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1.0 INTRODUCTION

1.1 Purpose and Scope

The Environmental Element establishes the 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 property 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 California Government Code requires General Plans to include conservation, open space, noise, and safety elements. These elements address relevant environmental issues, including: open space; water quality and conservation; biological resources; mineral resources; air quality; cultural resources; agricultural resources; energy; noise; and geologic, flood, and wildland fire hazards. These and other issues and topics are addressed in this Environmental Element, which is divided into the following sections: Conservation; Open Space; Natural Hazards; Hazardous Materials and Waste; and Noise.

1.2 Implementing the Vision and Themes

The Vision for Chula Vista is to preserve and enhance the unique features that give Chula Vista its character and identity, while at the same time improving our community and meeting the opportunities and challenges that lie ahead. Achieving this Vision requires that the City recognize that its natural resources are finite, and that responsible and just stewardship is essential for the future enjoyment and utilization of these resources.

A full discussion of our Vision and seven Themes is found in Chapter 4 of this General Plan. This Environmental Element focuses on and develops three of those Themes:

Theme 1: **Strong Community Character and Image**
Chula Vista continues to develop as a city with a distinct identity that its citizens are proud to call home.

Theme 5: **Healthy and Sustainable Environment**
Residents of Chula Vista cherish the open space and natural resources of our City and continue to protect, enhance, and preserve them.

Theme 6: **High Quality Community Services**
Chula Vista places a high priority on exemplary community services and facilities (such as police and fire protection, libraries, and park and recreation), and continues to ensure that services and infrastructure expand to match needs created by growth and redevelopment.

1.3 Relation to Other General Plan Elements and Policies

The elements of a general plan are closely interrelated. Each element must be internally consistent as well as consistent with one another. The Land Use and Transportation Element addresses the location and compatibility of land uses and provides for a planned pattern of land uses, including lands designated for habitat conservation, open space, and parks and recreation uses. The Public Facilities and Services Element addresses municipal water and sewer services; parks and recreation facilities; solid waste disposal; and energy, all of which relate to the Environmental Element. Cross-references are provided, where applicable, throughout the Environmental Element to identify where these interrelationships with other elements exist.

1.4 Related Plans and Programs

1.4.1 Regional Growth Management Strategy

The Regional Growth Management (Strategy) was adopted by the San Diego Association of Governments (SANDAG) in 1993, as mandated by the voters through Proposition C, the Regional Planning and Growth Control Initiative. The Strategy takes "a quality of life" approach to growth management, and contains standards, objectives and recommended actions for nine quality of life factors, such as: air quality; water; sensitive lands and open space preservation and protection; and solid waste management. Through a joint powers agreement, local jurisdictions, including Chula Vista, have agreed to certify that their general plans are consistent with the Strategy.

1.4.2 Regional Comprehensive Plan

SANDAG serves as the forum for decision-making on regional issues in San Diego County. Significant growth throughout the region and beyond has resulted in numerous challenges and anticipated future growth represents further challenges. As a result, SANDAG adopted the Regional Comprehensive Plan (RCP) in 2004 to help chart where the region's future growth should be focused and to prioritize public infrastructure investments. While new construction in the region in recent decades has occurred largely in previously undeveloped areas, the vision of the RCP is that future population growth will be focused away from rural areas and closer to existing and planned job centers and public facilities, including transit. The RCP was not designed as a regulatory plan, but rather as a guidance plan. As such, the preferred implementation approach is that local and regional agencies incorporate the recommended policy objectives and actions into their local and regional plans as these plans are updated in the future. Additionally, the RCP recommends that incentives be provided to member agencies for including the policy objectives in their plans, and for helping to implement the actions contained in the RCP. The City's General Plan supports relevant RCP policy objectives and actions.

1.5 Sustainable Development

Chula Vista's Vision to preserve and enhance the unique features that give the City its identity, while at the same time improving our community and meeting the opportunities and challenges that lie ahead, can be achieved, in part, through the promotion of sustainable development.

The most widely accepted definition of "sustainable development" as, presented by the United Nations World Commission on Environment and Development in 1987, is as follows:

"Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."

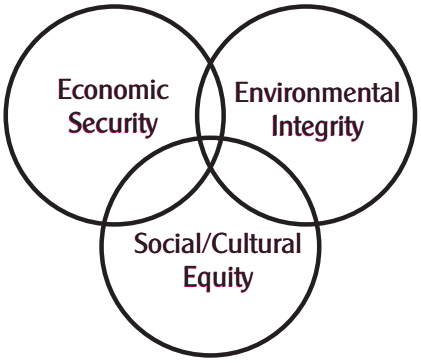
Sustainable development is a means of balancing growth and economic progress with the protection of natural resources and the environment in a socially responsible manner. Sustainable development consists of three key components--economic security, environmental integrity, and social/cultural equity--that overlap and function together, as illustrated in Figure 9-1.

These three components are equally important in developing a basis for sustainability, and are not mutually exclusive. Community sustainability is strengthened through identifying and addressing the issues that affect sustainable development, and creating measures to secure, protect, and enhance valuable resources.

Sustainability issues exist on a global level and at all levels of government. This General Plan addresses sustainable development at the local, community level. Such a local effort requires coordination and cooperation between all agencies that provide services within the community. While not all aspects of sustainability can be affected locally, much can be achieved by including policies and programs in a jurisdiction's General Plan that promote sustainable development. Chula Vista currently implements a number of programs to promote sustainable development, and strives to expand upon such programs.

Based upon the three key components illustrated in Figure 9-1, the following discussion addresses the characteristics of sustainability related to municipal planning functions:

Figure 9-1



Key Components of Sustainable Development

Economic Security focuses on balancing revenues and expenditures needed to provide sustainable services and improve the quality of life for local residents. This can be accomplished by creating a General Plan that facilitates revenue-generating sources sufficient to support the ongoing operation of a jurisdiction and its ability to provide the facilities and levels of service desired by the community. Jurisdictions can promote a mix of diverse jobs and affordable housing that provides the opportunity for residents to live and work within their community. By expanding educational opportunities within a community, residents can increase their marketable skills without leaving the area. A local economy that provide such opportunities is considered to be sustainable.

Environmental Integrity deals with the preservation and conservation of natural resources, including water, biological resources, and air quality, and with improving environmental sustainability, such as increasing development of and reliance on renewable energy sources. Jurisdictions can take a major step towards securing environmental integrity and ensuring a sustainable community by developing a consistent approach to environmental issues through the adoption of appropriate General Plan policies.

Social/Cultural Equity is realized through fair and equal access to community facilities and services, including: health care; social services; education; cultural arts; and natural resources. This can be achieved through a general plan by identifying future community services needs and by establishing policies to ensure that such needs can be met.

Closely related to sustainable development is the notion of an environmentally sustainable economy. On a local level, the backbone of an environmentally sustainable economy could consist of: facilitating the use of renewable sources of energy; an urban mobility system centered on a state-of-the-art public transportation system; and transit- and pedestrian-oriented development; and a comprehensive reuse/recycle program.

Local jurisdictions can take steps towards promoting and achieving sustainable development, as well as economic and ecological sustainability. Through various existing policies, programs, and procedures, Chula Vista has taken significant initial steps in this direction. Through various goals, objectives, policies, and implementation measures established through the adoption of this General Plan, Chula Vista will continue to move forward in supporting the ability to meet present needs without compromising the ability of future generations to meet their own needs.

1.6 Environmental Justice

State law defines environmental justice as:

"The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

The U.S. Environmental Protection Agency states:

"Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, and local policies."

Environmental justice problems are often related to procedural inequity and geographic inequity. Procedural inequity occurs when the planning process is not applied uniformly, resulting in disproportionate impacts to lower income or minority populations. Geographic inequity occurs when the burdens of undesirable land uses are concentrated in certain neighborhoods while the benefits are received elsewhere. It also describes a situation in which public amenities are concentrated only in certain areas.

The following topics, discussed in detail below, represent areas in which environmental justice can be addressed at the local level -- General Plan land use planning and policies; equitable distribution of public facilities and services; overconcentration of industrial uses; and transit-oriented development.

1.6.1 Relationship to General Plan Land Use Planning and Policies

Planning policies that promote livable communities and smart growth can be tools for achieving environmental justice. The primary purpose of planning, and the source of government authority to engage in planning, is to protect the public health, safety, and welfare. Traditionally, land use planning has attempted to minimize health and safety risks by segregating land uses. However, rigid separation of land uses has resulted in disconnected islands of activity and contributed to sprawl, counter to sustainable development goals. Mixed use development is a more sustainable approach to land use planning. Despite the desirability of mixed use development, it is important to recognize that there are certain land uses (e.g.,industrial, agricultural, major roadways and freeways) that will, in most cases, be incompatible with sensitive receptors, including residential

and school uses. Sensitive receptors may be adversely impacted by incompatible land uses as a result of air pollutant emissions, exposure to hazardous materials and related accident risks, and excessive noise. Most land use incompatibility issues can be addressed at the General Plan level through appropriate land use planning and the inclusion of policies addressing the siting and development of potentially harmful land uses in proximity to sensitive receptors.

1.6.2 Equitable Distribution of Public Facilities and Services

To the extent feasible through its General Plan, a jurisdiction should plan for the equitable distribution of new public facilities throughout the community, and services that increase and enhance community quality of life. Public facilities and services that enhance quality of life include: parks; open space; trails; recreational facilities; child care facilities; libraries; and museums. The equitable distribution of facilities and services has two components. The first component is the number and size of facilities -- a community should have adequate facilities and services to serve all residents equally. The second component is access, which can be measured as the distance or travel time from residential areas to facilities and services.

1.6.3 Overconcentration of Industrial Uses

Overconcentration occurs when two or more industrial facilities or uses, which do not individually exceed acceptable regulatory standards for public health and safety, pose a significant hazard to adjacent sensitive receptors, due to their cumulative effects. It is important to differentiate between overconcentration and the mere presence of materials that may be classified as hazardous. Many neighborhood businesses, such as, gas stations, retail paint stores, and dry cleaners, utilize hazardous materials. While these activities must be conducted in a responsible manner in accordance with applicable environmental regulations, they should not be confused with those truly industrial activities that are inappropriate within or adjacent to residential or mixed use areas. A General Plan should seek to avoid the development of sensitive receptors in close proximity to land uses that pose a significant hazard to human health and safety, due to the quantity, concentration, or physical or chemical characteristics of the hazardous materials that they utilize, or the hazardous waste that they generate or emit.

1.6.4 Transit-Oriented Development

Expanding opportunities for transit-oriented development (TOD) promotes livable communities. TOD is defined as moderate- to high-density development located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities. TOD can provide mobility choices; increase public safety; increase disposable household income by reducing transportation costs; reduce air pollution and energy consumption rates; help conserve resources and open space; assist in economic development; and expand the supply of housing.

By improving access to jobs and housing and revitalizing existing neighborhoods, TOD can be a tool for promoting environmental justice. Jurisdictions can promote TOD through general plan policies that support mixed use development; higher land use densities; reduced parking requirements; and increased transit service. TOD policies should facilitate a pedestrian-oriented environment with features such as traffic calming strategies and architectural and streetscape design that orients buildings to sidewalks, plazas, parks, and other public spaces, rather than to parking.

The promotion of environmental justice on a local level may be accomplished through a broad range of actions taken on various fronts, including through land use planning and policies at the general plan level. The issues of land use incompatibility; equitable distribution of public facilities and services; overconcentration of industrial uses; and transit-oriented development can be addressed in a general plan. Through various goals, objectives, policies, and implementation measures established through the adoption of this General Plan, Chula Vista is taking steps to address these issues in the interest of promoting environmental justice.

2.0 GOAL

The overall goal of the 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.

3.0 PLANNING FACTORS, OBJECTIVES, AND POLICIES

There are several planning factors involved in achieving the goal of the Environmental Element. Such factors are discussed in Sections 3.1 - 3.6 of this element. Each factor has at least one objective, or focused goal, and each objective has at least one policy, which describes how the City will meet the objectives.

3.1 Conservation

Source: Dudek & Associates, Inc.
Photographer: Jeff Priest

Conservation is the planned management, preservation, and wise utilization of natural resources to assure their continued availability for use, appreciation, and enjoyment. The Conservation Section of this Environmental Element provides the City with the necessary direction towards that end. The topics presented in this section include:

- Multiple Species Conservation Program
- Protecting Water Quality
- Meeting Water Demand Through Conservation and Efficient Use
- Preserving the Opportunity for Agricultural Uses
- Wise Use of Mineral Resources
- Promoting Clean Air
- Creating a Sustainable Energy Future
- Promoting Solid Waste Reduction Strategies
- Protecting Chula Vista's Cultural Resources
- Protecting Paleontological Resources

3.1.1 Multiple Species Conservation Program (MSCP)

Background

The Multiple Species Conservation Program (MSCP) is acomprehensive, long-term habitat conservation plan developed to address the needs of multiple species and the preservation of natural vegetation communities in San Diego County. The MSCP Subregional Plan was adopted by the City of San Diego and San Diego County in 1997, and conditionally approved by the the City of Chula Vista in October 2000. The MSCP Subregional Plan encompasses an area of approximately 580,000 acres and 12 local jurisdictions, including the City of Chula Vista.

City of Chula Vista MSCP Subarea Plan

Source: Dudek & Associates, Inc.
Photographer: Julie Vanderweir

On May 13, 2003, the City of Chula Vista City Council and Planning Commission approved the City of Chula Vista MSCP Subarea Plan (Subarea Plan) and formally adopted it as part of the City's General Plan. The Subarea Plan is the policy document through which the MSCP Subregional Plan is implemented within the City's jurisdiction. The Subarea Plan provides the framework for habitat planning and specifically establishes areas of conservation and development within the Chula Vista MSCP Planning Area. Figure 9-2 depicts the designated conservation and development areas within the Chula Vista MSCP Planning Area. It should be noted that select areas designated for development in the Subarea Plan are not necessary to conserve for biological purposes. However, other local City plans, policies, or guidelines may further regulate or prohibit the extent of development in these areas for a variety of reasons, such as topographical constraints or aesthetics (for example, the peak of Rock Mountain).

Additionally, since the completion of the County Subarea Plan and the approval of the City's Subarea Plan, several areas within the northern part of the City, as well as the unincorporated County portion of the Otay Ranch, have been acquired by public/quasi-public agencies to be preserved as Permanent open space. These areas are depicted on Figure 5-12.

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 complete Subarea Plan document has been included as part of this General Plan and is provided under separate cover as Appendix 1. The Subarea Plan goals found on page 1-2 of the Subarea Plan are as follows:

Subarea Plan Goals

1. To conserve Covered Species and their habitats through the conservation of interconnected significant habitat cores and linkages.

2. To delineate and assemble a Preserve using a variety of techniques, including public acquisition, on- and off-site mitigation, and land use regulations.

3. 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.

4. To provide necessary funding for a Preserve management program and biological monitoring of the Preserve.

5. 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.

Biological Resources

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); riparian/tamarisk scrub (604 acres); and natural flood channels (159 acres). (Source: City of Chula Vista MSCP Subarea Plan, February 2003.)

The Otay Ranch area includes important habitat resources, most notably the Otay River Valley and its tributary canyons: Salt Creek, Poggi, and Wolf Canyons.

As identified in the Subarea Plan, a total of approximately 2,251 acres of the MSCP Preserve (approximately 1,940 acres of undisturbed habitat types) will be conserved within the central and northern areas of the City. The Subarea Plan specifically provides protection for major canyon systems within the City, including Rice Canyon and Bonita Long Canyon. These canyon systems support large areas of coastal sage scrub and maritime succulent scrub. Additionally, a variety of narrow endemic plant species will be conserved, as well as documented locations of the Quino checkerspot butterfly. The federally listed endangered Quino checkerspot butterfly was not included as a Covered Species under the MSCP Subregional Plan. However, because the Subarea Plan defines the actions to be undertaken to provide for the long-term conservation and recovery of this species in the Chula Vista Subarea, the Quino checkerspot butterfly is included as a Covered Species under the Subarea Plan.

The portion of the Otay Ranch located within the City boundaries includes substantial areas of land that have historically been used for dry farming. Approximately 2,742 acres within Otay Ranch will be conserved within the subarea boundaries (approximately 2,617 acres, which represent undisturbed habitat types). The Otay Ranch area also includes important habitat resources, most notably the Otay River Valley and its tributary canyons; Salt Creek: Poggi, and Wolf Canyons.

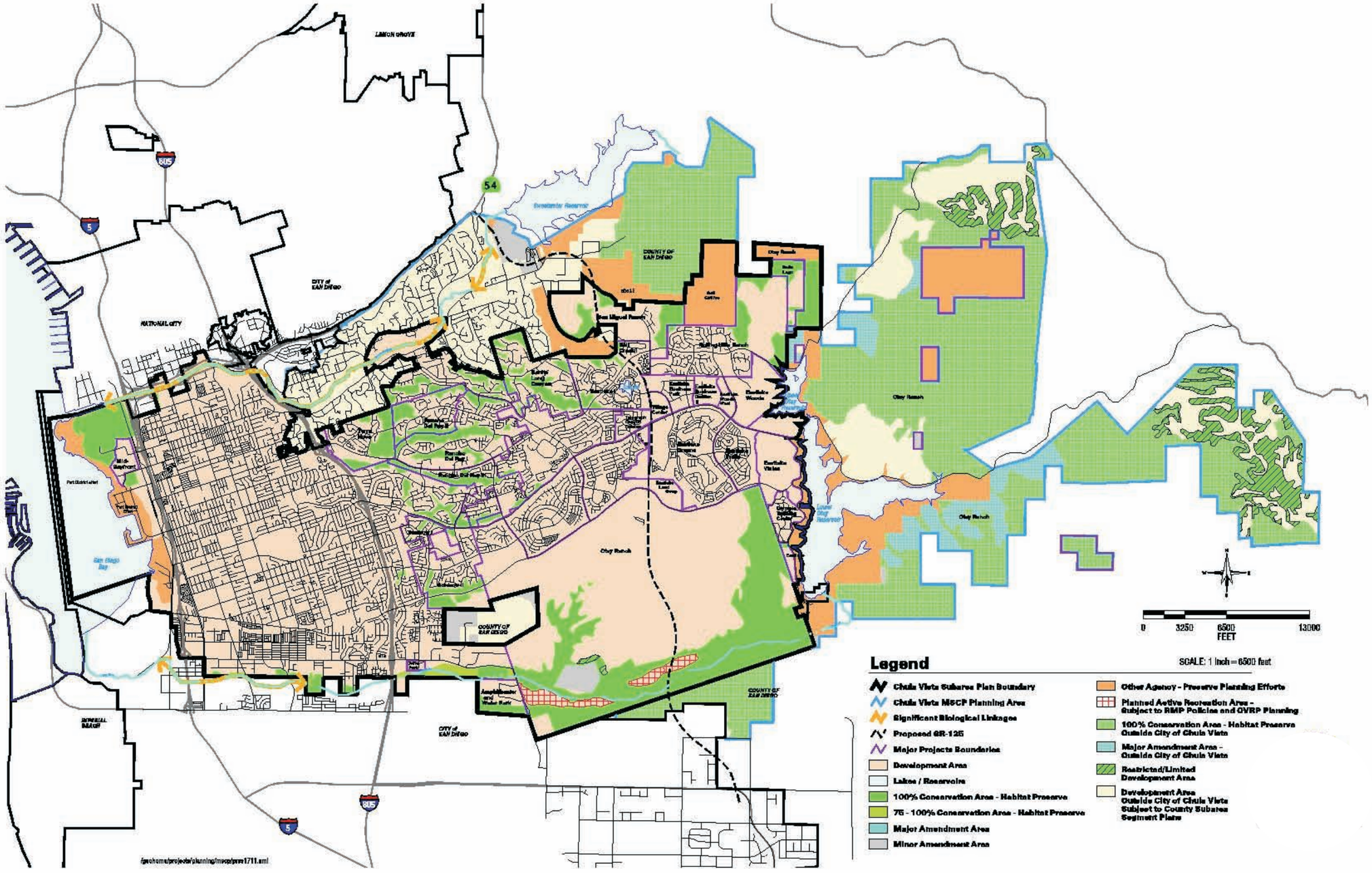

LEMON GROVE
NATIONAL CITY
CITY of SAN DIEGO
COUNTY OF SAN DIEGO
Otay Ranch
Otay Reservoir
San Diego Bay
Sweetwater Reservoir
805
5
54
0 3250 6500 13000
FEET
SCALE: 1 Inch = 6500 feet
Legend
Chula Vista Subarea Plan Boundary
Chula Vista MSCP Planning Area
Significant Biological Linkages
Proposed SR-125
Major Projects Boundaries
Development Area
Lakes / Reservoirs
100% Conservation Area - Habitat Preserve
75 - 100% Conservation Area - Habitat Preserve
Major Amendment Area
Minor Amendment Area
Other Agency - Preserve Planning Efforts
Planned Active Recreation Area - Subject to RMP Policies and OVRP Planning
100% Conservation Area - Habitat Preserve Outside City of Chula Vista
Major Amendment Area - Outside City of Chula Vista
Restricted/Limited Development Area
Development Area Outside City of Chula Vista Subject to County Subarea Segment Plans

Figure 9-2

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Implementation of the MSCP

Implementation of the Chula Vista MSCP 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. In addition, implementation of the Subarea Plan will contribute significant conservation outside the Chula Vista Subarea, within the Chula Vista MSCP Planning Area, in the unincorporated County Multi-Habitat Planning Area.

Objective - E1

Conserve Chula Vista's sensitive biological resources.

Policies

E 1.1 Implement the City of Chula Vista MSCP Subarea Plan.

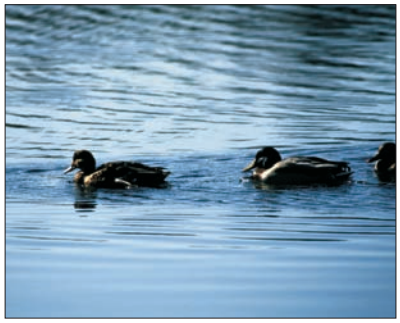
3.1.2 Protecting Water Quality

Water quality refers to the purity of water and the lack of pollutants. Urban runoff discharged into streams, bays, and oceans is one of the principal causes of poor water quality. Pollutants such as motor oil, antifreeze, fertilizers, and pesticides accumulate on impervious surfaces and are picked up and transported downstream via the storm drain system, ultimately reaching the Sweetwater and Otay Rivers, San Diego Bay, and the Pacific Ocean. These pollutants in urban runoff can cause both short-term and long-term impacts to local water bodies.

Clean Water Act

The Clean Water Act focuses on improving the quality of the nation's water and provides a comprehensive framework of standards and technical tools to address the causes of pollution and poor water quality. To satisfy the requirements of California Water Code Section 13241 and Clean Water Act Section 303, water quality criteria are assigned to all waters of the state. In Chula Vista, water quality objectives are achieved primarily through establishment of waste discharge requirements, and through implementation of the Water Quality Control Plan for the San Diego Basin (1994).

NPDES



On February 21, 2001, the San Diego Regional Water Quality Control Board issued a National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit) to the 18 municipalities within San Diego County, including the City of Chula Vista. San Diego County and the San Diego Unified Port District were co-permittees of the Municipal Permit. The minimum requirement of the Municipal Permit is to ensure that pollutants in discharges from storm drain systems owned and operated by the co-permittees are reduced to the maximum extent practicable. The Municipal Permit outlines the individual responsibilities of the co-permittees, including, but not limited to, the implementation of management programs, best management practices (BMPs), and monitoring programs. The NPDES regulations also consider the need to conserve natural areas, minimize impervious surfaces, and encourage the use of native or drought tolerant plant material in landscaping.

In accordance with NPDES requirements, construction projects in Chula Vista are required to implement BMPs to minimize the discharge of pollutants from construction sites. For certain types of developments, the Municipal Permit requires the implementation of permanent, post-construction BMPs, as described in the Chula Vista Standard Urban Stormwater Mitigation Plan and in the City of Chula Vista Development and Redevelopment Projects Storm Water Management Standards Requirements Manual.

The Chula Vista Pollution Prevention Policy addresses pollution reduction practices for City facilities and incorporates BMPs to prevent and reduce water pollution. The Pollution Prevention Policy identifies procedures and other practices for various City operations, including using environmentally friendly products for equipment maintenance; cleaning; swimming pool maintenance; and the use of chemicals and pesticides in parks, parkways, and street medians.

Watershed Planning

The State Water Resources Control Board uses watershed planning to improve and protect the quality of local and regional waters. Watersheds are the areas above and below ground that drain into a particular water body. This watershed planning approach recognizes that BMPs and treatment facilities may be more effective when located within a watershed or drainage basin, rather than on individual project sites. Watershed management practices can provide an integrated approach to protecting water quality.

- San Diego Bay Watershed

The San Diego Bay watershed is comprised of three subwatersheds, two of which are within the General Plan area (Sweetwater River and Otay River watersheds), and a third (Pueblo San Diego watershed), situated to the north (Figure 9-3). The 2001 Municipal Permit required local co-permittees to implement a comprehensive Urban Runoff Management Program at both the jurisdictional and watershed level. In compliance with the Municipal Permit, Chula Vista prepared a Jurisdictional Urban Runoff Management Program. Additionally, the City, along with seven other municipalities, San Diego County, and the Unified Port District, prepared the San Diego Bay Watershed Urban Runoff Management Program, which is a collaborative and comprehensive watershed plan for the San Diego Bay Watershed. Both of these watershed planning programs have been developed to identify and prioritize areas where local water quality can be improved and provide solutions to mitigate problems attributable to local urban runoff.

- Sweetwater River Watershed

The Sweetwater River watershed is the largest of the three subwatersheds comprising the San Diego Bay watershed, with 230-square-miles of the approximately 415-square-mile total. Over 86 percent of the Sweetwater River watershed is within unincorporated jurisdictions, with the urbanized lower portion of the watershed containing portions of the cities of San Diego, National City, Chula Vista, La Mesa, and Lemon Grove. Major water bodies in the watershed include the Sweetwater River, Sweetwater Reservoir, Loveland Reservoir, and the San Diego Bay. 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 River watershed is the largest of the three subwatersheds comprising the San Diego Bay watershed, with 230-square-miles of the approximately 415-square-mile total.

The Sweetwater River flood control channel, which generally represents the jurisdictional boundary between Chula Vista and National City, extends from Interstate 5 east to Interstate 805. The Sweetwater Regional Park extends from Interstate 805 east through the Chula Vista and Bonita golf courses to the County's Summit Park on the west edge of the Sweetwater Reservoir; the park comprises 570 acres, 178 of which are within Chula Vista. No recent watershed planning efforts for the Sweetwater River watershed have been undertaken and none are planned at this time.

- Otay River Watershed

The Otay River watershed, which encompasses approximately 160 square miles, is the second largest of three hydrologic units that discharge into San Diego Bay. The Otay River watershed consists largely of unincorporated area, but also includes portions of the cities of Chula Vista, Imperial Beach, Coronado, National City, and San Diego. The major inland water bodies, Upper and Lower Otay Lakes, are two water supply reservoirs that also provide important habitat and recreational opportunities. Approximately 36 square miles of the watershed are within the Chula Vista MSCP Planning Area that contains habitat for a wide range of endangered plant and animal species.

Currently, San Diego County is leading the efforts in the development of a Watershed Management Plan (WMP) and Special Area Management Plan (SAMP) for the Otay River watershed. The WMP will identify critical resource areas and recommend BMPs needed to prevent water pollution. The WMP will provide the framework for management activities to be implemented within the watershed, which will ensure the protection of existing beneficial uses and natural resources. The SAMP will be a comprehensive assessment of the Otay River watershed, which will provide regional protection of wetlands and wetland species. Furthermore, the SAMP will streamline the regulatory permitting process by assisting the federal, state and local regulatory agencies with their decision-making and permitting authority to protect aquatic resources.

Both plans will identify measures needed to preserve sensitive wetland species and habitat while still providing for reasonable economic growth. The goals of the watershed planning process include preventing water pollution and protecting natural resources and existing activities that are beneficial to the public, such as the Otay Valley Regional Park.

Implementation of Water Protection Measures

With further growth and redevelopment in Chula Vista, the protection of local and regional water resources must be adequately addressed. 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.

San Diego Bay Watershed Map

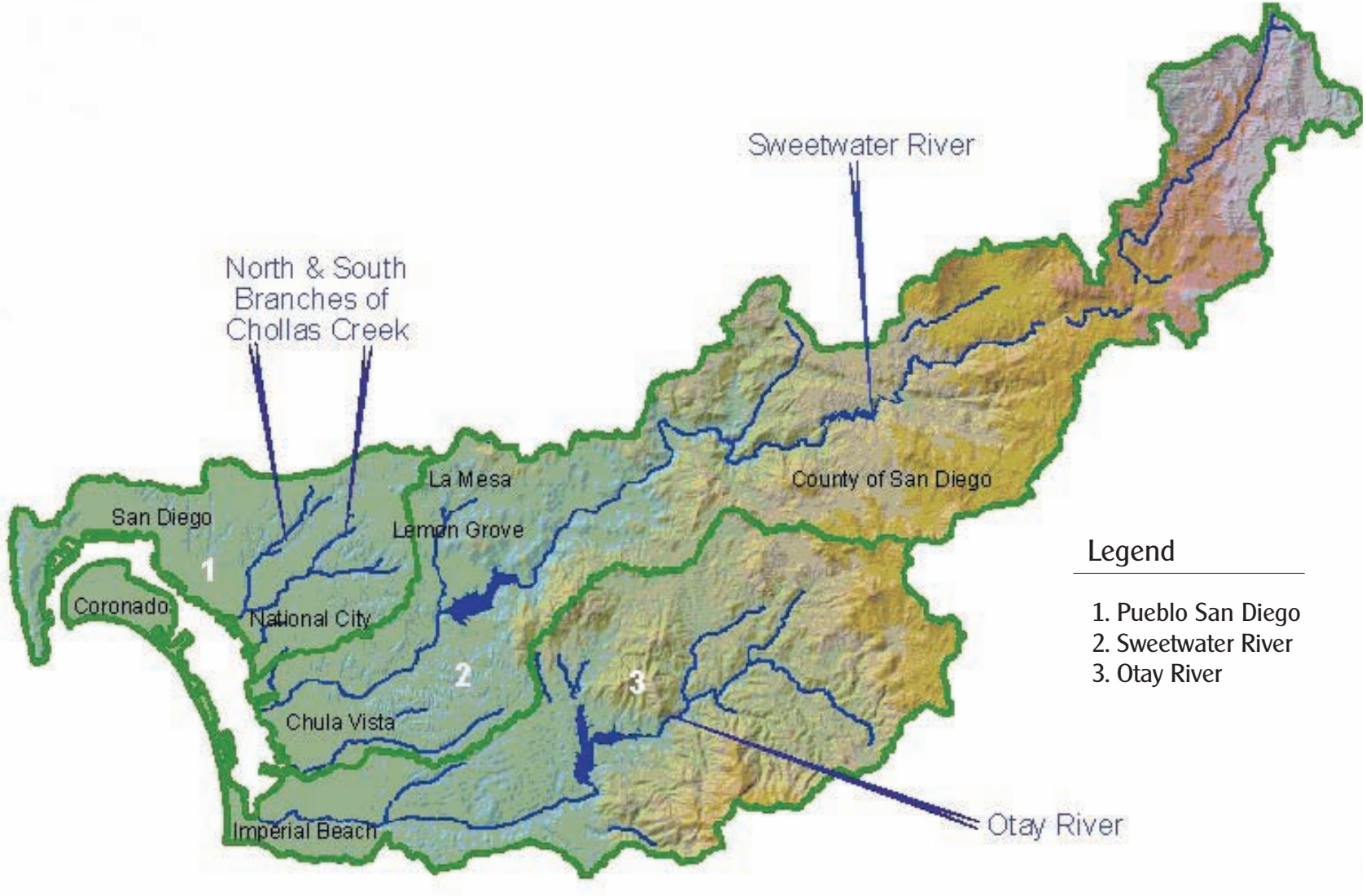


Figure 9-3

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Objective - E 2

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

Policies

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

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

E 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.

E 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.

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

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

E 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.

3.1.3 Meeting Water Demand Through Conservation and Efficient Use

This section of the Environmental Element addresses the conservation and efficient use of water. The Public Facilities and Services Element addresses current and future water supply and delivery issues.

Three water districts serve Chula Vista: The Otay Water District, Sweetwater Authority, and Cal-American Water Company. These districts base their facility master plans and capital improvement programs on projected population growth. Within the Otay Water District's service area, which includes the planned future development areas within eastern Chula Vista, all potable water comes from imported sources purchased from the San Diego County Water Authority. Due to the lack of significant undeveloped land area within the boundaries of the Sweetwater Authority's service area, future increases in the demand for potable water will be associated with infill development and redevelopment projects. The Sweetwater Authority's water supply is derived from a variety of sources, including Sweetwater Reservoir, a brackish groundwater demineralization facility, and deep freshwater wells. Seventy percent of the Authority's water supply comes from local sources. Areas served by the Cal-American Water Company are presently built out and significant growth in water demand is not anticipated.

Chula Vista can help to ensure adequate water supply by continuing to promote the development of water efficient communities and to implement water conservation programs.

Water recycling and conservation are major issues in southern California, as water suppliers strive to meet the increased water demands from population growth. Chula Vista's Growth Management Program and Growth Management Ordinance require that a Water Conservation Plan (WCP) be prepared for all major development projects. WCPs provide an analysis of potable and recycled water usage requirements and incorporate proven methods to reduce per capita water consumption. The adopted WCP Guidelines require all major projects to install specific indoor and outdoor water conservation devices. The requirement to prepare and implement WCPs promotes water-efficient development and community awareness of valuable water resources.

Chula Vista's Landscape Manual identifies the need for water conservation practices to be implemented, as required by State law and the State Department of Water Resources Water Efficient Landscape Ordinance. In addition, the City's Landscape Manual requires the use of recycled water to irrigate landscaped areas of residential, commercial, and industrial developments, as well as schools, parks, and golf courses, where recycled water is available.

Within the General Plan area, only the Otay Water District provides recycled water. Its Code of Ordinances requires recycled water to be used wherever it is technically and financially feasible, including the irrigation of greenbelt and open space slopes; roadway medians; parks; and the common areas of schools and multi-family residential properties. The Otay Water District's recycled water supply originates from the District's Ralph W. Chapman Water Recycling Facility in Rancho San Diego and is pumped to eastern Chula Vista. In the future, 6.0 million gallons per day (mgd) of recycled water will be supplied from the City of San Diego's South Bay Water Reclamation Plant. As required by an agreement with the City of San Diego, the Otay Water District is responsible for installing the infrastructure necessary to distribute recycled water within its service area. Recycled water is not a part of the potable water supply.

The demand for water will continue to increase as Chula Vista experiences further growth. Chula Vista can help to ensure adequate water supply for future generations by continuing to promote the development of water efficient communities and to implement water conservation programs.

Objective - E 3

Minimize the impacts of growth and development on water supply resources through the efficient use and conservation of water by residents, businesses, and city government.

Policies

E 3.1 Promote state-of-the-art water conservation practices in existing and new development, where proven to be safe and environmentally sound.

E 3.2 Promote the use of low water demand landscaping and drought tolerant plant materials in both existing and new development.

E 3.3 Where safe and feasible, promote and facilitate the continued use of recycled water in new developments, and explore opportunities for the use of recycled water in redevelopment projects.

E 3.4 Support the continued use of graduated rate structures by water suppliers in order to promote water conservation.

E 3.5 Require the preparation and implementation of Water Conservation Plans for large development and redevelopment projects in accordance with the City's Water Conservation Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.

E 3.6 For existing development, as well as small development and redevelopment projects not subject to the City's Growth Management Program, promote water conservation by residents and businesses through appropriately targeted education and community programs.

3.1.4 Preserving the Opportunity for Agricultural Uses

Through the early 1990s, the last of the large-scale agricultural operations in Chula Vista were located primarily on large landholdings within the eastern portion of the General Plan area. Agricultural production on lands within this area has been historically constrained due to the limited availability of water for irrigation and the high cost of water where it has been available.

Within the General Plan area the potential remains for some degree of agricultural uses to occur on both an interim and long-term basis.

Although the General Plan area does not contain any lands specifically designated for agricultural uses, the potential remains for agricultural uses to occur within certain portions of the General Plan area on both an interim and long-term basis. 2002 State Department of Conservation mapping identified 13 acres of Prime Farmland within the City limits (plus an additional 21 acres within the remainder of the General Plan area). There are no active Williamson Act contracts or properties, which are established agricultural preserves, within the General Plan area.

A limited number of parcels retain agricultural zoning, which is considered a holding zone, pending development proposals in conformance with the applicable land use plans. 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 portion of the General Plan area, located primarily in the vicinity of the Otay River, still retain small-scale agricultural operations. Agricultural production on these parcels may include seasonal fruit and vegetable crops but may also include nurseries; apiaries; riding facilities; or similar uses. Lands zoned for agriculture 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 containing biological resources and interim agricultural uses

are being phased out. Intermittent cattle grazing and dry land farming occur primarily on the non-irrigated land in the east. Production associated with these uses is not significant in terms of countywide agricultural value. Long-term agricultural use is not planned for the General Plan area, but is allowed where it is consistent with the Chula Vista MSCP Subarea Plan and zoning, including within portions of the Chula Vista Greenbelt open space system.

Although agriculture has a long history within Chula Vista and the surrounding area, the economic contributions of agriculture have continually decreased in both production and employment value over time. Although agricultural production within the General Plan area will not be a major factor in the local or regional economy, the potential remains for some degree of agricultural uses to occur on both an interim and long-term basis. Furthermore, recreational and educational benefits can be derived from agricultural-related uses, such as community gardens, which can be integrated within development areas.

Objective - E 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

E 4.1 Allow historical agricultural uses to continue within planned development areas as an interim land use in accordance with the MSCP Subarea Plan.

E 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 Chula Vista MSCP Subarea Plan, as well as the zoning of the property.

E 4.3 Encourage the development of community gardens and similar related uses within appropriate, compatible locations throughout the City.