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June 4, 2018

Ms. Cheryl Goddard  
City of Chula Vista Development Services Department  
276 Fourth Avenue  
Chula Vista, CA 91910

Reference: Post-survey Notification of Focused Survey Results for Otay Tarplant and San Diego Ambrosia and Updated Vegetation Mapping for the Shinohara Project (RECON Number 7014.2)

Dear Ms. Goddard,

This letter describes the results of the focused survey for the state endangered and federally threatened Otay tarplant (*Deinandra* [=*Hemizonia*] *conjungens*) and federally endangered San Diego ambrosia (*Ambrosia pumila*) conducted on the Shinohara Project (project) site. The project site is in the city of Chula Vista, east of Interstate 805, and north of Dennerly Road (Figure 1). The project site is found on the U.S. Geological Survey (USGS) 7.5-minute topographical map series, Imperial Beach quadrangle within the Township South 18 South and Range 1 West (Figure 2; USGS 1996). The 5.6-acre project site is currently composed of undeveloped land and is immediately adjacent to the Otay River to the north, east, and west, and residential development to the south (Figure 3). A discussion of the results of the survey conducted is provided below.

### Otay Tarplant

Otay tarplant is listed as a California endangered species (State of California 2018) and a federally threatened species (U.S. Fish and Wildlife Service [USFWS] 1998). It is a MSCP-covered species with a California Native Plant Society (CNPS) rare plant ranking of 1B.1 (City of Chula Vista 2003, CNPS 2018). This small, aromatic annual herb in the sunflower family (Asteraceae) produces mostly solitary yellow flowerheads in May and June (CNPS 2018). It ranges from southwestern San Diego County into Baja California, Mexico, in open coastal sage scrub and grassland habitats below 1,000 feet (CNPS 2001). It typically occurs in herbaceous plant communities on slopes and mesas with expansive clay soils (Reiser 2001). Otay tarplant is considered to be declining due to residential and commercial development, and highway construction.

### San Diego Ambrosia

San Diego ambrosia is federally listed as endangered (USFWS 2002), is a narrow endemic species under the Multiple Species Conservation Program (MSCP), and is a California Rare Plant Rank (CRPR) 1B.1 species (CNPS 2018). This perennial herb in the sunflower family (Asteraceae) emerges from rhizomes in spring and flowers from April to October (CNPS 2018). It is found at elevations below 500 feet in western Riverside and San Diego counties, and in northern Baja California. It may occur in disturbed areas in chaparral, coastal sage scrub, grassland, or vernal pool communities (CNPS 2018), and along creek beds, seasonally dry drainages, and floodplains along the edge of willow woodland, in Riverwash or sandy alluvial soils (Reiser 2001). San Diego ambrosia is considered to be declining due to residential and commercial development.

### Methods

RECON biologists J. R. Sundberg and Beth Procsal conducted a focused survey for Otay tarplant and San Diego ambrosia and collected updated vegetation mapping on May 16, 2018 within the project site and a 100-foot buffer (survey area). Prior to surveys, life history, habitat requirements, and occurrence data for these species were reviewed. The survey was conducted during the flowering period of these species to

optimize detectability (Otoy tarplant: May and June; and San Diego Ambrosia: April to October). The survey area was walked following meandering transects. On the same day as the survey, two reference sites were visited to confirm phenological stage of Otoy tarplant and San Diego ambrosia. A site where Otoy tarplant is known to occur is located in Moody Canyon in San Diego, approximately 2.3 miles from the project site, and the known site for San Diego ambrosia is just outside of Dennery Canyon, approximately two miles from the project site. While on-site, an assessment was made of the existing vegetation in comparison to the previous vegetation mapping (RECON 2015) and any updates were noted.

**Existing Conditions**

The survey area supports disturbed land and is dominated by dense, non-native species including Russian thistle (*Salsola tragus*), crown daisy (*Glebionis coronaria* [= *Chrysanthemum coronarium*]), crocea iceplant (*Malephora crocea*), and crystalline iceplant (*Mesembryanthemum crystallinum*) (Figure 4; Photographs 1 and 2). Over time, within the project site, the non-native grassland has degraded and is now disturbed land. Additionally, the manufactured slope southeast of the project site has been planted with native species. The existing vegetation communities/land cover types present within the survey area are presented in Table 1.

Vegetation Community/ Land Cover Type	Survey Area (acres)	Project Area/Limit of Work (acres)
Diegan Coastal Sage Scrub	0.70	--
Disturbed Diegan Coastal Sage Scrub	0.67	0.29
Revegetated Diegan Coastal Sage Scrub	0.46	--
Southern Willow Scrub	2.24	0.82
Coast and Valley Freshwater Marsh	1.31	0.06
Disturbed Habitat	5.14	4.40
Disturbed Wetland	0.04	--
Open Water	0.50	--
Urban/Developed	0.32	--
<b>TOTAL</b>	<b>11.38</b>	<b>5.57</b>

Evidence of soil disturbance and past dumping (e.g., concrete, brick, and glass) were observed on-site. Three soil types are mapped within the survey area: Salinas clay loam, riverwash, and gravel pits (U.S. Department of Agriculture 1973). However, the site historically received fill material, and thus the current soils within the survey area are not the same as originally mapped (RECON 2015).

At the reference sites, the vegetation consisted of a mix of maritime chaparral, coastal sage scrub, and vernal pools. The soil within the Otoy tarplant reference site is mapped as Olivenhain cobbly loam (U.S. Department of Agriculture 1973) and the San Diego ambrosia site is mapped as Strockpen gravelly clay loam. Several Otoy tarplant (approximately 1 inch in height) were observed in flower at the reference site on May 16, 2018. San Diego ambrosia was not detected at the reference site near Dennery Canyon, as it has been known to occur. The reference sites do not have a history of filling or dumping and generally have natural soil surface.

**Survey Results and Discussion**

No Otoy tarplant or San Diego ambrosia were observed within the survey area during the 2018 focused survey, as well as the original survey conducted in 2013 (RECON 2015). In a near normal rainfall year (approximately 11 inches) it is reasonable to expect that a high number of individuals in populations of these two species would flower. The timing of rainfall can be equally important in how many of the plants flower. In dry years, naturally fewer individuals flower, or may not come up at all.

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The 2017/2018 rain year has so far totaled 4.52 inches, which is well below average. Although, it is important to note that the rainfall levels are below average, the survey area is not expected to support these two sensitive species due to the high level of disturbance and lack of native soils on-site. In addition, the predominance of non-native vegetation and high density of non-native species on the project site are not optimal for or typical of known Otay tarplant and San Diego ambrosia habitats.

If you have any questions concerning the contents of this notification letter, please contact me at (619) 308-9333 or [bprocsal@reconenvironmental.com](mailto:bprocsal@reconenvironmental.com).

Sincerely,



Beth Procsal  
Associate Biologist

EAP:jg

#### References Cited

California, State of

- 2018 State and Federally Listed Endangered, Threatened, and Rare Plants of California. Natural Diversity Database. Department of Fish and Game. April.

California Native Plant Society (CNPS)

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- 1973 Soil Survey, San Diego Area, California. Soil Conservation Service and Forest Service. U.S. Fish and Wildlife Service (USFWS)

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- 2002 Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) From Southern California. Federal Register Vol. 67(127): 44372 – 44382. July 2.

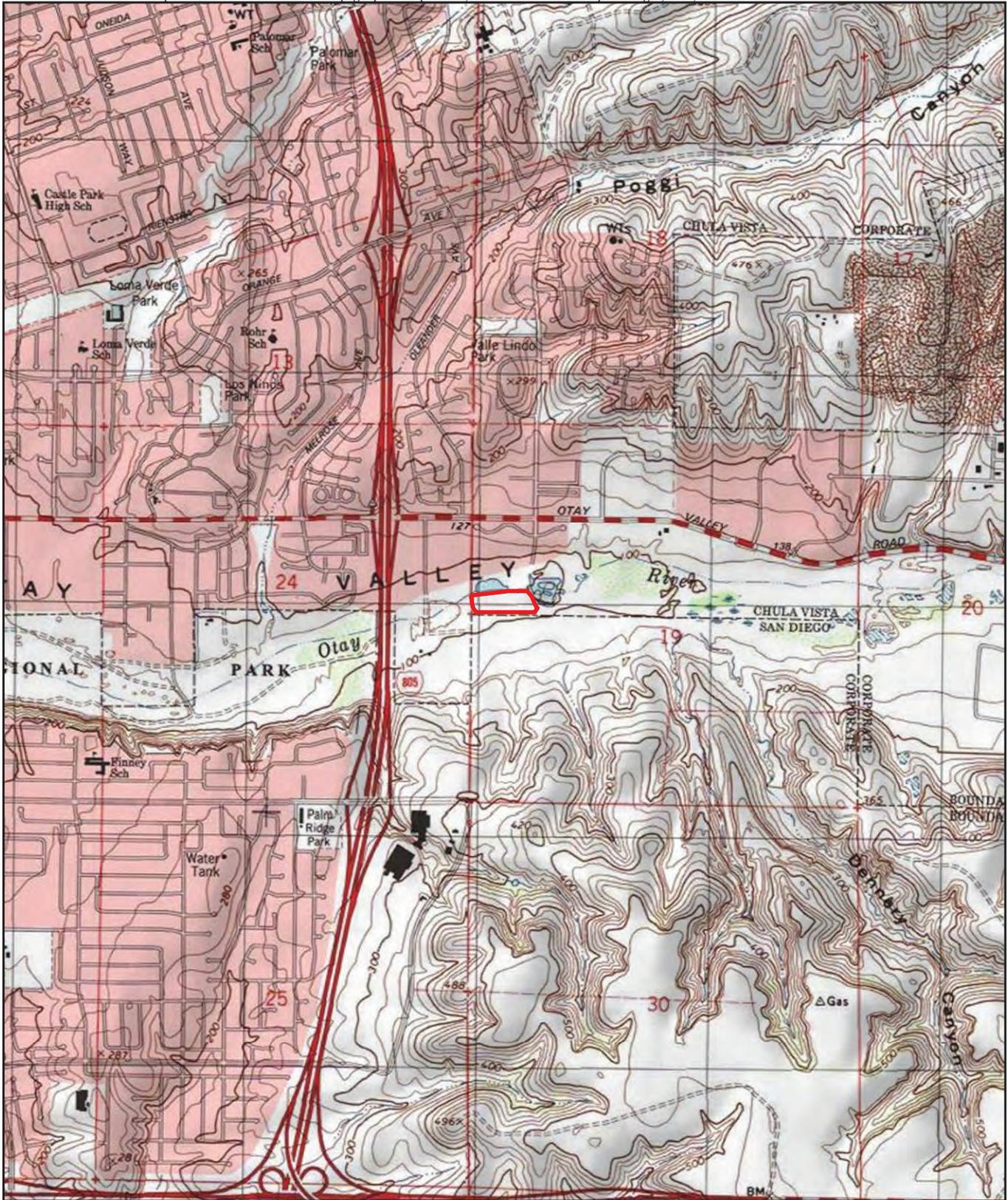
U.S. Geological Survey (USGS)

- 1996 Imperial Beach Quadrangle, 7.5-Minute Topographic Map.



 Project Location

**FIGURE 1**  
Regional Location



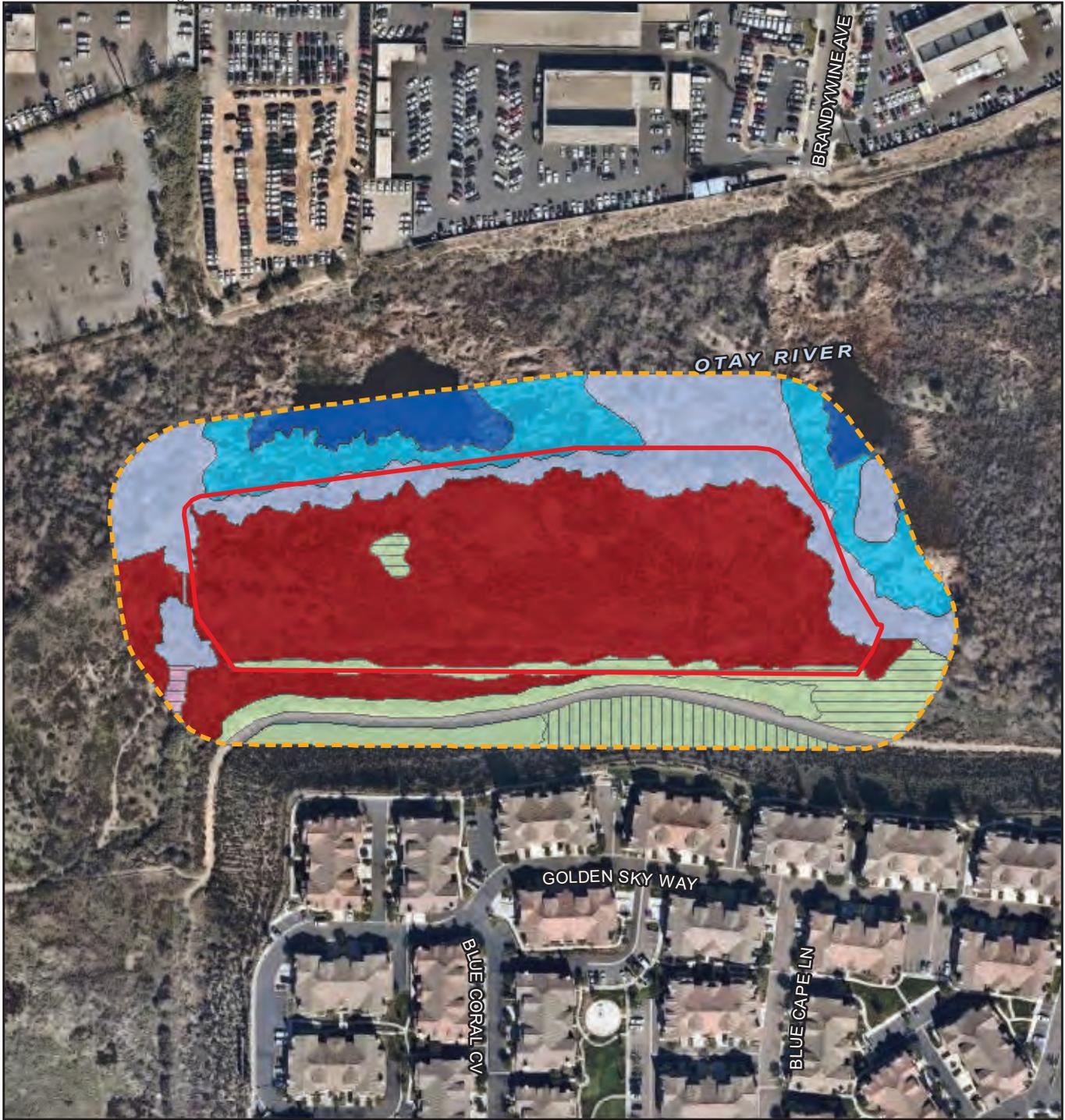
 Project Boundary

FIGURE 2  
Project Location on USGS Map



-  Project Area/Limit of Work
-  100-foot Buffer

FIGURE 3  
Project Location on Aerial Photograph



- |   |   |
|---|---|
|  Project Area/Limit of Work            |  Coast and Valley Freshwater Marsh |
|  100-foot Buffer                       |  Southern Willow Scrub             |
| <b>Vegetation and Landcover Types</b>   |   |
|  Diegan Coastal Sage Scrub             |  Disturbed Wetland                 |
|  Revegetated Diegan Coastal Sage Scrub |  Open Water                        |
|  Disturbed Diegan Coastal Sage Scrub   |  Disturbed Habitat                 |
|   |  Urban / Developed                 |

FIGURE 4  
Existing Biological Resources



**PHOTOGRAPH 1**  
View of Survey Area, Facing North  
Photo Date: May 16, 2018



**PHOTOGRAPH 2**  
View of Survey Area, Facing East  
Photo Date: May 16, 2018