay River. Like Shinohara I, Shinohara II is also a burn ash site. However, the LEA believes that "…there could be up to a 30- or 40-foot-thick deposit of burn ash at this site." Soil and groundwater testing has not been performed at this facility to date.

OTAY LANDFILL (ACTIVE)

This active County of San Diego Class III landfill is located at 1700 Maxwell Road, at the northern terminus of Maxwell Road. The Otay Landfill occupies approximately 464 acres and is privately owned by Allied Waste Industries, Inc. and operated in the County of San Diego by Otay Landfill, Inc. Approximately 10 percent of the facility's waste is generated by the City of Chula Vista; the rest is diverted from other cities throughout the region.

The facility accepts an average of 2,260 tons per day and, as of 2002, had an estimated remaining capacity of 40.5 million cubic yards/31 million tons. It is permitted to accept up to 5,000 tons per day and has an estimated closure date of 2028. In addition, the landfill operator has recently committed up to 30 free acres on the landfill site for the composting of green waste, which is estimated to comprise up to 25 percent of the total waste stream. The design capacity of the facility is estimated at just less than 60 million cubic yards. The discussion of the capacity of the landfill is provided in Section 5.14 of this report.

A portion of the Otay Landfill, consisting of approximately 22 acres, was operated as a Class I hazardous materials disposal facility according to the 1989 FEIR (City of Chula Vista 1989). The Class I hazardous materials disposal area is located in the central portion of the landfill. The disposal area presently is closed and no longer accepts wastes. The Otay Landfill is monitored on a regular basis by the LEA.

FORMER OMAR RENDERING FACILITY

This former facility was reportedly located at 4826 Otay Valley Road (note: Otay Valley Road has subsequently been renamed Main Street). The site was used for an animal by-products processing plant but other industrial operations were also conducted on-site during various times including an auto-wrecking yard and operation of a fleet of trucks during the 1950s to transport Class I liquid wastes for the Omar facility. Three USTs that contained diesel and gasoline were located north of the rendering plant and were used to support of the

trucking operations. Of the three tanks removed in 1987, one was found to be leaking. Contaminated soil was removed from the tank excavation and a groundwater monitoring well was installed down gradient. Subsequently, the county DEH closed the UST regulatory case with a determination of no further action needed for this area.

However, groundwater beneath the site has been impacted with volatile organic compounds (VOCs), SVOCs, and inorganics in varying degrees. The VOCs have been observed site-wide and off-site to the south and east, but are mostly concentrated in the vicinity of the former waste ponds.

In addition, chlorinated solvents have been detected across the site in soil, soil vapor, and groundwater but have been determined not to pose a significant human health risk for commercial/industrial workers. Placement of a deed restriction has been recommended on the property to prevent future use of the site for residential purposes since this use was not evaluated in a risk assessment conducted in 1996.

A Cleanup and Abatement Order was issued by the RWQCB on March 27, 2003 to formalize the voluntary semi-annual groundwater monitoring program that has been conducted on the site; require additional off-site groundwater monitoring; and detail the steps necessary to evaluate remedial options and ultimately support a revised containment zone application by the current property owners in addition to posting financial assurances to cover future monitoring costs. On April 9, 2003, the RWQCB authorized the Executive Officer to enter into a Polanco Act agreement with the City of Chula Vista which has resulted in preparation of a Remedial Action Plan (RAP). Upon completion of the soils requirements outlined in the RAP, a No Further Action (NFA) determination for soils will be issued by the RWQCB.

APPROPRIATE TECHNOLOGIES II FACILITY

According to the *FirstSearch* report, this facility is located at 1700 Maxwell Road. The P&D Technologies report (P&D 1989) describes this facility as a ". . . fully permitted hazardous waste treatment facility. . ." located immediately south of the Otay Landfill. Reportedly, at the time of the P&D Technologies investigation, the facility was active and ". . . permitted to receive all hazardous wastes for treatment with the exception of explosives, radioactive wastes and PCB's." The P&D report further states "suspended solids are removed through a settling process which produces sewerable water and a filter cake material which is then transported to another facility." This facility has not been in operation since approximately 1997.

5.15.2 Thresholds of Significance

The proposed General Plan Update would result in a significant hazards/risk of upset impact if it would:

- Threshold 1: Create a significant hazard to the public or the environment through the routine transport, use, disposal or accidental release of hazardous materials.

- Threshold 2: Place potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers.

- Threshold 3: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- Threshold 4: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

5.15.3 Impacts

5.15.3.1 Threshold 1: Hazardous Materials

Threshold 1 states that a significant impact would result if adoption of the plan creates a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.

Implementation of the proposed land uses identified in the General Plan Update has the potential to result in the routine transport, use, disposal, or accidental release of hazardous materials. The reconnaissance survey described in Section 5.15.1.2 identified 169 and 46 properties in the western and eastern portion of the plan area, respectively, that are of potential environmental concern that use, store, and transport hazardous materials. Under the proposed plan, these uses would continue. Development in accordance with the Preferred Plan or Scenarios 1, 2, or 3 has the potential to place people adjacent to these sites, such as the Otay Landfill, and, therefore, has the potential to expose people to hazards. However, Objective EE 19 assures that new development would not be approved and would not result in a significant impact due to the potential for hazardous materials use and transport to affect residents because Policy EE 19.1 requires that:

> Proposals for hazardous waste storage, collection, treatment, disposal and transfer facilities shall be accepted for review only if located within a designated "general area" as shown in Figure 9 [of the environmental element]. The proposal shall be reviewed based upon the following criteria:
>
> - The application shall include risk assessments, environmental reviews and other reports necessary to determine project impacts on the environment.

- A health risk assessment, as described in the Chula Vista Zoning Code, shall be prepared under the direction of the city, the Local Assessment Committee (LAC)and any Ad Hoc Technical Committees that may be created to advise the City and LAC on such matters.

- All facilities shall be a minimum of 1,000 feet from any residential zone, residence, school, hospital, hotel, motel or other similar land use.

- Setback or buffer areas shall be precluded from future residential uses through property restrictions such as easements or covenants, and where appropriate, through zoning.

- Special design features and/or on-site emergency services may be required where deemed necessary to facilitate the adequate handling of hazardous materials accidents.

- A traffic/transportation study shall be prepared as part of the environmental analysis and health risk assessment. The study shall address the proximity of the proposed facility to areas of waste generation; the distance along minor and major routes in the city from areas of waste generation to the facility and from the proposed facility to the freeway; the number and types of residences, schools, hospitals and shopping centers fronting the affected minor and major routes; and the highway accident rate, as determined by the California Department of Transportation, along highways identified as part of the transportation route.

Implementation of these policies is assured through Police EE 20.2 and 20.3 which specify:

EE 20.2: Through the environmental review of proposed developments in accordance with the California Environmental Quality Act, the City shall ensure that significant and potentially significant adverse effects from facilities using, storing, and handling hazardous materials and waste to existing and planned surrounding land uses will be avoided.

EE 20.3: Prior to the renewal of business licenses for businesses involving hazardous materials and/or generating hazardous waste, the city shall continue to require licensees to prepare and submit an acceptable Business Plan and Risk Management Prevention Program to the County Department of Environmental Health, as applicable, and to obtain all other necessary licenses and permits.

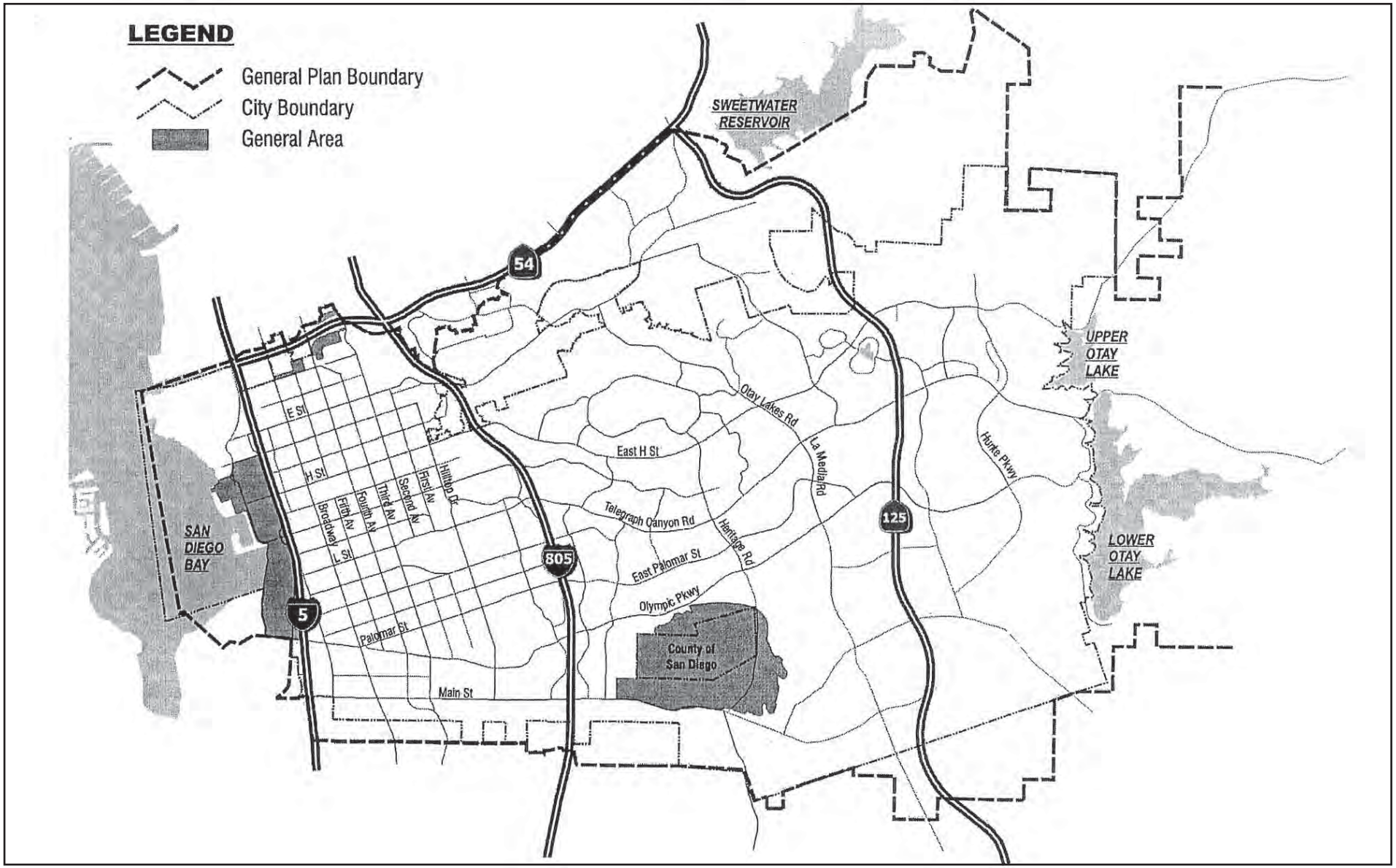

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FIGURE 5.15-12

General Areas Map For Proposed General Plan

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Therefore, impacts from hazardous materials resulting from development completed in conformance with the proposed General Plan are self-mitigated by the adoption and implementation of Objectives EE 19 and EE 20 and associated policies.

5.15.3.2 Threshold 2: Hazardous Materials Emitters

Threshold 2 states that a significant impact would result if adoption of the plan would place potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers.

Proposed Policy EE 19.1 addresses the siting of potentially hazardous materials and provides that development proposals for hazardous waste storage, collection, treatment, disposal, and transfer facilities will only be considered if they are located within a designated "General Area" as shown in Figure 9 of the City's General Plan (see Figure 5.15-12 of this EIR) and meet specific siting, design and operating criteria established by the Chula Vista Zoning Code and pursuant to the established City siting criteria guidelines. The proposed General Plan Update would revise the "General Areas" map to refine allowable hazardous waste materials handling adjacent to SR-54 and near the Otay Landfill. The proposed adjustments to the general areas coincide with the proposed industrial land use designations of the Preferred Plan and reflect non-industrial uses that have been developed on industrially designated lands subsequent to the adoption of the General Plan in 1989. The modified general areas map is included as Figure 5.15-12.

Policy EE 19.1 requires that all facilities shall be a minimum of 1,000 feet from any residential zone, residence, school, hospital, hotel, motel or other similar land use and that setback or buffer areas shall be precluded from future residential uses through property restrictions such as easements or covenants and, where appropriate, through zoning.

By limiting the location for potential emitters to general areas and by designing those areas in accordance with Policy 19.1, the adoption of the Preferred Plan or Scenarios 1, 2, or 3 would avoid placement of potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers. Therefore, impacts from hazardous materials resulting from development completed in conformance with the proposed General Plan are self-mitigated by the adoption and implementation of Objective EE 19 and associated policies.

5.15.3.3 Threshold 3: Emergency Response

Threshold 3 states that a significant impact would result if adoption of the plan would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

There are no objectives or policies contained in the proposed General Plan Update that would interfere with or impair implementation of an adopted emergency response or evacuation plan. In addition, the land uses identified in the proposed Preferred Plan and Scenarios 1, 2, or 3 would not physically interfere with any known adopted emergency plans. The plan contains Policy EE 19.1, which specifies that "special design features and/or on-site emergency services may be required where deemed necessary to facilitate the adequate handling of hazardous materials accidents." Therefore, impacts to adopted emergency response or evacuation plans are self-mitigating.

5.15.3.4 Threshold 4: Wildland Fires

Threshold 4 states that a significant impact would result if adoption of the plan exposes people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Implementation of the proposed Preferred Plan or Scenarios 1, 2, or 3 would increase development intensities in areas of the built environment and convert open land to residential, commercial, and industrial uses. Since Chula Vista receives limited precipitation, the potential for wildland fires represents a significant hazard within areas of the city in close proximity to wildland fuels, particularly in eastern Chula Vista. Development completed in conformance with the Preferred Plan or Scenarios 1, 2, or 3 in close proximity to wildland fuels, particularly in eastern Chula Vista, has the potential to result in a significant impact.

Wildland fire hazard impacts resulting from adoption of the plan are self-mitigating because the plan includes Policy EE 16.1, which specifies that the City shall:

- Implement brush management programs, which are consistent with the Chula Vista MSCP Subarea Plan and the City's Urban-Wildland Interface Code, within urban development and open space interface areas in order to reduce potential wildland fire hazards. Brush management guidelines contained in the MSCP Subarea Plan and the Urban-Wildland Interface Code shall include limits and measures to prevent increased risk of erosion.

Therefore, impacts from wildland fires resulting from development completed in conformance with the proposed General Plan are self-mitigated by the adoption and implementation of Objective EE 16.1.

5.15.4 Level of Significance Prior to Mitigation

Threshold 1: Create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.

Development in accordance with the proposed plan will be completed in compliance with policies in Objective EE 19, which assure that new development will not be approved if there is the potential for hazardous materials use and transport to affect residents. Implementation of these policies is assured through accordance with CEQA as indicated in Policy EE 20.2. As such, impacts in regard to Threshold 1 are not significant.

Threshold 2: Place potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers.

Proposed Policy EE 19.1 provides that development proposals for hazardous waste storage, collection, treatment, disposal, and transfer facilities will only be considered if they are located within a designated "General Area" and meet specific siting, design, and operating criteria established by the Chula Vista Zoning Code and pursuant to the established City siting criteria guidelines. The proposed General Plan Update would revise the "General Areas" map to coincide with the proposed industrial land use designations of the Preferred Plan and reflect non-industrial uses that have been developed on industrially designated lands subsequent to the adoption of the General Plan in 1989. By limiting the location for potential emitters to general areas and by designing those areas in accordance with Policy 19.1, the adoption of the Preferred Plan or Scenarios 1, 2, or 3 would avoid placement of potential emitters of hazardous or acutely hazardous materials or substances in close proximity to sensitive receivers. As such, impacts in regard to Threshold 2 are not significant.

Threshold 3: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The proposed General Plan Update does not contain any objectives or policies and does not propose any land uses that would interfere with or impair implementation of an adopted emergency response or evacuation plan. Implementation of Policy EE 19.1 avoids potential impacts by requiring special design features and/or on-site emergency services where deemed necessary to facilitate the adequate handling of hazardous materials accidents. Therefore, impacts to adopted emergency response or evacuation plans are self-mitigating and not significant.

Threshold 4: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Due to the limited amount of precipitation the City receives, the potential for wildland fires represents a significant hazard in areas of wildland fuels. Development completed in conformance with the Preferred Plan or Scenarios 1, 2, or 3 in close proximity to wildland fuels, particularly in eastern Chula Vista, has the potential to result in a significant impact. However, in accordance with Policy EE 16.1, implementing appropriate techniques,

consistent with the Chula Vista MSCP Subarea Plan and the City's Urban-Wildland Interface Code, would reduce hazards to an acceptable level. Therefore, impacts are self-mitigated and not significant.

5.15.5 Mitigation Measures

There are no significant hazards/risk of upset impacts with the adoption of the proposed General Plan Update; therefore, no mitigation is necessary.

5.15.6 Level of Significance After Mitigation

No significant hazards/risk of upset impacts have been identified.

5.16 Mineral Resources

5.16.1 Existing Conditions

5.16.1.1 Regulatory Plans and Policies

The California Department of Conservation is the primary state agency with regard to mineral resource protection. The Department is charged with conserving earth resources (Cal. Pub. Res. Code § 600 et/ seq.). The State Mining and Geology Board (SMGB) serves as a regulatory, policy, and appeals body representing the state's interests in conservation of mineral resources and reclamation of lands following surface mining activities. The SMGB operates within the Department of Conservation, and is granted certain autonomous responsibilities and obligations under several statutes including the Surface Mining and Reclamation Act (SMARA).

The State of California Surface Mining and Reclamation Act of 1975 (Cal. Pub. Res. Code §2710 et seq.) addresses the protection and subsequent beneficial use of mineral resources considered essential to the economic well-being of the state and to the needs of society while at the same time providing for the reclamation of mined lands to prevent or minimize adverse effects on the environment and to protect public health and safety (SMARA Section 2711[a]; http://www.consrv.ca.gov/omr/smara/2000Note26.pdf). Under SMARA (Sections 2762 and 2763), the City is required to provide justification of a conflicting land use to show why the approved use is more important to the region than the loss of the designated mineral resource.

5.16.1.2 Existing Citywide Conditions

Construction Aggregate

Since most of the western portions of the General Plan area are fully developed or nearly so, the potential for mineral resources and production in the General Plan area is generally limited to undeveloped portions of the Eastern Territories, floodplains, or biologically sensitive preserve areas. Significant aggregate reserves have been mapped in the vicinity of the Sweetwater and Otay River valleys as shown on Figure 5.16-1.

Alluvial material within the lower Sweetwater River extends from the San Diego Bay, easterly along Chula Vista's northern study area boundary and northeast to the Sweetwater Reservoir. Significant construction aggregate resources designated MRZ-2 and located within the approximate 150 acres comprising Sector N have been mapped by the California Geological Survey (CGS) as "urbanized" since originally mapped in 1982. Resources in this area are no longer available because the area has been dedicated as a habitat mitigation area. In addition, mining operations upstream in Sectors O and P located outside the study area

but nearby along the Sweetwater River, which were active as recently as 1982, have subsequently ceased operations.

The Otay River valley area encompasses approximately 3,193 acres and has been a major source of aggregate production for the south San Diego County area in the past. Sector R of the Otay River valley is an approximate 2,727-acre alluvial fill, which by 1982 had been mined to a depth of 15 feet over most of the entire area. The California Division of Mines and Geology (DMG) Open-file Report 96-04 estimates that this sector may contain up to 100 million tons of portland cement concrete (PCC)-grade quality sand and an additional 70 million tons of PCC-grade quality gravel. Replenishment of any mined resources occurs only from tributaries as the dam forming Otay Lakes prevents transport of sediment from upstream. Sector S comprises an approximate 360-acre mass of metavolcanic rock known as Rock Mountain. The Otay Mesa Pit at Rock Mountain is the only active mining operation currently permitted to operate within the city of Chula Vista and larger study area. The Otay Mesa Pit produces quarried rock from a metavolcanic deposit at Rock Mountain, which meets the quality specifications for PCC-grade aggregate.

Designated land uses and zoning within regionally significant MRZ-2 areas are shown on Figure 5.16-2. The majority of land in these sectors has been designated open space. An estimated 200 acres are designated or zoned for other uses, such as limited industrial or freeway.

OTHER MINERAL RESOURCES

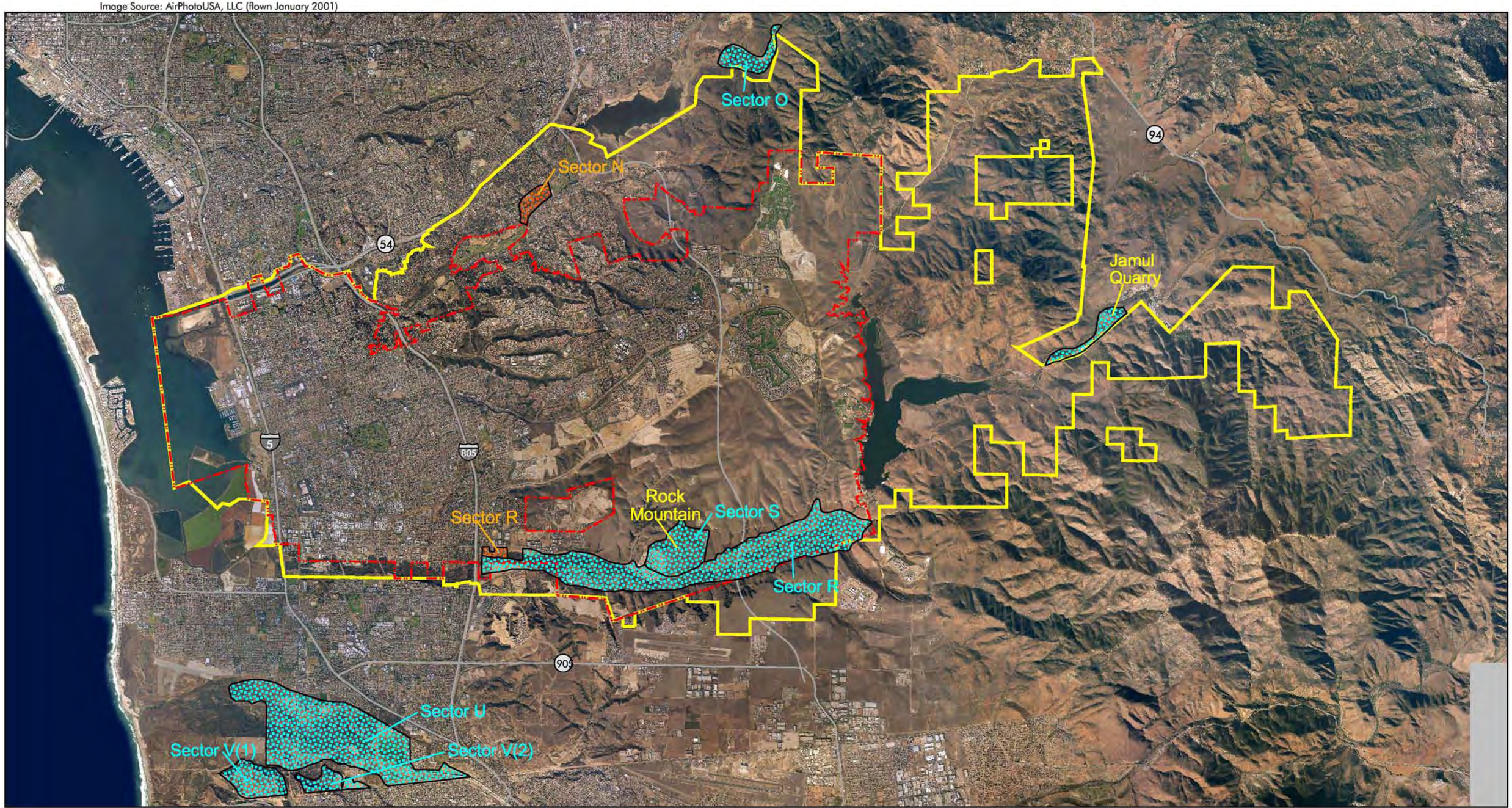
Magnesium Chloride

The Chula Vista Food Machinery and Chemical Corporation plant produces magnesium chloride by evaporating bittern from seawater supplied from an adjoining salt plant on San Diego Bay. No other mineral resources are currently generated within the study area.

Historic Mineral Resources

Records indicate the historic presence of other mineral resources in or near the study area that are no longer permitted or in production. These include limestone-dolomite deposits at Jamul Ranch east of the Proctor Valley portion of Otay Ranch; lead at the Cedar Creek (Lost Spanish) lead mine located in Cedar Canyon less than a mile southeast of the San Ysidro parcel within Otay Ranch; and bentonite clay at two locations: south of the Otay River parcel of Otay Ranch and a second to the west. Bentonite is a highly expansive clay with a variety of practical industrial and other uses. Potentially feasible bentonite clay extraction sites are also believed to occur in Poggi, Wolf, and Telegraph Canyons although the resource is not considered to be of regional significance on the Otay Ranch property.

Image Source: AirPhotoUSA, LLC (flown January 2001)



Chula Vista municipal boundary

Chula Vista General Plan area

"Regionally Significant" MRZ-2 Aggregate Resource Area

"Regionally Significant" MRZ-2 Aggregate Resource Area - Urbanized

0 Miles 1.2 N

FIGURE 5.16-1
"Regionally Significant" MRZ-2
Aggregate Resource Areas

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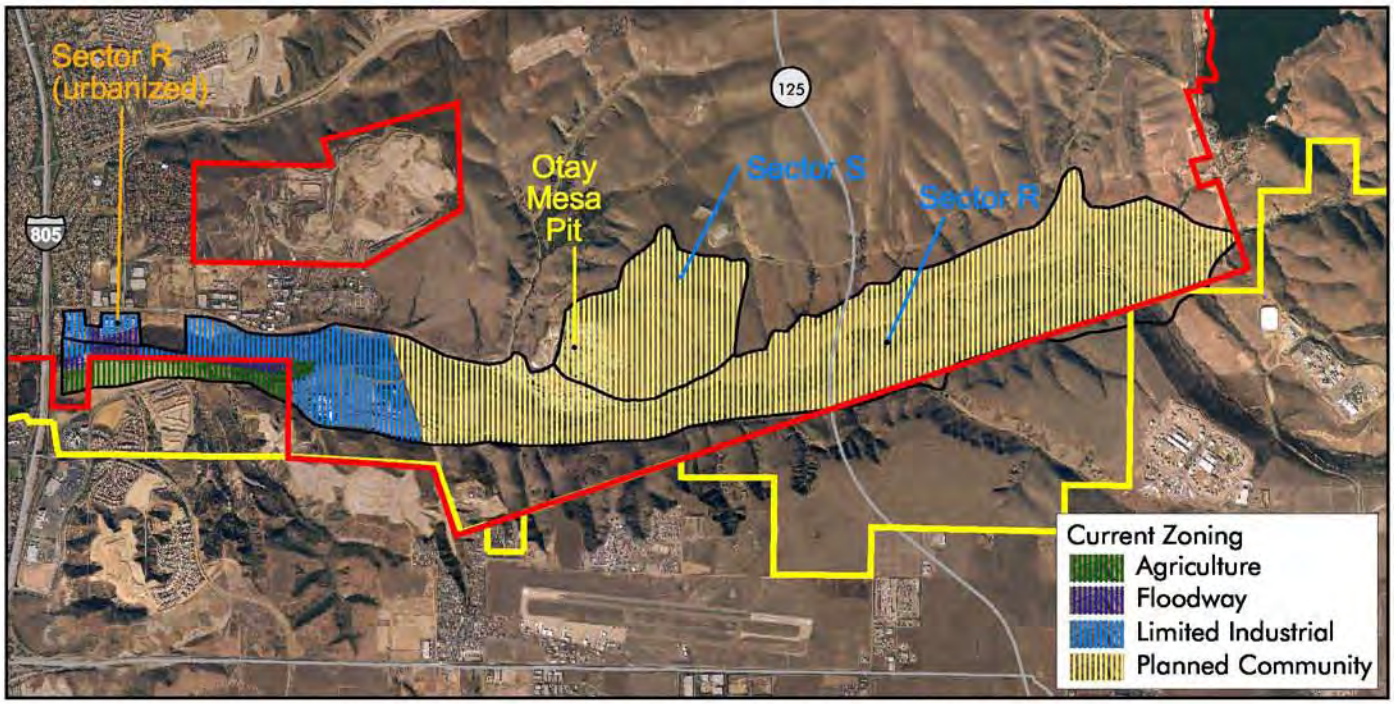
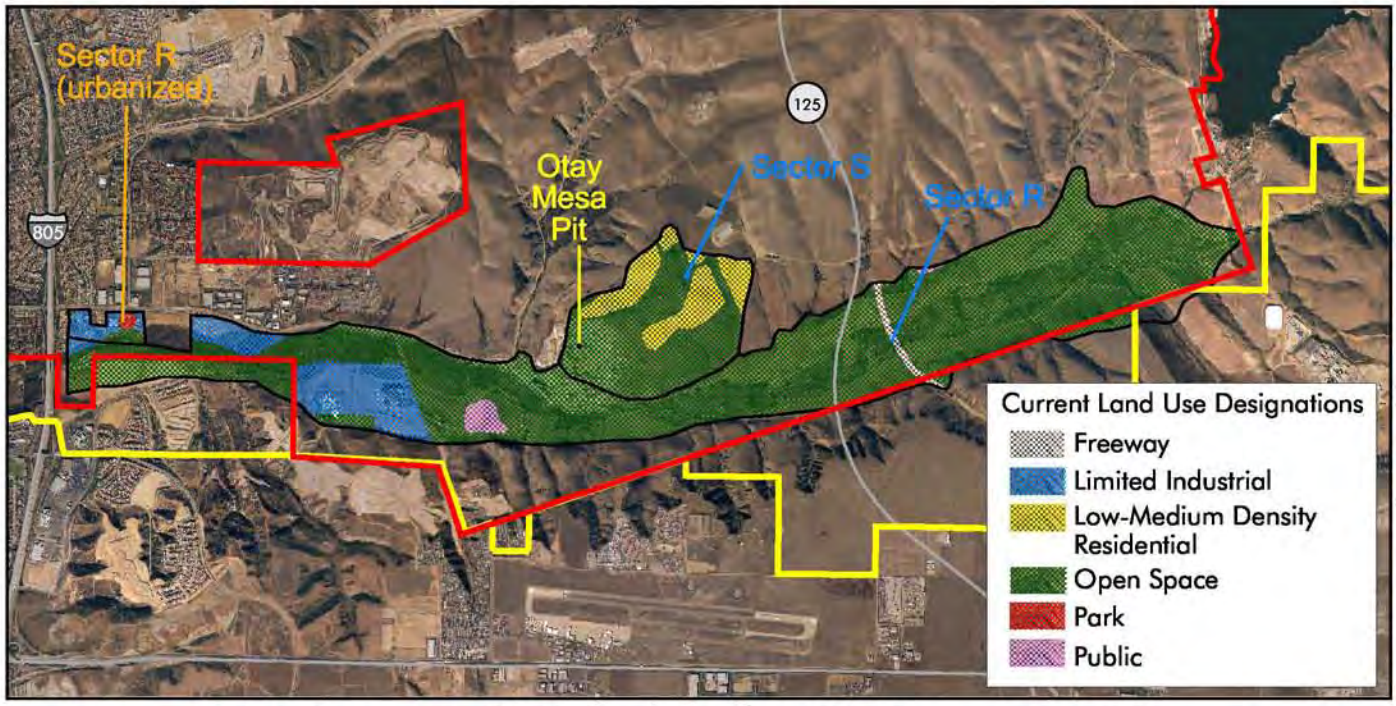
fig5.16-1 (aggregate resource areas) 09/14/05



Zoning within "Regionally Significant" MRZ-2 Aggregate Resource Areas



Land Use Designations within "Regionally Significant" MRZ-2 Aggregate Resource Areas

Chula Vista municipal boundary

Chula Vista General Plan area

0 Miles 1 N

FIGURE 5.16-2

Comparison of Current Land Use Designations and Zoning within MRZ-2 Aggregate Resource Areas

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fig5.16-2 (comparison) 12/17/04

5.16.1.3 Update Areas

The Northwest Update Area is underlain with Quaternary Terrace Deposits (see Figure 5.5-1). As stated above, the majority of western Chula Vista, including the Northwest Update Area, has been previously developed so the potential for significant mineral resources is considered low. No regionally significant MRZ-2 aggregate resource areas are designated within this update area.

The Southwest Update Area is underlain with quaternary alluvium, tertiary sedimentary rocks, and quaternary terrace deposits (see Figure 5.5-1). As with the Northwest Update Area, the Southwest Update Area has been previously developed so the potential for significant mineral resources is considered low. No regionally significant MRZ-2 aggregate resource areas are designated within this update area.

The East Update Area is underlain with quaternary alluvium, tertiary sedimentary rocks, quaternary terrace deposits, and metavolcanic rocks (see Figure 5.5-1). Regionally significant MRZ-2 aggregate resource areas are designated within this update area along the southern boundary. A small portion of this update area, just east of I-805, is located in an urbanized regionally significant MRZ-2 aggregate resource area (see Figure 5.15-1). The current zoning and existing land use for this portion of the update area is Limited Industrial (see Figure 5.16-2).

As seen in Figure 5.16-2, the majority of the land designated as “regionally significant” MRZ-2 aggregate resource area is currently designated as open space and is within the MSCP Preserve. Additionally, the East Update Area contains portions of Sector S, which includes Rock Mountain. As stated above, the Otay Mesa Pit at Rock Mountain is the only active mining operation currently permitted to operate within the city of Chula Vista, and produces quarried rock from a metavolcanic deposit at Rock Mountain, which meets the quality specifications for PCC-grade aggregate (California Division of Mines and Geology 1996).

5.16.2 Thresholds of Significance

The proposed project would result in a significant impact to mineral resources if it would:

- Threshold 1: Result in the loss of availability of a valuable mineral resource that would be of value to the region and the residents of the state.

5.16.3 Impacts

5.16.3.1 Threshold 1: Loss of Valuable Mineral Resources

Threshold 1 states that the proposed General Plan Update would result in a significant impact if the plan would result in the loss of availability of valuable mineral resource that would be of value to the region and the residents of the state.

There are no "regionally significant" MRZ-2 aggregate resource areas in western Chula Vista and no mining activities are currently occurring. Significant mineral resources occur in eastern Chula Vista, along the Otay River valley (see Figure 5.16-1).

Loss of access to mineral resources would primarily be the result of conversion of lands underlain by these resources to other uses, or within close proximity to the resources, such that the construction and occupancy of future projects would restrict or eliminate safe and environmentally sound measures to implement extractive operations. Loss of access could also be the result of changes in land ownership (e.g., non-renewal of a lease where active mining is occurring) or due to regulations for the protection of sensitive habitat and wildlife.

Currently, there is only one active mining site within the city; the Otay Mesa Pit at Rock Mountain. The Otay Mesa Pit is located at the southern limits of the city of Chula Vista. Existing operations are located within a larger 800+-acre ownership, of which approximately 188 acres are located within the boundaries of a reclamation plan approved in 1980. The approved reclamation plan for the Otay Mesa Pit originally considered a five-phased mining operation. Phases 1-4, located within the Otay River where sand and gravel resources were to be mined, have been eliminated. Phase 5 operations were planned for the mining of hard rock Santiago Peak Metavolcanics at Rock Mountain. Information on remaining extractable resources is proprietary and not currently available.

In the East Update Area, mining operations could conflict with nearby existing or proposed uses. Significant mineral resources occur in eastern Chula Vista, along the Otay River valley (see Figure 5.16-1). Development in the Otay River, an MRZ-2 aggregate resource area, exists in the Otay Valley District of the Otay Ranch Subarea and in the East Main Street Subarea. Because of the limited area affected by the land use recommendation, development of this portion of the MRZ-2 in accordance with the Open Space Active Recreation designation would prevent the extraction of a valuable mineral resource. Therefore, impacts would not be significant.

The proposed Environmental Element contains one objective and associated policies that address mineral resources and their extraction:

Objective EE 5

Efficiently extract regionally significant mineral resources in accordance with the Chula Vista MSCP Subarea Plan and require the appropriate reclamation of mined areas for suitable future development, recreation, open space, and/or habitat restoration.

Policies

EE 5.1: Ensure that permit applications for proposed mineral resource extraction are consistent with the Chula Vista MSCP Subarea Plan.

EE 5.2: Consider and minimize impacts from mining operations to existing and future surrounding land uses.

EE 5.3: Ensure that approved reclamation plans fully comply with requirements of the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, Otay Valley Regional Park Concept Plan, and all other applicable plans regarding the restoration of biological habitats and the creation of trails and parkland.

As noted above, because of the limited area affected by the land use recommendation, it is not anticipated that development of this portion of the MRZ-2 in accordance with the Open Space Active Recreation designation would prevent the extraction of a valuable mineral resource. The only potential situation that could result in the loss of availability of a valuable mineral resource stems from the location of the resource at Rock Mountain relative to the City's MSCP preserve.

Impacts resulting from development completed in conformance with the proposed General Plan are avoided because the plan contains Policies EE 5.1 and EE 5.3, which ensures that permits issued for extraction will not adversely impact MSCP lands. Application of Policy EE 5.1 requires that a permit for the operation for mineral extraction will not be issued if impacts to adjacent sensitive land uses cannot be reduced to below a level of significance in accordance with MSCP policies and regulations. In addition, the plan contains Policy EE 5.3 which requires that reclamation plans will only be approved if they are consistent with the requirements of the MSCP and all other applicable plans.

5.16.4 Level of Significance Prior to Mitigation

There are no "regionally significant" MRZ-2 aggregate resource areas in western Chula Vista and no mining activities are currently occurring. As such, adoption of the update would not have a significant mineral resource impact in these areas. Significant MRZ-2 zones occur along the Otay River valley and mining operations could conflict with nearby

existing or proposed uses. Significant mineral resources occur in eastern Chula Vista, along the Otay River Valley (see Figure 5.16-1). Because of the limited area affected by the land use recommendation, it is not anticipated that development of this portion of the MRZ-2 in accordance with the Open Space Active Recreation designation would prevent the extraction of a valuable mineral resource.

Potential impacts to important mineral resources resulting from mineral extraction in areas adjacent to MSCP preserve lands that are completed in conformance with the proposed General Plan Update are self-mitigating because the plan contains Policies EE 5.1 and 5.3, that require permit applications for proposed mineral resource extraction are consistent with the Chula Vista MSCP Subarea Plan (Policy EE 5.1) and that approved reclamation plans fully comply with requirements of the Chula Vista MSCP Subarea Plan, Chula Vista Greenbelt Master Plan, Otay Valley Regional Park Concept Plan, and all other applicable plans regarding the restoration of biological habitats and the creation of trails and parkland (Policy EE 5.3). Therefore, implementation of Policies EE 5.1 and EE 5.3 will avoid significant impacts to the availability of valuable mineral resources.

5.16.5 Mitigation Measures

Since no significant mineral resource impacts would result, no mitigation is necessary.

5.16.6 Level of Significance After Mitigation

There are no significant mineral resource impacts anticipated to result from the adoption of the General Plan Update.

5.17 Housing and Population

5.17.1 Existing Conditions

5.17.1.1 Regulatory Plans and Policies

Housing Element

The Housing Element of the General Plan is an important planning tool for the City of Chula Vista. It identifies the existing and projected housing needs of the City and recommends ways to meet these needs while balancing other community objectives and resources. The California State Legislature has identified the attainment of a decent home and suitable living environment for every Californian as the State's main housing goal. Recognizing the important part that local planning programs play in pursuit of this goal, the Legislature has mandated that all cities and counties prepare a housing element as part of their comprehensive general plans.

The City of Chula Vista Housing Element contains the following goals to address a number of important housing-related issues.

- Goal 1: Conserve existing affordable housing opportunities.
- Goal 2: Maintain and enhance the quality of residential neighborhoods in Chula Vista.
- Goal 3: Ensure that an adequate and diverse housing supply is available to meet the City's existing and future needs.
- Goal 4: Increase home ownership opportunities for low- and moderate-income households.
- Goal 5: Enable homeless individuals and families to find permanent housing.
- Goal 6: Encourage energy and waste conservation as an integral part of homes.
- Goal 7: Promote equal opportunity for all residents to reside in housing of their choice.
- Goal 8: Reduction and/or removal to the greatest extent possible of identified constraints to the development, maintenance, and improvement of housing.

Among its numerous policies and programs, the Housing Element includes the Affordable Housing Program (AHP) that requires new projects involving 50 or more units to set aside a

minimum of 10 percent of the project's units as affordable to low- and moderate-income households. The AHP, through its Implementation Guidelines, offers flexibility in meeting affordable housing goals by considering alternatives to actual developer built-in production. These alternatives include land set-asides, off-site projects, and in-lieu contributions.

There are no amendments to the Housing Element proposed as part of the General Plan Update. The existing Housing Element is located in Chapter 7 of the General Plan Update. Local Housing Element updates are subject to a regional council-of-governments (COG) process and are performed on a five-year cyclic basis as prescribed through the State Housing Element Law. The current Chula Vista Housing Element covers the five-year period from 1999 to 2004, and was originally self-certified by the City on December 19, 2000, pursuant to a State-approved program for jurisdictions in the San Diego Region. The current Chula Vista Housing Element covers the five-year period from 1999 to 2004, and was originally self-certified by the City on December 19, 2000, pursuant to a state-approved program for jurisdictions in the San Diego Region. Based on later financial qualifying provisions for particular housing assistance funds, in 2002, the City submitted the Housing Element for additional certification by State HCD, and re-adopted the state-certified document on May 28, 2002. Jurisdictions within the San Diego Association of Government's COG are currently working on Housing Element updates for the 2005 to 2010 planning cycle. Chula Vista currently anticipates adoption of the Housing Element update by early 2006. The updated Housing Element will be structured to include formatting consistent with the overall General Plan, and will be incorporated at such time as it is adopted.

Otay Ranch General Development Plan

The Otay Ranch GDP established a five-year objective that requires each village to proportionately assist the City of Chula Vista to meet or exceed Otay Ranch's share of the five-year regional allocation as provided by Chula Vista's Housing Element. The Otay Ranch GDP requires that prior to or concurrent with the approval of a SPA plan, a housing plan shall be approved that addresses the type and location of housing to be provided pursuant to the regional share allocation.

5.17.1.2 Existing Citywide Conditions

Table 5.17-1 summarizes the current population and the total number of housing units within each of the planning areas. The total number of housing units in the City of Chula Vista planning area as of January 1, 2004 was 74,231, with a population of 222,300 people. Within the incorporated City boundaries, there were 70,067 housing units and 209,200 people.

5.17.2 Thresholds of Significance

According to Appendix G of the CEQA guidelines, impacts to housing and population would be significant if the proposed project:

TABLE 5.17-1
PROJECT STATISTICS BY SCENARIO

		Planning Area					
		Northwest	Southwest	East	Bayfront	Total GPU Area	Incorporated Area
Existing Conditions	Dwelling Units	19,711	18,368	36,152	–	74,231	70,067
	Population	56,931	53,562	111,807	–	222,300	209,200
Adopted Plan	Dwelling Units	21,140	18,851	57,046	1,000	98,037	89,124
	Population	59,011	53,372	169,411	2,519	284,300*	257,376
Preferred Plan	Dwelling Units	27,497	22,281	64,315	1,000	115,093	105,762
	Population	74,861	61,790	187,655	2,519	326,900*	298,529
Scenario 1	Dwelling Units	27,749	21,806	61,581	1,000	112,136	102,805
	Population	75,624	60,687	181,013	2,519	319,843	291,546
Scenario 2	Dwelling Units	26,323	22,527	65,508	1,000	115,358	106,027
	Population	71,850	62,442	191,323	2,519	328,134	299,837
Scenario 3	Dwelling Units	26,837	23,124	59,203	1,000	110,164	100,833
	Population	73,327	63,920	174,187	2,519	313,953	285,656

*Totals vary due to rounding.

- Threshold 1: Induces substantial population growth in an area, either directly or indirectly;

- Threshold 2: Displaces substantial numbers of existing housing, necessitating the construction or replacement of housing elsewhere;

- Threshold 3: Displaces substantial numbers of people, necessitating the construction or replacement of housing elsewhere.

5.17.3 Impacts

5.17.3.1 Threshold 1: Substantial Population Growth

Threshold 1 states that impacts to housing and population would be significant if the proposed project would induce substantial population growth in an area, either directly or indirectly.

Assessment of this threshold includes a determination of whether substantial growth in population is induced by the proposed General Plan Update, and where that population growth might occur.

SANDAG is the agency responsible for forecasting regional growth. They indicate that population grows in two ways: (1) natural increase, which results from the number of births over deaths; and (2) net migration, which is primarily based on the condition of the local economy (SANDAG 2003). The growth effects of the General Plan Update are manifest, not in how many people arrive in the San Diego area, but in where those people elect to live and work, either in Chula Vista or elsewhere in the region.

The regional population is a function of the relative strength of the San Diego area economy. The location of that population is, in large part, a function of the planning decisions made by specific jurisdictions through their planning and approval processes; namely their current General Plans and zoning SANDAG has a cyclic process for updating these forecast every 3-5 years to reflect changes in factors affecting the overall region, as well as to reflect changes made to local General Plans and zoning..

Once SANDAG has developed the regional housing and population growth figures, they are distributed. That distribution of projected growth is based, in large part, on the housing and employment capacities of the current, adopted land use plans and policies of each jurisdiction. As a result, it can be assumed that the adoption of a General Plan that allows for a greater regional proportion of housing, the planning area will also receive a greater proportion of the population projected for the San Diego region. This effect, and SANDAG's model, is commonly referred to as a "gravity" model, as housing and population allocations gravitate to where housing and employment capacity exists

The extent to which the proposed General Plan Update will result in people living in the San Diego region that would not otherwise live there depends to a large part on the base employment opportunities that are created by the plan. The existing condition for projected future population is based on the potential for the region to generate base employment. The effect of the General Plan Update on causing a significant increase in substantial regional population growth, as projected by SANDAG, is contingent upon the extent to which the plan results in more base employment potential than the assumptions used in the SANDAG modeling process. Those assumptions are based on the existing General Plan.

The Preferred Plan proposes to increase industrial land over the adopted plan by 174 acres, and to increase land designated for commercial use by 156 acres. In the year 2000, SANDAG reports that there were 25,130 acres of industrial land and 37,334 acres of commercial property in the county. The proposed land use change represented by the Preferred Plan is a 0.7 percent increase in industrial land and a 0.4 percent increase in commercial property relative to the year 2000 condition for the county. Assuming 10 to 15 jobs per acre, the small proportional increase of industrial land, the use most likely to provide base employment, is insufficient to represent a potential regional population increase. It will, therefore, not cause a significant increase in the regional growth projections and, therefore, does not represent a significant impact to regional population growth.

As with the Preferred Plan, the land uses proposed for Scenarios 1, 2, and 3 will not cause a significant increase in regional growth projections. Scenarios 1 and 2 propose to decrease industrial land over the adopted plan by 30 and 16 acres, respectively. Scenario 3 proposes to increase industrial land over the adopted plan by 375 acres. Scenarios 1, 2, and 3 propose to increase land designated for commercial use by 186, 167, and 211 acres, respectively. The proposed land use change represented by Scenario 1 is a 0.1 percent decrease in industrial land and a 0.5 percent increase in commercial property relative to the year 2000 condition for the county. Scenario 2 represents a 0.06 percent decrease in industrial land and a 0.4 percent increase in commercial property. Scenario 3 represents a 1.5 percent increase in industrial land and a 0.6 percent increase in commercial property. Assuming 10 to 15 jobs per acre, the small proportional increase of industrial land for Scenario 3, the use most likely to provide base employment, is insufficient to represent a potential regional population increase. Additionally, the land uses proposed for Scenarios 1 and 2 result in a decrease in the amount of industrial land and therefore do not represent a potential regional population increase. Therefore, Scenarios 1, 2, or 3 will not cause a significant increase in the regional growth projections and, therefore, do not represent a significant impact to regional population growth.

Substantial local population growth, however, is possible. The Preferred Plan and all other Scenarios would accommodate a substantial increase in the population that can be compared to the existing condition. Table 5.17-1 summarizes the proposed population and the total number of housing units proposed for the Preferred Plan and each of the Scenarios within each of the planning areas. Table 5.17-2 compares the increase in population and housing

units for the Preferred Plan and all three Scenarios. The table shows that there would be a 47 percent increase in population and a 55 percent increase in housing units for the Preferred Plan over the existing condition. The smallest increase in population (40 percent) and number of housing units (47 percent) is projected for Scenario 3.

TABLE 5.17-2
INCREASE IN POPULATION AND HOUSING COMPARED TO EXISTING CONDITIONS FOR THE ENTIRE GENERAL PLAN PLANNING AREA

	Population	Increase	Percent Change	Housing Units	Increase	Percent Change
Existing	222,300	–	–	74,231	–	–
Preferred Plan	326,900	104,600	47	115,093	40,862	55
Scenario 1	319,843	97,543	44	112,136	37,905	51
Scenario 2	328,134	105,834	48	115,358	41,127	55
Scenario 3	313,953	91,653	41	110,164	35,933	48

SOURCE: City of Chula Vista 2005.

The Preferred Plan and all three Scenarios target the higher density and higher intensity development into specific areas to protect stable residential neighborhoods and to create mixed-use urban environments that are oriented to transit and pedestrian activity. Development is directed primarily to transit or commercial corridors, multi-family areas, vacant lands, and underutilized areas.

The proposed General Plan Update is specifically intended to provide for the orderly growth of the City of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted by land use policy would provide needed housing for all income levels, create compact and pedestrian-friendly urban development, and protect natural resources. The General Plan Update would result in a more inclusive community, improve the balance between housing and employment, and foster a stable economic base and diverse employment opportunities.

The General Plan Update would provide guidance to citizens, developers, City staff, and decision-makers over the next 25 years, through the Year 2030. It pays particular attention to "Smart Growth" principles being promoted throughout the country, California, and the region through SANDAG's Regional Comprehensive Plan. The Smart Growth principles are incorporated in the General Plan's Vision and Themes, which guide the Land Use Plan and also provide the basis for many of the Land Use and Transportation Element's policies. While there is no single definition of "smart growth" that everyone embraces, there are certain common elements.

The basic smart growth principles are summarized as follows:

- Provide a mix of compatible land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair and cost effective
- Encourage community and stakeholder collaboration in development decisions

The General Plan Update contains objectives and policies that provide needed housing for all income levels, supporting infrastructure within and adjacent to the General Plan area, allow for an increase of mixed-use development and transit-oriented uses in the vicinity of major transit corridors, and provide circulation improvements that facilitate mobility throughout the city and between the city and surrounding jurisdictions.

The Preferred Plan and all three Scenarios would accommodate growth that may occur. The General Plan is, therefore, growth inducing. Growth inducement is discussed in Chapter 7 of this report. West of I-805, the proposed General Plan Update would direct growth to already developed areas of the City. East of I-805 the potential increase in population would occur in areas not currently developed. The environmental impacts associated with this increased population are discussed in the individual topical sections of this report. Impact to issues, such as traffic, air quality noise, etc., due to population and housing increases from the adoption of the Preferred Plan and all three Scenarios are discussed in the Sections 5.1 through 5.16 and Chapter 7 of this document.

As noted above, population increases as evaluated as part of Threshold 1 can occur both regionally and locally. While there will not be a substantial increase in regional population as a result of the proposed Preferred Plan or any of the Scenarios, there will be a substantial increase in the population in the City of Chula Vista compared to the existing condition. This is considered a significant impact. Growth inducement is discussed in Chapter 7 of this report.

5.17.3.2 Threshold 2: Displaces Substantial Numbers of Existing Housing

Threshold 2 states that impacts to housing and population would be significant if the proposed project would displace substantial numbers of existing housing necessitating the construction or replacement of housing elsewhere.

The Preferred Plan and all other Scenarios would result in a substantial increase in the number of housing units over the existing condition. Development of the land uses under the

Preferred Plan and all three Scenarios would result in houses being temporarily displaced in the Northwest and Southwest Planning Area of the City as individual projects are completed that conform to the plan. The Preferred Plan allows for an increase of 7,815 dwelling units in the Northwest, and 3,913 units in the Southwest. Replacement of housing would be provided within the same area and would not occur elsewhere. As discussed above, build-out of the General Plan area under the Preferred Plan results in a total increase of 40,891 homes relative to existing conditions within the General Plan area.

The General Plan Update would help meet a projected long-term regional need for housing by providing a wide variety of housing types and prices. SANDAG housing capacity studies indicate a shortage of housing will occur in the project area within the next 20 years. In recent years, the cost of housing has risen disproportionately to the cost of other uses in the project area (e.g., commercial, industrial), reflective of imbalances between housing supply and demand.

The displacement of housing as evaluated relative to Threshold 2 is not considered a significant impact because the housing that may be removed by projects completed in compliance with the Preferred Plan or any of the Scenarios is accommodated within the General Plan area, and the number of units planned for all options increases.

5.17.3.3 Threshold 3: Displaces Substantial Numbers of People

Threshold 3 states that impacts to housing and population would be significant if the proposed project would displace substantial numbers of people, necessitating the construction or replacement of housing elsewhere.

The Preferred Plan and all other Scenarios would result in a substantial increase in population over the existing condition. People will be displaced as individual projects are developed in the Northwest and the Southwest planning areas. The increase in the numbers of units within these planning areas; however, will be able to accommodate those displaced and will not require construction of housing elsewhere, because the Preferred Plan projects an increase of 3,913 residential units in the Southwest Planning Area, and 7,815 units in the Northwest Planning Area will be able to accommodate the existing population.

The displacement of people as evaluated relative to Threshold 3 is not a significant impact because the housing will not need to be constructed elsewhere. The displacement is not considered a significant impact because the numbers of units planned in the Update areas are sufficient to accommodate the affected population.

5.17.4 Level of Significance Prior to Mitigation

5.17.4.1 Threshold 1: Substantial Population Growth

The Preferred Plan and all three Scenarios would result in a substantial increase in the population of Chula Vista because it would accommodate growth that may occur locally. It is, therefore, considered growth inducing. Growth inducing effects are described and evaluated in Chapter 7 of this report.

West of I-805, the proposed General Plan Update would direct that growth to developed areas of the City. East of I-805 the potential increase in population would occur in areas not currently developed. The environmental impacts associated with this increased population are discussed in the individual topical sections of this report. Impact to issues, such as traffic, air quality, noise, community character, land use, utilities and services, cultural and biological resources, geology, soils, and energy due to population and housing increases from the adoption of the Preferred Plan and all three Scenarios are discussed in the Sections 5.1 through 5.16 and Chapter 7 of this document. Because the Preferred Plan and any of the Scenarios would induce growth it is a significant impact in accordance with Threshold 1.

5.17.4.2 Threshold 2: Displaces Substantial Numbers of Existing Housing Necessitating the Construction or Replacement of Housing Elsewhere

The displacement of housing as evaluated relative to Threshold 2 is not a significant impact, because the housing will not need to be constructed elsewhere. Housing that may be removed by individual projects completed in compliance with the Preferred Plan or any of the Scenarios does not necessitate the construction of housing elsewhere because the proposed plan increases the number of housing units accommodated within the General Plan area. The number of units planned for all scenarios increases relative to the existing condition.

5.17.4.3 Threshold 3: Displaces Substantial Numbers of People Necessitating the Construction or Replacement of Housing Elsewhere

The displacement of people as evaluated relative to Threshold 3 is not a significant impact because the housing will not need to be constructed elsewhere. The displacement is not considered a significant impact because the numbers of units planned in the update areas are sufficient to accommodate the affected population.

5.17.5 Mitigation Measures

Impacts resulting from the projected population growth and the development permitted by the Preferred Plan or any of the Scenarios and associated mitigation measures are described in the individual sections of this report. Impacts in accordance with Threshold 1 are

significant because the plan accommodates an increase in population. No mitigation is available to avoid this effect, because adoption of the Preferred Plan or any of the Scenarios will result in that potential increase.

5.17.6 Level of Significance After Mitigation

Because there is no mitigation available to avoid an increase in population resulting from the adoption of a General Plan Update that establishes greater capacity than the existing condition, the impact remains significant and not mitigated.

6.0 CUMULATIVE IMPACTS

The State CEQA Guidelines (Section 15355) define a cumulative impact as "an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." The Guidelines further state that "an EIR should not discuss impacts which do not result in part from the evaluated project."

Section 15130(a) of the State CEQA Guidelines requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in Section 15065(c), "means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects."

The evaluation of cumulative impacts is required by Section 15130(b)(1) to be based on either (a) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency," or (b) "a summary of projections contained in an adopted plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact." This analysis relies on regional planning documents, in accordance with Section 15130(b)(1)(B), to serve as a basis for the analysis of the cumulative effects of the proposed General Plan Update.

The following regional plans are the foundation for the cumulative analysis in this section: SANDAG Regional Comprehensive Plan (RCP) (land use, landform alternation/aesthetics, cultural resources, paleontological resources, agricultural resources, traffic, noise, energy, and housing and population); MSCP (biological resources); Water Quality Control Plan for the San Diego Basin (water quality); San Diego Air Pollution Control District (APCD) Regional Air Quality Strategies (RAQS) (Air Quality); and the Regional Water Facilities Master Plan (utilities). These plans are discussed in Section 5.0 of this EIR and below in the cumulative analysis. They are on file at the City of Chula Vista and are available for review.

On July 23, 2004, the SANDAG Board of Directors adopted the Regional Comprehensive Plan (RCP) for the San Diego region. The RCP serves as the long-term planning framework for the San Diego region. It provides a broad context in which local and regional decisions can be made that move the region toward a sustainable future—a future with more choices and opportunities for all residents of the region. The RCP integrates local land use and transportation decisions and focuses attention on future growth. The RCP contains an incentive-based approach to encourage and channel growth into existing and future urban areas and smart growth communities.

The goal of the RCP is to ensure a high quality of life for current and future generations and to work toward a society that has resolved its housing shortage, transportation problems, and energy issues, and provides healthy, desirable environments for people and nature.

Because the direct impact analysis considers the buildout of the city, the analysis presented in Chapter 5 of this report is, in effect, a cumulative impact analysis. The basis for determining the direct impacts of the adoption of the General Plan Update, whether the Preferred Project or any of the Scenarios, assumes the SANDAG growth projections for the region outside of the General Plan area. The RCP provides the regional basis for the cumulative analysis presented in this section. The growth projections used in the RCP, outside the City of Chula Vista, are consistent for each of the issues evaluated. The cumulative discussion evaluates the proposed project for conformance to the RCP and identifies those areas where the General Plan Update may differ from that plan.

In deciding to rely on regional planning documents, rather than a list of projects or a blended approach, the current effort underway to plan for the development of the Bayfront Planning Area within the City was evaluated. The Bayfront plan represents a reasonably foreseeable project; however, plans for that development are in flux, and there is not, as yet, a fixed plan for development.

As currently being evaluated, the Chula Vista Bayfront Master Plan is considering three master plan concepts. Each concept includes the development of 2,000 multi-family residential units, development of a resort/conference center, mixed-use office/commercial/hotel uses, and civic, marina, and park uses. The area is divided into three main planning areas: the Sweetwater District on the north, the central Harbor District, and the southern Otay District. Table 6-1 provides the general land use breakdown for the preferred plan for each of these areas.

TABLE 6-1
LAND USE SUMMARY FOR THE CHULA VISTA BAYFRONT MASTER PLAN

	District		
Use	Sweetwater	Harbor	Otay
Public/Open space	76 acres	78 acres	86 acres
Civic/Cultural	50,000 square feet	400,000 square feet	None
Hotel(s)	400 rooms	750 rooms	None
Retail, commercial, mixed use	420,000 square feet	1,550,000 square feet	None
Marina/Harbor uses	None	1,100 slips 24 acres	None
Resort conference center	None	2,000 rooms	None
Residential	None	1,300 units	700 units

SOURCE: NOP San Diego Unified Port District.

As part of the cumulative analysis, the potential effect of the development described in Table 6-1 was considered. The goal of the analysis was to consider what land use on the Bayfront property would represent a worst case condition, with the intent to use the worst case condition as the basis for the analysis of the cumulative impacts.

As a result of the review of the condition described in Table 6-1 on the Bayfront property, it was concluded that traffic-related impacts would be worse with the adopted plan (see attachment to Appendix E). This resulted from the fact that the potential residential use involved a corresponding reduction in other office, commercial, and retail uses. In addition, the project currently being considered for the Bayfront property removes the intensive development from the Sweetwater District (formerly known as the Mid-Bayfront area) and places that use in the central and southern portions of the Bayfront Planning Area. By moving this development out of the Sweetwater District, the most intensive development is moved further away from the sensitive San Diego Bay National Wildlife Refuge, and the project is designed to reduce biological and visual impacts relative to the currently adopted plan. The adopted Bayfront plan not only reduces the intensity of development in the Sweetwater District, but moves intense development to the Harbor District, and area previously impacted and currently planned for industrial and commercial uses. As such the currently adopted plan is equivalent or more intensive as it pertains to other impact areas of the cumulative discussion.

The currently adopted plan for the Bayfront is the land use that is part of the RCP developed by SANDAG. Since the RCP uses the adopted land use and the adopted land use represents a worst-case environmental condition, the RCP assumptions were used for the cumulative analysis.

The project is a comprehensive update of the City of Chula Vista General Plan. As considered in this EIR, a Preferred Plan is considered along with three other Scenarios. A broad examination of cumulative impacts involves considering the project together with growth in the region. Development pursuant to the proposed General Plan would occur in accordance with the land use designations and development intensities identified in the Land Use and Transportation Element. These designations promote the redevelopment of underused land to higher uses, compact development, mixed-use development to promote a pedestrian-friendly environment, an improved balance between employment and housing, and protection of Chula Vista's natural resources.

The Chula Vista General Plan designated land uses and the associated potential development correlates to regional growth estimates made by SANDAG. SANDAG estimates anticipated growth for the 18 cities and the unincorporated areas within San Diego County for the purpose of allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth.

The population growth projected to occur by 2030 would necessitate augmentation of the City's current housing stock, infrastructure, and public services. Cumulative impacts would occur as a result of multiple projects developed by 2030. The proposed General Plan's strategy is to anticipate the cumulative effects of growth and plan for it in a manner that is balanced in its approach. The focused growth strategy addresses future growth as a whole, and proposes policies to avoid impacts on a cumulative basis.

6.1 Land Use

The cumulative assessment of land use impacts relies on the SANDAG RCP. Land use impacts resulting from the adoption of the General Plan Update are not considered cumulatively considerable. The three largest jurisdictions in San Diego County, including Chula Vista, are currently updating their general plans; the City and County of San Diego are also in the process of updating their General Plans. As discussed in the RCP, these plans promote locating future development near existing and planned urban infrastructure, including transit. New development in the City would place additional demands on regional facilities such as roads and public facilities/utilities; most notably water, wastewater treatment, schools, solid waste disposal, and police and fire protection. The specific cumulative effects related to these issues are discussed under the respective headings in this section.

The GPU's focus on smart growth and walkable communities minimizes much of the potential impacts associated with accommodation of growth. By promoting mobility through an increased jobs/housing balance, transit oriented development, increased densities and more extensive mixed-use developments, Chula Vista's General Plan Update incorporates the planning principles outlined in the RCP.

> The RCP defines a shared vision of the future and lays a foundation to achieve that future by improving connections between land use and transportation plans using smart growth principles, using land use and transportation plans to guide decisions regarding environmental and public facility investments; and focusing on collaboration and incentives to achieve regional goals and objectives (SANDAG 2004: 31).

As recognized in the RCP,

> Chula Vista's draft general plan update takes two approaches to accommodating future growth. In several older areas west of Interstate 805, the plan proposes infill development and redevelopment zones. In the newer, eastern portion of the city, it proposes focusing development in master planned communities designed to support regional transit service, such as bus rapid transit (SANDAG 2004:42).

The RCP identifies seven categories for smart growth in the San Diego area. These include: (1) Metropolitan Center, (2) Urban Center, (3) Town Center, (4) Community Center, (5) Transit Corridor, (6) Special Use Center, and (7) Rural Community. For each of these categories, SANDAG identifies the type and intensity of land use, and the transportation and transit issues associated with that land use. These categories are designed to promote mixed use, particularly associated with transit centers; human scale development with a strong pedestrian orientation, and nearby recreational facilities and public plazas.

The RCP sets the following goals for area planning efforts (SANDAG 2004:76):

> 1. Focus future population and job growth away from rural areas and closer to existing and planned job centers and public facilities to preserve open space and to make more efficient use of existing urban infrastructure.
>
> 2. Create safe, healthy, walkable, and vibrant communities that are designed and built accessible to people of all abilities.
>
> 3. Integrate the development of land use and transportation, recognizing their interdependence.

The Land Use and Transportation Element sets a series of goals and objectives that address these issues. Goal LUT 6.1 states "Safe, healthy, walkable, and vibrant communities with a balance of jobs and housing." To further this goal Policy LUT 4.2 encourages new development that is organized around compact, walkable, mixed-use neighborhoods and districts in order to conserve open space resources, minimize infrastructure costs, and reduce reliance on the automobile. Higher density residential and mixed use development would be completed in accordance with Policy LUT 5.13 that provides the following guidelines:

- Create a pleasant walking environment to encourage pedestrian activity.
- Maximize transit usage.
- Provide opportunities for residents to conduct routine errands close to their residence.
- Integrate with surrounding uses to become a part of the neighborhood rather than an isolated project.
- Use architectural elements or themes from the surrounding neighborhood.
- Provide appropriate transition between land use designations to minimize neighbor compatibility conflicts.

Furthermore, policies associated with Objective LUT 24 stress the importance of integrating the City's planning efforts with other regional planning bodies.

Objective LUT 23 states that the City will:

> Work cooperatively with other agencies and jurisdictions to address regional issues that affect the quality of life for Chula Vista's residents, such as land use, jobs/housing balance, transportation, mobility, and economic prosperity, and advocate proactively with appropriate agencies regarding key issues.

The objective sets the following Policies that address that cooperation:

LUT 24.1: Continue to coordinate with regional planning agencies to address regional issues integral to Chula Vista residents' quality of life, and advocate proactively with appropriate bodies regarding key issues.

LUT 24.2: Coordinate City strategies with SANDAG, member jurisdictions, and other appropriate agencies and/or organizations to meet housing and employment needs.

Because of the use of "smart growth" principals the Preferred Plan and each of the scenarios further the goals of the RCP. Because of the conformance to the smart growth principals in the RCP, the incremental land use effect of adopting the proposed General Plan Update is not cumulatively considerable and is not significant.

6.2 Landform Alteration/Aesthetics

The cumulative assessment of landform relies on the RCP. SANDAG development in the Northwest and Southwest Planning Areas would occur in previously developed locations. The aesthetic effects of the proposed update in the Northwest and Southwest Planning areas are focused on the bulk and mass represented by the designated land uses. The potential for an adverse effect is contingent upon the design and location of future buildings.

Future growth has the potential to impact the visual environment through fundamental changes in land use. Adoption of the Preferred Plan and all three Scenarios would result in substantial changes to landforms and visual quality throughout the General Plan area. Increased density within the Urban Core and Montgomery Subareas would result in increased building heights and mass. In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses. Objectives LUT 9 and 10 promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista.

For the western areas of the city, Objectives LUT 10 and LUT 11 address the aesthetic quality of the developed portions of the city. Objective LUT 10 states:

> Create attractive street environments that complement private and public properties, create attractive public rights-of-way, and provide visual interest for residents and visitors.

While Objective LUT 11 states:

> Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

The policies associated with these objectives are described in detail in Section 5.2 of this report, and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista. This would be done by using the design review process for multi-family residential and commercial developments to review and evaluate projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone.

Implementation of these policies reduce direct visual quality impacts within the Urban Core Subarea resulting from the adoption of the Preferred Plan and all three Scenarios, but not to below a level of significance. Direct impacts were determined to remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

The RCP was used to assess the cumulative impact of this effect. The RCP EIR concluded that:

> Increased density in existing neighborhoods may result in buildings that are different in bulk and scale than existing structures. Depending on the buildings location and design, the construction of larger buildings within an already established community poses a significant visual resource impact…" (SANDAG 2004:5.3-10).

The RCP EIR goes on to provide mitigation for this effect in the form of a measure that calls for the design of projects to minimize contrasts in scale and massing between a project and the surrounding natural forms and developments.

Conformance with the proposed General Plan Update objectives and policies reduce visual quality impacts within the General Plan Update Area resulting from the adoption of the

Preferred Plan and all three Scenarios, but not to below a level of significance. As with the RCP mitigation measure, the General Plan policies call for the development of design standards. Impacts remain significant because of the lack of specific design standards at this time. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Development in the East Planning Area would result in a significantly changed landform condition. Much of this area has not been previously developed and would be significantly changed when development occurs. Implementation of mitigation measure 5.2-1 reduces the significant landform alteration and aesthetics impacts; however, the open, rolling hills would be permanently altered by development and the impact due to the change from open areas to developed areas remains significant and unmitigated. As discussed in the body of the EIR, landform alteration is a significant effect, both directly, through its development, and cumulatively as it adds to the general trend in the region of converting undeveloped land to developed land in response to population growth.

The cumulative analysis of the RCP EIR concludes that there would not be "…a cumulatively significant impact to designated or eligible scenic highways in the greater southern California region. Implementation of the proposed General Plan Update would therefore not have a cumulatively significant impact to designated or eligible scenic highways. State law requires a Scenic Highway Element as a component of their general plans and the expectation is that development guidance in these documents would reduce impact to scenic highways. Therefore, implementation of the proposed General Plan Update is determined to have a less than significant cumulative impact to scenic highways. The RCP concluded that the loss of views of significant landscape features and landforms would incrementally increase with implementation of the RCP and general plans within the region. Future development within the East Planning Area would permanently alter the open, rolling hills by development. The impact due to the change from open areas to developed areas are cumulatively significant and unmitigated.

6.3 Biological Resources

The cumulative assessment of biological resources impacts relies on the Chula Vista MSCP Subarea Plan. Preservation of the region's biological resources is being addressed through the implementation of regional habitat plans. Impacts to biological resources in Chula Vista are managed through the Chula Vista MSCP Subarea Plan. The Subarea Plan is part of the adopted General Plan and there are no proposed amendments to the Subarea Plan that would lessen the protection of sensitive biological resources. In addition, implementation of the Subarea Plan would contribute significant conservation outside the Chula Vista Subarea within the Chula Vista MSCP Planning Area in the unincorporated County Multi-Habitat Planning Area (MHPA).

In accordance with Section 15064 h(3) of the State CEQA Guidelines:

> . . . a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

Because compliance with the MSCP subarea plan prevents significant impacts to biological resources, the effect of the proposed General Plan Update would be less than cumulatively considerable. Therefore, no significant cumulative impacts would result.

Scenario 2 proposes to change the designation of a portion of Wolf Canyon from Open Space to Residential. This was identified in the biology and land use sections of this document as a significant direct impact. It is not considered a cumulative effect because on a regional basis, cumulative impacts to biology are addressed though the application of the MSCP and the Chula Vista Subarea Plan.

6.4 Cultural Resources

The cumulative assessment of cultural resources impacts relies on SANDAG's Regional Comprehensive Plan. The continued pressure to develop or redevelop areas would result in incremental impacts to the historic record in the San Diego region. Regardless of the efforts to avoid impacts to cultural resources, the more that land is converted to developed uses the greater the potential for impacts to cultural resources. While any individual project may avoid or mitigate the direct loss of a specific resource, the effect is considerable when considered cumulatively. The RCP concluded that the loss of historic or prehistoric resources from the past, present, and probable future projects in the Southern California/Northern Baja California, Mexico areas would contribute to cumulatively significant impacts to cultural resources. Implementation of the proposed General Plan Update, in conjunction with other future projects would result in a significant cumulative impact to cultural resources. Mitigation measure 5.4-1 requires a cultural resource survey or review, for any future development project that has not been previously examined, to identify any specific resources that could be potentially affected by the proposed General Plan Update. This mitigation measure would reduce incremental cumulative impacts associated with the adoption of the Preferred Plan or any of the Scenarios, but it would not reduce the cumulative impact to cultural resources to below a level of significance. Therefore, the cumulative impact on cultural resources is significant and unmitigated.

6.5 Paleontological Resources

The cumulative assessment of paleontological resources impacts relies on SANDAG's Regional Comprehensive Plan. As with cultural resources, the continued pressure to develop undeveloped areas would result in incremental impacts to the paleontological record in the San Diego region. Regardless of the efforts to avoid impacts to these resources, the more that land is converted to developed uses the greater the potential for adverse impacts. While any individual project may avoid or mitigate the direct loss of a specific resource, the effect is considerable when considered cumulatively. The RCP concluded that the loss of historic or prehistoric resources from the past, present, and probable future projects in the Southern California/Northern Baja California, Mexico areas would contribute to cumulatively significant impacts to paleontological resources. Implementation of the proposed General Plan Update, in conjunction with other future projects in the cumulative analysis areas would result in a significant cumulative impact to paleontological resources. Mitigation measures 5.6-1 and 5.6-2 require a pre-construction mitigation program or construction mitigation program, or both, if it is determined that potentially significant impacts to sensitive paleontological resources may result. These measures would reduce incremental cumulative impacts associated with the adoption of the Preferred Plan or any of the Scenarios, but they would not reduce the cumulative impact to paleontological resources to below a level of significance. Therefore, the cumulative impact on paleontological resources is significant and unmitigated.

6.6 Agriculture

The cumulative assessment of agricultural impacts relies on SANDAG's Regional Comprehensive Plan and the City of Chula Vista Subarea Plan. The city of Chula Vista contains 0.03 percent Prime Farmland and no Farmland of Statewide Importance. The limited amount of Prime Farmland in the city by itself is not considered substantial.

As noted in the agricultural discussion of this EIR, no areas of highly productive agricultural lands have been identified within the General Plan area. Lands zoned for agriculture in the Eastern Territories, specifically, within the eastern portions of the Otay Ranch, east of the Otay Reservoir, and north and south of Dulzura Creek, are generally located in areas with higher biological resource potential and interim agricultural uses have been phased out. Long-term agricultural use is not planned for the area but is allowed to continue where consistent with existing habitat preservation requirements and zoning.

Supplying agricultural land within the city of Chula Vista with an economical source of water is a major impediment. Domestic and agricultural uses must compete for this scarce resource. Rising land values, water costs, increasing taxes, habitat management planning, and other land use conflicts, combined with pressure for urbanization, have contributed to a significant reduction in agricultural uses and future viability for agricultural production within the plan area.

Although there is a trend in the region to convert land from agricultural uses to developed uses, and while the proposed amendments to the Chula Vista General Plan would not prevent that conversion, they also would not contribute to it. As such, impacts to agricultural resources are not considered cumulatively considerable.

The Preferred Plan does not alter the land use designation for the small amount of Prime Farmland within the General Plan Update area. Direct impacts to agricultural uses are considered not significant because the plan does not require or result in the conversion of prime farmland or farmland of statewide importance. The proposed General Plan Update continues to apply non-agricultural land uses to this 0.03 percent of prime farmland within the City and provides for its continued use as farming land. Policy EE 4.1 allows historical agricultural uses to continue within planned development areas as an interim land use in accordance with the MSCP Subarea Plan, and Policy EE 4.2 allows agricultural uses on privately owned property within the Chula Vista Greenbelt and elsewhere, provided the use is consistent with the provisions of the MSCP Subarea Plan as well as the zoning of the property. Because the Preferred Plan does not alter the land use designations for the small amount of Prime Farmland it does not contribute to the cumulative conversion of farmland and does not, therefore, represent a significant cumulative adverse impact.

6.7 Air Quality

The cumulative assessment of air quality impacts relies on the current Regional Air Quality Strategy (RAQS). In order to meet federal air quality standards in California, the California Air Resources Board (CARB) required each air district to develop its own strategy for achieving the NAAQS. The San Diego APCD prepared the 1991/1992 RAQS in response to the requirements set forth in the California Clean Air Act. The RAQS set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The current RAQS are based on the adopted General Plan. Because the proposed land use changes would be inconsistent with the adopted General Plan upon which the RAQS was based, the General Plan Update would not conform to the current RAQS. If a project is inconsistent with a City's adopted General Plan, it cannot be considered consistent with the growth assumptions in the RAQS. Consequently, the proposed General Plan Update is not considered consistent with the growth assumptions in the RAQS.

The City of Chula Vista has adopted and developed a number of strategies and plans aimed at improving air quality. The Carbon Dioxide (CO_2) Reduction Plan was designed to lower the community's major greenhouse gas emissions, strengthen the local economy, and improve the global environment. The CO_2 Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels (City of Chula Vista 2002a). A reduction in the usage of power generated by fossil fuels would result in a decrease in the total amount of air pollutants that are emitted into the atmosphere during power generation.

The City of Chula Vista's Growth Management Program is a component of the City's effort to create a comprehensive system to manage future growth (City of Chula Vista 1991). Air quality is one of eleven approved public facility and service topics with related "quality-of-life" indicator threshold standards and implementation measures listed in a policy statement dated November 17, 1987 that includes a list of the public facilities and services approved with City Council Resolution No. 13346 (City of Chula Vista 1991). The goal of the air quality portion of the program is to improve the ambient air quality of Chula Vista.

The City's Growth Management Ordinance and Growth Management Program require an Air Quality Improvement Plan (AQIP) to be prepared for all major development projects. A major development project is defined as a project that would develop 50 or more dwelling units. The purpose and role of the AQIPs is to reduce air emissions and energy use resulting from major development projects through improved project design and construction of structures that exceed mandated energy code requirements. The AQIP Guidelines establish the process for AQIP compliance.

In addition to the AQIPs that are required by the growth management ordinance for all projects over 50 units, the City also implements a number of measures recommended in the CO_2 Reduction Plan adopted by City Council on November 14, 2000. The plan is directed to lower the community's major greenhouse gas emissions, strengthen the local economy, and improve the global environment. The CO_2 Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels (City of Chula Vista 2002b). A reduction in the usage of power generated by fossil fuels would result in a decrease in the total amount of air pollutants that are emitted into the atmosphere. Implementation of these programs would go a long way to lessen adverse air quality impacts.

Nevertheless, the General Plan Update is considered to have a significant cumulative air quality impact. Future development projects within the cumulative study area are anticipated to significantly impact the local street network, resulting in the potential for an increase in carbon monoxide (CO) hot spots. Because air quality, particularly ozone, is a regional issue, not all measures needed to comply with state and federal standards are within the ability of Chula Vista to control. Mitigation of these regional issues requires coordination of the planning process with the regional air quality management program as implemented by the San Diego APCD.

Because the significant cumulative air impacts stem from an inconsistency between the proposed General Plan Update and the adopted General Plan upon which the RAQS were based, the only measure that can lessen the effect is the revision of the RAQS based on the updated General Plan. This effort is the responsibility of SANDAG and the San Diego APCD and is outside the jurisdiction of the City. While the RCP and the RTP provide for measures that reduce air quality impacts, such as pedestrian paths and bicycle paths, this impact results from the incompatibility between the growth projections and the proposed General Plan Update. As such, no mitigation is available to the City.

The San Diego Air Basin is non-attainment for federal and state ozone standards, state PM_{10} and state $PM_{2.5}$ standards. An increase in air emissions would be roughly proportional to an increase in population. While commercial and industrial sources would contribute to these emissions, proportional increase in residential units can serve as a general indicator of the potential for population growth and related air quality effects. Because the air basin is non-attainment for ozone, $PM_{2.5}$, and PM_{10}, the potential increase in residential units and the activities associated with population growth, even as mitigated in the General Plan Update and as otherwise mitigated by the City in its CO_2 Reduction Plan and Growth Management Program, represents a cumulatively considerable and significant air quality impact. Mitigation measure 5.11-1 would reduce incremental cumulative impacts associated with the adoption of the Preferred Plan or any of the Scenarios, but it would not reduce the cumulative impact to air quality resources to below a level of significance. This measure 5.11-1 addresses the mitigation of PM_{10} impacts by requiring active dust control during construction. It states that, as a matter of standard practice, the City shall require 10 standard construction measures during construction to the extent applicable. These measures are listed in Section 5.11.5 of this report.

6.8 Transportation

The traffic analysis conducted for this project employed the regional traffic database and modeling employed by SANDAG. As such, it included the projected growth for the region, including both growth in regional trips and anticipated expansion of the circulation system. Traffic effects identified in Chapter 5.10 of this EIR are significant. The traffic analyses included mitigation measures to reduce significant traffic impacts. These mitigation measures included operational improvements which would improve traffic flow and alleviate peak hour congestion; however, they would not increase the 24-hour capacity of a segment, which is based on the number of lanes, and would, therefore, not result in avoidance of impacts. As such, operational improvements would reduce impacts but not to a level less than significant. Therefore, significant and unmitigated cumulative traffic impacts are noted for the street network. The mitigation measures presented in Section 5.10.5 require operational improvements as specified in Table 5.10-4 of this EIR, or the contribution to the existing Transportation Development Impact Fee (TDIF) program or Traffic Signal Fee Program for applicable projects in eastern Chula Vista. These measures would reduce some of the incremental cumulative impacts associated with the proposed General Plan Update, however, these measures would not reduce the cumulative traffic impacts to below a level of significance. Therefore, the cumulative impact on traffic is significant and unmitigated.

6.9 Noise

The cumulative assessment of noise impacts relies on SANDAG's RCP. Cumulative noise impacts would generally be attributed to increases in traffic volumes. The noise analysis conducted for this EIR and presented in Chapter 5 used cumulative traffic volumes on area roads. Those traffic volumes assumed the growth in the City as projected in accordance with

the proposed General Plan Update, and, for areas outside the City, the traffic volumes projected by SANDAG for the RCP. The RCP concluded that cumulative traffic impacts throughout the region could exacerbate noise levels to such a magnitude to significantly affect existing land uses. Similarly, the noise analysis conducted for the project indicated that significant cumulative noise impacts would occur to existing receivers adjacent to certain circulation element roadways (see Table 5.12-6).

Section 3.5 of the proposed Environmental Element addresses noise. That section recognizes that land uses that generate significant noise should be separated from uses that are particularly sensitive to noise. To establish the compatibility of various land uses with exterior noise levels, the element specifies the use of CNEL to address potential adverse noise effects. Plans developed in the city of San Diego or county of San Diego would not contribute to noise in the city of Chula Vista or be affected by noise generated within the city. As such, avoidance of direct noise effects resulting from new development as identified in Chapter 5.12 of this EIR would also ensure avoidance of an incrementally considerable contribution to an adverse condition.

The noise contour maps presented in Section 5.12 reflect the cumulative effects of traffic noise. Policies associated with Objectives EE 21 and EE 22 protect people from excessive noise through careful land use planning and the incorporation of appropriate mitigation techniques as well as protect the community from the effects of transportation noise. Implementation of these policies reduce impacts from this additional noise, but not to below a level of significance. Future traffic volumes are the basis for the predominance of future noise effects. The traffic volumes used in the noise report are based on the cumulative effects of traffic. As such, the noise analysis is a cumulative analysis. A significant impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage, direct and cumulative impacts remain significant and not mitigated. The adoption of the Preferred Plan or any of the Scenarios have the same effects since they are the same at the general plan level of analysis.

6.10 Public Services and Utilities

Potable water for the city of Chula Vista is provided by member agencies of the SDCWA whose mission it is to provide a safe and reliable supply of water to the San Diego region. To meet their long-term obligation of supplying water to member agencies, SDCWA has developed several plans. These plans use estimates of future populations developed by

SANDAG to forecast the need for water and delivery systems. Key among these plans are the UWMP and the Regional Water Facilities Master Plan.

In order to project and plan for future water needs, SDCWA has entered into a Memorandum of Agreement with SANDAG to use the most recent regional growth forecast for planning purposes. Using the growth forecasts, SDCWA has developed the UWMP and updates it every five years. This plan considers the demands for population and water use through the next 20 years.

Because the UWMP is closely integrated with the regional growth forecasts by SANDAG, the basis of those forecasts is critical to supply and demand projections. SANDAG projects growth based in part on local general plans. The projections involve development of an estimate of regional population growth and the distribution of that population within the region. To the extent that development occurs in accordance with the general plans used to prepare the growth forecasts, their long-term impact on water supply and demand were included in the Authority's plans. To the extent that a project differs from the General Plan assumptions, it could vary from the SDCWA projection.

Because water supply forecasts are based on the regional growth forecasts conducted by SANDAG, and because the regional growth forecasts rely on adopted general plans, amending the adopted general plan with land uses proposed for the General Plan Update to increase development potential would result in an inconsistency between the water supply forecast and Chula Vista's General Plan Update. The inconsistency results from the fact that with the adoption of the General Plan Update the supply forecast would not be based on the adopted plan.

The cumulative effects of water supply are addressed in the EIR prepared for the RCP. That document indicated that the Regional Water Facilities Master Plan is sufficiently flexible to "…allow for the sizing and timing of water supplies to be adjusted to meet the demand…" (SANDAG 2004 5.12-10). And concludes that "Therefore, adequate water supplies are expected to meet the additional need anticipated with the implementation of the RCP." (SANDAG 2004 5.12-10).

Each of the scenarios proposes to increase development potential in each update area of the city. Table 5.14-2 contains projected water demand for the Update areas, for the Preferred Plan, and Scenarios 1, 2, and 3 compared to existing conditions. Because demand for water is expected to increase along with the increase in population, and because a long-term water supply is not assured, the supply of potable water is considered a cumulatively significant issue.

Objective PFS 2 contains policies to increase efficiencies in water use, wastewater generation and its re-use, and handling of stormwater runoff throughout the city through use of alternative technologies. Objective PFS 3 contains policies to ensure a long-term water

supply to meet the needs of existing and future uses in Chula Vista. Compliance with the policies associated with Objectives PFS 2 and 3 and implementation of the mitigation measures 15.14-1 and 5.14-2, which require the appropriate projects to demonstrate compliance with the requirements of SB 610 and SB 221, would reduce the impact to water supply; however, because there is no assurance that water supply would be available to adequately serve the projected increase in population resulting from the proposed General Plan Update, the cumulative impact remains significant and unmitigated.

Sewer services are addressed in two elements of the General Plan Update. Based on recent flow analysis performed by City staff, it is estimated that by the year 2020 approximately 25 MGD of sewage would be generated within the city. Additional capacity would be needed to meet this demand.

Recently, City of San Diego Metropolitan Sewage System (Metro) allocated additional capacity rights to participating agencies. The completion of the Southbay treatment plant resulted in an additional 15 MGD treatment capacity to the Metro regional system. While the allocation process has not yet been finalized, the anticipated allocation to the City of Chula Vista is currently estimated to be 1.027 MGD. As the city's sewage generation approaches its capacity rights, Metro will take appropriate steps to provide the city with additional capacity to meet build-out needs.

Policies GM 1.9 and GM 1.11 would require that major development projects provide a public facilities financing plan that articulates needed facilities and identifies funding mechanisms as well as provides the authority to withhold discretionary approvals and subsequent building permits from projects that are out of compliance with threshold standards. Implementation of Policies GM 1.9 and GM 1.11, avoid impacts resulting from completion of infrastructure. Therefore, cumulative impacts to wastewater are not significant.

6.11 Energy

The cumulative assessment of energy impacts relies on SANDAG's Regional Comprehensive Plan. The RCP concluded that future population growth in the Southern California/Northern Baja California, Mexico region would result in an increase in the need for energy resources, which would be considered to have a cumulatively significant energy impact.

As population increases, demand for energy also increases. Because the development and management of energy resources are not presently within the control of the City, there is no assurance that an adequate supply of energy would be available. While it is anticipated that an adequate supply of energy would be available, experience has shown that shortages in energy supply can occur. As with direct impacts, Mitigation Measure 5.8-1 would lessen the extent of cumulative energy impacts that would result from the approval of the Preferred

Plan or any of the Scenarios. This measure calls for the City to continue to implement the Energy Strategy and Action Plan and continuing implementation of the CO_2 Reduction Plan. Although the City has taken steps to limit the expanding need for energy, the potential increase in development represented by the proposed General Plan Update has the potential to add incrementally to this demand and represents an unmitigated significant cumulative impact.

6.12 Housing and Population

The RCP EIR prepared by SANDAG (2004) indicates that there will be a potential increase in regional population between 2004 and 2030 of 1,012,737 people and an increase of 301,065 housing units. These figures represent a 3.4 percent increase over previous, non-RCP projections. The RCP EIR concluded that this represented a significant regional impact to housing and population. Table 6-2 provides the projected increase for the Preferred Plan and each of the Scenarios relative to the existing condition. Of the million person increase anticipated in the region, the Preferred Plan would represent about 10 percent of that amount. The increase in housing units represents about 14 percent of the regional growth. Because the regional growth was considered significant and the population and housing growth forecast for Chula Vista is a substantial portion of those numbers, housing and population is considered cumulatively considerable and therefore a significant impact.

The environmental impacts associated with increased population are discussed in the individual topical sections of this report. Impacts to issues, such as traffic, air quality noise, etc., due to population and housing increases from the adoption of the Preferred Plan and all three Scenarios are discussed in Sections 5.1 through 5.16 and Chapter 7 of this document. As indicated in the RCP EIR there is no feasible mitigation available to reduce the regional population increase, and, therefore, the impact remains significant and unmitigated.

TABLE 6-2
INCREASE IN POPULATION AND HOUSING COMPARED TO EXISTING CONDITIONS FOR THE GENERAL PLAN UPDATE PLANNING AREA

	Population	Increase	Percent Change	Housing Units	Increase	Percent Change
Existing	222,300	–	–	74,231	–	–
Preferred Plan	326,900	104,600	47	115,093	40,862	55
Scenario 1	319,843	97,543	44	112,136	37,905	51
Scenario 2	328,134	105,834	48	115,358	41,127	55
Scenario 3	313,953	91,653	41	110,164	35,933	48

SOURCE: City of Chula Vista 2005.

7.0 GROWTH INDUCEMENT

State CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impact of the project. Growth inducement includes, "ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

The proposed General Plan Update is specifically intended to provide for the orderly growth of the city of Chula Vista, define the limits to that growth, and act as a mechanism to accommodate and control future growth. Development permitted by land use policy would provide needed housing for all income levels, create compact and pedestrian-friendly urban development, and protect natural resources. The General Plan Update would result in a more inclusive community, maintain a balance between housing and employment, and foster a stable economic base and diverse employment opportunities.

The proposed General Plan Update would accommodate an increase in population within the General Plan Area in comparison to the adopted General Plan (Table 7-1). New residents would locate in Chula Vista because of the diverse employment base and proposed new housing developments.

TABLE 7-1
INCREASE IN POPULATION AND HOUSING UNITS OVER ADOPTED PLAN

Scenario	Population Increase Over Adopted Plan	Increase in Housing Units Over Adopted Plan
Preferred	41,153	16,638
1	34,170	13,681
2	42,461	16,903
3	28,280	11,709

NOTE: Population and dwelling units are for incorporated area of the city.

The proposed General Plan Update would accommodate additional growth beyond existing conditions and beyond the level possible under the adopted General Plan. As such, people may choose to live in Chula Vista rather than elsewhere in the San Diego region.

SANDAG is the agency responsible for forecasting regional growth. They indicate that population grows in two ways: (1) natural increase, which results from the number of births over deaths; and (2) net migration, which is primarily based on the condition of the local

economy (SANDAG 2003). The growth effects of the General Plan Update are manifest, therefore, in the issues associated with people electing to live and work in Chula Vista, rather than elsewhere in the region and beyond. The significance of those effects are contingent upon where they would have lived had this additional housing and employment capacity not been available.

Because the General Plan establishes land uses that can accommodate growth, thereby removing a barrier to growth in the city, it is growth inducing. The issues discussed in the Environmental Impact Analysis section of this EIR address the direct and indirect effects of this growth. Since there are impacts resulting from issues associated with this growth, the growth-inducing impacts of the proposed General Plan Update area considered significant and not mitigated.

8.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires that an EIR consider significant irreversible environmental changes that would result from the proposed actions should they be implemented. According to the CEQA Guidelines:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Implementation of the proposed General Plan Update would result in the short-term commitment of nonrenewable and/or slowly renewable energy resources and natural resources including lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water due to construction activities. Both residential and non-residential development would require the long-term commitment of energy resources in the form of natural gas and electricity generated by coal, natural gas or hydroelectric power. Increased motor vehicle travel would result in the long-term commitment of fossil fuels unless alternative fuel vehicles ultimately replace the internal combustion engine on a broad scale. Other nonrenewable resources that would be affected by growth and development under the General Plan Update are the conversion of undeveloped land to urban uses. Policies and Programs are included in the proposed General Plan Update to mitigate the loss of use of these resources to acceptable levels.

9.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

All potential environmental impacts associated with the General Plan Update have been addressed in the preceding sections of this EIR.

10.0 PLAN TO PLAN – NO PROJECT ALTERNATIVE

In the event that the plan update is not approved, the currently adopted General Plan would remain in effect. This condition is the No Project alternative. The adopted General Plan land use map is shown in Figure 10-1 and Table 10-1 provides a description of the land use categories for the adopted General Plan.

The adopted City of Chula Vista General Plan (1989, as amended) has 10 elements grouped into three main categories: Community Development, Environmental Resources Management, and Hazard Management. Each category reflects specific aspects of development policies. The Issues, Goals, and Objectives section of each element within these categories provides the framework for development of the planning area. The Policies and Guidelines section identifies actions that the City should follow to attain the stated goal. Those are often specific and quantified guidelines, which can directly translate into regulatory controls.

The elements of the adopted General Plan are:

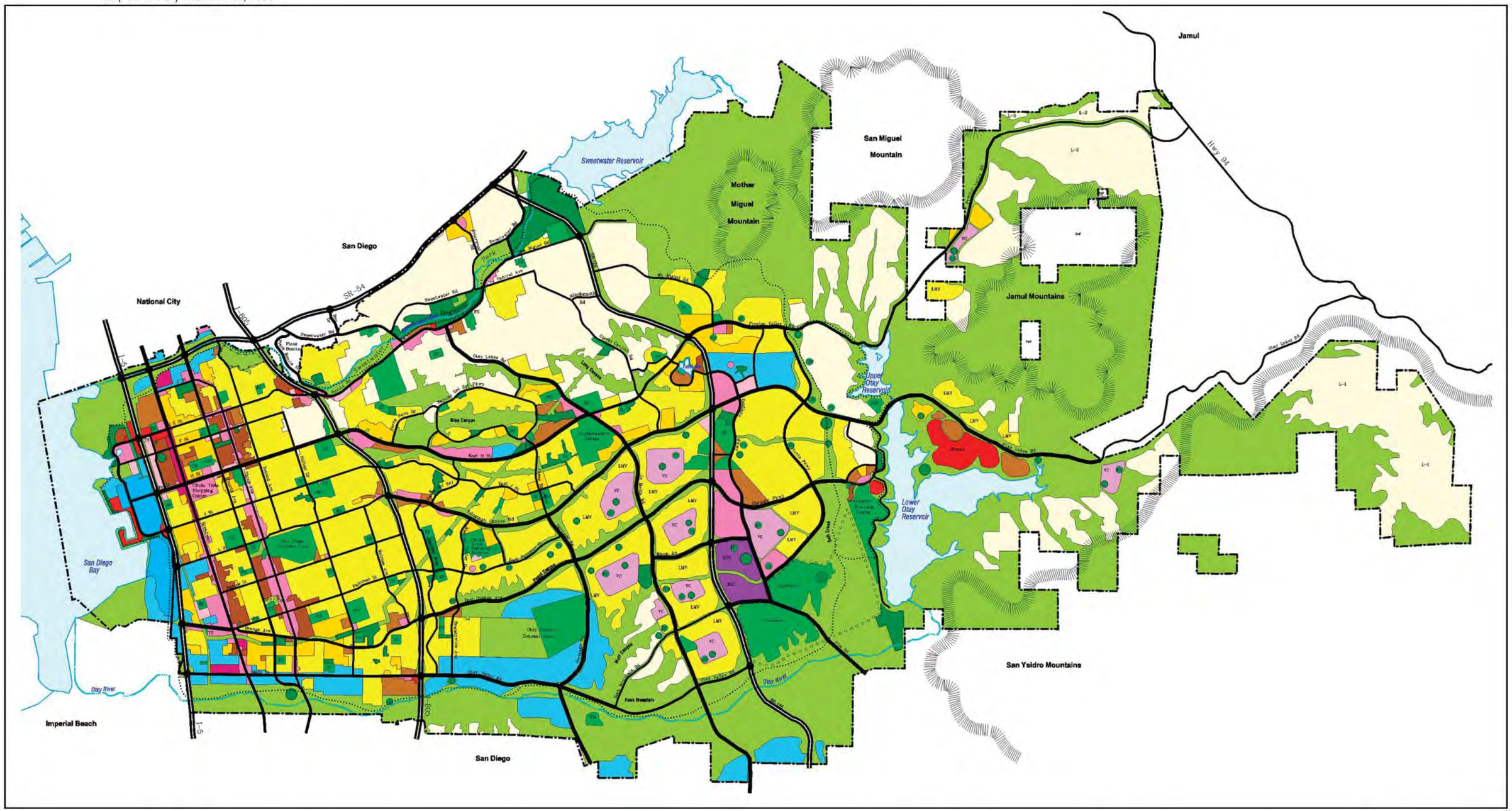
- Land Use
- Circulation
- Housing
- Conservation and Open Space
- Parks and Recreation
- Safety
- Noise
- Public Facilities
- Growth Management
- Child Care

The Chula Vista General Plan is not self-implementing. Intermediary plans necessary to execute planning actions include specific plans, general development plans (GDP), sectional planning area (SPA) plans master and precise plans, and redevelopment plans. Each of the above must be entirely consistent with the General Plan since they implement the General Plan.

The Chula Vista General Plan area is divided into five planning areas under the adopted General Plan: Bayfront, Central Chula Vista, Montgomery, Sweetwater, and Eastern Territories. The Central Chula Vista area is the focus of a future specific plan. The Montgomery area has a separate, adopted specific plan and the unincorporated Sweetwater area has a separate community plan adopted by the County of San Diego.

In the Eastern Territories, GDPs refine the General Plan. GDPs generally address large, previously undeveloped areas. Within the GDP area, SPA plans are developed to guide

Map Source: City of Chula Vista, 2004



LAND USE

RESIDENTIAL	du/ac
Low1 (Min. 4 ac. lot size)	0.25
Low2 (Min. 2 ac. lot size)	0.50
Low3 (Min. 1 ac. lot size)	1.0
Low	0-3

RESIDENTIAL	du/ac
Low-Medium	3-6
Low-Medium Village	3-6
Medium	6-11
Medium-High	11-18
High	18-27

COMMERCIAL
- Retail
- Thoroughfare
- Visitor
- Professional & Administrative

INDUSTRIAL
- Research & Limited Industrial
- General Industrial

PUBLIC & OPEN SPACE
- Public & Quasi Public
- Open Space
- Parks & Recreation
- Water

SPECIAL PLAN AREAS
- Resort
- Special Conference Center
- Village Core
- Eastern Urban Center
- University Study Area
- Special Study Area

CIRCULATION SYSTEM
- Freeway
- Prime Arterial & Major Street (6 lanes)
- Major Street (4 lanes)
- Collector Street (2&4 lanes)

PUBLIC FACILITIES

HS	High School
JHS	Junior High School
ES	Elementary School
CC	Civic Center
L	Library
FS	Fire Station
TS	Transit Station/Stop

- Future
- Future - Community Park
- Future Neighborhood Park (All sites not included)
- Greenbelt Trail System
- General Plan Area
- River or Stream

0 Feet 5400 N

FIGURE 10-1
Adopted General Plan Land Use Map

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TABLE 10-1
ADOPTED GENERAL PLAN LAND USE CATEGORIES

Symbol	Category	Description
	The Residential category includes the following six categories:	
L	Low Residential (0-3 DUs/gross ac.)	This category includes single-family detached dwellings on medium-size lots. Although not a minimum or a standard, this category includes single-family detached dwellings on large rural and estate-type lots. Residential neighborhoods in the Sweetwater Valley best exemplify the category. For development of the eastern territories within this category, the following subcategories apply: <u>Residential-Low (1)</u> • Maximum density of 0.25-du/ac and four-acre minimum parcel size for areas with average slope less than or equal to 25 percent. • Maximum density of 0.125 du/ac and 8-acre minimum parcel size for areas with average slope greater than 25 percent and less than or equal to 50 percent. • Maximum density of 0.05 du/ac and 20-acre minimum parcel size for areas with average slope greater than 50 percent. <u>Residential-Low (2)</u> • Maximum density of 0.5 du/ac and 2-acre minimum parcel size for areas with average slope less than or equal to 25 percent. • Maximum density of 0.25 du/ac and 2-acre minimum parcel size for areas with average slope greater than 25 percent.
LM	Low Medium Residential (3-6 DU/gross ac.)	This category includes single-family detached dwellings on medium size lots as typically found in Chula Vista's existing single-family areas west of I-805. Although not a minimum or a standard, these areas are typically 7,000 square foot lots. In addition, under the concept of cluster development, single- family dwellings on smaller lots, zero lot line houses, and some single-family attached units (townhouses and patio homes) could also be consistent with this designation.

TABLE 10-1
ADOPTED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
LMV	Low Medium (Village) Residential (3-6 DU/gross ac.)	Residential-Low Medium (Village): The LMV category is permitted only in large-scale master planned communities containing a variety of uses, including commercial, designed and organized in a manner that encourages non-automotive travel and pedestrian orientation: a village. To ensure character differentiation and village viability, the LMV category requires specific area densities within the range of three to six dwelling units per acre. Therefore, LMV categories are accompanied by a specific density and number of homes. The density is not tied to any segment of the range. This housing type includes a wide variety of lot sizes, predominantly single-family, organized in patterns which contribute to a small-scale pedestrian-oriented community. The occurrence of some attached homes within this designation is consistent with the intent, as long as the character of the development area is consistent with the typical single-family neighborhood.
M	Medium Residential (6-11 du/gross acre)	This category includes small single-family, detached units on smaller lots, zero lot line homes, patio homes, and attached units, such as duplexes and townhouses. The category also includes mobile home parks.
MH	Medium-High Residential (11-18 du/gross acre)	This category includes multi-family units, such as townhouses and garden apartments. The category also includes mobile home parks.
H	High Residential (18-27+ Dwelling Units per Gross Acre)	This category is essentially for apartment type dwellings ranging from low-rise to high-rise structures and must contain substantial landscaped open space for use by the residents. No maximum density is included for this category.
C	Commercial	Currently, there are five commercial categories; retail, thoroughfare, visitor, professional/administrative and resort as described below: Retail Commercial: This category includes neighborhood, community, and regional shopping centers; retail establishments typical of traditional downtowns (i.e., shops on 3rd Avenue between E and G Streets); and service commercial. Limited thoroughfare retail and automobile-oriented services may constitute a small part of a planned commercial development. Thoroughfare Commercial: This category includes all uses identified for Retail Commercial plus thoroughfare retail and automobile-oriented services. Visitor Commercial: This category includes transient lodging (hotels, motels), restaurants, commercial recreation and retail establishments. Professional and Administrative: This category is intended for

TABLE 10-1
ADOPTED GENERAL PLAN LAND USE CATEGORIES
(continued)

Symbol	Category	Description
		professional and administrative office uses. Limited retail uses serving nearby office employees are also permitted. Resort: Large-scale resort facilities proposed to serve as "destination"-oriented facilities with a full range of resort-related services. Siting is intended for areas with significant attractions, such as bodies of water or other natural features, which provide ample recreational opportunities and scenic vistas. Resort facilities include, but are not limited to hotels and motels, resort-oriented commercial services, restaurants and retail shops, cultural arts centers, recreational uses, time share residences, conference centers, and permanent residences. Specific intensity of use for resorts within this category shall be determined at the SPA level, with consideration give to general plan consistency, environmental impacts and other relevant factors.
I	Industrial	This category allows research and limited industrial uses such as research and development, light manufacturing, warehousing, flexible use buildings which combine the previous uses with office space, and public utilities.
CP/P	Community Park/Park	This overlay designation indicates the approximate location of community parks (CP) and neighborhood parks (P). These facilities are to be fixed in location at the SPA level.
P/OS	Public/Quasi-Public/ Open Space	These areas include open space, agriculture, reserve, public and quasi-public, parks and recreation. Open space and reserve provides for open space such as floodplains and mountains, limited recreation uses, rural residential. Agricultural uses include farms, orchards, pastures, and livestock raising. Public and Quasi-Public, Parks and Recreation includes existing areas used by schools, churches, hospitals, civic centers, fire stations, and libraries and future sites designated for such uses.

SOURCE: City of Chula Vista General Plan 1989.

NOTE: Each of the above categories can be tailored to meet specific objectives through use of an overlay designation. Specifically, the general plan encourages a mix of land use categories through precise planning in the following locations: the area surrounding Town Centre I; the Eastern Urban Center in the vicinity of the intersection of SR125/Orange Avenue; the San Diego Trolley Stations at E, H and Palomar Streets; areas adjacent to Broadway between Flower Street on the north and I Street on the south; and the area south of Orange Avenue and adjacent to the Olympic Training Center (OTC) site. This last area is designated as a Community Activity Center to complement the OTC facility and provide village character to the area. In addition, a mixed use overlay is applied to the "Village Cores" on the Otay Ranch Plan where a mix of residential, commercial, educational and community serving uses are planned and designed to function as an integrated whole.

specific projects. A SPA is a portion of a planned community area, created for the purpose of having identified common services, a strong internal identity, and an integrated pattern of land uses and circulation. SPAs are designed with a comprehensive master plan illustrating the overall urban design, building, site, and landscape guidelines. Precise and Master plans consist of written and graphic material setting forth a specific development scheme for all or a portion of a parcel of land.

The following discussion describes the current General Plan and considers the effect of its continued application. As part of this discussion, the application of the adopted General Plan is considered in light of both existing conditions and the Preferred Plan. Tables 10-2 and 10-3 present a comparison of land uses by acres and residential units respectively for the update areas. This information for the Adopted General Plan, existing condition, and each of the Scenarios is also illustrated in Charts 10-1 through 10-4.

TABLE 10-2
ACRES BY SCENARIO/ALTERNATIVE FOR THE UPDATE AREAS

	Land Use				
Scenario	Commercial	Industrial	Open Space	Park	Public
1	967	632	219	409	935
2	903	606	141	416	786
3	982	996	205	357	982
Adopted	955	598	515	154	980
Existing	450	252	–	17	180
Preferred	914	796	227	458	860

TABLE 10-3
RESIDENTIAL UNITS BY SCENARIO/
ALTERNATIVE FOR THE UPDATE AREAS

	Subarea			
Scenario	Montgomery	Otay Ranch	Urban Core	Total
1	7,679	11,658	17,090	36,427
2	8,400	15,585	15,664	39,649
3	8,997	8,805	16,178	33,980
Adopted	4,724	7,541	10,481	22,746
Existing	4,963	–	9,499	14,462
Preferred	8,174	14,241	16,756	39,322

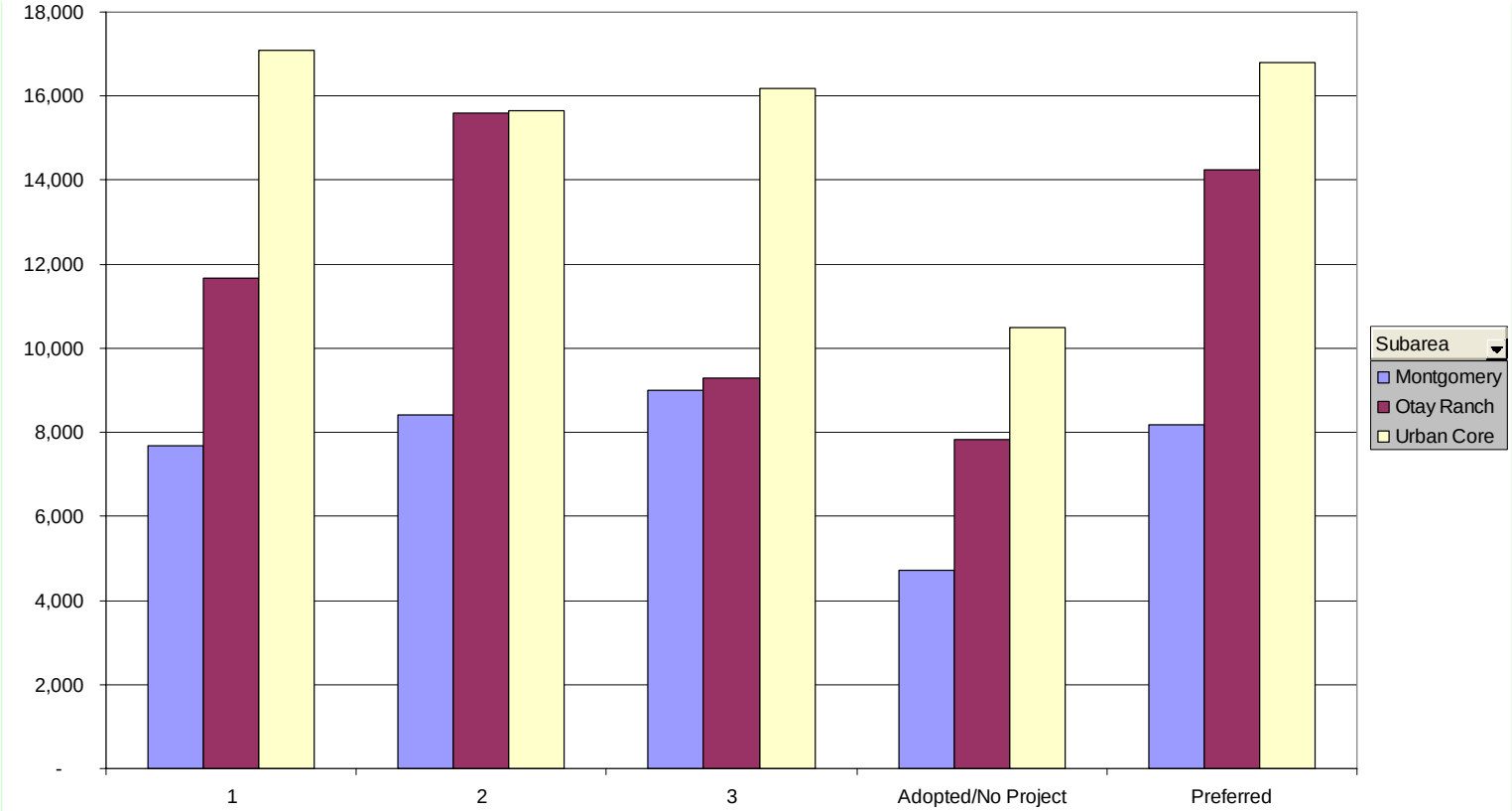

Chart 10-1
Residential Units by Scenario

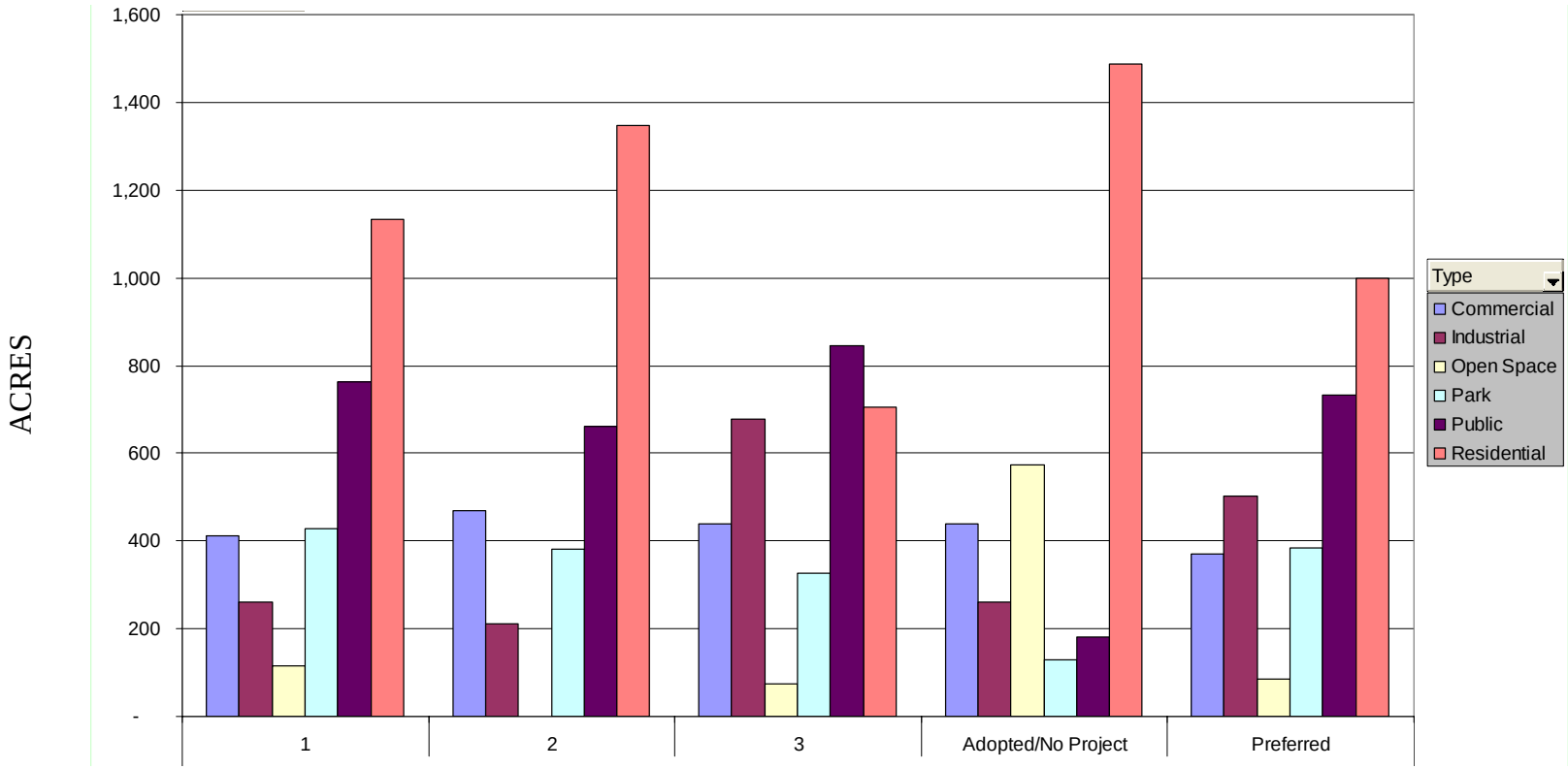

Chart 10-2
Land Use Comparison
Otay Ranch Subarea

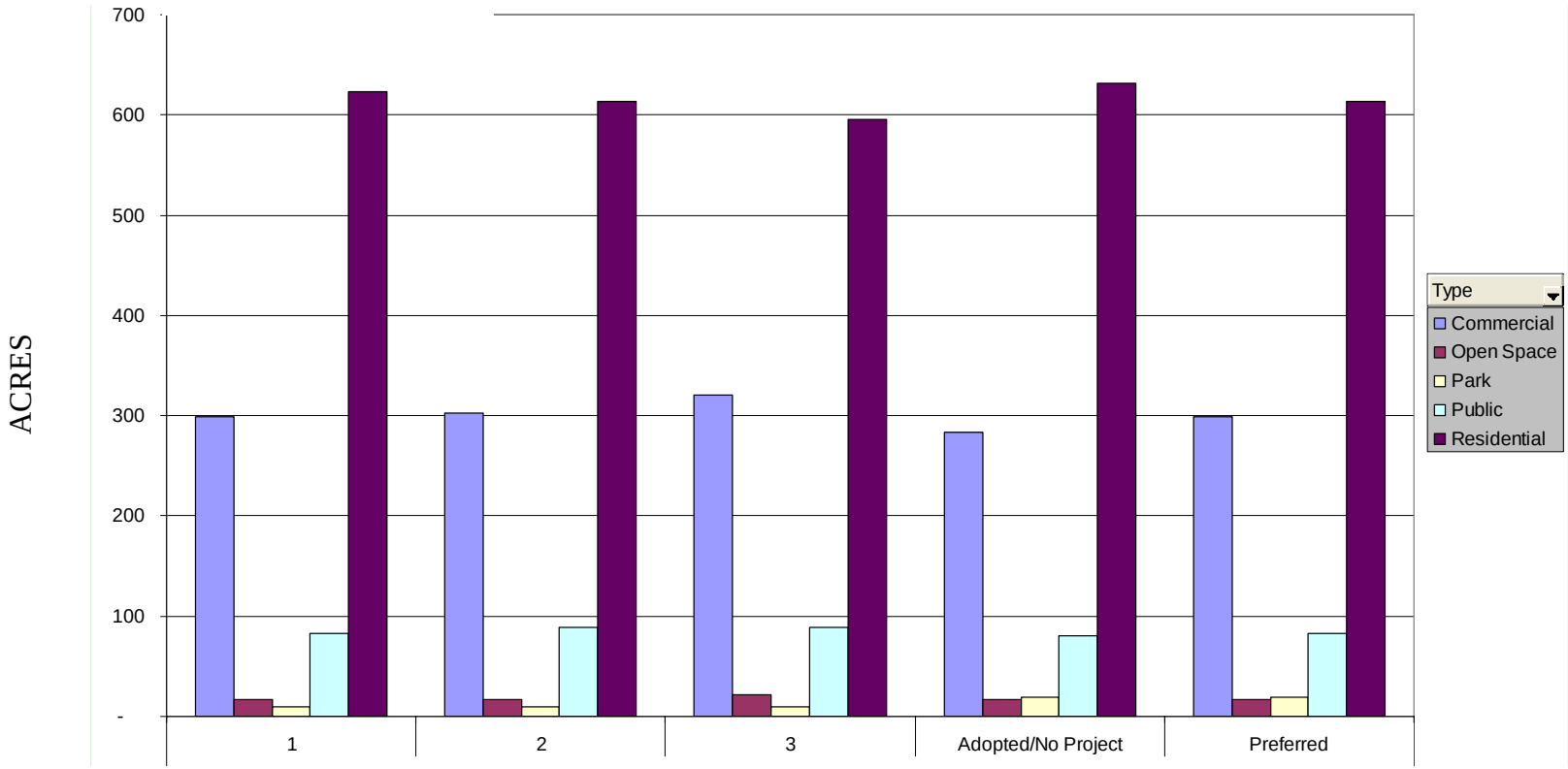

Chart 10-3
Land Use Comparison
Urban Core Subarea

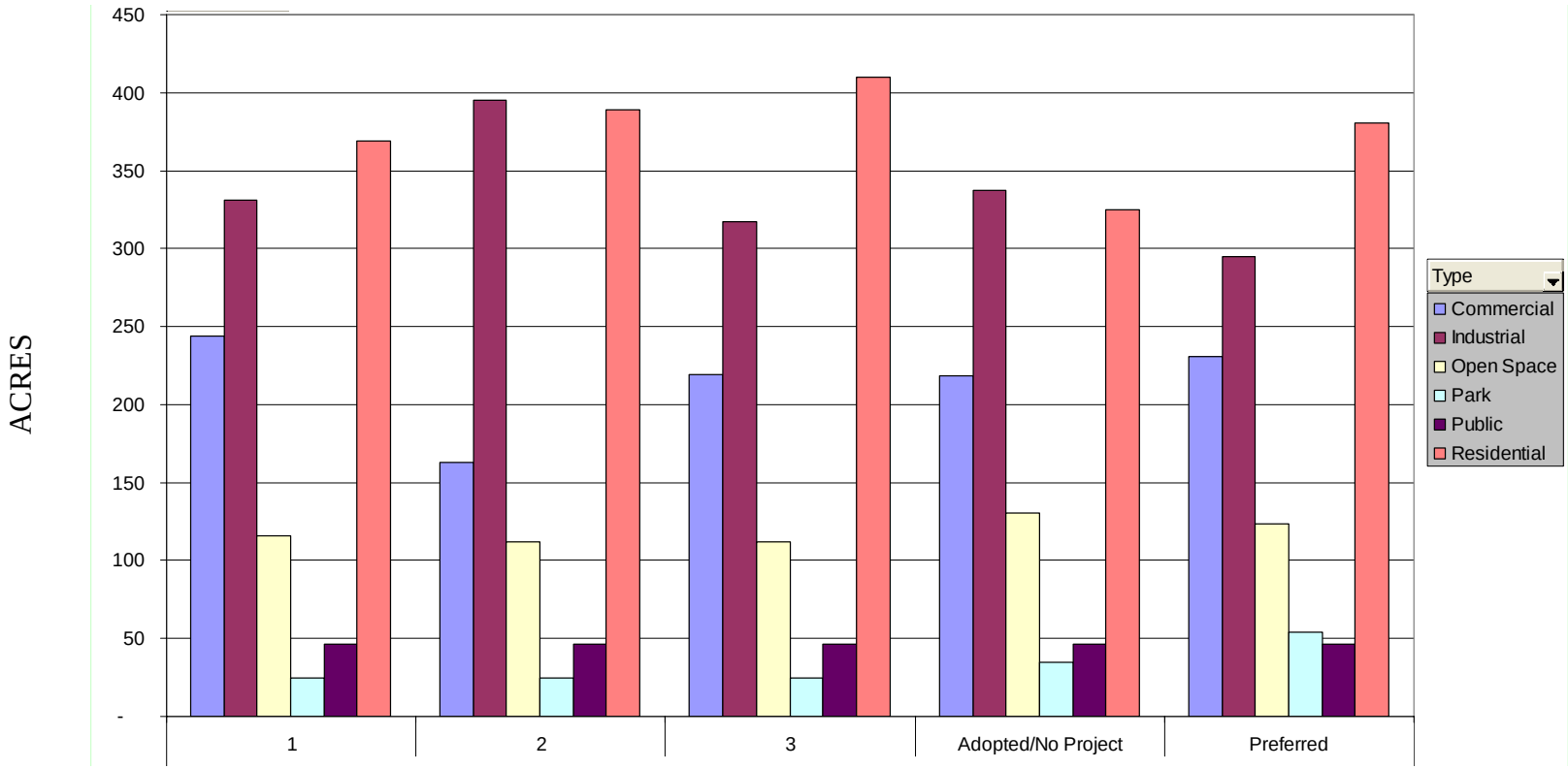

Chart 10-4
Land Use Comparison
Montgomery Subarea

10.1 Land Use

The adopted Land Use Element is contained in the Community Development part of the General Plan, which also includes the Circulation, Public Facilities, Housing, Growth Management, and Child Care Elements, and reflects the physical changes anticipated with implementation of the policies for each of the elements. The Environmental Resources Management part of the General Plan reflects the natural, environmental, and historic aspects of the planning area and includes the Open Space and Conservation Element and the Parks and Recreation Element. The Hazard Management category reflects the efforts affecting the population's safety from natural and man-made hazards and includes the Safety and Noise Elements.

The community and urban design section of the adopted Land Use Element provides an overview of nine subject areas: landform, urban core, eastern urban center and community activity centers, greenbelt, open space and trail system, gateways, regional transit, neighborhood character, and land development.

As shown on Figure 10-1, the areas of open space are designated within the Chula Vista Greenbelt and along major canyons and corridors of the city. The highest density urban development is located in Central Chula Vista, the area near Southwestern College, and the Eastern Urban Center. Areas with the lowest density residential uses are located primarily in the Sweetwater Planning area and Eastern Territories. Pockets of low-density residential also exist in the Hilltop neighborhood west of I-805.

The adopted General Plan includes four primary land use categories: Residential; Commercial; Industrial; and Public, Quasi-Public, and Open Space. A detailed description of each of these land use categories is provided in the adopted General Plan and is summarized on Table 10-1.

The Land Use Element also designates scenic highways. Designation of scenic highways is intended to preserve attractive natural and man-made amenities along the roadway and its scenic corridor. The boundaries of a scenic corridor include the area visible outside the highway's right-of-way (view from the road) and vary with the natural characteristics of the landscape as viewed by motorists.

The Chula Vista Greenbelt, a continuous 28-mile open space linkage encircling the city, is the backbone of the city's open space and park system. Although a majority of the acreage is comprised of undeveloped open space, commercial recreation uses such as golf courses and the Olympic Training Center are components. Other principal elements of the open space and non-vehicular circulation network include numerous community parks, public areas, and natural areas, which provide open space and trails.

Analysis

The adopted General Plan land use element designates the general location and intensity of housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other land uses. Table 10-4 provides a comparison of the total number of dwelling units designated under the adopted General Plan, existing conditions, and those that could be developed pursuant to the Preferred Plan or any of the scenarios for the proposed General Plan Update.

TABLE 10-4
SUMMARY OF TOTAL DWELLING UNITS
WITHIN THE PLANNING AREA

		Increase Relative to Existing Condition		Increase Relative to Adopted Plan	
Condition	Total Units*	Units	Percent	Units	Percent
Existing	74,231	–	0	(23,806)	(24)
Adopted*	98,037	23,806	32	–	0
Scenario 1*	112,136	37,905		14,099	
Scenario 2*	115,358	41,127		17,321	
Scenario 3*	110,164	35,933		12,127	
Preferred Plan*	115,093	40,862	55	17,056	17

*Planning area numbers include 1,000 planned units in the Bayfront Planning Area and 9,331 units in the unincorporated area.

Development under the adopted General Plan represents a 32 percent increase in dwelling units compared to the existing condition. Development under the Preferred Plan would increase the overall number of dwelling units by 17 percent compared to the adopted General Plan and a 55 percent increase compared to the existing condition.

Table 10-5 provides the land uses by subarea for the adopted General Plan for those areas that are proposed to be changed as a result of the General Plan Update.

Northwest Planning Area

In the Northwest, the highest density urban development is located within the Urban Core. The adopted General Plan represents less residential development in areas currently restricted to retail use along the downtown segments of Third Avenue, along E Street in the vicinity of Third and Fourth Avenues, and decreased residential and transit-oriented uses in the vicinity of major transit corridors, over the Preferred Plan. The proposed General Plan Update proposes changes to increase density and to allow for a greater degree of mixed-use development in key locations promoting pedestrian and transit oriented development.

TABLE 10-5
ADOPTED GENERAL PLAN LAND USES
FOR THE UPDATE AREAS

		Adopted General Plan	
Planning Area/Subarea	Type	Acres	Units
East	Commercial	400.0	-
	Industrial	261.2	-
	Open space	367.7	-
	Park	113.0	-
	Public	853.0	-
	Residential	1,077.2	7,541
East Total		3,072.1	7,541
Montgomery	Commercial	218.4	111
	Industrial	337.0	-
	Open space	130.2	71
	Park	34.5	-
	Public	46.3	21
	Residential	325.3	4,521
Montgomery Total		1,091.7	4,724
Urban Core	Commercial	336.2	984
	Open space	16.9	-
	Park	19.0	-
	Public	80.2	23
	Residential	578.7	9,474
Urban Core Total		1,031.0	10,481

NOTE: Approximately 38 acres located outside of the adopted General Plan boundary are being considered for addition to the General Plan area.

For the Northwest Planning Area, the future number of residential units under the adopted General Plan exceeds the existing condition by 1,429 units and is 6,386 units fewer than the Preferred Plan. Within those portions of the Northwest Planning Area that are scheduled to change, the adopted General Plan has 12 acres of commercial use more than currently exist and 15 acres less than are proposed under the Preferred Plan. There is no industrial land existing or proposed under the adopted plan or the proposed plan in the area of change for the Northwest Planning Area.

The potential for incompatibilities between land uses would exist with implementation of either the adopted General Plan or the General Plan Update. The adopted General Plan would allow the conflicting land use of the landfill and neighboring/underlying land uses to remain. It would, however, result in lower building heights in transit focus areas in the Northwest Planning Area and would, therefore, represent less of an impact to the community character of a portion of the Urban Core than would the Preferred Plan or any of the scenarios. In the area along H Street east of Fourth Avenue, building heights are limited to 45 feet for development that is not within a redevelopment area and limited to 100 feet for development within a redevelopment area. Future buildings complying to these standards would be lower than those that could be permitted under the proposed criteria. Because they would be reduced in scale, they would be more in keeping with the character of the existing neighborhood.

Southwest Planning Area

For the entire Southwest Planning Area, the future number of residential units under the adopted General Plan exceeds the existing condition by 483 units. Within those portions of the Southwest Planning Area that are scheduled to change, buildout under the adopted General Plan provides for the addition of approximately 41 acres of commercial and 85 acres of industrial uses than that of existing conditions, and 12 acres less of commercial and 42 acres more of industrial relative to the Preferred Plan.

In the Southwest Planning Area, the adopted General Plan designates the West Fairfield District research/limited manufacturing. The Preferred Plan proposes a mix of retail commercial, professional office, research, and limited manufacturing designated as Mixed-Use Commercial. An educational facility within the West Fairfield District to serve the residents of the South Bay and take advantage of transit facilities at the Palomar Trolley Station is also proposed. These uses are generally consistent with one another and would not significantly alter the existing character of this area. The change in designation from research/limited manufacturing to Mixed-Use Commercial described above would not divide an established neighborhood or otherwise adversely affect community character.

East Planning Area

Within the East Planning Area, there are 16,145 more homes designated in the incorporated area than currently exist. The areas proposed for planned land use changes in the East Planning Area are largely undeveloped. Within that area, buildout of the adopted General Plan and Otay Ranch GDP provides approximately 556 acres of commercial use, 301 additional acres of industrial uses, and 1,619 additional acres designated for residential use.

In the East, land use impacts center around the conversion of open areas to developed areas. This conversion would occur under either the adopted General Plan or the General Plan Update and would be considered a significant impact.

Development under the adopted General Plan would not achieve the increased residential and transit-oriented uses, which conflicts with one of the proposed General Plan Update objectives of targeting higher-density and higher-intensity development into specific focus areas to protect stable residential neighborhoods and to create mixed-use urban environments that are oriented to transit and pedestrian activity.

10.2 Landform Alteration/Aesthetics

Landform alteration/aesthetics is addressed in the adopted General Plan in the Land Use Element and Conservation and Open Space Element, as well as in the Area Plans. The Land Use Element of the adopted General Plan addresses the need to protect scenic resources while at the same time recognizes that urbanization contributes to substantial changes. The adopted Land Use Element defines three general categories of land use, which, through development, would affect the visual and scenic resources of the community. These categories include urban development, transportation corridors, and open space areas.

The adopted Land Use Element provides that residential density and clustering be based on sensitivity to physical characteristics of development sites with regard to landform preservation, open space/greenbelt systems, natural amenities, and visual and function quality. Residential density and residential clustering are addressed in Sections 6.2 and 6.3, respectively. General design and construction guidelines include requirements, among other things, to cluster and configure new development to emphasize existing topography to avoid altering hillsides to fit structures; vary lot sizes, elevation, and orientation; preserve natural drainage systems; sensitively design streets to relate to existing contours while maintaining safety; use landform grading techniques to avoid large cut/fill slopes, especially in highly visible areas and minimize building pad areas. Disturbed slopes are to be revegetated with native species, maintained until established, and should be compatible with existing surrounding vegetation. General design and construction guidelines are listed in Section 6.5.1 and additional landform grading measures are provided in Section 7.7.

The adopted General Plan calls for new development to be sited on the least visually sensitive portion of the site to preserve natural landforms and preserve important natural views of the site. Architectural themes and/or massing should vary and structures should be consistent with the scale and character of terrain and surrounding neighborhoods. Natural topographic features such as skyline ridges and significant hillsides should be preserved to serve as a connecting resource between intensive development and the natural topographic features to be preserved. Aesthetics are specifically addressed in Section 6.5.6.

The Land Use Element of the adopted General Plan contains goals, objectives, and policies that specifically relate to the preservation of scenic roadways. This may include creation of substantial open space areas adjacent to the roadways, special landscaping, varied building setbacks, special signage and use of graphics, etc. These roadways include Marina Parkway, F Street Gateway, Fourth Avenue, Bonita Road from I-805 to State Route 125 (SR-125), East H Street/Proctor Valley Road (easterly from I-805), East L Street and Telegraph Canyon Road (from Hilltop to Lower Otay Lake), Olympic Parkway, Otay Lakes Road, and Otay Valley Road.

The plan calls for all properties adjacent to scenic routes, with the exception of properties in the R-1 zone, to have the "P" Precise Plan Modifying District or other districts requiring design review attached to the underlying zone. In connection with any tentative map submitted on R-1 properties abutting a scenic route, each applicant is required to submit a proposal for beautification of the portion of the scenic route adjacent to the development. Designated Scenic Roadways are discussed in Section 8.2.

The Land Use Element of the adopted General Plan provides objectives and policies for the preservation of natural open space areas and corridors to the extent feasible. These areas include unique finger canyons; native trees or mature man-made groves of unique visual characteristics or environments; rock outcroppings; ridgelines and dominant topographic features that are highly visible from adjacent public areas or neighborhoods; and areas that are part of, or adjacent to, an open space linkage system.

The Open Space and Conservation Element of the adopted General Plan provides the planning goals for protection of natural resources, including regionally significant visual resources. These resources include wildlife habitat, canyons, ridgelines, waterways, and significant rock outcroppings. Existing conservation and open space policies are intended to maintain designated open space in its natural state with selected areas developed for parks and active recreation facilities and other areas actively managed for enhancement of wildlife and plant habitat and development of a trail system. Additionally, these policies protect Mother Miguel Mountain, which rises 1,200 feet above the Sweetwater Reservoir and Proctor Valley. It is the intent of the City to preserve this dominant landform in its natural state and direct urban development areas away from the landform which defines the mass of the mountain.

Goals and objectives developed for the Central Chula Vista, Bayfront, Montgomery, Sweetwater, and Eastern Territories areas provide specific objectives and goals for the enhancement of residential, retail commercial, open space, and industrial use areas. Specific objectives include special treatment of entry locations, as well as specific guidelines for design, street trees, furnishings, signage, and ongoing property management. Special emphasis is placed on enhancement of older single-family residential neighborhoods, major thoroughfares, and bayfront industrial uses.

Analysis

As with the General Plan Update, the adopted General Plan would result in a change in bulk and mass in the Montgomery and Urban Core Subareas. Although the bulk and mass would be reduced when compared to the General Plan Update, there still is a potential for a significant impact to the aesthetic character of these areas. Conversely, development in accordance with the adopted and Preferred Plan could improve the visual character of these areas. The adopted General Plan and the Preferred Plan include policies that provide for the review and evaluation of projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans. Conformance with these policies would avoid adverse aesthetic impacts resulting from the increased development density in the Northwest and Southwest Planning Areas, as well as design issues associated with the enhancement of the City's gateways for both the adopted General Plan and the proposed General Plan Update.

In the East Planning Area, aesthetic impacts would result primarily from the conversion of open areas to developed areas. As with the Northwest and Southwest Planning areas, the adopted General Plan contains policies for the East that include design review processes to provide specific site planning, architectural, and landscaping requirements for single-family and multi-family residential and commercial and industrial development. Additional sign guidelines apply to commercial and industrial design. The change from open areas to developed areas in the east was recognized in the adopted plan and the Preferred Plan would not affect the scope or nature of that condition. As such, aesthetic impacts in the east would not be significant for the adopted General Plan and the proposed General Plan Update.

10.3 Biological Resources

As stated in Section 5.3, Biological Resources, the City adopted the Multiple Species Conservation Program (MSCP) Subarea Plan on May 13, 2003, as a part of the City's General Plan. The MSCP is a comprehensive, long-term habitat conservation program intended to protect species against the potential impacts of habitat loss associated with development of both public and private lands. The City's Subarea Plan is an implementation mechanism for the broader MSCP Subregional Framework Plan, which ultimately executes

and enforces California Natural Communities Conservation Planning. All projects subject to City approval must be in conformance with the City's Subarea Plan.

Analysis

In accordance with the adopted Subarea Plan, impacts to sensitive biological resources must be mitigated to below a level of significance. Therefore, implementation of the adopted General Plan would not result in significant unmitigated impacts to biological resources. The General Plan Update would resolve mapping inconsistencies that exist with the adopted General Plan and the MSCP Subarea Plan and Otay Ranch RMP. It does not represent an increase in the potential for impacts to biological resources over the adopted plan, in that both plans conform to and do not materially revise the Subarea Plan or RMP.

The proposal for designating residential uses in a portion of Wolf Canyon under Scenario 2 would represent an increased impact to biological resources relative to the adopted plan which has the area designated as open space.

10.4 Cultural and Paleontological Resources

The adopted General Plan does not contain policies addressing archaeological or paleontological resources. However, the EIR adopted for the General Plan in 1989 addressed potential impacts associated with the adoption of the plan. The General Plan EIR contained a map of "areas of cultural resource potential." With the work that has been completed since that study, areas of prehistoric archaeological resource potential were updated (see Figure 5.4-1).

Analysis

In open areas, there is the potential that future development, as permitted by the adopted plan, could impact historic and prehistoric archaeological sites as well as paleontological sites and any potential impacts to cultural or paleontological resources would be considered significant. The proposed General Plan Update and the adopted General Plan both forecast development over roughly the same area. As such, both the General Plan Update and the adopted plan have a roughly equivalent potential for impacting cultural and paleontological resources.

10.5 Geology and Soils

Section 3 of the Safety Element of the adopted General Plan addresses seismic activity and the promotion of public safety from geologic hazards. The adopted General Plan indicates that five regional faults, including two potentially active faults, the Sweetwater and La Nacion; and three inferred faults, the Otay Valley fault, the Telegraph Canyon fault, and the San Diego Bay-Tijuana fault have the potential to result in seismic effects within the General

Plan area. Section 3.2 of the Safety Element contains policies regarding public safety associated with geologic hazards.

Analysis

As with the proposed General Plan Update, implementation of the adopted General Plan has the potential to result in significant impacts related to geology and soils. Future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils. Potential impacts resulting from geologic hazards would be reduced below a level of significance through project-specific design measures, including compliance with applicable building codes (e.g., Title 24 of the California Code of Regulations, and the UBC). Additionally, a comprehensive, site-specific soil and geologic evaluation shall be conducted for all future projects to determine potential hazards and site conditions.

10.6 Agriculture

Goal 2 of the Open Space and Conservation Element of the adopted General Plan strives to "maintain agriculture as a viable land use in the planning area." The main objective is to "preserve highly productive agricultural lands for the production of food and fiber." The adopted General Plan states that agricultural uses may be maintained or introduced on rural and estate lots in the Eastern Territories. However, planning efforts for the Eastern Territories are focused on accommodating planned development primarily in the western and central portions; preservation of prominent landform features in the areas of Proctor Valley, Otay Valley, Telegraph Canyon, Poggi Canyon, Wolf Canyon, and Salt Creek; and protection of sensitive biological, water, and scenic resources associated with the Chula Vista Greenbelt.

Analysis

Adoption of Objective EE 4 represents a policy change from Objective 5 under Goal 2 of the adopted General Plan which calls for preservation of highly productive agricultural lands for the production of food and fiber.

For both the adopted General Plan and the proposed General Plan Update, the loss of agricultural land and land suitable for the production of crops would not result in a significant impact due to the limited amount of potential agricultural land within the General Plan area. There are no Farmlands of Statewide Importance within the General Plan area and the loss of the limited amount of Prime Farmland within the General Plan area is not considered significant.

10.7 Water Resources and Water Quality

Water quality and watershed protection principles and policies are incorporated into the adopted General Plan in three major areas: the Land Use Element, the Public Facilities Element, and the Conservation and Open Space Element. Objective 25 under Goal 7, Water Use and Reclamation, the adopted land use element discusses the promotion of water conservation through increased efficiency in essential uses and use of low water-demand landscaping. The stated goal of the adopted plan is to control the growth in demand for water and wastewater treatment. Additionally, the Land Use Element includes several policies and guidelines for landform grading and for the protection and preservation of drainage courses.

The Public Facilities Element discusses guidelines and policies for collecting and conveying stormwater. This element states that the Drainage and Flood Control Master Plan shall be used to guide future stormwater facility development. The Conservation and Open Space Element contains a goal to conserve and maintain the quality of existing water resources by careful management of lands adjacent to water resource areas.

Analysis

As with the proposed General Plan Update, implementation of the adopted General Plan has the potential to result in significant impacts related to water resources and quality. Future development would increase runoff by increasing the impermeable surface area in the city. Adherence to water quality control measures required under the San Diego County Municipal Permit would avoid potential water quality impacts. The proposed General Plan Update does not represent an appreciable change from the adopted General Plan as it pertains to water resources and water quality.

Inspection of the comparison for Poggi Canyon Basin 1 shows a very slight decrease in runoff for each storm event associated with implementation of the Preferred Plan. Decreases in runoff due to rezoning are typically associated with changing land use from that associated with high percentages of impermeable surfaces, such as industrial and commercial land use, to that associated with lower percentages of impermeable surfaces, such as residential land use.

10.8 Transportation

The General Plan Update would allow additional traffic on area roadways over that of the Adopted Plan. The Preferred Plan for the proposed General Plan Update would impact 15 non-urban core roadways street segments compared to the adopted General Plan, which would impact 23 segments.

Because no Urban Core roadways would exist, the level of service requirements under the currently adopted plan would remain the same. Development under the current adopted

General Plan would not implement the Urban Core Roadway Classifications specified in the General Plan Update. As such, there would be no urban amenities program and the level of service used to assess area roadways would remain at LOS C.

Analysis

With the continued development under the current General Plan, 23 roadway segments would have a significant impact, because they are projected to operate at a level of service below C. These roadways include the following segments:

E Street between Marina Boulevard and I-5
E Street between First Avenue and I-805
H Street between I-5 and Broadway
H Street between Hilltop and I-805
H Street between I-805 and Hidden Vista Drive
J Street between Bay Boulevard and Broadway
L Street between Hilltop and I-805
Palomar between I-5 and Broadway
Main Street between I-5 and Broadway
Bonita Road between 1-805 and Plaza Bonita Road
Bonita Road between Plaza Bonita Road and Willow Street
Bonita Road between Willow Street and Central Avenue
Telegraph Canyon Road between I-805 and Crest/Oleander Avenue
Telegraph Canyon Road between Crest/Oleander Avenue and Paseo del Rey
Telegraph Canyon Road between Paseo del Rey and Paseo Ranchero
Otay Lakes Road between SR-125 and Eastlake Parkway
Otay Lakes Road between Eastlake Parkway and Lane Avenue
Olympic Parkway between Heritage and La Media
Rock Mountain between La Media and SR-125
Third Avenue between L Street and Palomar
Third Avenue between H Street and L Street
Eastlake Parkway between Otay Lakes Road and Trinidad Cove
Lane Avenue between Proctor Valley Road and Otay Lakes Road

FREEWAYS

Four freeways were considered in the traffic analysis. This included 24 segments of Interstate 5, Interstate 805, and State Routes 125 and 54. Under the adopted plan, all but 8 segments represent a significant traffic impact. Since the freeway system is developed and managed by Caltrans, the City has only limited ability to affect the level of congestion on these roadways. Portions of these freeways that would represent a significant impact with development under the adopted General Plan include:

I-5 between SR-54 and L Street
I-805 between SR-54 and Telegraph Canyon Road
SR-125 between SR-54 and Mount Miguel Road
SR-54 between I-5 and Briarwood Road

10.9 Air Quality

The adopted City of Chula Vista General Plan contains several policies that relate to air quality. In most cases, policies dealing with air quality are described in the context of other planning issues.

The adopted Public Facilities Element indicates that in instances when a Health Risk Assessment is required, the City shall involve the APCD in the screening and scoping process, and the risk assessment shall address potential emissions and indicate whether any have the potential to adversely affect human health and the environment, and to what extent (City of Chula Vista 1989). A Health Risk Assessment must be submitted to the APCD if the APCD classifies the facility as a high or intermediate priority (County of San Diego 1996). The Growth Management Element explains that the air plan for the San Diego region, the Regional Air Quality Strategy (RAQS), is designed to accommodate a moderate amount of new development and growth throughout the basin. The Growth Management Element states that when the General Plan was prepared, air quality planning was based on SANDAG's adopted series 5 regional growth forecast. Objective 6(b) of the Growth Management Element describes air quality and transportation as issues that require active participation in regional and subregional cooperative planning forums, issues that affect the quality of life in Chula Vista and the San Diego region, and issues which must be addressed on a regional basis. Objective 6(c) strives for active participation in regional planning efforts to meet air quality standards in accordance with established federal and state requirements.

The adopted General Plan Conservation and Open Space Element states that "the policies of the General Plan are to be in conformance with the State Implementation Plan on Air Quality for the region" (City of Chula Vista 1989).

Analysis

For comparative purposes, an assessment of the anticipated air emissions resulting from buildout of the adopted General Plan and the preferred alternative in the year 2030 was prepared using the URBEMIS2002 computer program (Yolo-Solano Air Quality Management District 2003). Using the land use designations for the adopted and preferred alternative General Plans, along with trip generation rates developed by SANDAG (SANDAG 2002), and URBEMIS2002 defaults for other parameters, average daily emissions were estimated using URBEMIS2002 assuming buildout of the plans in the year 2030.

The results of the modeling, which include both mobile and area source emissions, are shown in Tables 10-6 and 10-7. As seen in the tables, with the exception of reactive organic gases, the emissions resulting from the preferred alternative, including NO_x compounds, are anticipated to be less than those that would occur under the adopted General Plan. In addition, the adopted General Plan shows an increase in PM_{10} and SO_X relative to the existing condition.

While construction activities may have relatively short-term air quality impacts, increases in multi-family residential use and improvements in the emission factors from the motor vehicle fleet are predicted to result in an improvement in air quality from non-construction daily operations in the year 2030 relative to the existing condition, but be slightly worse than the Preferred Plan.

Because the adopted General Plan is consistent with the goals and objectives of the RAQS, implementation of the adopted plan would comply with the SANDAG TCM Plan and, therefore, would not result in significant air quality impacts. The proposed General Plan Update is not in compliance with the SANDAG TCM Plan and as such is considered a significant impact. The adopted General Plan conforms to the program and does not represent a significant air plan impact.

10.10 Noise

The adopted General Plan contains a noise element that briefly describes the existing noise environment within the city, provides a discussion of noise and its effects, and considers the regulation and abatement of noise generated by various sources. The adopted noise element does not contain specific numerical noise/land use compatibility levels that establish significance criteria.

Analysis

As with the proposed General Plan Update, development of the adopted General Plan has the potential to result in significant noise impacts. Development under the adopted General Plan would result in an increase in allowable density along highways and major arterials, adjacent to rail, and within the airport influence area of Brown Field. As with the proposed General Plan Update, all future projects with the potential to be exposed to noise in excess of the specified limits shall be required to complete a noise analysis to the satisfaction of the Environmental Review Coordinator to reduce any noise impacts to below a level of significance.

The General Plan Update would incorporate specific noise planning criteria into the General Plan, which the adopted General Plan does not contain. As such, the proposed plan amendment represents an improvement over the adopted plan in this regard.

TABLE 10-6
AVERAGE DAILY EMISSIONS TO THE SAN DIEGO AIR BASIN
RESULTING FROM BUILDOUT OF THE ADOPTED GENERAL PLAN
(pounds per day)

	Existing Condition (2005)			Adopted General Plan (2030)			Change		
Season/Pollutant	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]
Summer									
CO	276,810	1,009	277,819	102,868	773	103,641	(173,942)	(236)	(174,178)
NOx	28,005	1,132	29,137	8,985	1,135	10,120	(19,020)	3	(19,017)
ROG	20,747	3,778	24,525	8,238	4,896	13,134	(12,509)	1,118	(11,391)
SO_X[2]	244	17	261	300	10	310	56	(7)	49
PM_{10}	23,872	3	23,875	52,544	2	52,547	28,672	(1)	28,672
Winter									
CO	307,557	8,216	315,773	106,350	10,675	117,026	(201,207)	2,459	(198,747)
NOx	42,538	1,204	43,742	13,458	1,233	14,691	(29,080)	29	(29,051)
ROG	25,033	10,739	35,773	9,481	14,114	23,595	(15,552)	3,375	(12,178)
SO_X[2]	243	12	255	295	16	311	52	4	56
PM_{10}	23,872	1,063	24,935	52,544	1,399	53,944	28,672	336	29,009

[1]Totals may differ due to rounding.
[2]Emissions calculated by URBEMIS2002 are for SO_2.

TABLE 10-7
COMPARISON OF AVERAGE DAILY EMISSIONS
ADOPTED GENERAL PLAN, SCENARIOS, AND PREFERRED PLAN
(pounds per day)

	Adopted General Plan (2030)			Scenario 1 (2030)			Scenario 2 (2030)			Scenario 3 (2030)			Preferred Alternative (2030)		
Season/ Pollutant	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]	Mobile Sources	Area Sources	Total[1]
Summer															
CO	102,868	773	103,641	108,917	802	109,720	107,037	813	107,851	111,003	787	111,790	96,225	821	97,046
NOx	8,985	1,135	10,120	9,509	1,219	10,727	9,340	1,241	10,581	9,693	1,198	10,892	8,381	1,256	9,638
ROG	8,238	4,896	13,134	8,739	5,465	14,204	8,605	5,625	14,230	8,891	5,367	14,258	7,784	5,741	13,525
SO_X[2]	300	10	310	318	10	328	312	10	322	324	10	334	280	10	290
PM_{10}	52,544	2	52,547	55,604	3	55,607	54,622	3	54,625	56,686	3	56,688	49,028	3	49,031
Winter															
CO	106,350	10,675	117,026	112,588	11,913	124,502	110,619	12,258	122,877	114,748	11,698	126,446	99,340	12,510	111,850
NOx	13,458	1,233	14,691	14,243	1,329	15,572	13,991	1,355	15,345	14,519	1,307	15,826	12,555	1,373	13,928
ROG	9,481	14,114	23,595	10,036	15,773	25,809	9,860	16,238	26,097	10,229	15,489	25,718	8,852	16,576	25,428
SO_X[2]	295	16	311	312	18	330	306	19	325	318	18	336	275	19	294
PM_{10}	52,544	1,399	53,944	55,604	1,564	57,168	54,622	1,610	56,232	56,686	1,536	58,221	49,028	1,644	50,672

The proposed General Plan Update would result in additional traffic on area roadways, and, given equivalent speeds and day/night distributions, would result in higher noise levels adjacent to area roadways. As discussed above, the projected increase in traffic volumes, however, are small enough so that the increase in potential noise will be imperceptible on a plan-to-plan basis.

10.11 Public Services and Utilities

Development of the adopted General Plan has the potential to result in significant impacts to Public Services and Utilities. The adopted General Plan provides policies and guidelines for the provision of public services and utilities in Chula Vista. Implementation of these policies would ensure that any impacts to public services and utilities would be below a level of significance.

10.11.1 Fire

Fire protection services are addressed in the Safety and Growth Management Elements of the adopted General Plan. Section 2.1 of the Safety Element provides requirements for locating fire stations such that, among other considerations, 75 percent of dwelling units should be located within a five-minute response time and 95 percent within a seven-minute response time. This section also addresses design requirements for fire flow, minimum road widths and clearances, and hydrant spacing.

Fire protection services are also addressed in the Growth Management Element. Objective 1 of the adopted Growth Management Element requires that the pace and pattern of residential, commercial, and other non-residential development be coordinated with provision for adequate public facilities and services, including fire protection services, and to monitor changes in adequacy standards to measure the impacts of growth.

Fire protection services are addressed in the City's Threshold Standards Policy, the Otay Ranch GDP, and the Fire Station Master Plan. The Fire Department Strategic Plan which will lead to an updated Fire Station Master Plan is being prepared by the Chula Vista Fire Department. The sufficiency of the nine-station network identified in the adopted Fire Station Master Plan will be assessed through the update of that plan, based upon the parameters of the Strategic Plan.

10.11.2 Police

Police services are addressed in the Growth Management Element of the adopted General Plan. Objective 1 of this element requires that that the pace and pattern of residential, commercial, and other non-residential development be coordinated with provision for adequate public facilities and services, including police services, and to monitor changes in adequacy standards to measure the impacts of growth.

Police services are addressed in the City's Threshold Standards Policy and Otay Ranch GDP. With regards to police services, the Threshold Standard requires that, among other considerations, 81 percent of Priority I emergency calls (i.e., life threatening) and 57 percent of Priority II urgent calls (i.e., misdemeanor in progress) throughout the city shall be responded to within seven minutes and shall maintain an average response time of 5.5 and 7.5 minutes, respectively.

The objective under Section E, Part 6, Law Enforcement Facilities, of the Otay Ranch GDP is to make provisions for criminal justice facilities, including jails, courts, and police facilities adequate to serve the Otay Ranch area.

Table 10-8 summarizes the projected police calls for service at buildout above adopted General Plan. The central police station located on Fourth Avenue is sufficient to meet the increase in law enforcement needs projected to result from new development in the city under the adopted General Plan or under the General Plan Update. However, in order to maintain response times, more police officers will be needed. Adherence to police protection standards would be necessary to ensure that adequate levels of service are maintained. An increase in the number of police officers would not require additional facilities and, therefore, does not represent a significant environmental impact.

TABLE 10-8
PROJECTED POLICE CALLS FOR SERVICE AT BUILDOUT ABOVE ADOPTED GENERAL PLAN

Condition	Northwest Planning Area	Southwest Planning Area	East Planning Area	Total
Scenario 1	3,568	1,542	457	5,567
Scenario 2	5,645	1,762	532	7,939
Scenario 3	2,644	1,818	2,034	6,496
Preferred Plan	4,576	1,459	801	6836

SOURCE: City of Chula Vista Police Department.

10.11.3 Schools

Schools are addressed in the Public Facilities and Growth Management Elements of the adopted General Plan. The unifying objective under Goal 6, Schools, of the Public Facilities Element is to facilitate the provision of school services within each district as population growth occurs; however, control and siting of school sites falls under the jurisdiction of local public school districts, not the City.

Schools are addressed under Objective 1 of the adopted Growth Management Element. Objective 1 requires that the pace and pattern of residential, commercial, and other non-residential development be coordinated with provision for adequate public facilities and

services, including schools, and monitor to changes in adequacy standards to measure the impacts of growth.

The proposed General Plan Update does not require the addition of any new elementary schools beyond those anticipated to conform to the adopted General Plan. As such, plan-to-plan impacts as they relate to elementary schools are not considered significant. In the Northwest; additional middle school capacity of between 400 and 500 students and high school capacity of between 500 and 700 students are needed. In the Southwest, a capacity increase of between 300 and 400 students is needed for both middle schools and high schools. In the East, currently plan schools will be needed.

10.11.4 Libraries

Library services are addressed in the Growth Management Element of the adopted General Plan. Objective 1 of this element requires that that the pace and pattern of residential, commercial, and other non-residential development be coordinated with provision for adequate public facilities and services, including libraries, and to monitor changes in adequacy standards to measure the impacts of growth.

The objective of Goal 7 of the Public Facilities Element of the adopted General Plan is to provide expansion of the library system into newly developing areas and areas not adequately served by existing library facilities. Additionally, Section 5.6 requires that 0.5 gross square feet (GSF) per capita of library space be provided, three books per capita, and one periodical subscription be provided per each 150-200 residents.

Policies and guidelines regarding library services in the city of Chula Vista are contained within the Library Facilities Master Plan, the Library Strategic Plan, the Otay Ranch GDP, and the City's Threshold Standard.

The proposed General Plan Update does not represent a change to the plans or policies for the provision of library services and facilities represented by the adopted General Plan. As these plans are equivalent, there is no plan-to-plan impact anticipated as a result of adopting the General Plan Update.

10.11.5 Water Supply

The adopted General Plan served as the basis for growth projections by SANDAG that were utilized by SDCWA, Otay Water District, and Sweetwater Authority to forecast water demand within the C.V. in their UWMP's. Because the adoption of the General Plan Update would result in the current UWMPs for these agencies to be inconsistent with the General Plan and since the proposed plan represents an increase in potential population, this plan level impact is considered significant.

The proposed General Plan Update represents an increase in potential population relative to the adopted plan. The Preferred Plan for the General Plan Update projects an increase in population and corresponding water demand increase of 17 percent over the adopted General Plan in the northwestern area, an increase of 9 percent in the southwest area, an increase of 5 percent in the east. Table 10-9 contains water demand projections for the Preferred Plan and Scenarios 1, 2, and 3 compared to the adopted General Plan.

TABLE 10-9
PROJECTED WATER DEMAND – UPDATE AREAS ONLY
(mgd)

	Sweetwater Authority Service Area		Otay Water District Service Area		Combined Service Area	
Condition	Demand	Demand Increase Above Adopted General Plan	Demand	Demand Increase Above Adopted General Plan	Demand	Demand Increase Above Adopted General Plan
Adopted General Plan	3.76	NA	5.99	NA	16.39	NA
Scenario 1	7.87	4.11	7.51	1.52	22.55	6.16
Scenario 2	7.62	3.86	8.62	2.63	23.38	6.99
Scenario 3	7.91	4.15	6.81	0.82	23.57	7.18
Preferred Plan	7.83	4.07	8.01	2.02	23.93	7.53

SOURCE: Chula Vista General Plan Update Water Technical Report, December 2004.
mgd = million gallons per day

10.11.6 Energy

Regardless of the amount of energy consumed, the provision of that energy is outside the authority of the City, and does not vary between the General Plan Update and the adopted General Plan. It is not anticipated that the total energy requirements of the adopted plan and the updated plan would be substantially different. As such, the plan to plan effect for energy consumption and provision are not considered significant. Table 10-10 contains electricity and natural gas demand projections for the Preferred Plan and Scenarios 1, 2, and 3 compared to the adopted General Plan.

TABLE 10-10
PROJECTED ENERGY DEMAND

	Electricity		Natural Gas*	
Condition	Demand (million kWh)	Demand Increase Above Adopted General Plan (million kWh)	Demand (million therms)	Demand Increase Above Adopted General Plan (million therms)
Adopted General Plan	1,052	NA	56.9	NA
Scenario 1	1,178	126	63.7	6.8
Scenario 2	1,209	157	65.3	8.4
Scenario 3	1,150	98	62.1	5.2
Preferred Plan	1,212	160	65.5	8.6

SOURCE: City of Chula Vista calculations based upon Chula Vista consumption quantities contained in the Chula Vista Energy Strategy and Action Plan (Chula Vista 2001).
kWh = kilowatt hours
*Demand estimates do not include natural gas consumed by the South Bay Power Plant.

10.11.7 Wastewater

The proposed General Plan Update represents an increase in potential population over the adopted General Plan. Because the adoption of the General Plan Update would result in the current METRO capacity being insufficient to meet demand on buildout of the general plan and since the proposed plan represents an increase in potential population, this plan level impact is considered significant. Table 10-11 contains wastewater generation projections for the Preferred Plan and Scenarios 1, 2, and 3 compared to the adopted General Plan.

TABLE 10-11
PROJECTED WASTEWATER GENERATION QUANTITIES

Condition	Average Daily Flow (mgd)	Increase Above Adopted General Plan Buildout Flow/ Metro Capacity Rights Needed Above Adopted General Plan Buildout (mgd)
Adopted General Plan	23.3	NA
Scenario 1	25.2	1.9
Scenario 2	25.5	2.2
Scenario 3	25.3	2.0
Preferred Plan	26.2	2.9

SOURCE: Wastewater Master Plan Technical Memorandum, General Plan Update Sewer Capacity Evaluation for the City of Chula Vista (PBS&J 2004).
mgd = million gallons per day

10.11.8 Solid Waste

The proposed General Plan Update does not represent a change to the solid waste control plans and policies represented by the adopted General Plan. Control and siting of disposal sites falls under the jurisdiction of agencies other than Chula Vista. The Otay Landfill has sufficient capacity to serve additional development at buildout of the adopted plan and the

preferred plan. As such, no significant plan-to-plan impact is anticipated. Table 10-12 contains solid waste disposal projections for the Preferred Plan and Scenarios 1, 2, and 3 compared to the adopted General Plan.

TABLE 10-12
PROJECTED SOLID WASTE DISPOSAL QUANTITIES

Condition	Disposal Quantity (tons)	Disposal Quantity Above Adopted General Plan (tons)
Adopted General Plan	247,353	NA
Scenario 1	277,094	29,741
Scenario 2	284,266	36,913
Scenario 3	270,335	22,982
Preferred Plan	285,029	37,676

SOURCE: City of Chula Vista calculations based upon the 2003 Chula Vista landfill disposal quantity as reported in the California Integrated Waste Management Board Disposal Reporting System, San Diego Landfill Division Jurisdictional Report (Revised March 23, 2004).

10.11.9 Parks and Recreation

Parks and recreation are addressed in the Land Use, Growth Management, Conservation and Open Space, and Parks and Recreation Elements of the adopted General Plan. The objective of the Parks and Recreation Element is to provide guidelines for upgrading existing park facilities in addition to guidelines for the planning and siting of new parks in the developing areas.

Goal 5 of the Land Use Element is directed to preserve important landforms and natural features as part of a recreation-oriented open space network.

Goal 3 of the Conservation and Open Space Element identifies maintenance of open space in its natural state with selected areas developed for parks and active recreation facilities.

As with other services, parks and recreation are addressed in the Growth Management Element of the adopted General Plan. Objective 1 of this element requires that the pace and pattern of residential, commercial, and other non-residential development be coordinated with provision for adequate public facilities and services, including parks and recreational facilities, and to monitor changes in adequacy standards to measure the impacts of growth. Objective 5, Open Space Resources, addresses the preservation of open space areas to allow for the development of recreational facilities and the development of a citywide open space system which incorporates public access for passive pedestrian, bicycle, and equestrian activities.

Parks and recreation are addressed in the Parks and Recreation Master Plan, Otay Ranch GDP, Otay Valley Regional Park Concept Plan, Greenbelt Master Plan, and the City's Threshold Standard Policy.

Analysis

The proposed General Plan Update represents an increase in potential population over the adopted General Plan. Compliance with the PDO assures provision of 3 acres of dedicated park land for every 1,000 people for all new development. As a result, there is no significant impact to parks as a result of the adoption of the proposed General Plan Update.

11.0 ALTERNATIVES

In order to fully evaluate the environmental effects of proposed projects, CEQA mandates that alternatives to the proposed project be analyzed. Section 15126.6 of the State CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project," even if these alternatives would impede to some degree the attainment of the project alternatives.

Three alternative land use scenarios were developed as part of the outreach program for the General Plan Update. Each scenario identified possible land use changes in the three of the four planning areas of the General Plan area. After review of these scenarios, a Preferred Plan was developed and reviewed. All four of these land use plans were evaluated at an equivalent level of detail throughout this EIR. Four additional project alternatives in accordance with the requirements of CEQA were evaluated for this project. They include the No Project Alternative, the Reduced Project Alternative, the Community Character Alternative, and the Reduced Traffic Impact Alternative. Each major issue area included in the detailed impact analysis of this EIR (Chapter 5) has been given consideration in the alternative analysis. A summary of all the major issue areas for each alternative is provided in Table 1-4 of the Executive Summary of this EIR.

As required under Section 15126.6 (e)(2) of the CEQA Guidelines, the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among the alternatives evaluated must be identified as the environmentally superior project. The Reduced Project Alternative is the environmentally superior project because it would reduce impacts associated with land use, visual quality/landform alternation, traffic, air quality, noise, utilities and services, and water quality while implementing some of the project objectives. The project objectives are enumerated in Section 3.3 of this EIR.

11.1 No Project (Adopted General Plan) Alternative

The No Project alternative would continue to implement the adopted General Plan, which was adopted in 1989. The elements of the adopted General Plan are grouped into three main categories: Community Development, Environmental Resources Management, and Hazard Management. Each category reflects specific aspects of development policies. The analysis of the No Project Alternative can be found in Section 10, Plan to Plan – No Project Alternative, of this EIR.

11.2 Reduced Project Alternative

The Reduced Project Alternative would reduce development throughout the General Plan area compared to the Preferred Plan and each of the scenarios. The purpose of this alternative is to evaluate the potential for reducing traffic and traffic-related impacts, such as noise and air quality, and evaluating the potential for reducing the effects on land use and community character. It was developed by taking a combination of the least developed, highest park and open space components from the Preferred Plan and each of the scenarios for the areas that change. Table 11-1 presents the source scenarios used for developing the Reduced Project Alternative. For example, this table indicates that in the areas that change, the scenario with the least number of residential units planned for the Otay Ranch Subarea is Scenario 3, while the greatest amount of open space for the Montgomery Subarea is proposed in the Preferred Plan. The total acreage and number of residential units resulting from combining these elements is presented in Table 11-2. Where there was no difference between scenarios or where the Preferred Plan scenario represented the least developed condition, the Preferred Plan component was included in this alternative.

TABLE 11-1
SCENARIO FORMING THE BASIS FOR THE REDUCED PROJECT ALTERNATIVE

	Subarea		
	Montgomery	Otay Ranch	Urban Core
Commercial	Scenario 2	Preferred	Preferred
Industrial	Preferred	Scenario 2	Preferred
Open space	Preferred	Scenario 1	Preferred
Park	Preferred	Preferred	Preferred
Public	Preferred	Scenario 3	Scenario 3
Residential	Scenario 1	Scenario 3	Scenario 2

TABLE 11-2
REDUCED PROJECT ALTERNATIVE TOTAL ACREAGE AND RESIDENTIAL UNITS IN UPDATE AREAS BY PRIMARY SUBAREA

	Subarea		
Type	Montgomery	Otay Ranch	Urban Core
Commercial acres	163	369	299
Industrial acres	295	211	–
Open space acres	123	126	17
Park acres	54	385	20
Public acres	46	846	89
Residential units	7,679	8,805	15,664

Tables 11-3 and 11-4 show a comparison of land uses of the Reduced Project Alternative to each of the scenarios, the Preferred Plan and the adopted General Plan. These comparisons are illustrated in Charts 10-1 through 10-4. The Reduced Project Alternative would allow for a total of 32,148 residential units and 2,998 acres of commercial, industrial, and public uses. This alternative would allow for an increase of open space and park uses when compared to the Preferred Plan and each of the scenarios. The following discussion identifies issues that differentiate the Proposed Project with the Reduced Project Alternative.

TABLE 11-3
ACRES BY SCENARIO/ALTERNATIVE FOR THE UPDATE AREAS

	Land Use				
Scenario	Commercial	Industrial	Open Space	Park	Public
1	967	632	219	409	935
2	903	606	141	416	786
3	982	996	205	357	982
Adopted	955	598	515	154	980
Existing	450	252	–	17	180
Preferred	914	796	227	458	860
Reduced	903	592	259	458	786

TABLE 11-4
RESIDENTIAL UNITS BY SCENARIO/
ALTERNATIVE FOR THE UPDATE AREAS

	Subarea			
Scenario	Montgomery	Otay Ranch	Urban Core	Total
1	7,679	11,658	17,090	36,427
2	8,400	15,585	15,664	39,649
3	8,997	8,805	16,178	33,980
Adopted	4,724	7,541	10,481	22,746
Existing	4,963	–	9,499	14,462
Preferred	8,174	14,241	16,756	39,322
Reduced	7,679	8,805	15,664	32,623

11.2.1 Land Use

Chapter 5 of the EIR identified significant land use impacts in the Northwest, Southwest, and East Planning Areas. In the Northwest and Southwest, community character impacts were identified because of the bulk and scale of buildings that could be placed adjacent to predominantly one-story residential neighborhoods. In the Southwest, impacts were identified within the West Fairfield District from the existing land use condition to the proposed, more intensive development adjacent to the wildlife refuge and, in the Montgomery Subarea, due to the conversion of land designated for open space to an industrial use as proposed by Scenarios 1, 2, and 3. In the East, impacts were identified resulting from Scenario 2 due to the proposed residential uses within the 1,000-foot buffer around Otay Landfill, redesignation of industrial land to residential uses, and removal of habitat within a portion of Wolf Canyon.

11.2.1.1 Northwest

The Reduced Project Alternative reduces the intensity of housing, commercial, and industrial uses as well as increases open space and park uses over that of the Preferred Plan and each of the Scenarios. This reduction decreases the intensity of land uses allowing for improved design features, integration of uses, and height/intensity objectives and policies to be met easier. Under the Reduced Project Alternative, individual projects could still be approved that affect the bulk and scale of buildings within the Urban Core. The reduction of over 1,300 dwelling units in the Urban Core would reduce the potential community character impacts relative to the Preferred Plan and each of the Scenarios; however, impacts remain significant and unmitigated because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

11.2.1.2 Southwest

In the Southwest, the Reduced Project Alternative reduces the intensity of housing, commercial, and industrial uses as well as increases open space and park uses over that of the Preferred Plan and each of the Scenarios. This reduction in land uses allows for improved design features and better integration of varying uses. The reduction in the intensity of housing, commercial, and industrial uses in the Southwest would reduce the potential community character impacts relative to the Preferred Plan and each of the Scenarios; however, impacts remain significant and unmitigated because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future

Specific Plans are developed and zoning specifications are implemented impacts remain significant.

11.2.1.3 East

Chapter 5 of this EIR identifies significant adverse effects upon the community character of the surrounding villages within the East Planning Area. In the East, the Reduced Project Alternative reduces the intensity of housing, commercial, and industrial uses as well as increases open space and park uses over that of the Preferred Plan and each of the Scenarios. For these reasons, the reduction in the intensity in the East may lessen the potential community character impacts relative to the Preferred Plan and each of the Scenarios; however, impacts remain significant and unmitigated because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

Additionally, significant unmitigated impacts were identified in the East Planning Area resulting from Scenario 2 due to the proposed residential uses within the 1,000-foot buffer around Otay Landfill, redesignation of industrial land to residential uses, and removal of habitat within a portion of Wolf Canyon. Significant unmitigated impacts were also identified for Scenario 3 resulting from proposed residential uses within the 1,000-foot landfill buffer. As with the Preferred Plan, the Reduced Project Alternative reduces the impacts represented by Scenario 2 and 3, but not to below a level of significance. The Reduced Project Alternative would reduce the impacts represented by Scenario 2 and 3 because it does not place residential uses within the 1,000-foot buffer around the Otay Landfill, and would not remove habitat within a portion of Wolf Canyon.

11.2.2 Landform Alteration/Aesthetics

Adoption of the Preferred Plan and all three Scenarios would result in substantial changes to landforms and visual quality throughout the General Plan area. Increased density within the Urban Core and Montgomery Subareas would result in increased building heights and mass. In the east, currently undeveloped areas characterized by mesas, canyons, and hills would be developed with urban uses. The General Plan Update objectives and policies reduce the impact to substantial changes to landforms and visual quality throughout the General Plan area but not to below a level of significance.

The Reduced Project Alternative does not reduce the footprint or location of development or change the nature of the projects that could be permitted within in the General Plan Area, however, the alternative would lessen the aesthetic effects relative to the Preferred Plan or any of the Scenarios because there are lower densities proposed with the Reduced Project

Alternative. As with the Preferred Plan and each of the Scenarios, the objectives and policies do not completely mitigate the impact because development standards have not been developed. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

A significant landform impact was identified for the East Planning Area and mitigation was identified. Because the Reduced Project Alternative reduces density and not the footprint of potential development, this impact remains the same and the specified mitigation is still required (see Section 5.2.5.2). Implementation of mitigation measure 5.2-1 would reduce significant landform alteration and aesthetics impacts associated with the Reduced Project Alternative; however, the open, rolling hills would be permanently altered by development and the impact would remain significant and unmitigated.

11.2.3 Biological Resources

The Preferred Plan and Scenarios 1 and 3 would not result in significant impacts to biological resources. Significant biological impacts were identified for Scenario 2 due to development proposed within Wolf Canyon. The Reduced Project Alternative's direct impacts to sensitive biological resources would be less than that proposed for Scenario 2 of the General Plan Update. This alternative would not develop within Wolf Canyon and would provide more parks and open space lands throughout the General Plan area. The Reduced Project Alternative would be required to comply with the Chula Vista MSCP Subarea Plan, which provides comprehensive long-term habitat conservation to address the needs of multiple species and the preservation of natural vegetation communities for lands within the city and sphere of influence boundaries. Regulations would be imposed to all future projects by state and federal resource agencies to provide additional assurances that impacts would not be significant. As with the Preferred Plan and Scenarios 1 and 3, implementation of the Reduced Project Alternative would not result in significant impacts to biological resources.

11.2.4 Cultural and Paleontological Resources

Impacts to cultural and paleontological resources were identified as significant impacts for the Preferred Plan and each of the Scenarios. Because the Reduced Project Alternative has the same potential footprint as these options, the potential effect is the same. As with the proposed General Plan Update, implementation of the Reduced Project Alternative has the potential to result in significant impacts related to cultural and paleontological resources. As with the Preferred Plan and each of the Scenarios, significant impacts to cultural resources could be mitigated to below a level of significance. Mitigation of impacts to cultural resources is presented in Section 5.4.5, and mitigation of impacts to paleontological resources is provided in Section 5.6.5.

11.2.5 Geology and Soils

As with the proposed General Plan Update, implementation of the Reduced Project Alternative would not result in significant impacts related to geology and soils. As with the each of the Scenarios of the proposed General Plan Update, implementation of the Reduced Project Alternative is self-mitigating as it pertains to geology and soils. While future development would be exposed to geological hazards associated with seismic events, liquefaction, and expansive soils, potential impacts resulting from geologic hazards would be reduced below a level of significance through conformance to General Plan Policies EE 14.1 through EE 14.5.

11.2.6 Water Resources and Water Quality

The impacts to water quality would be reduced over that of the Preferred Plan and each of the scenarios with the Reduced Project Alternative due to an increase of open space and park uses and less impermeable surface area. As with the Preferred Plan, and each of the Scenarios, implementation of the Reduced Project Alternative would avoid significant impacts by complying with Policies EE 2.2 through EE 2.7 and Objectives PFS 1 and 2.

11.2.7 Transportation

Because there would be less acres of commercial, residential, and industrial development under the Reduced Project Alternative and because there would be fewer residential units under this alternative, there would be less traffic generated. The Reduced Project Alternative would result in fewer trips generated than the Preferred Plan or any of the scenarios.

As stated in Appendix H of the Traffic Impact Report, the Reduced Project Alternative represents a 10 percent reduction in traffic on area roadways as compared to the Preferred Plan. The following segments would be significantly impacted under the Reduced Project Alternative:

- E Street, from Marina to I-5
- H Street, from Marina to I-5
- J Street, from Marina to I-5
- Main Street, from I-5 to Broadway
- Main Street, from Hilltop to I-805
- Marina Parkway, from E to J

- Hunte Parkway, from SR-125 to Eastlake

When compared to the Preferred Plan and all three Scenarios, the Reduced Project Alternative would result in impacts to fewer roadway segments. Impacts to seven segments, however, would remain significant. As with the Preferred Project and the Scenarios, implementation of the mitigation measures called for in Section 5.10.6 would lessen these impacts, but not to below a level of significance.

11.2.8 Air Quality

The San Diego Air Basin is designated as federal non-attainment for Ozone and state non-attainment for PM 10, Ozone and PM 2.5 air quality standards. Development in accordance with the Reduced Project Alternative would, as with the Preferred Project and each of the Scenarios, add to Ozone precursors and particulates. While the reduced development would have a corresponding reduction in the potential for emissions under both the Preferred Plan and the Reduced Project Alternative, air quality impacts remains significant and unmitigated.

As with the proposed Preferred Plan and all three Scenarios, the Reduced Project Alternative is not consistent with the growth assumptions in the RAQS. This is a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are significant and unmitigated.

11.2.9 Noise

As with the proposed General Plan Update, development of the Reduced Project Alternative has the potential to expose sensitive receivers to undesirable noise levels. Development would equate to the increase in allowable density along highways and major arterials, adjacent to rail, and within the airport influence area of Brown Field. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage, direct impacts remain significant and not mitigated under the Reduced Project Alternative.

11.2.10 Public Services and Utilities

The Reduced Project Alternative would be required to comply with the policies and guidelines for the provision of public services and utilities in Chula Vista, and would, thereby, avoid significant adverse service and utility impacts to water facilities, wastewater, school service, libraries, police and fire protection, and park and recreation. While the Reduced Project Alternative would reduce demand for Public Services and Utilities

resources, as with the proposed Preferred Plan and each of the Scenarios, development of the Reduced Project Alternative has the potential to result in significant impacts to water supply and energy supply because of the absence of long term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative, however, because of the absence of long-term supply contracts for water and energy, the impact remains significant and unmitigated.

11.2.11 Parks and Recreation

The Reduced Project Alternative reduce impacts to parks and recreation because the alternative would allow for an increase of open space and park uses when compared to the Preferred Plan and each of the scenarios. As with the proposed General Plan Update, the Reduced Project Alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.

11.3 Community Character Alternative

The EIR identified potential adverse impacts to community character that could result from the adoption of the Preferred Plan and each of the Scenarios. This impact would result from heights and mass of buildings throughout the General Plan area. This potential effect could also impact the historic character of Downtown on Third Avenue. While mitigation was identified for these impacts in the land use section of this EIR, an alternative was established that reduces these effects. The purpose of this alternative was to consider the potential to reduce community character effects resulting from increased height and mass of buildings throughout the General Plan area.

The Community Character Alternative is analyzed within this EIR as a means of reducing impacts associated with land use specifically community character, and visual resources. To reduce these impacts, this alternative would reduce the height of development throughout the General Plan area compared to the Preferred Plan and each of the Scenarios. The proposed General Plan Update uses three basic categories of building heights, as follows:

- Low-rise: 1 to 3 stories
- Mid-rise: 4 to 7 stories
- High-rise: 8 or more stories

These height ranges identify the predominant building height intended for a particular area and are used throughout the General Plan area. This alternative reduces the designated building heights by one category level, except for the low-rise category, to achieve a reduction in building heights throughout the General Plan area. For instance, every area designated for High-rise would be reduced to Mid-rise, likewise the areas designated for Mid-rise would be reduced to Low-rise. Areas affected with the reduction from High-rise to Mid-rise include the H Street Focus Area, the E Street Visitor Focus Area, and the H Street Gateway Focus Area. Reductions from Mid-rise to Low-rise would occur in other areas of change throughout the Northwest and Southwest Planning Areas and the also the Eastern Urban Center of Otay Ranch. The reduction from Mid-rise to Low-rise effects areas throughout the General Plan area. Even though this alternative would reduce heights, density ranges as specified in the General Plan Update would remain the same. As a result, it is possible that the bulk of buildings constructed in conformance with this alternative might be greater and lot coverage might increase.

The Community Character Alternative assumes that the basic goals, objectives, and policies of the proposed General Plan Update would be adopted except those pertaining to building heights. While the reduction in mass and scale would not necessarily reduce the footprint of development, nor the extent to which an area is redeveloped, the reduction in mass and height makes it more likely that the current community character would be maintained.

11.3.1 Land Use

This alternative would reduce the impacts to community character compared to the Preferred Plan or any of the Scenarios. The mass and heights of buildings in the area would decrease which would be more likely to maintain the current community character over the Preferred Plan or any of the Scenarios. The Community Character Alternative assumes that the basic goals, objectives, and policies of the proposed General Plan Update would be adopted except those pertaining to building heights.

The reduction from high-rise to mid-rise buildings would occur in the H Street Focus Area, the E Street Visitor Focus Area, and the H Street Gateway Focus Area. This reduction would reduce any adjacency impacts due to the placement of high-rise buildings next to existing single family, one-story residences. Reducing these building heights has the potential to retain the traditional character of the Downtown area and increase the compatibility with surrounding properties compared to the Preferred Plan and each of the Scenarios. However, as with the Preferred Plan and the three Scenarios, impacts would remain significant because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. The current project is a General Plan Update and the development of design standards is a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant.

11.3.2 Landform Alteration/Aesthetics

Implementation of the Community Character Alternative would reduce the impacts related to Landform Alteration/Aesthetics compared to the Preferred Plan and each of the Scenarios. This alternative would reduce the height of development throughout the General Plan area. This alternative would comply with the objectives and policies of the General Plan Update, which would be implemented as part of future development to reduce aesthetic impacts, however not to below a level of significance. The ultimate effect on these issues would be based largely on the design of the development ultimately approved for the area, therefore, impacts would remain significant because implementation of the objectives and policies require subsequent planning and design standards that are not available at this stage in the planning process. The current project is a General Plan Update and the development of design standards are a zoning and specific plan effort. Until future Specific Plans are developed and zoning specifications are implemented impacts remain significant. While the Community Character Alternative would reduce visual impacts through the lowering of building heights, lowering the heights could result in an increase in bulk and potentially the area of the lot that is covered by development.

11.3.3 Biological Resources

The Community Character Alternative's direct impacts to sensitive biological resources would be similar to the proposed General Plan Update. As with the proposed project, this alternative would be required to comply with the Chula Vista MSCP Subarea Plan, which provides comprehensive long-term habitat conservation to address the needs of multiple species and the preservation of natural vegetation communities for lands within the city and sphere of influence boundaries. Regulations would be imposed to all future projects by state and federal resource agencies to provide additional assurances that impacts would not be significant. Similar to the Preferred Plan and Scenarios 1 and 3, implementation of the Community Character Alternative would not result in significant impacts to biological resources. Scenario 2 proposed to place residential development within Wolf Canyon, and to designate portions of the Otay Valley District in an area specified as Active Recreation for commercial and residential use. These uses are not compatible with the MSCP and the RMP. The Community Character Alternative is consistent with the MSCP or RMP, and, therefore, would not result in significant impacts to biological resources.

11.3.4 Cultural and Paleontological Resources

Implementation of the Community Character alternative would reduce the impacts to historic character of Downtown on Third Avenue compared to the Preferred Plan or any of the Scenarios. The reduction in scale of buildings near historic resources would lessen the potential for an adverse effect on the historic context. All other cultural resource impacts associated with the Community Character Alternative would be similar to impacts associated with the proposed project.

Paleontological impacts associated with the Community Character Alternative would be similar to impacts associated with the preferred project. Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative and would reduce the impacts to below a level of significance.

Mitigation measures identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative. Compliance with the policies associated with Objectives LUT 12 and EE 9 and the Mitigation Measures 5.4-1 would reduce the impact to cultural resources resulting from the adoption of the Community Character alternative to below a level of significance.

11.3.5 Geology and Soils

Implementation of this alternative would result in a similar level of impact to geological and soils resources as the Proposed Project. Under this alternative, development would still occur throughout the General Plan area. Therefore, since development would still occur under this alternative, geological resources would still be impacted. The goals, objectives, and policies associated with geology and soils would also be applicable to this alternative, and would reduce the impact to below a level of significance.

11.3.6 Water Resources and Water Quality

The impacts to water quality would be similar to that of the Preferred Plan and each of the Scenarios with implementation of the Community Character Alternative. This alternative would reduce the height and bulk of the building however, the footprint of impermeable surfaces would be similar to that of the Preferred Plan and each of the Scenarios. As with the proposed project, adherence to water quality control measures required by the Regional Water Quality Control Board and the City's SUSMP and JURMP would reduce the potential impacts to below a level of significance.

11.3.7 Transportation

The decrease in height as specified in this alternative does not necessarily result in a decrease in density. As such it cannot be definitively stated that the community character alternative would reduce traffic impacts as compared to the Preferred Plan or Scenarios 1, 2, or 3. Therefore, it is assumed for the purposes of this analysis, the traffic impacts would not be reduced. Therefore, impacts from the Preferred Plan and all three Scenarios, and the Community Character Alternative would be significant. The required traffic mitigation measures would be the same for both the Community Character Alternative and the proposed General Plan Update. As with the Preferred Project and the Scenarios, implementation of the mitigation measures called for in Section 5.10.6 would lessen these impacts, but not to below a level of significance.

11.3.8 Air Quality

Impacts to air quality are closely associated with the number and length of vehicle trips on area roadways, as well as the flow of traffic on those roads. As with transportation, the decrease in height as specified in this alternative does not necessarily result in a decrease in density, and as such, it cannot be assumed that the it would reduce air quality impacts as compared to the Preferred Plan or Scenarios 1, 2, or 3. Therefore, it is assumed for the purposes of this analysis that because traffic impacts are not reduced, air quality impacts would also not be reduced. In addition, this alternative is not consistent with the goals and objectives of the RAQS. Similar to the proposed project, this is considered a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are considered significant and unmitigated.

11.3.9 Noise

Without a reduction in traffic volumes, there would not be a reduction in noise resulting from traffic on area roadways. As such, the Community Character Alternative does not result in a reduced noise impact relative to the Preferred Plan or any of the Scenarios.

As with the proposed General Plan Update, a significant impact will occur to existing receivers adjacent to circulation element roadways where traffic volumes are projected to result in noise level increases of more than 3 decibels. Lessening the noise levels in these areas would require a lot-by-lot review of potential exterior use areas and an evaluation of the acoustical performance of each building exposed to the increase. The exterior analysis would assess the feasibility of reducing noise levels to outdoor use areas and the interior review would require consideration of the effectiveness of existing windows and doors, the adequacy of existing construction, and the need for retrofit. Since this level of analysis is infeasible at the General Plan stage, direct impacts remain significant and not mitigated under the Community Character Alternative.

11.3.10 Public Services and Utilities

The EIR identified potential adverse impacts to public services and utilities that could result from the adoption of the Preferred Plan or any of the Scenarios. As noted above, the decrease in height as specified in this alternative does not necessarily result in a decrease in density. As such it cannot be definitively stated that the Community Character Alterative would reduce impacts to public services or utilities as compared to the Preferred Plan or Scenarios 1, 2, or 3. Therefore, it is assumed for the purposes of this analysis, the service and utilities impacts would not be reduced.

As with the proposed Preferred Plan and each of the Scenarios, development of the Community Character Alternative has the potential to result in significant impacts to water

supply and energy supply because of the absence of long-term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative; however, because of the absence of long-term supply contracts for water and energy the impact remains significant and unmitigated.

11.3.11 Parks and Recreation

The Community Character Alternative would have the same impacts to open space and park uses when compared to the Preferred Plan or any of the Scenarios. As with the proposed General Plan Update, this alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.

11.4 Reduced Traffic Impact Alternative

The EIR identified the potential for future development in accordance with the adoption of the Preferred Plan, or any of the Scenarios, would have a significant adverse impact to traffic. The purpose of the reduced traffic impact alternative was to avoid potential traffic effects by increasing the physical capacity of impacted roadways (Table 11-5). As a result of the traffic analysis in this EIR, 15 non-urban roadway segments were determined to have a significant impact with the adoption of the Preferred Plan. Scenario 1 would impact 18 segments, Scenario 2 would impact 18 segments, and Scenario 3 would impact 19 segments. The alternative does not affect the classification of the Urban Core roadways for the Preferred Plan and Scenario 3 because traffic on those street segments was not a significant adverse impact. Urban Core roadway segments on Broadway from C Street to E Street, and on E from Woodlawn to Broadway had significant impacts under Scenarios 1 and 2. The reduced Traffic Impact Alternative was developed to reduce these impacts. This alternative would upsize the classification of all roadways segments identified as being significantly impacted under the Preferred Plan and each of the Scenarios to reduce these impacts.

Table 11-5 shows the roadway segments that were determined to have a significant impact after mitigation with the adoption of the Preferred Plan or any of the Scenarios. This table also lists the roadway classifications proposed under the Preferred Plan and what classification the roadways were increased to under the Reduced Traffic Impact Alternative. Upsizing the roadway segments would improve traffic flow and alleviate peak hour congestion.

TABLE 11-5
INCREASED ROADWAY CLASSIFICATION FOR THE REDUCED TRAFFIC IMPACT ALTERNATIVE

Impacted Roadway Segment	GPU Classification	Plan/Scenario with Impact	Reduced Traffic Impact Alternative Classification
E Street from Marina Parkway to I-5	4-lane Major	All	6-Lane Major
E Street from Woodlawn to Broadway*	4-lane Urban Arterial	1	4-Lane Gateway
H Street from Marina Parkway to I-5	4-Lane Class I	All	6-Lane Major
J Street from Marina Parkway to I-5	4-Lane Major	All	6-Lane Prime
L Street from Hilltop to I-805	4-lane Class I	All	4-lane Major
Palomar Street from I-5 to Broadway	6-Lane Major	1, 2 and 3	6-Lane Prime
Main Street from I-5 to Broadway	4-lane Major	All	6-Lane Prime
Main Street from Broadway to Hilltop Dr.	4-lane Major	Preferred, 1 and 2	6-Lane Major
Main Street from Hilltop Dr. to I-805	4-lane Major	All	6-Lane Major
Main Street from I-805 to Heritage Road	6-Lane Prime	2 and 3	7-Lane Exp
Bonita Road from I-805 to Plaza Bonita Road	4-lane Major	All	6-lane Major
Bonita Road from Plaza Bonita Road to Willow	4-lane Major	1 and 3	6-lane Major
Bonita Road from Willow to Central	4-lane Major	All	6-lane Major
Telegraph Canyon Road from I-805 to Crest/Oleander	7-lane Exp	1, 2 and 3	8-lane Exp
Telegraph Canyon Road from Crest/Oleander to Paseo del Rey	6-lane Prime	All	8-lane Exp
Telegraph Canyon Road from Paseo del Rey to Paseo Ranchero	6-lane Prime	All	8-lane Exp
Otay Lakes Road from SR-125 to Eastlake Parkway	7-lane Exp	All	Not mitigable†
Otay Lakes Road from Eastlake Parkway to Lane Avenue	6-lane Prime	All	7-lane Exp
Olympic Parkway from I-805 to Oleander	6-lane Prime	All	7-lane Exp
Olympic Parkway from Oleander to Heritage	6-lane Prime	1 and 3	7-Lane Exp
Marina Parkway from E Street to J Street	4-Lane Major	All	6-Lane Major
Broadway from C Street to E Street*	4-Lane Commercial Boulevard	2	4-Lane Urban Arterial
Broadway between L Street and Palomar Street	4-Lane Major	1	6-Lane Major
Third Avenue from L Street to Palomar	4-Lane Class I	All	4-Lane Major
Third Avenue from Palomar to Main	4-Lane Class I	3	4-Lane Major
Paseo Ranchero from H to Telegraph Canyon	4-Lane Class I	1, 2 and 3	4-Lane Major
Eastlake Parkway from Hunte and Otay Valley	4-Lane Major	1 and 2	6-Lane Major
Lane Avenue from Proctor Valley to Otay Lakes	4-lane Class I	All	4-lane Major
Hunte Parkway from SR-125 to EastLake Parkway	6-lane Town Center Arterial	All	8-lane Exp

*Roadway is a part of the Urban Core Circulation Element.
†There is no standard street classification in the City that can accommodate this volume with an acceptable LOS.

11.4.1 Land Use

The Reduced Traffic Impact Alternative results in the same land use impacts as the Preferred Alternative and Scenario 1. It has fewer impacts than Scenarios 2 and 3 in that it avoids the effects resulting from placement of residential units adjacent to the Otay Landfill. The widening of the roads listed in Table 11.5 could significantly affect community character, particularly in the developed areas in western Chula Vista. The eastern roadways, including Otay Lakes Road, Olympic Parkway, and Eastlake Parkway, are large roadways and their widening would have less an effect on community character. Homes and businesses are at a greater distance from these streets than roads in older neighborhoods. As with the Preferred Plan and each of the Scenarios, land use impacts associated with community character would be significant and unmitigated as a result of the adoption of the Reduced Traffic Impact Alternative.

11.4.2 Landform Alteration/Aesthetics

Implementation of the Reduced Traffic Impact Alternative would increase the significant impacts related to Landform Alteration/Aesthetics compared to the significant impacts identified for the Preferred Plan and each of the Scenarios because this alternative increases the roadway widths throughout the General Plan area. This would have an effect on the character in areas of the built environment and could substantially alter existing scenic resources. In open areas, there is the potential that future development of these increased road segments to impact important scenic resources. While this alternative would reduce traffic-related impacts it would increase impacts upon landform and aesthetics compared to the Preferred Plan and each of the Scenarios.

11.4.3 Biological Resources

The Reduced Traffic Impact Alternative's will have a greater impact on sensitive biological resources than the Preferred Plan and each of the Scenarios. The increase widths to roadway segments in the undeveloped portions in the East Planning area, particularly along Main Street and Olympic Parkway could increase the potential for an impact to biological resources compared to the Preferred Plan or any of the Scenarios. Additional lanes on roadways have increases in width. An average lane width is 12 feet, with corresponding additional improvements. By increasing a roadway by 12 to 24 feet, the potential for additional impacts is similarly increased.

11.4.4 Cultural and Paleontological Resources

Implementation of the Reduced Traffic Impact Alternative will increase the impacts to Cultural and Paleontological Resources compared to the Preferred Plan and each of the Scenarios. Mitigation measures identified for the Preferred Plan would also be applicable to this alternative. Compliance with the policies associated with Objectives LUT 12 and EE 9

and the Mitigation Measures 5.4-1 would reduce the impact to cultural resources resulting from the adoption of the Community Character alternative to below a level of significance.

11.4.5 Geology and Soils

Implementation of this alternative will have a greater impact on geological and soils resources than the Preferred Plan and each of the Scenarios. Under this alternative, more impacts from the development of new roadways and improvements of existing roadways would occur throughout the General Plan area. Therefore, since development would still occur under this alternative, geological resources would still be impacted. The goals, objectives, and policies associated with geology and soils would also be applicable to this alternative, and would reduce the impact to below a level of significance.

11.4.6 Water Resources and Water Quality

The impacts to water quality will be greater than that of the Preferred Plan and each of the Scenarios with implementation of the Reduced Traffic Impact Alternative. This alternative would increase the development footprint of the roadways which would increase impermeable surfaces over that of the Preferred Plan. As with the proposed project, adherence to water quality control measures required by the Regional Water Quality Control Board and the City's SUSMP and JURMP would reduce the potential impacts to below a level of significance.

11.4.7 Transportation

The Reduced Traffic Impact Alternative would reduce the significant traffic impacts compared to the Preferred Plan and each of the Scenarios. As stated above, 15 non-urban roadway segments were determined to have a significant impact after mitigation with the adoption of the Preferred Plan. Scenario 1 would impact 18 segments, Scenario 2 would impact 18 segments, and Scenario 3 would impact 19 segments. The Reduced Traffic Impact Alternative would upsize the classification of all roadways segments identified as being significantly impacted under the Preferred Plan and the three Scenarios to reduce these impacts. Increasing a four-lane major to a six-lane major results in an increase capacity of 10,000 ADT. It is anticipated that those roadways operating at LOS D under the Preferred Plan would operate at C or better under this alternative.

11.4.8 Air Quality

Development of the Reduced Traffic Impact Alternative will result in a reduction of significant air quality impacts compared to the Preferred Plan and each of the Scenarios. The Reduced Traffic Impact Alternative would increase the roadway widths of 29 street segments throughout the General Plan area. This would improve traffic flow and increase the speed. This improved flow would increase turbulence around the roadway and could result

in fewer hot spots than the Preferred Plan and each of the Scenarios. All other air quality impacts associated with this alternative would be similar to impacts associated with the Proposed Project and each of the Scenarios. The region is in federal non-attainment for Ozone and state non-attainment for PM_{10}, Ozone, and $PM_{2.5}$. Population growth will have a corresponding increase in Ozone precursors and particulates, adding to the cumulative air quality problem. The Reduced Traffic Impact Alternative would, therefore, still represent a significant air quality impact.

This alternative is not consistent with the growth assumptions of the RAQS. Similar to the proposed project, this is considered a significant adverse impact until the SANDAG TCM Plan is revised. Because the RAQS is the strategy for avoiding cumulative air quality impacts, these effects are considered significant and unmitigated.

11.4.9 Noise

Development of the Reduced Traffic Impact Alternative will have a greater impact on noise than the Preferred Plan and all three Scenarios. As stated above, this alternative would increase the roadway widths of 29 street segments throughout the General Plan area. This would increase the speed on those roadways. The increase in speed would have a corresponding increase in noise. Widening the roadway could, potentially, bring the noise source closer to a sensitive receiver as well. The Reduced Traffic Impact Alternative will have a greater impact on noise than the Preferred Plan and all three Scenarios, therefore, impacts remain significant and not mitigated under this alternative.

11.4.10 Public Services and Utilities

Development of the Reduced Traffic Impact Alternative will result in similar impacts to Public Services and Utilities compared to the Preferred Plan and all three Scenarios. Thus, the significant water facilities and supply, sewer, wastewater, school service, police and fire protection, and park and recreation impacts identified for the proposed project would remain the same under this alternative. The mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative.

As with the proposed Preferred Plan and each of the Scenarios, development of the Reduced Traffic Impact Alternative has the potential to result in significant impacts to water supply and energy supply because of the absence of long-term supply contracts for water and energy. The required mitigation measures and the policies and guidelines for the provision of public services and utilities in Chula Vista identified for the Preferred Plan and each of the Scenarios would also be applicable to this alternative, however, because of the absence of long-term supply contracts for water and energy the impact remains significant and unmitigated.

11.4.11 Parks and Recreation

The Reduced Traffic Impact Alternative would have the same impacts to open space and park uses when compared to the Preferred Plan and each of the Scenarios. As with the proposed General Plan Update, this alternative would comply with the policies and guidelines for the development of parks in Chula Vista as well as the policies regarding the Chula Vista Greenbelt, trails, bicycle ways and pedestrian-oriented street corridors linking community parks to the greenbelt and provide guidance for development of park facilities. Implementation of these policies would ensure that any parks and recreation impacts would be below a level of significance.

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