

APPENDIX B – BIOLOGICAL TECHNICAL REPORT

**BIOLOGICAL TECHNICAL REPORT FOR THE
CHERRY CHANNEL DRAINAGE PROJECT
CITY OF BEAUMONT, CALIFORNIA**

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SECTION 1.0 – INTRODUCTION

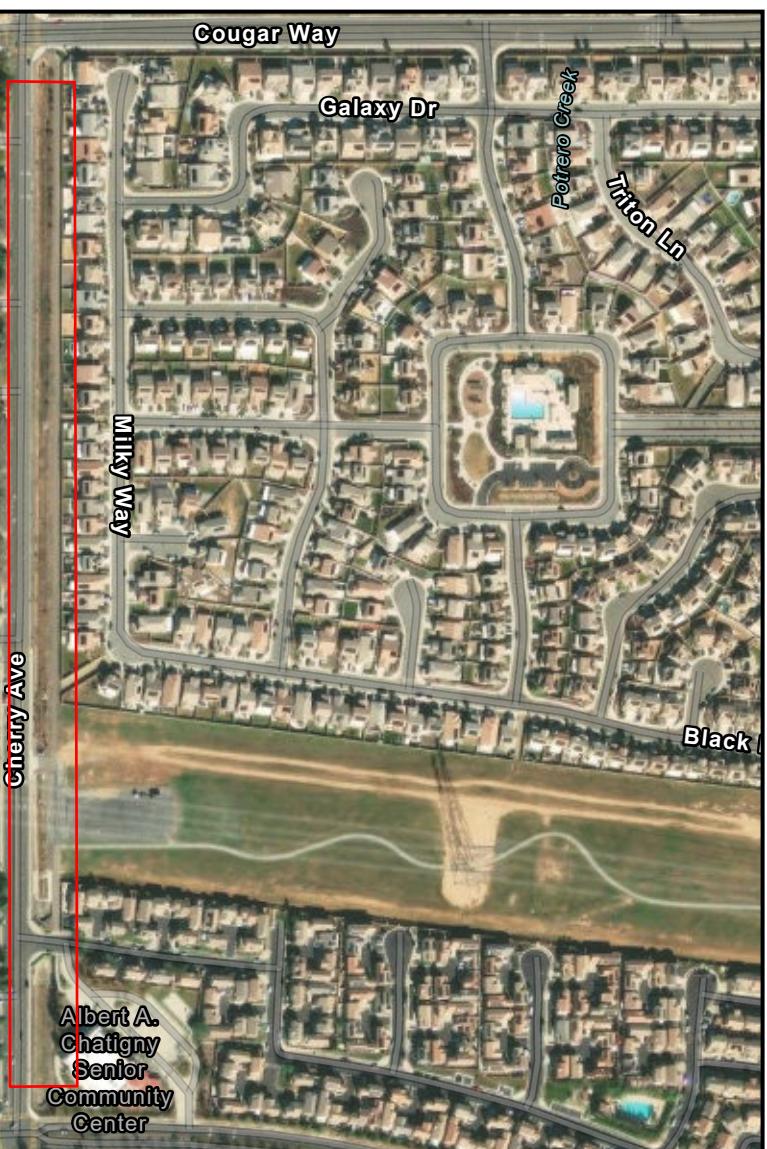
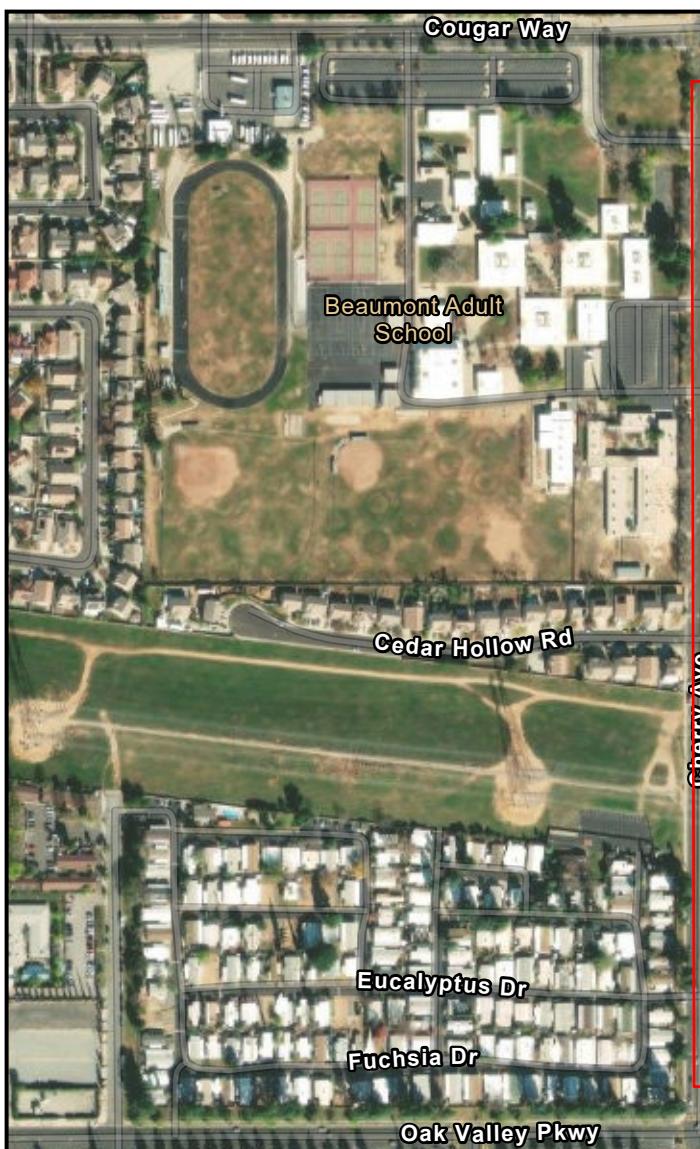
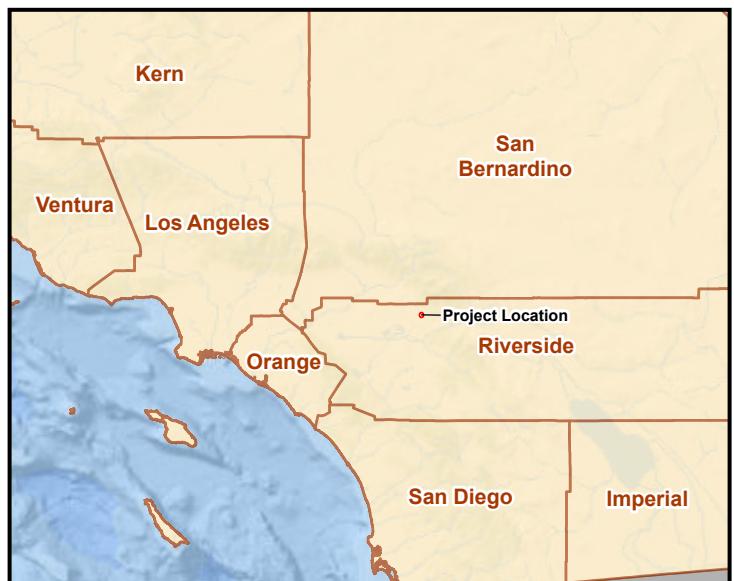
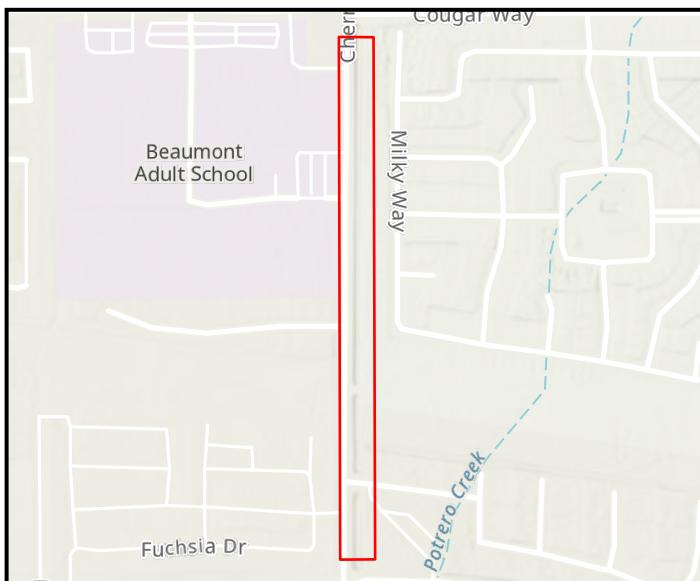
Chambers Group, Inc. (Chambers Group) was retained by the City of Beaumont (City) to conduct a literature review and habitat assessment survey for the Cherry Channel Drainage Project (Project). The survey identified vegetation communities, potential for the occurrence of special status species or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological technical report has been prepared for the City to document that the proposed Project is consistent with the Western Riverside County Regional Conservation Authority (RCA) Multiple Species Habitat Conservation Plan (MSHCP). Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The consistency analysis requires project proponents to evaluate a project's adherence to the MSHCP and Implementing Agreement (IA) guidelines and requirements. The Project is located outside of the mapped criteria area, as such, it is only required to comply with "Other Plan Requirements" discussed further in Section 2.2.

1.1 PROJECT LOCATION

The City of Beaumont is located within the western area of Riverside County, bounded by Calimesa to the north/northwest, Banning to the east, and San Jacinto to the south. The Project site is located along Cherry Avenue, between Cougar Way and Oak Valley Parkway. The elevational range is 2,689 to 2,721 feet above mean sea level (amsl). Residential communities are located along Cherry Avenue to the northeast, southeast, and southwest. Beaumont Adult School and San Gorgonio Middle School are located to the west of Cherry Avenue. An operational and City-owned paved parking lot is located to the east of Cherry Avenue, north of Rover Lane. Land uses surrounding the Cherry Avenue channel consists of Single Family Residential, High Density Residential, Public Facilities, and Open Space.

1.2 PROJECT DESCRIPTION

The Project would line the existing channel with concrete to improve the channel flow conditions to alleviate the increasing level of maintenance by City staff. The existing channel is lined with a turf reinforced geo-mat lining along the side slope and channel bottom. The channels geo-mats have been affected by urban runoff flows and rodent burrows with sections torn or missing over the years. The Project proposes to remove the existing geo-mat lining, wingwall, and riprap within the channel and replace it with concrete along the slopes and channel bottom. The existing headwalls and culverts will remain and be protected in place.



Project Location

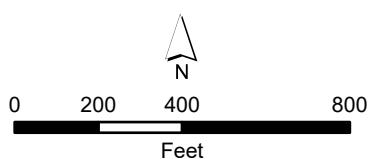


Figure 1
Cherry Channel Drainage
Project Location and Vicinity

SECTION 2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project was reviewed. The most recent records of the California Natural Diversity Database (CNDB) managed by CDFW (CDFW 2024), the USFWS Critical Habitat Mapper (USFWS 2024) and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2024) were reviewed for the following quadrangles containing and surrounding the Project site: *Beaumont, Yucaipa, Lakeview, San Jacinto, Forest Falls, El Casco, Cabazon, Lake Fulmor, and San Gorgonio Mtn*, California USGS 7.5 minute quadrangles. These databases contain records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site.

In accordance with the MSHCP, and during the initial property assessment process, all Project site APNs were searched using the online western Riverside County Regional Conservation Authority (RCA) MSHCP Information Tool to determine if the property falls within a “Criteria Area” and if additional surveys for narrow endemic/criteria area plant species or wildlife not adequately covered by the MSHCP may be required.

2.2 MSHCP OTHER PLAN REQUIREMENTS

Regardless of whether the site is located within any Criteria Cells, Narrow Endemic Plant Species Survey Areas, or proposed Conservation Areas, and whether it is subject to the focused species surveys associated with those areas, all projects within the MSHCP area require an evaluation of potential impacts on riparian/riverine areas and vernal pools and the protected species associated with those habitats. Riparian/riverine areas and vernal pools are defined in the MSHCP as follows:

- Riparian/riverine areas include lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens which occur close to, or which depend upon soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year.
- Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season, but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

When a site supports suitable riparian/riverine areas and/or vernal pool habitats for the wildlife species covered by the MSHCP listed below, focused surveys are required to determine their presence or absence from the site.

Vernal Pool Invertebrates

- Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)

- vernal pool fairy shrimp (*Branchinecta lynchii*)

Riparian Birds

- least Bell's vireo (*Vireo bellii pusillus*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)

2.3 SOILS

Before conducting the survey, soil maps for Riverside County were referenced online to determine the types of soil found within the Project site and surrounding Survey Area. Soils were determined in accordance with categories set forth by the United States Department of Agriculture (USDA) Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2024).

2.4 JURISDICTIONAL WATERS

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. In addition, a complete jurisdictional delineation including field verification was prepared under separate cover.

2.5 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Chambers Group biologists, Heather Franklin and Austin Burke, conducted the general reconnaissance survey within the Project site and a larger Survey Area (including up to a 500-foot buffer where feasible) to identify the potential for occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The survey was conducted on foot, throughout the Survey Area between 0900 and 1300 hours on July 25, 2024. Weather conditions included temperatures ranging from 86 to 99 degrees Fahrenheit, with 0 to 2 percent cloud cover, and no precipitation. Wind speeds ranged from 0 to 3 miles per hour. Photographs of the Survey Area were taken to document existing conditions (Appendix A).

2.5.1 Vegetation

All plant species observed within the Survey Area were recorded. Vegetation communities within the Survey Area were identified, qualitatively described, and mapped onto a high-resolution imagery aerial photograph. Plant communities were determined in accordance with the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual*,

Second Edition (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix B.

2.5.2 Wildlife

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federal-listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Survey Area. A comprehensive list of the wildlife species observed during the survey is provided in Appendix C.

SECTION 3.0 – RESULTS

3.1 MSHCP CONSISTENCY DETERMINATION

3.1.1 Outside of MSHCP Criteria Area

The Project site is located within the San Timoteo Unit, of the Pass Area Plan, and is not within a Criteria Area Cell (Figure 2). Because the site does not occur within a Criteria Area Cell, a Joint Project Review (JPR) is not required. The site is not within an amphibian survey area or a mammal survey area. However, the site is located within a designated burrowing owl survey area and narrow endemic plant survey area, which includes Marvin's onion and Many-stemmed dudleya (RCA 2024). Therefore, additional surveys for these species may be required.

3.1.2 Vegetation

Riverine/Riparian

A cattail marsh and Goodding's Willow - Red Willow Riparian Woodland occur within the northern portion of the channel. However, the primary source of water is this area is provided by an irrigation system with sprinklers located along the top of the banks and within the channel, providing an artificial water source to this area. In addition, this area receives nuisance flow from the surrounding residential area. This riparian area is primarily vegetated with cattails (*Typha* sp.), emergent Goodding's (*Salix gooddingii*) and red willows (*Salix laevigata*), and mulefat (*Baccharis salicifolia*) scattered throughout with an understory of cyperus and non-native grassland. Because of the presence of riparian vegetation, this area should be considered an MSHCP Riparian area. However, this area appears to be fed solely by artificial and nuisance water sources and is maintained regularly by the City, which includes regular removal of vegetation within the channel. Thus, if the sprinklers were to be permanently removed, this riparian area is not expected to persist.

Vernal Pools

There were no Vernal Pools located within or adjacent to the Project site.

3.1.3 Wildlife

Least Bell's Vireo (*Vireo bellii pusillus*) FE, SE

The least Bell's vireo (nesting) is a federal- and state-listed endangered subspecies of the Bell's vireo. The least Bell's vireo typically nests in willows and other riparian trees or shrubs, and typically nests 3 to 6 feet above the ground. This species requires densely vegetated riparian habitat along streams and rivers during the spring and summer months to breed, and foraging in habitat adjacent to its nesting territory, which is typically riparian or chaparral. The Project site lacks the dense riparian habitat required by this species for nesting. Additionally, no connectivity to suitable habitat occurs directly upstream or downstream of the site. Therefore, this species is not anticipated to occur within the site or be impacted by Project activities.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) FE, SE

The southwestern willow flycatcher (nesting) is a federally endangered subspecies of willow flycatcher whose summer breeding range includes southern California (from the Santa Ynez River south), Arizona,

New Mexico, extreme southern portions of Nevada and Utah, extreme southwest Colorado, and western Texas (USGS 2024). This species is known to breed in a variety of riparian habitats with multi-tiered canopies and surface water and/or saturated soils, whether along streams in broad valleys, in canyon bottoms, around mountain-side seepages, or at the margins of ponds and lakes. Where willow species dominate, high foliage-volume willow cover is preferred but with willow clumps separated by openings. Habitat types may include a variety of willow, cottonwood (*Populus* sp.), coast live oak, alder (*Alnus* sp.), and tamarisk (*Tamarix* sp.) woodlands. The Project site lacks suitable habitat required by this species; therefore, the southwestern willow flycatcher is not anticipated to occur within or adjacent to the Project site.

Western Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*) FT, SE

The western yellow-billed cuckoo (nesting) is a state-listed endangered species. The yellow-billed cuckoo is found primarily in the Eastern United States, but this subspecies is an extremely rare and localized summer resident of the southwestern U.S. Historically, it was found commonly throughout the Central Valley and California coastline until the early twentieth century. This species primarily inhabits mature, open riparian woodlands along the broad, lower flood-bottoms of larger river systems. Habitat features usually include some relatively open patches and intermixed low, dense, scrubby vegetation typical of these watercourses. In the southwestern U.S., the western yellow-billed cuckoo also occupies desert riparian woodlands composed of willows, cottonwoods, and dense mesquite (*Prosopis* sp.). It typically nests in willows and forages more so among the cottonwoods than other trees. The Project site lacks the mature and dense riparian habitat required by this species. Therefore, this species is not anticipated to occur within or adjacent to the Project site.

Burrowing Owl (*Athene cunicularia hypugaea*) SSC

The following APNs within the Project site are within a species survey area for burrowing owl: 408-250-034; 408-240-038; 408-090-066; and 408-100-025, 028, 024. This California species of special concern is one of the 146 species covered by RCA's MSHCP. Nesting in underground burrows typically abandoned by other animals such as ground squirrels, the burrowing owl prefers open, flat, grassland habitat, a factor that has led to declining numbers in the last 20 years as development has progressed. Under federal laws protecting migratory birds, both the owls and their burrows are protected. Mitigation includes relocating birds that have been displaced and allowing birds to relocate into new burrows in a safe location. Some of the Project site and areas within 500 feet of the site contain flat and open space consisting of disturbed and ruderal vegetation. These areas have a low potential to support burrowing owls and require further surveys.

3.1.4 Invertebrates

Santa Rosa Plateau Fairy Shrimp (*Linderiella santarosae*) FT

The only known population of this species occurs on a mesa underlain with basalt flows on the Santa Rosa Plateau, located within the Santa Rosa Ecological Reserve. However, this species is endemic to western Riverside County and could potentially exist in vernal pools with similar substrate. The Project site lacks the suitable habitat that is required by this species; therefore, this species is not anticipated to be impacted by Project activities.

Riverside Fairy Shrimp (*Streptocephalus woottoni*) FE

The Riverside Fairy Shrimp is a federally endangered species. It prefers moderately deep vernal or ephemeral ponds situated within coastal sage scrub or grassland. It is found in seasonally astatic pools filled by winter/spring rains. It is endemic to western Riverside and San Diego counties in areas of tectonic swales/earth slump basins that form playas, that are underlain by basalt flow and clay soils, including the Santa Rosa Plateau, Skunk Hollow, Murrieta, and the Lake Elsinore back basin areas of Riverside County. No suitable habitat for this species occurs within the Project site. Therefore, this species is not anticipated to occur within the Project site.

Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) FT

The vernal pool fairy shrimp is a federally threatened species and is endemic to California in Riverside County. This species occurs only in vernal pools and vernal pool-like habitats in alluvial fans and terraces, and will not occur in riverine, marine, or other permanent bodies of water (USFWS 2007). This species requires cool waters of 50 degrees Fahrenheit or cooler (USFWS 2007). No vernal pools were observed within the Project site. Therefore, this species is not anticipated to be impacted by Project activities.

3.2 SOILS

After review of USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2024), it was determined that the Project site is located within the Western Riverside Area CA679. Based on the results of the database search, two soil types were observed in the Survey Area:

Ramona sandy loam (RaB2), 2 to 5 percent slopes is a well-drained soil typically found in linear positions from 250 to 3,500 feet amsl. The soil profile is typically composed of sandy loam, fine sandy loam, sandy clay loam and gravelly sandy loam. These soils typically have relatively high permeability, with a low runoff when wet. The soil is 68 to 74 inches to gravelly sandy loam.

Greenfield sandy loam (GyC2), 2 to 5 percent slopes is a well-drained soil typically found in linear alluvial fans and terraces at elevations of about 100 to 3,500 feet. The soil profile is typically composed of sandy loam, fine sandy loam, loam and stratified loamy sand to sandy loam. These soils have a relatively high permeability with a low runoff. The soil is 60 to 72 inches to stratified loamy sand to sandy loam.

3.3 JURISDICTIONAL WATERS

The Project site is located within the San Jacinto Watershed and contains riparian vegetation and flowing water. Therefore, this section is subject USACE, RWQCB, and CDFW jurisdiction. A jurisdictional delineation survey was conducted and potential impacts to waters of the United States and waters of the State are provided in the Jurisdictional Delineation Report for the Cherry Channel Drainage Project (Appendix D).

3.4 VEGETATION COMMUNITIES

Five vegetation communities including Cattail Marsh, Disturbed Goodding's Willow-Red Willow Riparian Woodland, Disturbed Wild Tarragon Patches, Ruderal, Ornamental, and Developed were mapped within the Project site (Table 1). A map showing these different areas within the Project site is provided as Figure 3, and the communities are described in the following subsections.

Table 1: Vegetation Communities and Other Areas Occurring Within the Project Site

Vegetation Communities	Acres
Cattail Marsh	0.11
Disturbed Goodding's Willow - Red Willow Riparian Woodland	0.54
Disturbed Wild Tarragon Patches	0.24
Ruderal	1.48
Ornamental	0.88
Developed	5.55
Total	8.80

3.4.1 Cattail Marsh

Cattail Marshes are found in semi-permanently flooded freshwater or brackish marshes. Soils in this community are typically clayey or silty (Sawyer et al. 2009). The USFWS Wetland Inventory (1996 national list) recognizes narrow leaf cattail (*Typha angustifolia*), Slender cattail (*Typha domingensis*), and broadleaf cattail (*Typha latifolia*) as OBL plants. Slender cattail, narrow leaf cattail, or broadleaf cattail is dominant or co-dominant in the herbaceous layer with sedge (*Cyperus* sp.), salt grass (*Distichlis spicata*), barnyard grass (*Echinochloa crus-galli*), rushes (*Juncus* sp.), common reed (*Phragmites australis*), Chairmaker's bulrush (*Schoenoplectus americanus*), California bulrush (*Schoenoplectus californicus*), and rough cocklebur (*Xanthium strumarium*). Emergent trees may be present at low cover, including willows (*Salix* sp.) and herbs are less than 1.5 meters tall. Cover in this community is intermittent to continuous.

Areas with Cattail Marsh vegetation are present within 0.11 acres of the Project site located near the middle lower half of the channel along the bottom of the drainage. Native plant species found on the Project site typical of this vegetation community included: cattail, tall Cyperus, and Cyperus (*Cyperus* sp.). Non-native species included: barnyard grass, annual beard grass (*Polypogon monspeliensis*), and tamarisk (*Tamarix chinensis*).

3.4.2 Disturbed Goodding's Willow - Red Willow Riparian Woodland

Goodding's Willow - Red Willow Riparian Woodland vegetation is found along terraces by large rivers, canyons, along floodplains of streams, seeps, springs, ditches, floodplains, lake edges, low-gradient depositions (Sawyer et al. 2009). Black willow (aka Gooding's willow) and/or red willow is dominant or co-dominant in the tree or shrub canopy with boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), white alder (*Alnus rhombifolia*), incense cedar (*Calocedrus decurrens*), Oregon ash (*Fraxinus latifolia*), gray pine (*Pinus sabiniana*), California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*), canyon live oak (*Quercus chrysolepis*), valley oak (*Quercus lobata*), Pacific willow (*Salix lucida* var. *lasiandra*) or California fan palm (*Washingtonia filifera*). Shrubs include mule fat, red twig dogwood (*Cornus sericea*), Calofirnia rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), sand bar willow (*Salix exigua*), arroyo willow (*Salix lasiolepis*) or blue elderberry (*Sambucus mexicana*). Gooding's willow and red willow were formerly described and treated as separate alliances, but the two types have been merged since they often occur together and share similar habitats (Sawyer 2009). The tree canopy in this community is open to continuous with a shrub layer that is sparse to continuous and an herbaceous layer that is variable.

A Disturbed form of Goodding's Willow - Red Willow Riparian Woodland is present within 0.54 acres of the Project site, located on the northern half of the channel at the bottom of the drainage. Disturbed areas are those areas that experience frequent human disturbance such as vegetation clearing, off-road vehicle traffic, and littering or those areas that have a high percentage of non-native weedy species (i.e., greater than 25 percent of the species cover). This area is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all tree and shrub species are prevented from forming woody growth and must sprout back up from the base each year. Native plant species found on the Project site typical of this vegetation community included: black willow, arroyo willow, sandbar willow, mulefat, *Cyperus*, and cattail.

3.4.3 Disturbed Wild Tarragon Patches

Wild tarragon patches can be found in intermittently flooded stream channels, terraces, and flats (Sawyer et al. 2009). Soils are typically sandy alluvium to silt loam, are derived from many substrates, and are often subject to flooding or other disturbances. The alliance occurs in disturbed environments, particularly along intermittently flooded alluvium. Membership rules for vegetation mapping state that wild tarragon (*Artemisia dracunculus*) and/or cudweed (*Pseudognaphalium canescens*) is greater than 50 percent relative cover in the herbaceous layer (Kittel et al. 2012). Wild tarragon is dominant, co-dominant, or characteristically present in the herbaceous layer with common fiddleneck (*Amsinckia menziesii*), mugwort (*Artemisia douglasiana*), *Bromus* spp., tocalote (*Centaurea melitensis*), purple clarkia (*Clarkia purpurea*), woodland clarkia (*Clarkia unguiculata*), Coastal heron's bill (*Erodium cicutarium*), California Poppy (*Eschscholzia californica*), shortpod mustard (*Hirschfeldia incana*), cat's ears (*Hypochaeris glabra*), Spanish lotus (*Acmispon americanus*), miniature lupine (*Lupinus bicolor*), cudweed (*Pseudognaphalium canescens*), willow leaved dock (*Rumex salicifolius*) and ratail fescue (*Festuca myuros*). Emergent trees and shrubs may be present at low cover, including trees like gray pine (*Pinus sabiniana*) and shrubs like mule fat, California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*) and threadleaf ragwort (*Senecio flaccidus*). The herbaceous layer in this community is typically less than 5 feet and cover is intermittent to continuous (Sawyer et al. 2009).

A Disturbed form of Wild Tarragon Patches are present within 0.24 acres of the Project site located in the southern portion of the channel along the bottom of the drainage. Disturbed areas are those areas that experience frequent human disturbance such as vegetation clearing, off-road vehicle traffic, and littering or those areas that have a high percentage of non-native weedy species (i.e., greater than 25 percent of the species cover). This area is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all shrub species are prevented from forming woody growth and must sprout back up from the base each year. Trash and high weed cover were additional disturbance factors in this area. The dominant native species typical of this community included: tarragon, tall *Cyperus*, parched fireweed (*Epilobium brachycarpum*), willowherb (*Epilobium ciliatum* subsp. *ciliatum*), horseweed (*Erigeron canadensis*), and young emergent black willow and arroyo willow. Non-native species included: barnyard grass, annual beard grass, shortpod mustard, common knotweed (*Polygonum arenastrum*), and curly dock (*Rumex crispus*).

3.4.4 Ruderal

Areas classified as Ruderal tend to be dominated by pioneering herbaceous species that readily colonize disturbed ground and that are typically found in temporary, often frequently disturbed habitats (Barbour et al. 1999). The soils in Ruderal areas are typically characterized as heavily compacted or frequently disturbed. The vegetation in these areas are adapted to living in compact soils where water does not

readily penetrate the soil. Often, Ruderal areas are dominated by species of the *Centaurea*, *Brassica*, *Malva*, *Salsola*, *Eremocarpus*, *Amaranthus*, and *Atriplex* genera.

Areas with Ruderal vegetation are present throughout the Project site within the open space on the north and south side of the overflow parking lot, all along the channel's sloped banks, and within several sections in the base of the channel. The open space shows signs of human disturbance from disc/mowing and the ruderal sections of the channel base contain various trash and debris. Non-native species included: shortpod mustard, Russian-thistle (*Salsola australis*), ripgut grass (*Bromus diandrus*), annual beard grass, wild oat (*Avena fatua*), and occasional tamarisk. Native plant species found on the banks and in the drainage included: horseweed which was the dominant species with scattered turkey-mullein (*Croton setiger*), California buckwheat along the top edges of the side banks. There are 1.48 acres of Ruderal vegetation located within the Project site.

3.4.5 Ornamental

Ornamental Landscaping includes areas where the vegetation is dominated by non-native horticultural plants (Gray and Bramlet 1992). Typically, the species composition consists of introduced trees, shrubs, flowers and turf grass.

Ornamental Landscaping is present along the top edges of the Cherry Channel Drainage. These areas receive supplemental water from above ground irrigation. Plant species found on the Project site typical of this community include Japanese privet (*Ligustrum japonicum*), star jasmine (*Trachelospermum jasminoides*), Japanese cheesewood (*Pittosporum tobira*), and occasional patches of California buckwheat. There are 0.88 acres of Ornamental Landscaping on the Project site.

3.4.6 Developed

Developed areas are areas that have been altered by humans and now display man-made structures such as houses, paved roads, buildings, parks, and other maintained areas.

Developed areas are present within the Project site and make up approximately 5.55 acres. Cherry Avenue runs parallel to the channel and is included in the Project boundary, along with sidewalks, walking paths, and a parking lot located to the east within the Project site. Residential buildings are located along the eastern edge of the Project site.

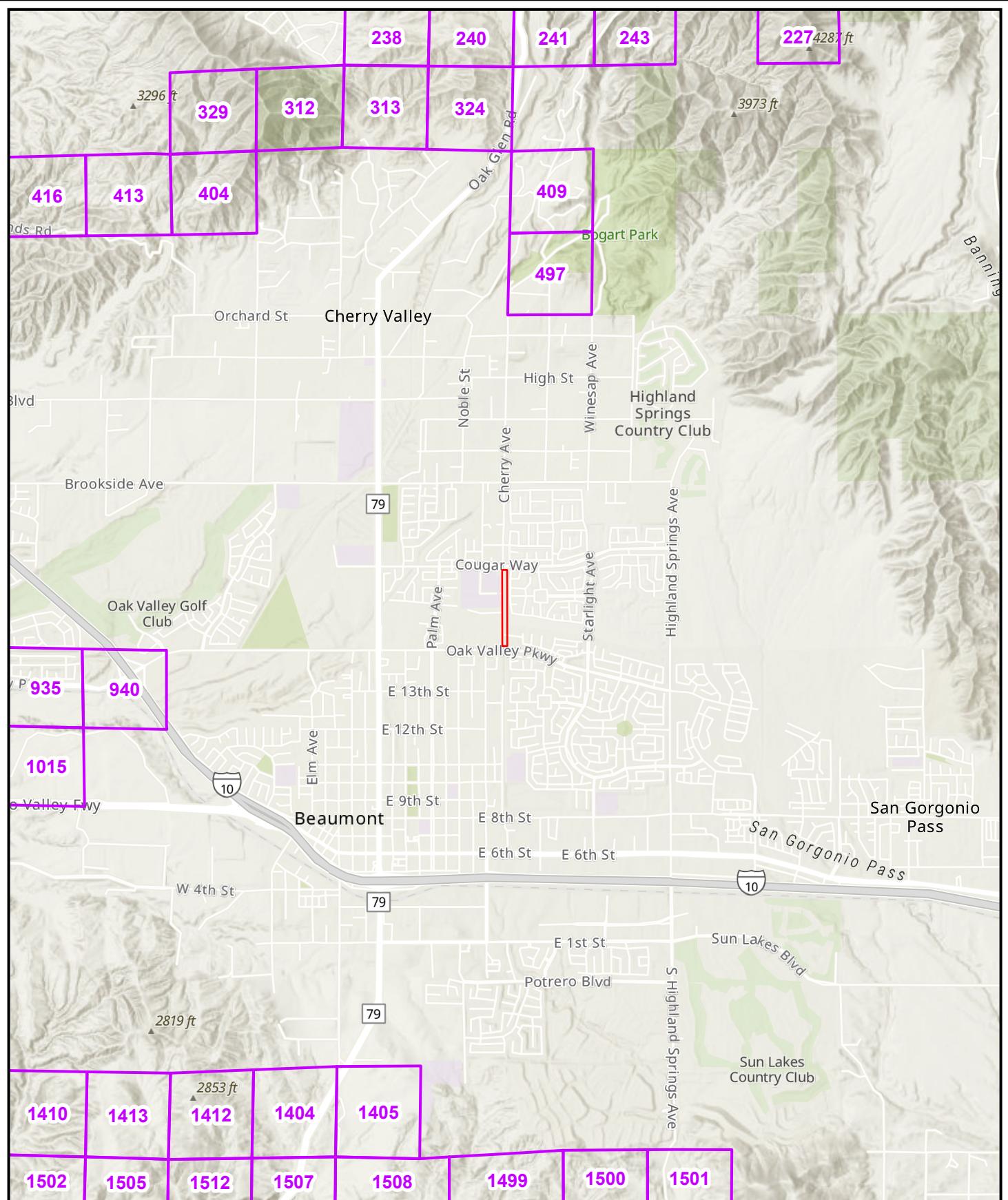


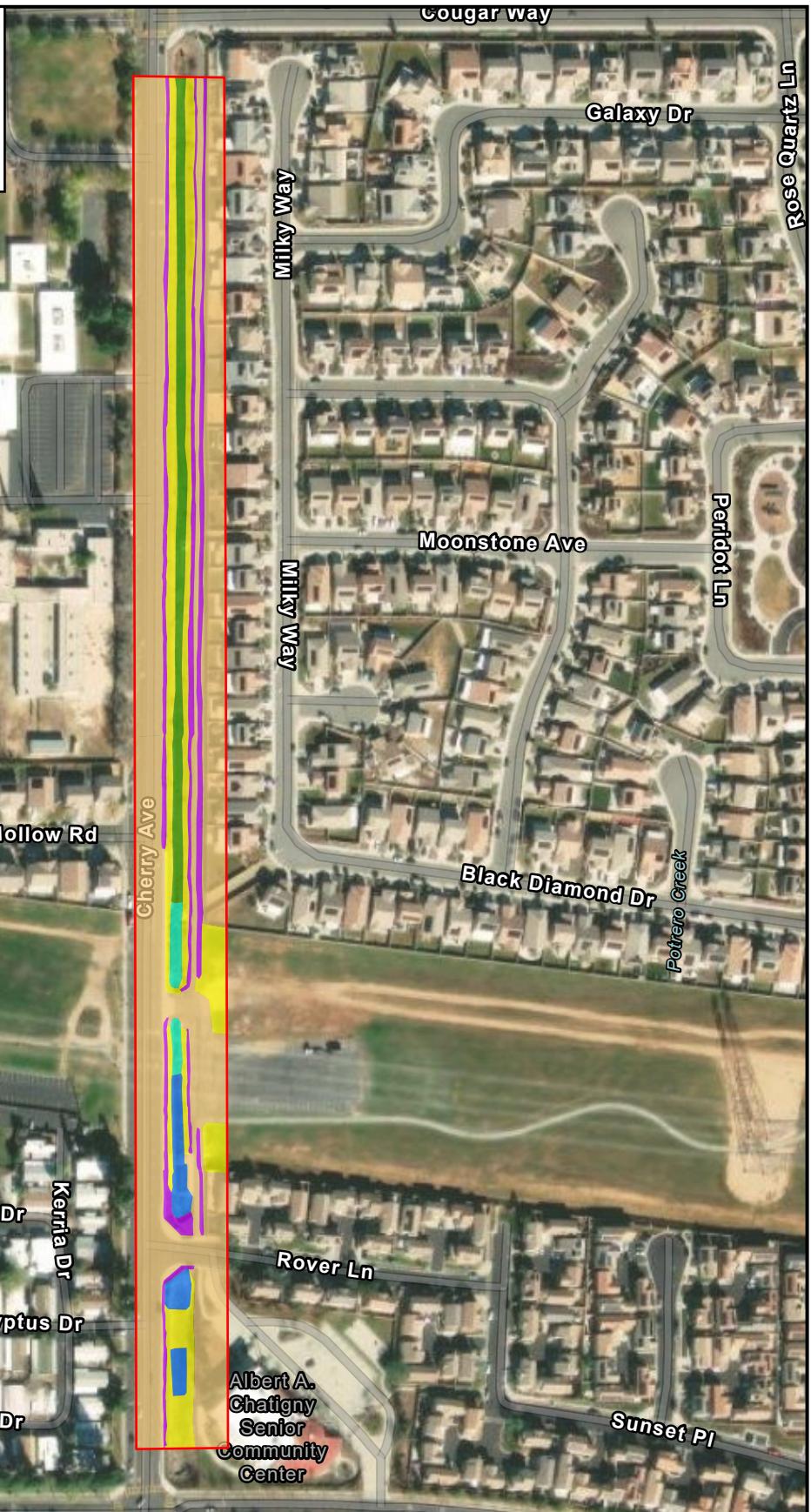
Figure 2
Cherry Channel Drainage
RCA Western Riverside County Criteria Area Cells

Project Location

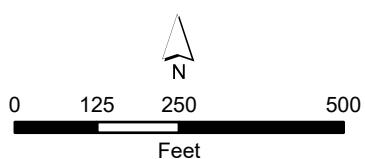
Criteria Cell



0 0.38 0.75 1.5
Miles



Project Location



Overview

Figure 3
Cherry Channel Drainage
Vegetation Communities

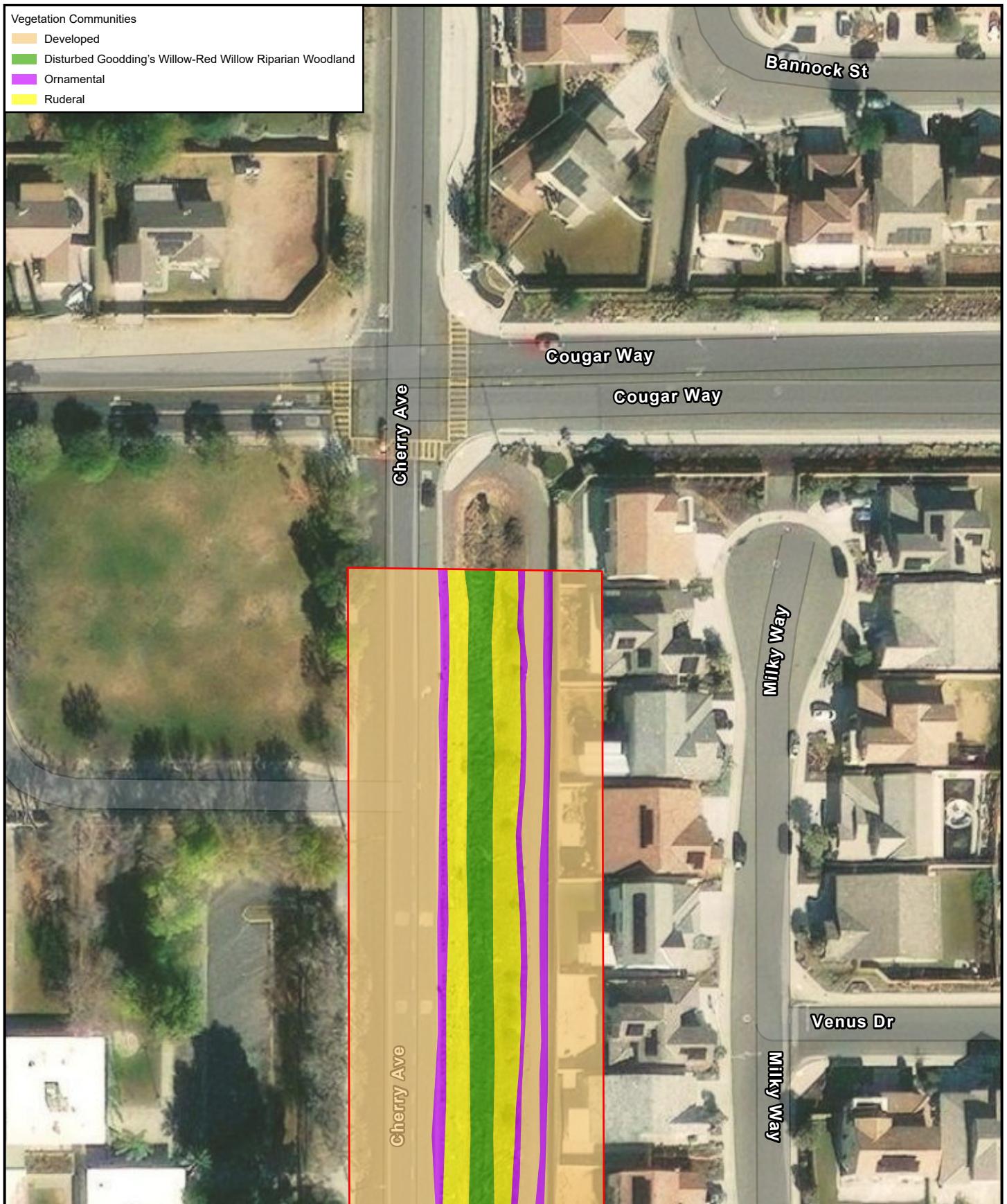


Figure 3
Cherry Channel Drainage
Vegetation Communities

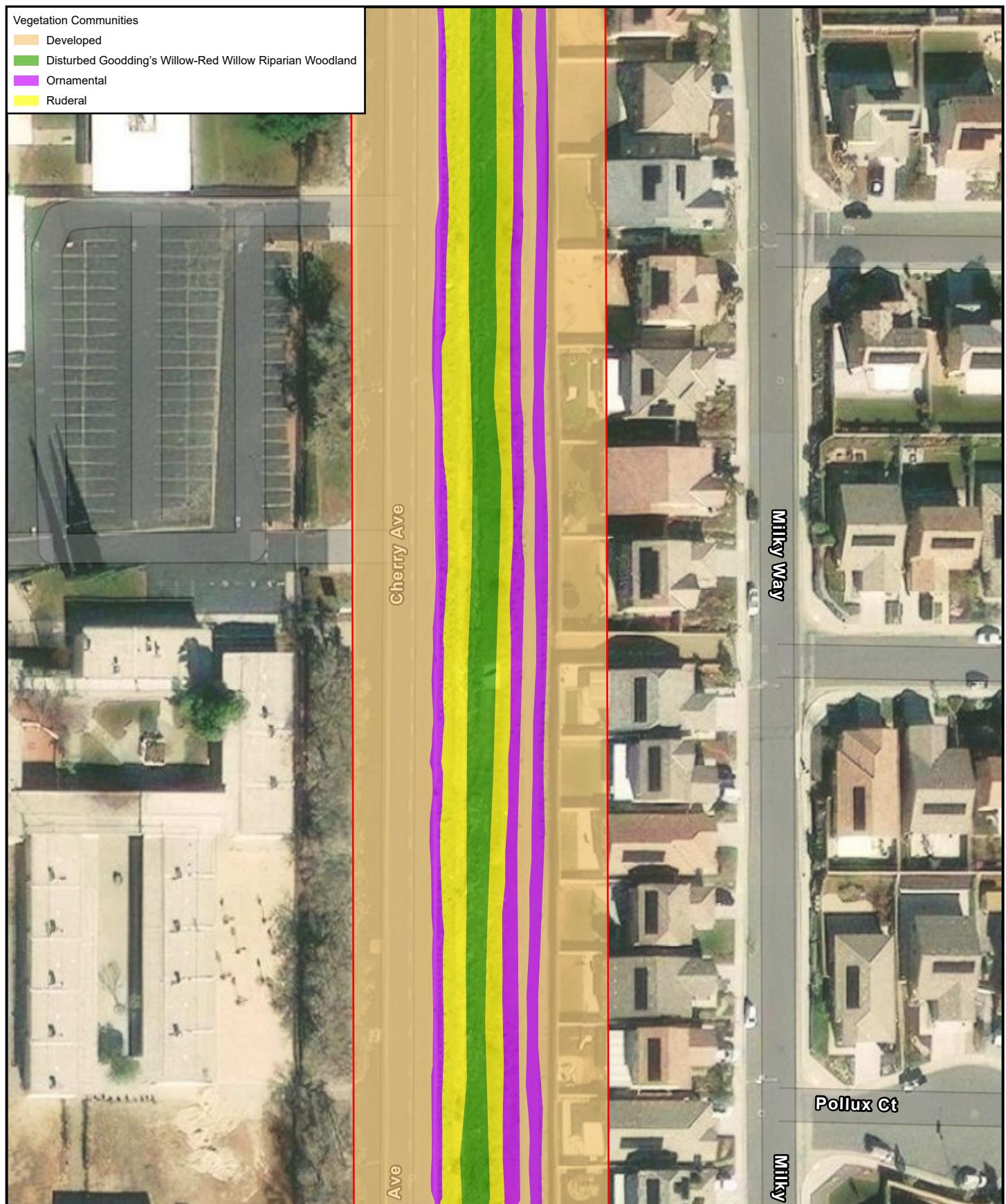


Figure 3
Cherry Channel Drainage
Vegetation Communities

Vegetation Communities

- Cattail Marsh
- Developed
- Disturbed Wild Tarragon Patches
- Disturbed Goodding's Willow-Red Willow Riparian Woodland
- Ornamental
- Ruderal



Figure 3
Cherry Channel Drainage
Vegetation Communities

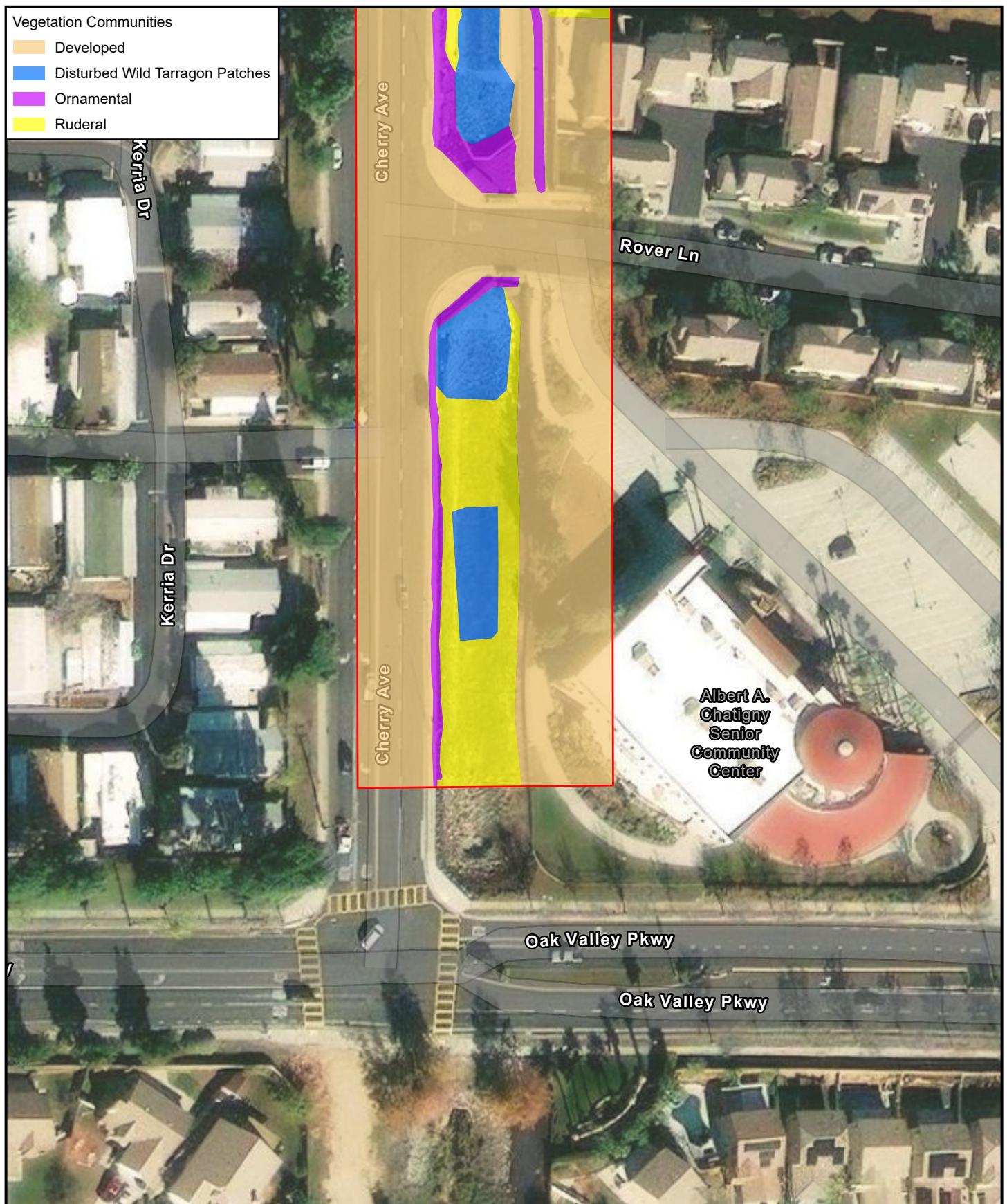


Figure 3

Cherry Channel Drainage
Vegetation Communities



0 40 80 160
Feet

Name: 21492 Cherry Channel Drainage.Mxd
Print Date: 8/26/2024 12:24 PM Author: pcarlos



3.5 SPECIAL STATUS SPECIES

The following information is a list of abbreviations used to help determine the significance of biological special status resources potentially occurring on the Project site.

California Rare Plant Rank (CRPR)

CRPR 1A = Plants presumed extinct in California.
CRPR 1B = Plants rare and endangered in California and throughout their range.
CRPR 2 = Plants rare, threatened or endangered in California but more common elsewhere in their range.
CRPR 3 = Plants about which we need more information, a review list.

CRPR Extensions

0.1 = Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat).
0.2 = Fairly endangered in California (20-80 percent occurrences threatened).
0.3 = Not very endangered in California (less than 20 percent of occurrences threatened).

Federal

FE = Federally listed; Endangered
FT = Federally listed; Threatened

State

ST = State listed; Threatened
SE = State listed; Endangered
RARE = State-listed; Rare (Listed “Rare” animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
SSC = California Species of Special Concern

The following information was used to determine the significance of biological resources potentially occurring within the Project site. The criteria used to evaluate the potential for special status species to occur on the Project site are outlined in Table 2.

Table 2: Criteria for Evaluating Special Status Species Potential for Occurrence (PFO)

PFO*	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Project site.
Low:	Historical records for this species do not exist within the immediate vicinity (approximately 5 miles) of the Project site, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the immediate vicinity of the Project site (approximately 3 miles) and marginal habitat exists on the Project site, or the habitat requirements or environmental conditions associated with the species occur within the Project site, but no historical records exist within 5 miles of the Project site.
High:	Both a historical record exists of the species within the Project site or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Project site.
Present:	Species was detected within the Project site at the time of the survey.

* PFO: Potential for Occurrence

3.5.1 Special Status Plant Species

Current database searches (CDFW 2024 and CNPS 2024) resulted in a list of 41 federally and/or state listed threatened and endangered or otherwise special status plant species documented to occur within 5 miles of the Project site. After the literature review and the reconnaissance-level survey, it was determined that 39 of the 41 species are considered absent from the Survey Area based on the assessment of the various habitat types observed in the area of the site. Two of the species are considered to have a low potential to be present in the site due to low quality and disturbed suitable habitat. Factors used to determine the potential for occurrence included the quality of habitat, elevation, soil type, and the results of the reconnaissance survey. In addition, the location of prior CNDDB records of occurrence was used as additional data, but because the CNDDB is a positive-sighting database, these data were used only in support of the analysis from the previously identified factors.

The following 34 plant species are considered **absent** from the Project site due to lack of suitable habitat and/or the species are found outside of the elevational range on site:

- chaparral sand-verbena (*Abronia villosa* var. *aurita*) – CRPR 1B.1
- Yucaipa onion (*Allium marvinii*) – CRPR 1B.2
- Horn's milk-vetch (*Astragalus hornii* var. *hornii*) – CRPR 1B.1
- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*) – **FE**, CRPR 1B.2
- Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*) – CRPR 1B.1
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) – **FE**, CRPR 1B.1
- Parish's brittlescale (*Atriplex parishii*) – CRPR 1B.1
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*) – CRPR 1B.2
- thread-leaved brodiaea (*Brodiaea filifolia*) – **CE, FT**, CRPR 1B.1
- Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*) – CRPR 1.B2

- San Bernardino Mountains owl's-clover (*Castilleja lasiorhyncha*) – CRPR 1B.2
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1
- white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) – CRPR 1B.2
- slender-horned spineflower (*Dodecahema leptoceras*) – **CE, FE**, CRPR 1B.1
- Santa Ana River woollystar (*Eriastrum densifolium* subsp. *sanctorum*) – **CE, FE**, CRPR 1B.1
- San Jacinto Mountains bedstraw (*Galium angustifolium* subsp. *jacinticum*) – CRPR 1.B3
- Alvin meadow bedstraw (*Galium californicum* subsp. *primum*) – CRPR 1.B2
- Parish's alumroot (*Heuchera parishii*) – CRPR 1B.3
- vernal barley (*Hordeum intercedens*) – CRPR 3.2
- mesa horkelia (*Horkelia cuneata* var. *puberula*) – CRPR 1B.1
- pygmy hulsea (*Hulsea vestita* subsp. *pygmaea*) – CRPR 1B.3
- lemon lily (*Lilium parryi*) – CRPR 1B.2
- white bog adder's-mouth (*Malaxis monophyllos* var. *brachypoda*) – CRPR 2B.1
- spiny-hair blazing star (*Mentzelia tricuspidis*) – CRPR 2B.1
- Hall's monardella (*Monardella macrantha* subsp. *hallii*) – CRPR 1B.3
- San Felipe monardella (*Monardella nana* subsp. *leptosiphon*) – CRPR 1B.2
- little mousetail (*Myosurus minimus* subsp. *apus*) – CRPR 3.1
- mud nama (*Nama stenocarpa*) – CRPR 2B.2
- narrow-leaf sandpaper-plant (*Petalonyx linearis*) – CRPR 2B.3
- Latimer's woodland-gilia (*Saltugilia latimeri*) – CRPR 1B.2
- salt spring checkerbloom (*Sidalcea neomexicana*) – CRPR 2B.2
- southern jewelflower (*Streptanthus campestris*) – CRPR 1B.3
- California screw-moss (*Tortula californica*) – CRPR 1B.2
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) – CRPR 2B.1

The following five plant species are considered **absent** from the Project site because surveys took place during each species' bloom period when they would have been conspicuous and identifiable and yet were not observed:

- smooth tarplant (*Centromadia pungens* subsp. *laevis*) – CRPR 1B.1
- Mojave tarplant (*Deinandra mohavensis*) – **CE**, CRPR 1B.3
- California satintail (*Imperata brevifolia*) – CRPR 2B.1
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*) – CRPR 2B.2
- San Bernardino aster (*Sympyotrichum defoliatum*) – CRPR 1B.2

The analysis of the literature review and the field survey resulted in two species with a **low** potential to occur in the Project site. California satintail and Coulter's goldfields have a low potential:

- Coulter's goldfields (*Lasthenia glabrata* subsp. *coulteri*) – CRPR 1B.1
- spreading navarretia (*Navarretia fossalis*) – **FT**, CRPR 1B.1

3.5.2 Special Status Wildlife

A current database search (CNDDB 2024) resulted in a list of 40 federal- and/or state-listed endangered or threatened, Species of Concern, or otherwise special status wildlife species that may potentially occur within the Project site. After a literature review and the assessment of the various habitat types within the Project site, it was determined that 38 special status wildlife species were considered absent from the Project site, one species have a low potential to occur, and one species was present within the Project

site. Factors used to determine potential for occurrence included the quality of habitat and the location of prior CNDDDB records of occurrence.

The following 38 wildlife species are considered **absent** from the Project site due to lack of suitable habitat present or because the species falls outside the elevation range found on the Project site:

- American badger (*Taxidea taxus*) - SSC
- black swift (*Cypseloides niger*) - SSC
- California glossy snake (*Arizona elegans occidentalis*) – SSC
- coastal whiptail (*Aspidoscelis tigris stejnegeri*) - SSC
- coast horned lizard (*Phrynosoma blainvillii*) - SSC
- coast patch-nosed snake (*Salvadora hexalepis virgulata*) - SSC
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) - SSC
- coastal California gnatcatcher (*Polioptila californica californica*) - FT, SSC
- Le Conte's thrasher (*Toxostoma lecontei*) – SSC
- least Bell's vireo (*Vireo bellii pusillus*) - FE, SE
- lesser long-nosed bat (*Leptonycteris yerbabuenae*) - SSC
- loggerhead shrike (*Lanius ludovicianus*) - SSC
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) - SSC
- pallid bat (*Antrozous pallidus*) - SSC
- Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorurus*) - SSC
- purple martin (*Progne subis*) - SSC
- red-diamond rattlesnake (*Crotalus ruber*) - SSC
- San Bernardino flying squirrel (*Glaucomys oregonensis californicus*) - FE
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*) - FE, SE, SSC
- San Diego desert woodrat (*Neotoma lepida intermedia*) - SSC
- Santa Ana speckled dace (*Rhinichthys osculus* ssp. 3) - SSC
- southern California legless lizard (*Anniella stebbinsi*) – SSC
- southern grasshopper mouse (*Onychomys torridus ramona*) – SSC
- southern mountain yellow-legged frog (*Rana muscosa*) - FE, SE
- southern rubber boa (*Charina umbratica*) – ST
- southwestern willow flycatcher (*Empidonax traillii extimus*) - FE, SE
- steelhead - southern California DPS (*Oncorhynchus mykiss irideus* pop. 10) - FE
- Stephens' kangaroo rat (*Dipodomys stephensi*) - FT, ST
- Swainson's hawk (*Buteo swainsoni*) – ST
- Townsend's big-eared bat (*Corynorhinus townsendii*) – SSC
- tricolored blackbird (*Agelaius tricolor*) - ST, SSC
- two-striped gartersnake (*Thamnophis hammondii*) - SSC
- western spadefoot (*Spea hammondii*) – SSC
- western yellow-billed cuckoo - FT, SE
- western yellow bat (*Lasiorurus xanthinus*) - SSC
- yellow breasted chat (*Icteria virens*) - SSC
- yellow-headed blackbird (*Xanthocephalus xanthocephalus*) – SSC
- yellow warbler (*Setophaga petechia*) - SSC

The analysis of the CNDDDB search and field survey resulted in one species with a **low** potential to occur on the Project site due to recent occurrences within 5 miles and/or low quality habitat:

- burrowing owl (*Athene cunicularia*) - SSC

The analysis of the CNDDDB search and field survey resulted in one species to be **present** at the Project site. A Cooper's hawk was present and is described below:

Cooper's Hawk (*Accipiter cooperii*) WL

The Cooper's hawk (nesting) is a CDFW Watch List species. This species occurs as a migrant and/or resident over most of the United States from southern Canada to northern Mexico. It is similar in appearance to the sharp-shinned hawk (*Accipiter striatus*), but is distinguished by its larger size, more rounded tail, and darker crown. Favored habitats include open woodlands, mature forests, woodland edges, and river groves. More recently, the Cooper's hawk has been known to breed in suburban and urban areas with tree structure similar to native habitats. This medium-sized (14 to 20 inches) hawk is well-adapted for hunting birds as prey with its long tail and short, rounded wings; these features allow maneuverability while in pursuit and on the ambush. In addition to birds, it may also take amphibians, reptiles, and small mammals as supplemental prey items. Historic population losses resulted from the widespread use of DDT. Other threats include habitat loss and illegal hunting (Remsen 1978). The channel does not support the habitat required for nesting by Cooper's hawk; however, it does contain marginally suitable foraging habitat for this species. This species is not anticipated to nest within the Project site but has potential for foraging along the channel. Therefore, no impacts are anticipated to occur from Cooper's Hawk.

3.6 GENERAL PLANTS

A total of 46 plant species were observed during the survey. Plant species observed or detected during the site survey were characteristic of the existing Survey Area conditions. No special status species were observed during the survey effort. A complete list of plants observed is provided in Appendix B.

3.7 GENERAL WILDLIFE

A total of 10 wildlife species were observed during the survey. Wildlife species observed or detected during the site survey were characteristic of the existing Survey Area conditions. A Cooper's hawk, which is a CDFW watchlist species, was observed just south of the Project site, foraging. No other special status species were observed during the survey effort. A complete list of wildlife observed is provided in Appendix C.

SECTION 4.0 – CONCLUSIONS AND RECOMMENDATIONS

4.1 UNAVOIDABLE IMPACTS

A total of 0.65 acre of riparian vegetated streambed was mapped within the Project impact area. The Channel does support native riparian vegetation throughout the northern portion of the Channel. However, as stated previously, the riparian vegetation is regularly maintained by the City and is considered early successional, lacking the mature forest and canopy required by the riparian species listed in Section 6.1.2 of the MSHCP. Therefore, the vegetated streambed does not meet the MSHCP definition of Riverine as it cannot support the covered species within the site. While a portion of the site does contain habitat dominated by emergent trees, shrubs, and forbs, which occur close to or which depend upon soil moisture from a nearby fresh water source, this area is supported solely by the presence of the sprinkler system and would not exist without it. Additionally, the drainage has no direct connectivity to downstream MSHCP Conservation areas, thus does not contribute to the biological functions and values of downstream habitat for covered species within the MSHCP Conservation Area. Additionally, species listed in Section 6.1.2 of the MSHCP are not present and are not expected to occur within the Project area. Thus, no impacts are anticipated to occur to least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo.

The site does not support vernal pools or other seasonal wetland habitats. Additionally, the site lacks the basalt soils and other suitable habitat required by Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, or vernal pool fairy shrimp. Therefore, the Project is not anticipated to result in impacts to these species.

4.2 SPECIAL STATUS PLANTS

After the literature review, the assessment of the various habitat types in the Project area, and the reconnaissance survey was conducted, it was determined that 39 of the 41 species with a potential to occur are considered absent from the Project site. Two of the 41 species are considered to have a low potential to be present at the Project site due to low quality and disturbed suitable habitat. The Project site is not within a Criteria Area Cell but is in a narrow endemic plant survey area which includes Marvin's onion and Many-stemmed dudleya. However, the Project site does not contain suitable habitat required by these two species; thus, these species are not anticipated to be found within the Project site or the associated buffer. Therefore, focused protocol-level surveys are not required.

4.3 SPECIAL STATUS WILDLIFE

Of the 40 special status wildlife species identified in the literature review, it was determined that 38 special status wildlife species were considered absent from the Project site, one had a low potential to occur, and one was present within the Project site. Burrowing owls have a low potential to occur within the Project site; therefore, a burrowing owl focused survey is required in accordance with the MSHCP. Least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo are not anticipated to nest within the Project site. Therefore, no impacts are anticipated to occur to these species and no additional mitigation is recommended. A Cooper's Hawk, which is a watchlist species, was present during the survey. This species is not anticipated to nest within the Project site but has potential for foraging along the channel. Therefore, no impacts are anticipated to occur to Cooper's Hawk as a result of Project activities. While not anticipated to occur, in order to minimize potential impacts to these species, a preconstruction survey should be conducted prior to the start of construction activities. If any of the above

species are identified, measures to avoid or minimize impacts to these species should be submitted to resource agencies for approval prior to construction.

4.4 MIGRATORY BIRD TREATY ACT, AS AMENDED (16 USC 703-711)

In compliance with the Migratory Bird Treaty Act (MBTA), any vegetation clearing should take place outside the general bird breeding season (February 15 to September 15), to the maximum extent practical. If this is not possible, a qualified biologist should conduct a nesting bird and raptor survey prior to ground-disturbing activities. The survey should occur no more than one week prior to initiation of Project activities, and any occupied passerine and/or raptor nests occurring within or adjacent to the Project site should be delineated. Additional follow-up surveys may be required by the resource agencies. To the maximum extent practicable, a minimum buffer zone around occupied nests should be maintained during physical ground-disturbing activities. The buffer zone should be sufficient in size to prevent impacts to the nest. Once nesting has ceased, the buffer may be removed.

4.5 JURISDICTIONAL WATERS

The Project site is located within the San Jacinto Watershed, a blue-line stream, and contains riparian vegetation and flowing water. This section is subject USACE, RWQCB, and CDFG jurisdiction (Appendix D).

4.6 PROJECT DESIGN FEATURES

Some areas within the Project site could provide suitable habitat for special status plant species including Coulter's goldfields and spreading navarretia; thus, these species may be impacted by Project activities. However, the suitable habitat for these two species is considered marginal or low quality. Because only marginal quality habitat is present and the site is significantly disturbed from annual flooding, protocol-level surveys for these two plant species are not required.

The Project site does not contain suitable nesting habitat for least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, or suitable habitat for any listed fairy shrimp species. Therefore, no additional surveys are required for these species. The Project site is within the designated survey area for burrowing owl. Therefore, a pre-construction focused survey for burrowing owl (BUOW) shall be conducted within 30 days prior to ground disturbance to reevaluate the locations of active burrowing owl burrows located adjacent to or within the Project limits and to avoid direct take of BUOW (MSHCP Species Specific Objective 6). If BUOWs are identified on site, avoidance measures will be developed in compliance with the MSHCP and in coordination with the CDFW and/or Western Riverside County Regional Conservation Authority (RCA). These measures would include the following as well as any others developed in coordination with CDFW and/or RCA:

- A biologist with knowledge of BUOW and its habitat will be retained to function as a biological monitor.
- The biological monitor will develop and implement a contractor education program with regard to the BUOW to be provided to all personnel (including temporary contractors and subcontractors) before beginning work on the Project.
- The biological monitor will be present during vegetation clearing, grading, and construction, to monitor occupied BUOW burrows and any construction-related impacts.

- Prior to any ground disturbance, all limits of Project construction will be delineated and marked to be clearly visible to personnel on foot and in heavy equipment. All construction-related activities (e.g., vegetation removal, grading, equipment lay-down and storage, and contractor parking) will occur inside the limits of construction and designated staging areas. Construction staging and equipment storage will be located outside any occupied BUOW burrow locations.
- All movement of contractors, subcontractors, or their agents and equipment will be restricted to the limits of construction and staging areas.
- A qualified biologist will conduct any necessary BUOW passive relocation that may be required to avoid Project effects to BUOW.
- If BUOW must be moved away from the proposed work area, passive relocation techniques would be used rather than actual avian trapping. At least one or more weeks would be necessary to accomplish this to allow the birds to acclimate to alternate burrows.
- The Project would provide funding for long-term management and monitoring of the protected lands acquired for BUOW impacts. This monitoring would include an annual report submittal to the CDFW.

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APPENDIX A – SITE PHOTOGRAPHS

APPENDIX A – SITE PHOTOGRAPHS



Photo 1.

Overview photo of Cherry Channel drainage from the north end. The northern half of the drainage is dominated by young Goodding's Willow Riparian habitat. Photo is facing south.



Photo 2.

Overview photo of Cherry Channel drainage from the middle of the Project site. Disturbed Goodding's Willow Riparian habitat begins to transition into cattail marsh habitat. Photo is facing south.



Photo 3.
Cattail marsh habitat with Ruderal vegetation lining the slopes located near the middle of the drainage. Photo is facing southwest.



Photo 4.
Section on the southern half of the drainage that is dominated by Disturbed Wild Tarragon habitat. Slopes of the drainage are Ruderal with scattered natives including horseweed and California buckwheat. Photo is facing north.

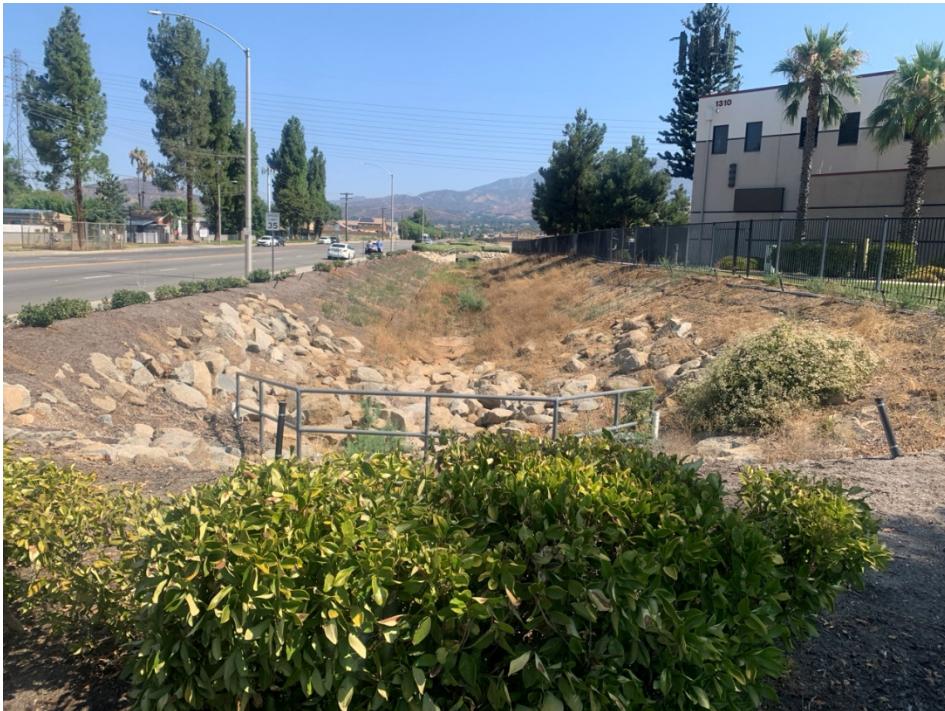


Photo 5.

Overview of the southern portion of the drainage. This area is dominated with Ruderal vegetation. Ornamental vegetation lines the outsides of the channel. Photo is facing north.



Photo 6.

Overview photo of the parking lot located east of the drainage. More Ruderal vegetation is located on both sides of the Parking lot. Photo is facing southwest.



Photo 7.

Overview of the open space located along the SCE power lines. This area has a low potential for BUOW. Soils look freshly tilled/mowed. Photo is facing east.



Photo 8.

Overview photo of the natural drainage (Potrero Creek) located south, outside of the Project site boundary. This drainage leads to San Jacinto River which is a NWI mapped waterway. Photo is facing southwest.

APPENDIX B – PLANT SPECIES OBSERVED

APPENDIX B – PLANT SPECIES OBSERVED

Scientific Name	Common Name
ANGIOSPERMS (EUDICOTS)	
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus albus</i> *	tumbling pigweed
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Schinus molle</i> *	Peruvian pepper tree
APOCYNACEAE	DOGBANE FAMILY
<i>Trachelospermum jasminoides</i> *	star jasmine
ASTERACEAE	SUNFLOWER FAMILY
<i>Artemisia dracunculus</i>	tarragon
<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule fat
<i>Cirsium vulgare</i> *	bull thistle
<i>Erigeron bonariensis</i> *	flax-leaved horseweed
<i>Erigeron canadensis</i>	horseweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i>	coast goldenbush
<i>Stephanomeria pauciflora</i>	wire lettuce
BRASSICACEAE	MUSTARD FAMILY
<i>Hirschfeldia incana</i> *	shortpod mustard
CHENOPodiACEAE	GOOSEFOOT FAMILY
<i>Salsola australis</i> *	Russian-thistle
EUPHORBIACEAE	SPURGE FAMILY
<i>Chamaesyce maculata</i> *	spotted spurge
<i>Croton setiger</i>	turkey-mullein
FABACEAE	LEGUME FAMILY
<i>Melilotus albus</i> *	white sweetclover
<i>Melilotus indicus</i> *	sourclover
<i>Vicia sp.</i> *	vetch
OLEACEAE	OLIVE FAMILY
<i>Ligustrum japonicum</i> *	Japanese privet
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Epilobium brachycarpum</i>	parched fireweed
<i>Epilobium ciliatum</i> subsp. <i>ciliatum</i>	epilobium cilatum
PITTOSPORACEAE	TOBIRA FAMILY
<i>Pittosporum tobira</i>	Japanese cheesewood
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Veronica anagallis-aquatica</i> *	water speedwell
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Persicaria hydropiperoides</i>	water pepper

<i>Polygonum arenastrum</i> *	common knotweed
<i>Rumex crispus</i> *	curly dock
SALICACEAE	WILLOW FAMILY
<i>Populus fremontii</i> subsp. <i>fremontii</i>	fremont cottonwood
<i>Salix exigua</i>	narrow-leaved willow
<i>Salix gooddingii</i>	black willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
SOLANACEAE	NIGHTSHADE FAMILY
<i>Datura wrightii</i>	jimson weed
<i>Solanum americanum</i>	small-flowered nightshade
TAMARICACEAE	TAMARISK FAMILY
<i>Tamarix chinensis</i> *	tamarisk
ZYGOPHYLLACEAE	CALTROP FAMILY
<i>Tribulus terrestris</i> *	puncture vine
ANGIOSPERMS (MONOCOTS)	
ARECACEAE	PALM FAMILY
<i>Washingtonia robusta</i> *	Mexican fan palm
CYPERACEAE	SEDGE FAMILY
<i>Cyperus eragrostis</i>	tall cyperus
<i>Cyperus sp.</i>	sedge
POACEAE	GRASS FAMILY
<i>Avena fatua</i> *	wild oat
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus tectorum</i> *	cheat grass
<i>Echinochloa crus-galli</i> *	barnyard grass
<i>Leptochloa fusca</i> subsp. <i>uninervia</i>	Mexican sprangletop
<i>Polypogon monspeliensis</i> *	annual beard grass
TYPHACEAE	CATTAIL FAMILY
<i>Typha domingensis</i>	cattail

*Non-Native Species

APPENDIX C – WILDLIFE SPECIES LIST

APPENDIX C – WILDLIFE SPECIES OBSERVED OR DETECTED

Scientific Name	Common Name
CLASS AVES	BIRDS
CORVIDAE	JAYS & CROWS
<i>Corvus corax</i>	common raven
TROCHILIDAE	HUMMINGBIRDS
<i>Calypte anna</i>	Anna's hummingbird
FRINGILLIDAE	FINCHES
<i>Carpodacus mexicanus</i>	house finch
<i>Spinus psaltria</i>	lesser goldfinch
COLUMBIDAE	PIGEONS & DOVES
<i>Zenaida macroura</i>	mourning dove
<i>Columba livia</i>	rock pigeon
ACCIPITRIDAE	HAWKS, KITES, EAGLES
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Accipiter cooperii</i>	Cooper's hawk
CLASS INSECTA	INSECTS
PIERIDAE	WHITES & SULPHURS
<i>Pieris rapae</i>	cabbage white
CLASS AMPHIBIA	AMPHIBIANS
RANIDAE	TRUE FROGS
<i>Lithobates catesbeianus</i>	bullfrog

APPENDIX D – JURISDICTIONAL DELINEATION REPORT

**JURISDICTIONAL DELINEATION REPORT
FOR THE CHERRY CHANNEL DRAINAGE
PROJECT
BEAUMONT, CALIFORNIA**

Prepared for:

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October 2024

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SECTION 1.0 – INTRODUCTION

Chambers Group, Inc. (Chambers Group) was retained by the City of Beaumont (City) to conduct a Jurisdictional Delineation (JD) for the proposed Cherry Channel Drainage Project (Project).

The purpose of this JD report is to delineate the potential waters and wetlands that occur within and/or immediately adjacent to the Project site. This JD report describes the type and extent of: (1) waters of the United States, including wetlands (if present), under the regulatory authority of the U.S. Army Corps of Engineers (USACE); (2) waters of the State under the regulatory authority of the Regional Water Quality Control Board (RWQCB); (3) waters under the regulatory authority of the California Department of Fish and Wildlife (CDFW); and (4) Riparian/Riverine areas pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Section 6.1.2.

1.1. PROJECT BACKGROUND

The Project site is located along Cherry Avenue, between Cougar Way and Oak Valley Parkway in Riverside County. Residential communities are located along Cherry Avenue to the northeast, southeast, and southwest. Beaumont Adult School and San Gorgonio Middle School are located to the west of Cherry Avenue.

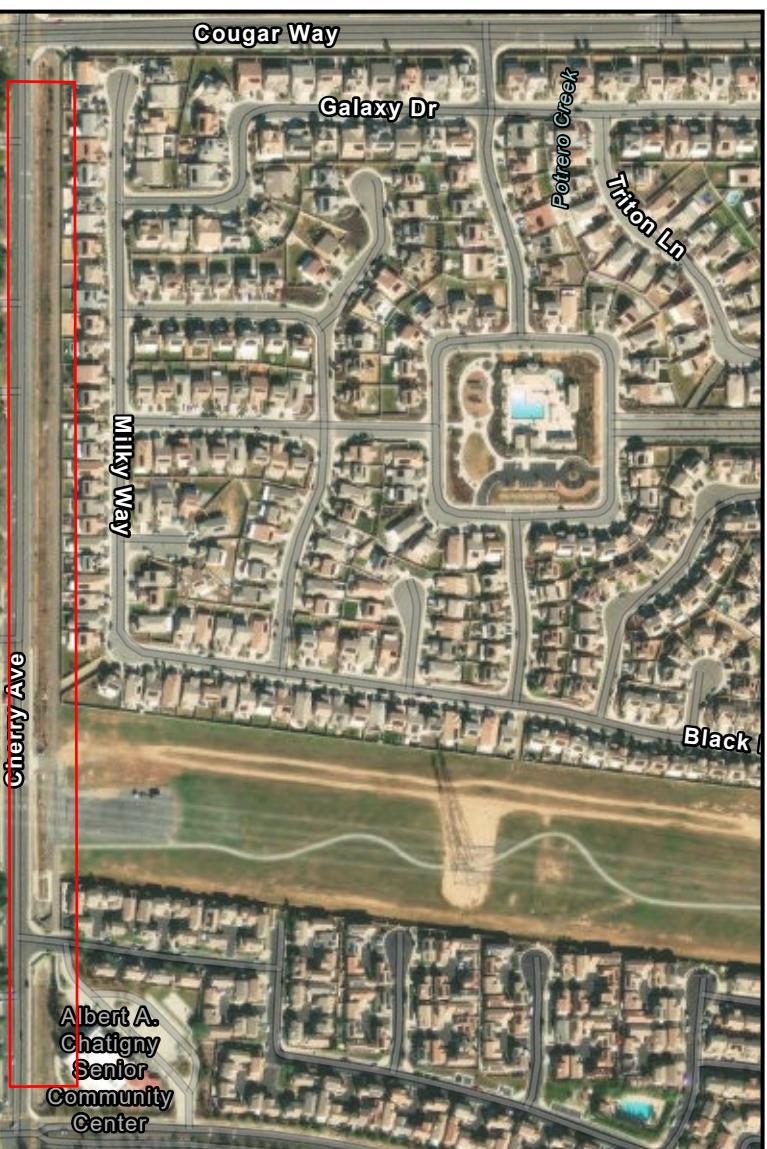
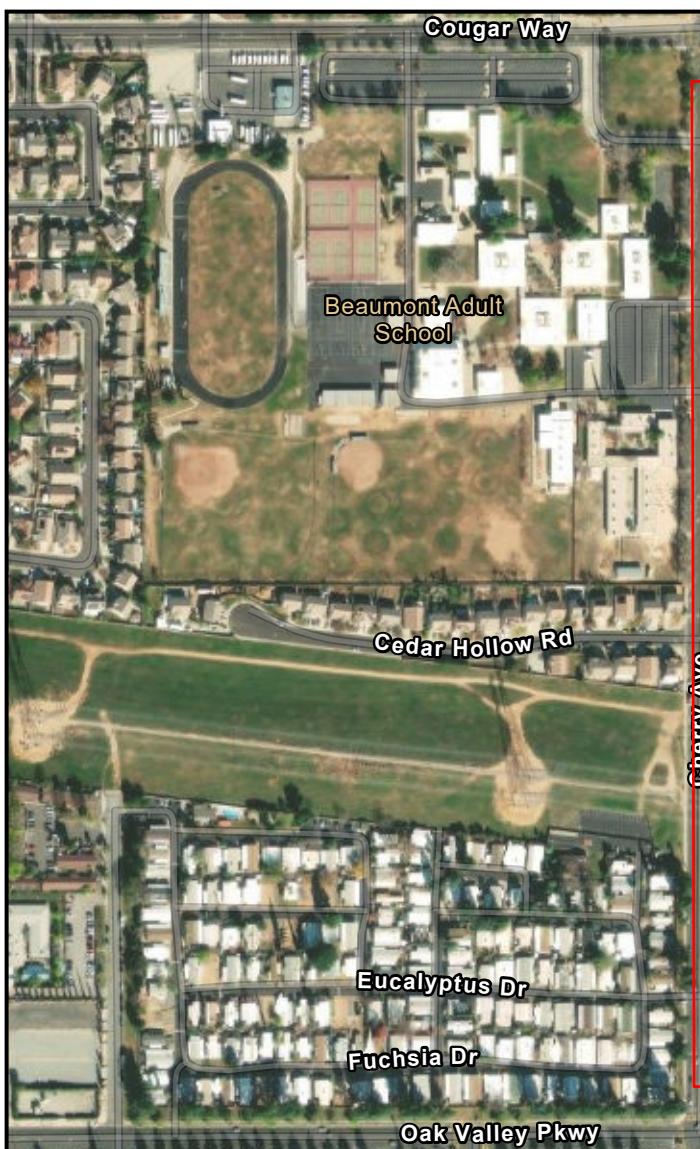
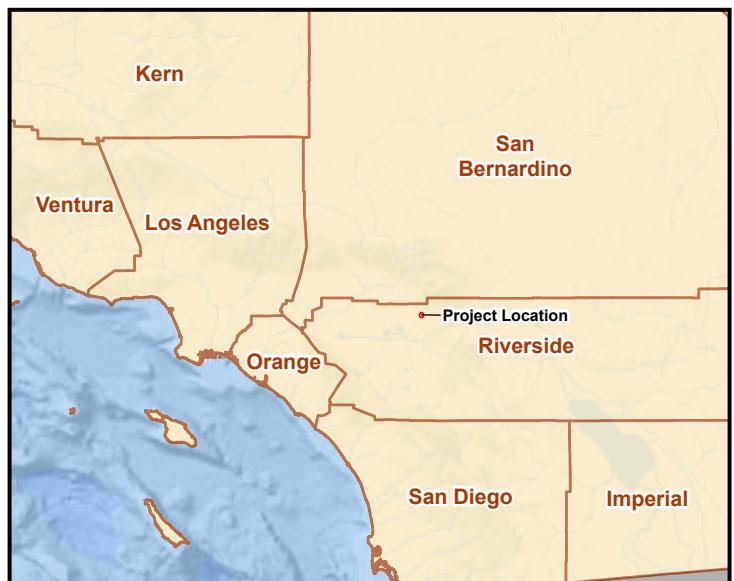
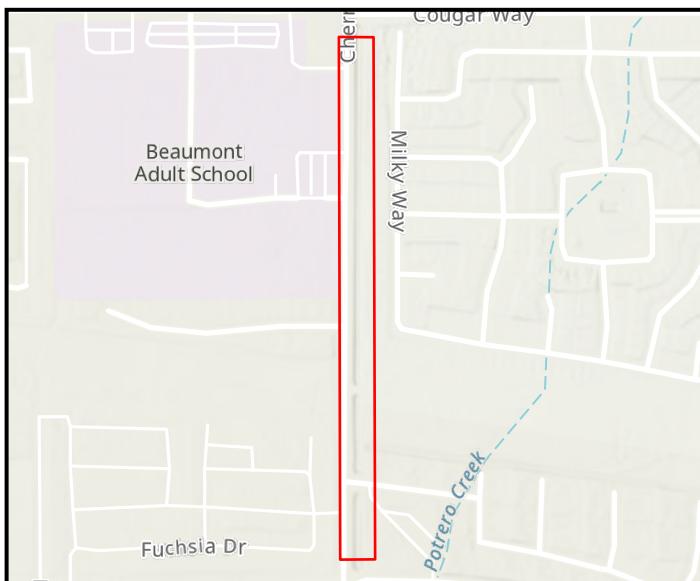
An operational and City-owned paved parking lot is located to the east of Cherry Avenue, north of Rover Lane. The parking lot is owned by the City and primarily used as overflow parking for the Community Recreation Center to the south as well as access to the drainage and conducting maintenance to the area. In addition to City use, the parking lot is available for recreational use by the public, such as walking/hiking on the maintenance access roads and unmarked trails within the open space area of an existing Southern California Edison (SCE) easement following the powerlines. Land uses surrounding the Cherry Avenue channel consists of Single Family Residential, High Density Residential, Public Facilities, and Open Space.

The Project plans to line the existing channel with concrete to improve the channel flow conditions to alleviate the increasing level of maintenance by City staff. The existing channel is lined with a turf reinforced geo-mat lining along the side slope and channel bottom. The entire channel is currently maintained under an agreement with Cal Fire for weed abatement/vegetation control twice a year after the rainy season (March/April) and July/August, prior to the school schedule. During maintenance activities, all vegetation within the channel is removed and/or trimmed down to the base.

The channel geo-mats have been affected by urban runoff flows, with sections torn or missing over the years. The Project proposes to remove the existing geo-mat lining, wingwall, and riprap within the channel and replace it with concrete along the slopes and channel bottom. The existing headwalls and culverts will remain and be protected in place. The Project would result in reduced maintenance costs and improved flow of runoff to the channel.

An irrigation system with sprinklers is located along the top of the banks and within the bottom of the channel, providing an artificial water source to this area. In addition, there are two concrete culvert crossings within the Project site, one at Rover Lane leading into the Community Recreation Center and one providing access to the parking lot, and four smaller culverts on the eastern bank of the channel, which collect water from the residential communities to the east.

The Project is located the U.S. Geological Survey (USGS) *Beaumont*, California 7.5-minute topographic quadrangle. The elevation at the Project site ranges from 2,680 to 2,703 feet above mean sea level (amsl). Maps of the Project Location and Project Vicinity are provided in Figure 1.



Project Location

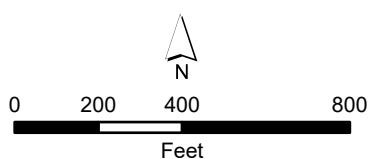


Figure 1
Cherry Channel Drainage
Project Location and Vicinity

SECTION 2.0 – REGULATORY OVERVIEW

The limits of jurisdictional waters regulated by the USACE, RWQCB and CDFW were delineated for the proposed Project site. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife.

On September 12, 2019, the Environmental Protection Agency (EPA) and Department of the Army signed a final rule to repeal the 2015 Clean Water Rule (2015 Rule) and re-codify the regulatory text defining "waters of the United States" that existed prior to the 2015 Rule. The new regulations went into effect on December 23, 2019. One of the proposed changes includes ephemeral features that contain water only during or in response to rainfall would no longer be considered "waters of the United States" under the jurisdiction of the USACE. On August 28, 2019, the Office of Administrative Law approved the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to "waters of the State". The procedures went into effect on May 28, 2020. Under these new regulations, the State Water Resources Control Board and its nine RWQCBs will assert jurisdiction over all existing "waters of the United States", and all waters that would have been considered "waters of the United States" under the 2015 Rule.

The EPA and USACE are in receipt of the U.S. District Court for the District of Arizona's August 30, 2021, order vacating and remanding the Navigable Waters Protection Rule in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*. On October 22, 2019, the EPA and USACE published a final rule to repeal the 2015 Clean Water Rule: Definition of "Waters of the United States" ("2015 Rule"), which amended portions of the Code of Federal Regulations (CFR), and to restore the regulatory text that existed prior to the 2015 Rule. The final "Revised Definition of 'Waters of the United States'" rule (the "2023 Rule") became effective on March 20, 2023. Subsequently, the Conforming 2023 Rule took into account the *Sackett v. Environmental Protection Agency* and its implications to the definition of Waters of the United States. Therefore, this JD is consistent with the 2023 Conforming Rule and includes measurement of the Ordinary High Water Mark (OHWM) to determine Waters of the United States (WoUS).

Evaluation of the state jurisdiction follows guidance from the same jurisdictional areas as USACE. In addition, the JD study area was reviewed for resources potentially regulated under the Porter-Cologne Act (i.e., isolated features).

CDFW regulates impacts or alterations to streambeds, including any obstruction or diversion to the natural flow of a stream, substantial change or use of material from a stream, or a deposit or disposal of any debris into a stream as part of Fish and Game Code Sections 1600-02. CDFW jurisdiction includes water features with a defined bed and bank. Features were delineated by measuring the outer width and length boundaries, consisting of either the top of bank (TOB) measurement or the extent of associated riparian or wetland vegetation (whichever is greater).

The Western Riverside County MSHCP requires that project sites be evaluated for a number of factors to assess how they meet MSHCP criteria. The jurisdictional delineation for the Project includes assessments for Riparian/Riverine areas (and associated species) and vernal pools (and associated species) pursuant to

MSHCP Section 6.1.2; urban/wildlands interface issues pursuant to MSHCP Section 6.1.4; and areas under the jurisdictions of the USACE and/or the CDFW as discussed in MSHCP Section 6.1.2. MSHCP Riparian/Riverine areas are defined as:

“those lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year” (MSHCP 2004).

Additional discussion of the regulatory framework is provided in Appendix A.

SECTION 3.0 – METHODS

3.1. LITERATURE REVIEW

As part of the delineation effort, high-resolution aerial photographs, USGS topographic maps, and Google Earth (Google 2024) imagery were examined to determine the potential areas that may contain waters subject to USACE, RWQCB, and CDFW jurisdiction on the Project site. USFWS National Wetlands Inventory (NWI) maps, National Hydrological Database (NHD) maps, topographic maps, and aerial photographs were used to identify drainage patterns and potential connectivity (nexus) through the Project site. Aerial photos (Google 2024) and topographic maps (USGS 1973) were used to identify potential hydrologic connectivity (significant nexus) to traditional navigable waters (TNW); features indicating connectivity were investigated in the field.

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2024) was reviewed for soil types found within the Project sites.

3.2. FIELD SURVEY

During the field survey, boundaries and dimensions of jurisdictional features were recorded on aerial photographs, Global Positioning System (GPS) units, and standardized datasheets. Features within the proposed Project were investigated for the presence of federally jurisdictional wetlands, federally jurisdictional non-wetland waters of the United States, CDFW jurisdictional streambeds including ephemeral and intermittent streambeds, RWQCB jurisdictional waters, and other water bodies, riparian habitats, potential wetlands, and connectivity, and MSHCP Riparian/Riverine Areas. The delineation defined the USACE and RWQCB jurisdictional boundaries based on the OHWM. The presence or absence of wetlands within or adjacent to the OHWM were verified through the determination of the presence of (1) hydrologic conditions and (2) hydrophytic vegetation pursuant to the 1987 Wetland Manual and Arid West Supplement guidelines (USACE 1987, 2007, 2008a, 2008b) and A Field Guide to the Identification of the OHWM in the Arid West Region of the Western U.S., A Delineation Manual; a soil test pit documenting the presence of hydrophytic vegetation would only be dug if the other wetland indicators were present or if problematic situations were present. The limits of CDFW jurisdiction were mapped from the top of bank to the top of bank along the channel/drainage, or to the outer limits of riparian vegetation (outer dripline), whichever was greater.

Where accessible, connectivity was determined by following the drainages from their origins to their terminal points. In areas with limited access or occurring on private property, connectivity was determined using USGS topographic maps, NWI and NHD maps, and aerial images. Water features (e.g., drainages, water bodies) within the Project limits were investigated for the presence of OHWM, bank to bank (BTB) measurements, and connectivity. The existing width of the water feature (e.g., OHWM or BTB) crossed by the proposed Project was measured (linear feet) in the field perpendicular to the drainage path.

Data from the delineation was digitized and recorded using Geographic Information System (GIS) software and displayed on aerial maps for this report. Reference photographs were taken during this survey and are included as Appendix D.

3.2.1 Hydrology

Typical hydrologic indicators were noted, if observed per the *1987 Wetland Manual and Arid West Supplement Guidelines* (USACE 1987, 2007, 2008b) and the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (USACE 2022). Indicators include evidence of inundation, saturation, surface water, watermarks, drift lines, sediment deposits, destruction of vegetation, water-stained leaves, and the presence or oxidation/reduction features in the soil, among several others.

Consideration of the climate and flow frequency was given when observing watermarks and drift lines. For the purpose of determining a significant nexus to a TNW, aerial photographs, NWI and NHD maps, and USGS quadrangles were referenced. All features were inspected in the field on and off site for true connectivity.

3.2.2 Vegetation

If wetland plants were identified, they were categorized according to their probability to occur in wetlands versus non-wetlands in accordance with the categories in the National List of Species that Occur in Wetlands (Reed 2016). More specifically, the California Land Resource Region (Region 0) wetlands plant list was used, which is a regional adaptation of the National List. The wetland species categories are:

- I. Obligate Wetland (OBL) – Occur almost always (estimated probability >99 percent) under natural conditions in wetlands.
- II. Facultative Wetland (FACW) – Usually occur in wetlands (estimated probability 67 percent to 99 percent), but occasionally found in non-wetlands.
- III. Facultative (FAC) – Equally likely to occur in wetlands or non-wetlands (estimated probability 34 percent to 66 percent).
- IV. Facultative Upland (FACU) – Usually occur in non-wetlands (estimated probability 67 percent to 99 percent), but occasionally found in wetlands.
- V. Obligate Upland (UPL) – May occur in wetlands in another region but occur almost always (estimated probability >99 percent) under natural conditions in non-wetlands in southern California. All species not listed on the *National List of Species that Occur in Wetlands* (Reed 2016) are considered to be UPL.
- VI. No Indicator (NI) – NI is recorded for those species for which insufficient information was available to determine an indicator status.

Plant species and absolute cover values were recorded by stratum (i.e., tree, sapling/shrub, herb, woody vine) and evaluated for dominance and prevalence according to guidelines in the *1987 Wetland Manual and 2008 Arid West Supplement* (USACE 1987, 2008b). Plant species naming conventions follow the *Jepson Manual, Second Edition* (Baldwin et al. 2012). Vegetation communities follow the naming convention in *A Manual of California Vegetation* (Sawyer et al. 2009).

3.2.3 Soils

Soil pits were dug in representative delineated features on the Project site, and soils were evaluated according to guidelines in the *1987 Wetland Manual and 2008 Arid West Supplement* (USACE 1987, 2008b). Soil layers were examined for the presence or absence of hydric soil indicators and oxidation/reduction features indicative of historic saturated soil conditions. In addition, soil pits were dug in representative delineated features on the Project site in areas that had the most potential to exhibit hydric characteristics.

SECTION 4.0 – RESULTS

The following sections provide context and background by describing soils, vegetation, and hydrological features within the Project site. The results of the field delineation are presented below. Site photographs are included in Appendix C.

4.1. HYDROLOGY AND HYDROLOGIC CONNECTIVITY

The Project is located within the Portrero Creek sub watershed, within the Santa Ana River watershed, outside of the flood hazard area within the Federal Emergency Management Agency (FEMA) 100-year flood zone (Hydrologic Unit Code [HUC12] 180702020201) (USDA 2024) (Figures 2 and 3). The Middle Santa Ana River watershed in Beaumont is bordered to the north by the San Bernardino Mountains and to the south by the San Jacinto Mountains, to the west by the San Gabriel and Santa Ana Mountains, and to the east by the Little San Bernardino Mountains. Portrero Creek flows south/southwest for 5 miles until it joins the San Jacinto River near California State Route 79, which ultimately drains into Lake Elsinore. The headwaters of the San Jacinto River are in the San Bernardino Mountains.

4.2. FIELD SURVEY

A field survey was conducted on July 25, 2024, by Chambers Group biologists Heather Madera and Austin Burke between the hours of 0830 and 1430. The temperatures ranged from 88 to 112 degrees Fahrenheit (°F), with no cloud cover, and no precipitation.

The Project site consists of a man-made drainage. One wetland was identified within the drainage.

4.3. VEGETATION COMMUNITIES

Six vegetation communities were mapped within the Project site, including Cattail Marsh, Disturbed Goodding's Willow - Red Willow Riparian Woodland, Wild Tarragon Patches, Ruderal, Ornamental, and Developed. Vegetation mapped during the delineation is provided in Figure 4.

4.3.1 Cattail Marsh

Cattail Marshes are found in semi-permanently flooded freshwater or brackish marshes. Soils in this community are typically clayey or silty (Sawyer et al. 2009). The USFWS Wetland Inventory (1996 national list) recognizes narrow leaf cattail (*Typha angustifolia*), slender cattail (*Typha domingensis*), and broadleaf cattail (*Typha latifolia*) as OBL plants. Slender cattail, narrow leaf cattail, or broadleaf cattail is dominant or co-dominant in the herbaceous layer with sedge (*Cyperus* sp.), salt grass (*Distichlis spicata*), barnyard grass (*Echinochloa crus-galli*), rushes (*Juncus* sp.), common reed (*Phragmites australis*), Chairmaker's bulrush (*Schoenoplectus americanus*), California bulrush (*Schoenoplectus californicus*), and rough cocklebur (*Xanthium strumarium*). Emergent trees may be present at low cover, including willows (*Salix* sp.) and herbs are less than 1.5 meters tall. Cover in this community is intermittent to continuous.

Areas with Cattail Marsh vegetation are present within 0.11 acres of the Project site located near the middle lower half of the channel along the bottom of the drainage. This area is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all tree and shrub species are prevented from forming woody growth and must sprout back up from the base each year. Native plant species found on the Project site typical of this vegetation community included: cattail (NWI

OBL), tall Cyperus (NWI FACW), and cyperus (*Cyperus* sp.). Non-native species included: barnyard grass (NWI FACW), annual beard grass (*Polypogon monspeliensis*; NWI FACW), and tamarisk (*Tamarix chinensis*; NWI FAC). An irrigational system with sprinklers is located along the top of the banks and within the bottom of the channel, providing an artificial water source as the primary source to this area. In addition, this area receives nuisance flow from the surrounding residential area. Thus, this community likely would not occur within the Project site without the presence of the irrigation system.

4.3.2 Disturbed Goodding's Willow - Red Willow Riparian Woodland

Goodding's Willow - Red Willow Riparian Woodland vegetation is found along terraces by large rivers, canyons, along floodplains of streams, seeps, springs, ditches, floodplains, lake edges, low-gradient depositions (Sawyer et al. 2009). Black willow (aka Gooding's willow) (*Salix gooddingii*) and/or red willow (*Salix laevigata*) is dominant or co-dominant in the tree or shrub canopy with boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), white alder (*Alnus rhombifolia*), incense cedar (*Calocedrus decurrens*), Oregon ash (*Fraxinus latifolia*), gray pine (*Pinus sabiniana*), California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*), canyon live oak (*Quercus chrysolepis*), valley oak (*Quercus lobata*), Pacific willow (*Salix lucida* var. *lasiandra*) or California fan palm (*Washingtonia filifera*). Shrubs include mule fat (*Baccharis salicifolia*), red twig dogwood (*Cornus sericea*), California rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), sand bar willow (*Salix exigua*), arroyo willow (*Salix lasiolepis*) or blue elderberry (*Sambucus mexicana*). Gooding's willow and red willow were formerly described and treated as separate alliances, but the two types have been merged since they often occur together and share similar habitats (Sawyer 2009). The tree canopy in this community is open to continuous with a shrub layer that is sparse to continuous and an herbaceous layer that is variable.

A disturbed form of Goodding's Willow - Red Willow Riparian Woodland is present within 0.54 acres of the Project site, located on the northern half of the channel at the bottom of the drainage. Disturbed areas are those areas that experience frequent human disturbance such as vegetation clearing, off-road vehicle traffic, and littering or those areas that have a high percentage of non-native weedy species (i.e., greater than 25 percent of the species cover). This area is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all tree and shrub species are prevented from forming woody growth and must sprout back up from the base each year. Native plant species found on the Project site typical of this vegetation community included: black willow (NWI FACW), arroyo willow (NWI FACW), sandbar willow (NWI FACW), mulefat, Cyperus and cattail (NWI FACW).

4.3.3 Disturbed Wild Tarragon Patches

Wild Tarragon Patches can be found in intermittently flooded stream channels, terraces, and flats (Sawyer et al. 2009). Soils are typically sandy alluvium to silt loam, are derived from many substrates, and are often subject to flooding or other disturbances. The alliance occurs in disturbed environments, particularly along intermittently flooded alluvium. Membership rules for vegetation mapping state that wild tarragon (*Artemisia dracunculus*) and/or cudweed (*Pseudognaphalium canescens*) is greater than 50 percent relative cover in the herbaceous layer (Kittel et al. 2012). Wild tarragon is dominant, co-dominant, or characteristically present in the herbaceous layer with common fiddleneck (*Amsinckia menziesii*), mugwort (*Artemisia douglasiana*), *Bromus* spp., tocalote (*Centaurea melitensis*), purple clarkia (*Clarkia purpurea*), woodland clarkia (*Clarkia unguiculata*), coastal heron's bill (*Erodium cicutarium*), California poppy (*Eschscholzia californica*), shortpod mustard (*Hirschfeldia incana*), cat's ears (*Hypochaeris glabra*),

Spanish lotus (*Acmispon americanus*), miniature lupine (*Lupinus bicolor*), cudweed (*Pseudognaphalium canescens*), willow leaved dock (*Rumex salicifolius*) and rattail fescue (*Festuca myuros*). Emergent trees and shrubs may be present at low cover, including trees like gray pine (*Pinus sabiniana*) and shrubs like mule fat, California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*) and threadleaf ragwort (*Senecio flaccidus*). The herbaceous layer in this community is typically less than 5 feet and cover is intermittent to continuous (Sawyer et al. 2009).

A disturbed form of Wild Tarragon Patches are present within 0.24 acres of the Project site located in the southern portion of the channel along the bottom of the drainage. Disturbed areas are those areas that experience frequent human disturbance such as vegetation clearing, off-road vehicle traffic, and littering or those areas that have a high percentage of non-native weedy species (i.e., greater than 25 percent of the species cover). This area is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all shrub species are prevented from forming woody growth and must sprout back up from the base each year. Trash and high weed cover were additional disturbance factors in this area. The dominant native species typical of this community included: tarragon, tall cyperus (NWI FACW), parched fireweed (*Epilobium brachycarpum*), willowherb (*Epilobium ciliatum* subsp. *ciliatum*; NWI FACW), horseweed (*Erigeron canadensis*), and young emergent black willow and arroyo willow, both NWI FACW species. Non-native species included: barnyard grass (NWI FACW), annual beard grass (NWI FACW), shortpod mustard, common knotweed (*Polygonum arenastrum*), and curly dock (*Rumex crispus*; NWI FAC). As stated above, an irrigational system with sprinklers is located along the top of the banks and within the bottom of the channel, providing an artificial water source as the primary source to this area. Therefore, this community likely would not occur within the Project site without the presence of the irrigation system.

4.3.4 Ruderal

Areas classified as Ruderal tend to be dominated by pioneering herbaceous species that readily colonize disturbed ground and that are typically found in temporary, often frequently disturbed habitats (Barbour et al. 1999). The soils in Ruderal areas are typically characterized as heavily compacted or frequently disturbed. The vegetation in these areas are adapted to living in compact soils where water does not readily penetrate the soil. Often, Ruderal areas are dominated by species of the *Centaurea*, *Brassica*, *Malva*, *Salsola*, *Eremocarpus*, *Amaranthus*, and *Atriplex* genera.

Areas with Ruderal vegetation are present throughout the Project site within the open space on the north and south side of the overflow parking lot, all along the channel's sloped banks, and within several sections in the base of the channel. The open space shows signs of human disturbance from disc/mowing and the ruderal sections of the channel base contain various trash and debris. The area within the channel is subject to annual maintenance and vegetation trimming by the City for flood control purposes and thus all tree and shrub species are prevented from forming woody growth and must sprout back up from the base each year. Non-native species included: shortpod mustard, Russian-thistle (*Salsola australis*), ripgut grass (*Bromus diandrus*), annual beard grass, wild oat (*Avena fatua*), and occasional tamarisk. Native plant species found on the banks and in the drainage included: horseweed which was the dominant species with scattered turkey-mullein (*Croton setiger*), California buckwheat along the top edges of the side banks. There are 1.48 acres of Ruderal vegetation located within the Project site.

4.3.5 Ornamental

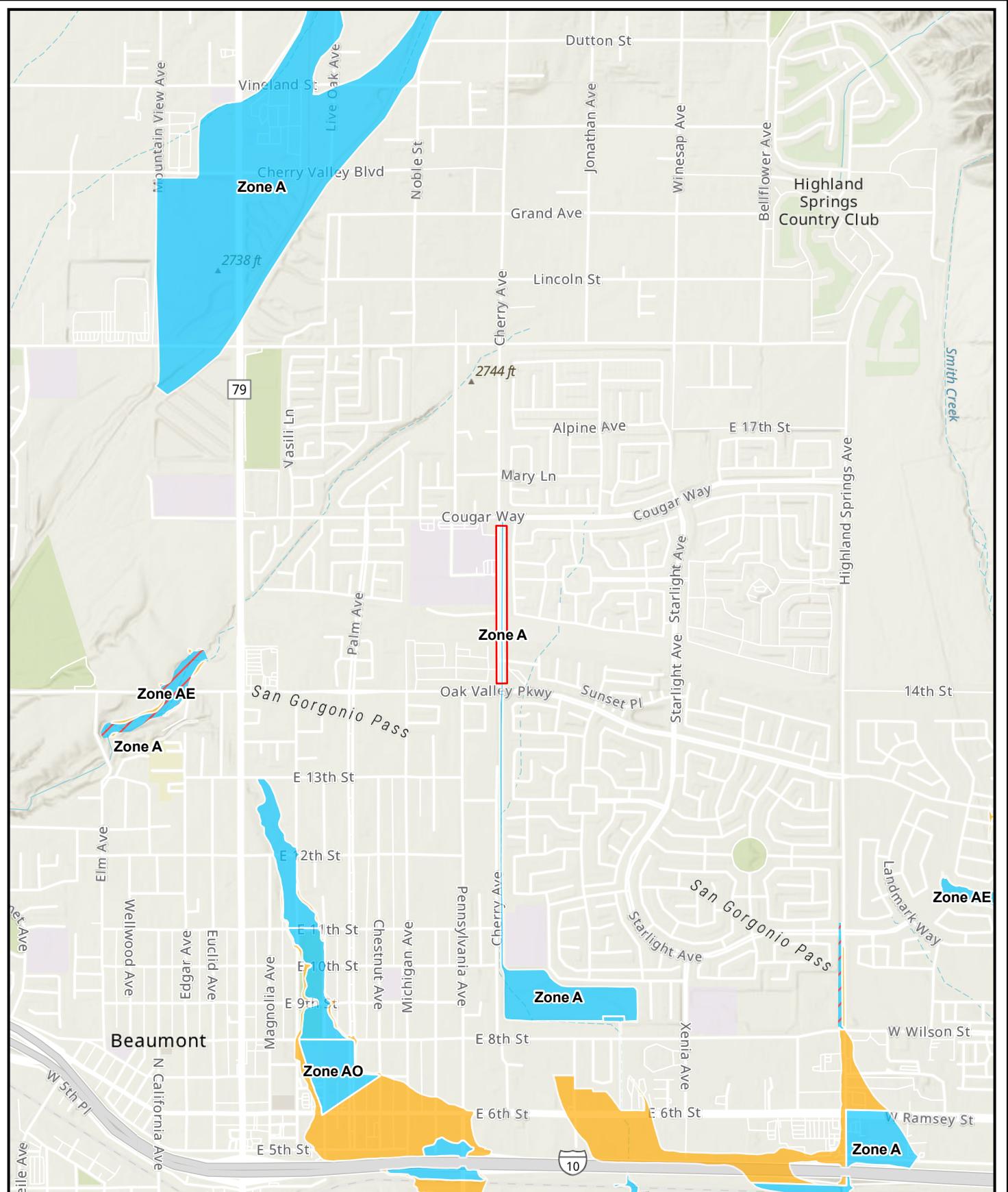
Ornamental Landscaping includes areas where the vegetation is dominated by non-native horticultural plants (Gray and Bramlet 1992). Typically, the species composition consists of introduced trees, shrubs, flowers and turf grass.

Ornamental Landscaping is present along the top edges of the Cherry Channel Drainage. These areas receive supplemental water from above ground irrigation. Plant species found on the Project site typical of this community include Japanese privet (*Ligustrum japonicum*), star jasmine (*Trachelospermum jasminoides*), Japanese cheesewood (*Pittosporum tobira*), and occasional patches of California buckwheat. There are 0.88 acres of Ornamental Landscaping on the Project site.

4.3.6 Developed

Developed areas are areas that have been altered by humans and now display man-made structures such as houses, paved roads, buildings, parks, and other maintained areas.

Developed areas are present within the Project site and make up approximately 5.55 acres. Cherry Avenue runs parallel to the channel and is included in the Project boundary, along with sidewalks, walking paths, and a parking lot located to the east within the Project site. Residential buildings are located along the eastern edge of the Project site.



Project Location

FEMA Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard



0 800 1,600 3,200
Feet

Figure 2
Cherry Channel Drainage
FEMA Flood Hazard Zones

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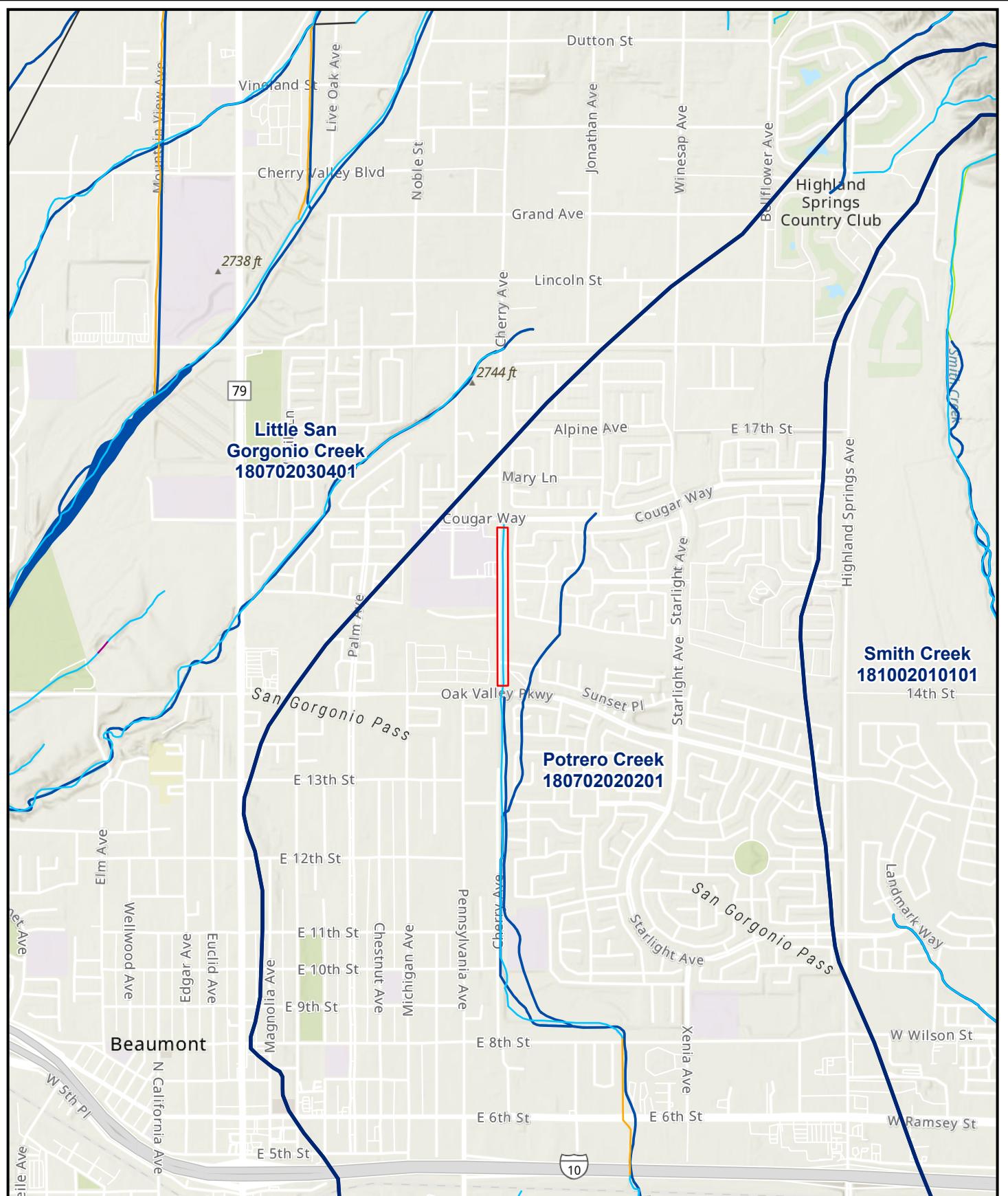
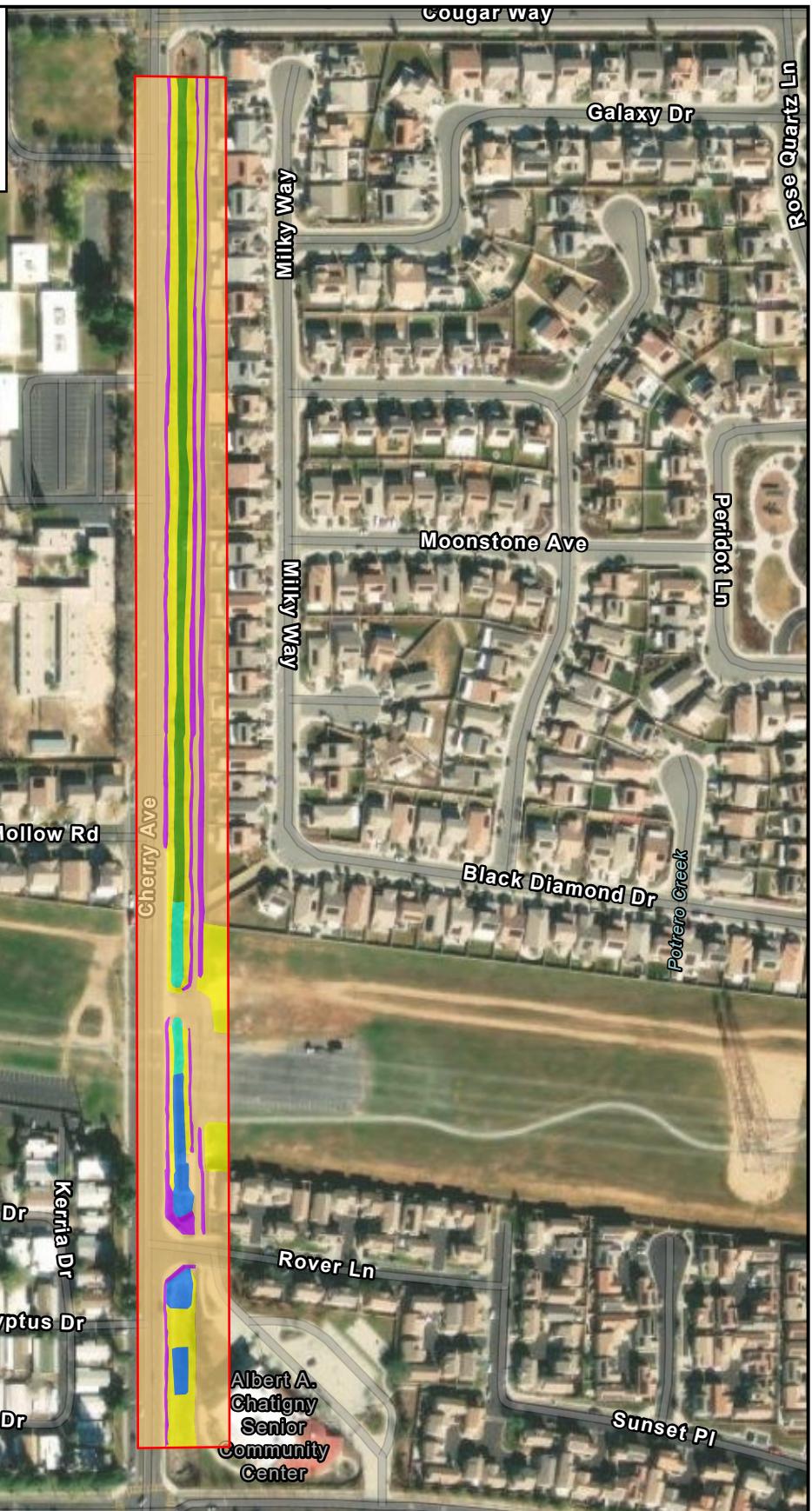
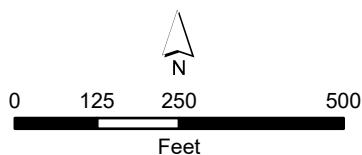


Figure 3
Cherry Channel Drainage
Jurisdictional Waters Database



Project Location



Overview

Figure 4
Cherry Channel Drainage
Vegetation Communities

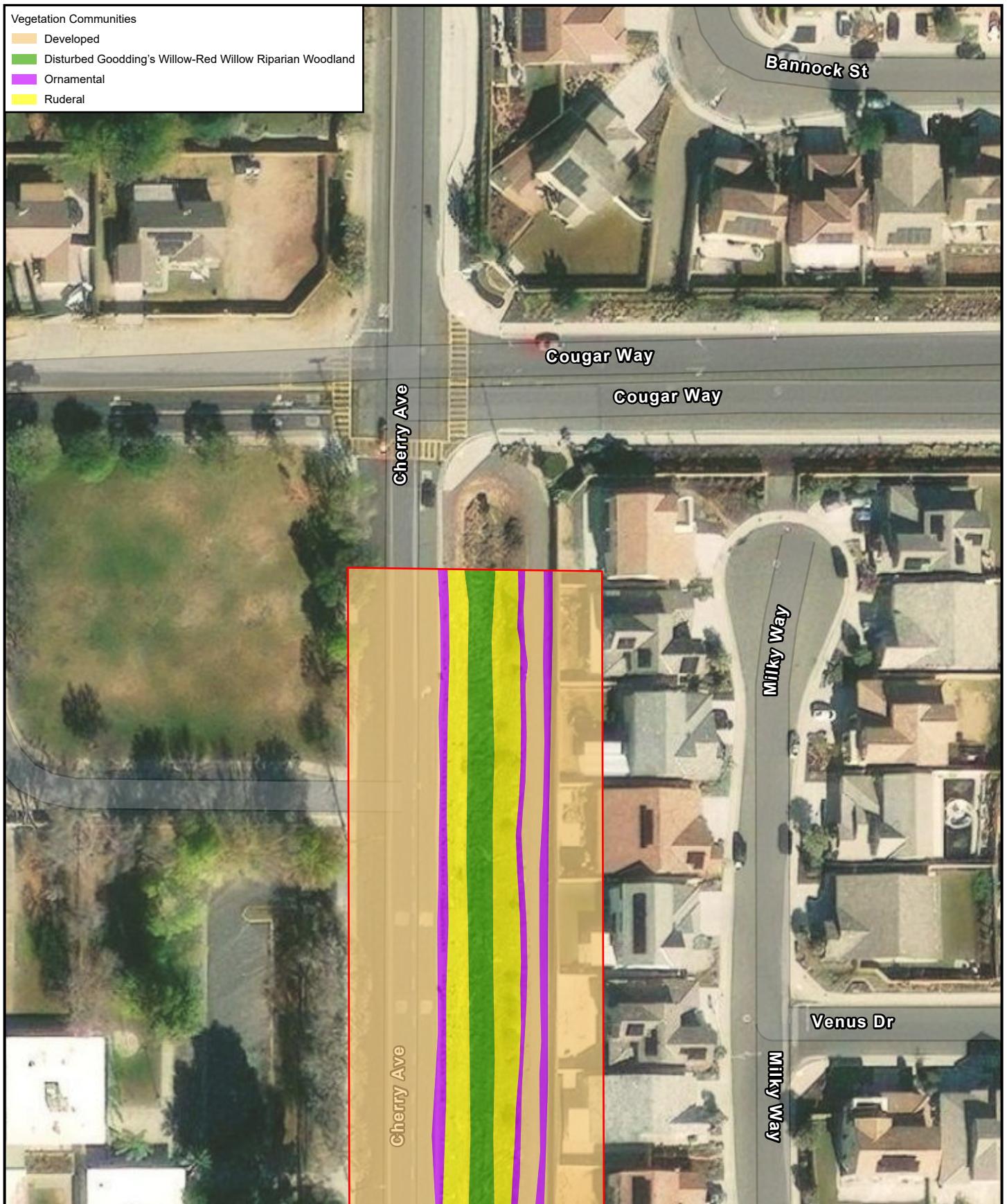


Figure 4
Cherry Channel Drainage
Vegetation Communities

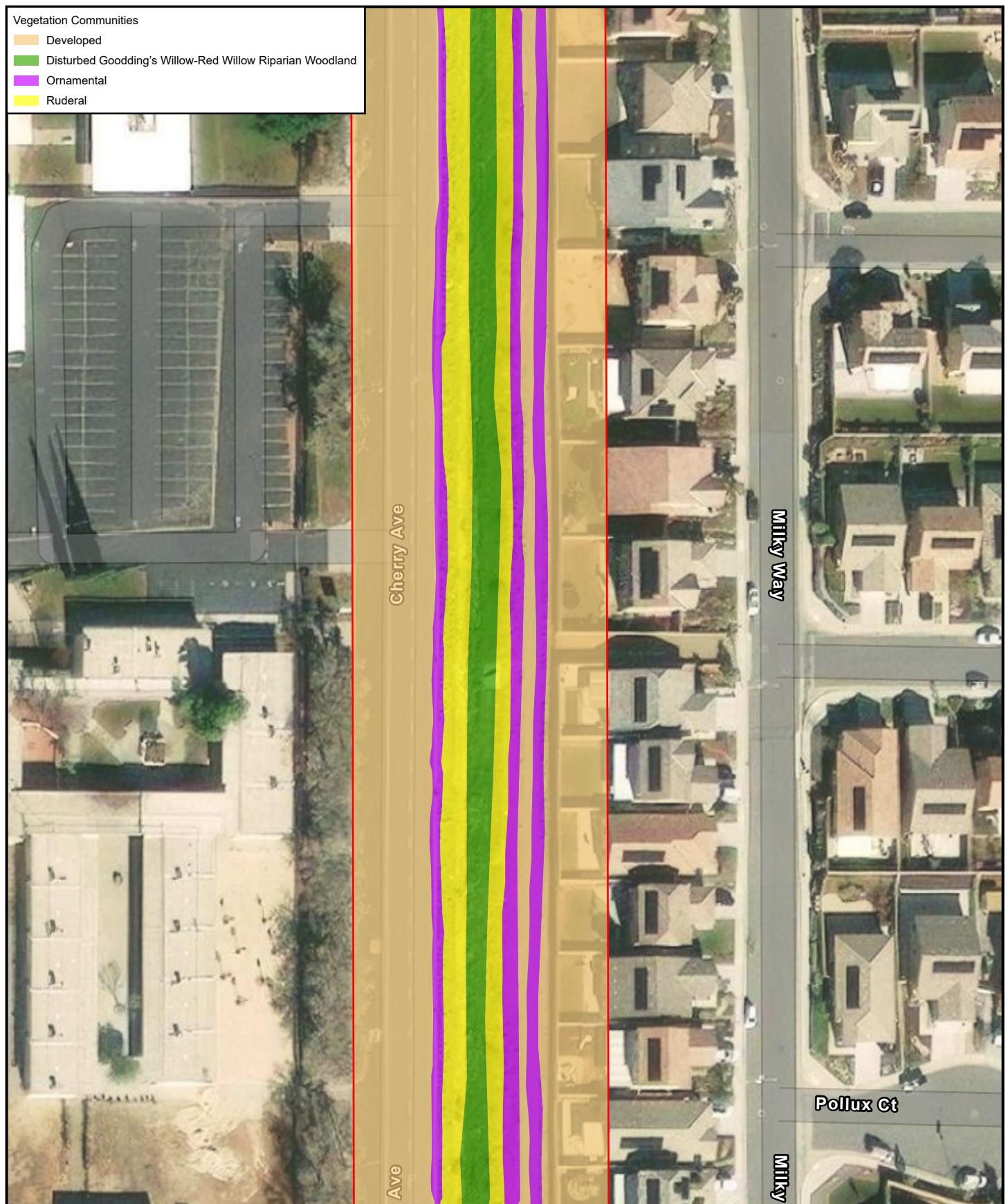


Figure 4
Cherry Channel Drainage
Vegetation Communities

Vegetation Communities

- Cattail Marsh
- Developed
- Disturbed Wild Tarragon Patches
- Disturbed Goodding's Willow-Red Willow Riparian Woodland
- Ornamental
- Ruderal



Figure 4
Cherry Channel Drainage
Vegetation Communities

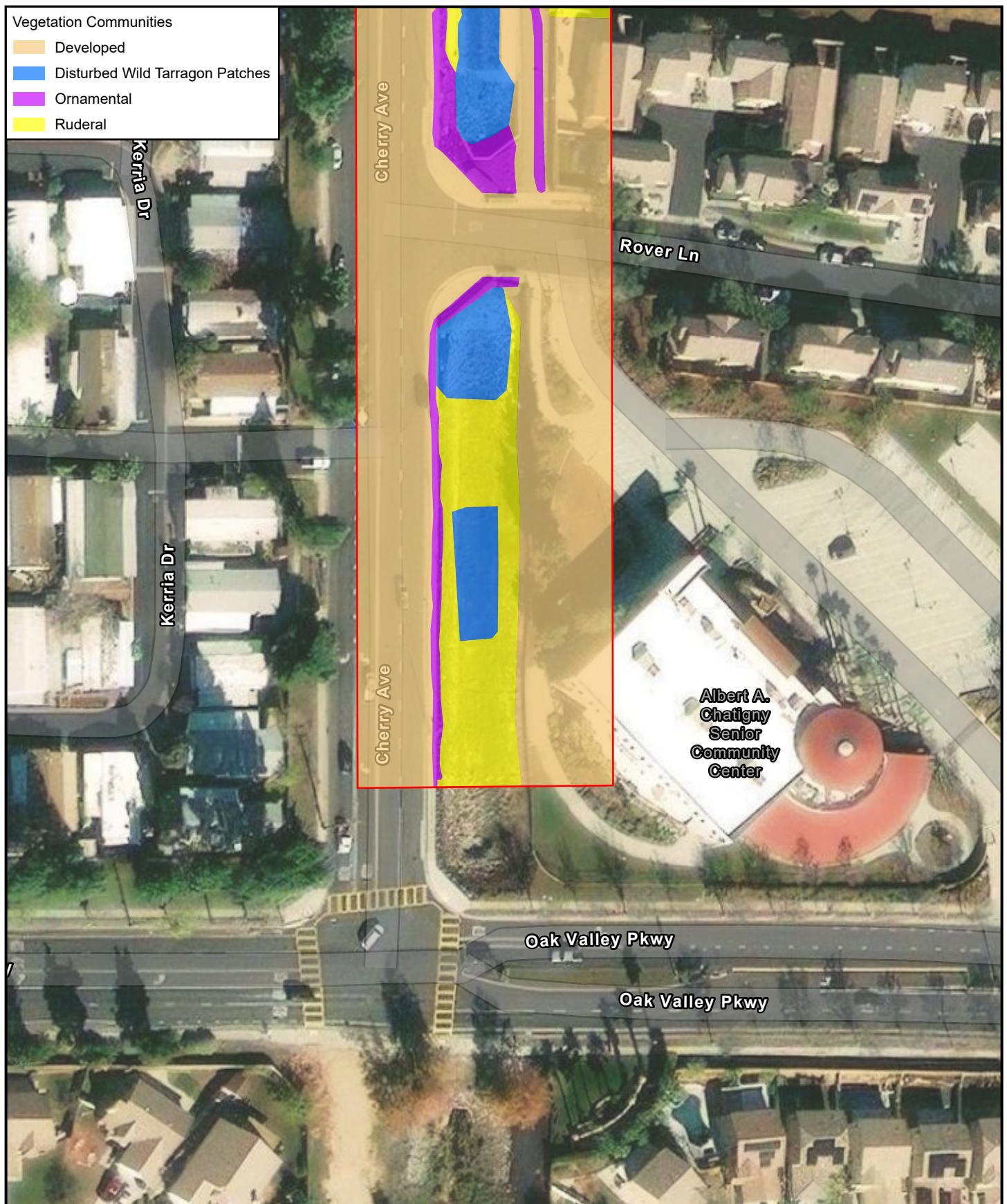


Figure 4

Cherry Channel Drainage
Vegetation Communities



0 40 80 160
Feet

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4.4. SOILS

After review of USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2024), it was determined that the Project site is located within the Western Riverside Area, California area CA679. Based on the results of the database search the soil present on site is not classified as hydric. The Project site contains one soil type:

Ramona sandy loam (RaB2), 2 to 5 percent slopes is a well-drained soil typically found on terraces and alluvial fans at elevations of 250 to 3,500 feet amsl. The soil profile is typically composed of sandy loam, sandy clay loam, and gravelly sandy loam. These soils typically have low runoff when wet.

4.5. DRAINAGE FEATURES

The Project site is located within Cherry Channel and is historically mapped as a portion of Portrero Creek. Cherry Channel at the northern most point of the Project boundary at Cougar Way and terminates at Cherry Avenue and 8th Street into a large detention basin. Flow is then directed south/southeast through a series of underground storm drains, culverts, and surface hydrology until it ultimately flows into the San Jacinto River, a traditional navigable water (TNW).

The Project site is located within the Cherry Channel and flows via surface hydrology primarily from nuisance water from the irrigation line running along the entire channel and runoff from the surrounding residences. In addition, the channel facilitates runoff from the adjacent road and neighborhood during seasonal rainfall events. Standing water was present during the survey, no flow was observed within the channel during the survey; however, several indicators of hydrology were present at the time of the field delineation. Hydrological characteristics within Cherry Channel included: surface water, evidence of inundation watermarks, drift lines, and sediment and drift deposits. In addition, hydrophytic vegetation was present within the northern portion of the site. However, hydric soils could not be confirmed within the channel (i.e., presence of geotextile mats and the compaction of the channel bottom); therefore, the Project site contains only two of the three wetland parameters. Due to the presence of the geo-mats within the channel, the site is able to hold water for the long periods of time allowing hydrophytic vegetation to grow within the channel. The limits of the Ordinary High Water Mark (OHWM) were delineated visually by change in sediment, water marks and erosion caused by water flow within the Project limits. OHWM measured approximately 7 feet 8 inches throughout the channel, and bank-to-bank measured 27 feet 1 inch (Figure 5). Cherry Channel is a City maintained channel that has geo-mats along the sidewalls for erosion control of the banks; and, therefore, the bank-to-bank measurement is a fixed measurement along the length of the entire channel. Although Cherry Channel is maintained by the County with surface flow existing only directly after a heavy rain event, this system eventually flows into the San Jacinto River.

While riparian vegetation does occur within the channel, the drainage does not meet the MSHCP definition of Riverine. While it does eventually connect to the San Jacinto River, with portions considered a MSHCP Conservation area, the Project site is several towns northwest of any MSHCP conservation area and any flow from the site travels through many subsurface drainages and tributaries before terminating in the river. Therefore, the Project site does not contribute to the biological functions and values of downstream habitat for covered species within the MSHCP Conservation Area. Additionally, the riparian vegetation that occurs within the drainage is early successional and lacks the mature trees and dense vegetation required by the species listed in Section 6.1.2 of the MSHCP. None of these species were

observed during the survey and they are not expected to occur within the Project area. The mapped drainage can be found in Figure 5.

4.6. CDFW/MSHCP RIPARIAN HABITAT

No NWI mapped wetlands were identified within the Project site. However, a cattail marsh and Goodding's Willow - Red Willow Riparian Woodland occur within the northern portion of the channel. An irrigation system with sprinklers is located along the top of the banks and within the channel, providing an artificial water source to this area. In addition, this area receives nuisance flow from the surrounding residential area. This riparian area is primarily vegetated with cattails, emergent Gooding's and red willows, and mulefat scattered throughout with an understory of cyperus and non-native grassland. Several soil test pits were attempted during the survey; however, due to the presence of the geo-mats and the compaction of the channel bottom, a soil pit could not be obtained. In addition, no hydric soils were revealed during the database soil search. Although the presence of hydric soils could not be confirmed, hydrophytic vegetation is present within this area, as evidence of hydrology was observed throughout the area; therefore, this riparian area is considered to be a wetland area with problematic soils. In addition, since bank-to-bank channelization occurs, this area should be considered under CDFW jurisdiction and an MSHCP Riparian area. However, this area appears to be fed solely by artificial and nuisance water sources and is maintained regularly by the City, which includes regular removal of vegetation within the channel. This area is not considered a natural wetland; if the sprinklers were to be permanently removed, this riparian area is not expected to persist.

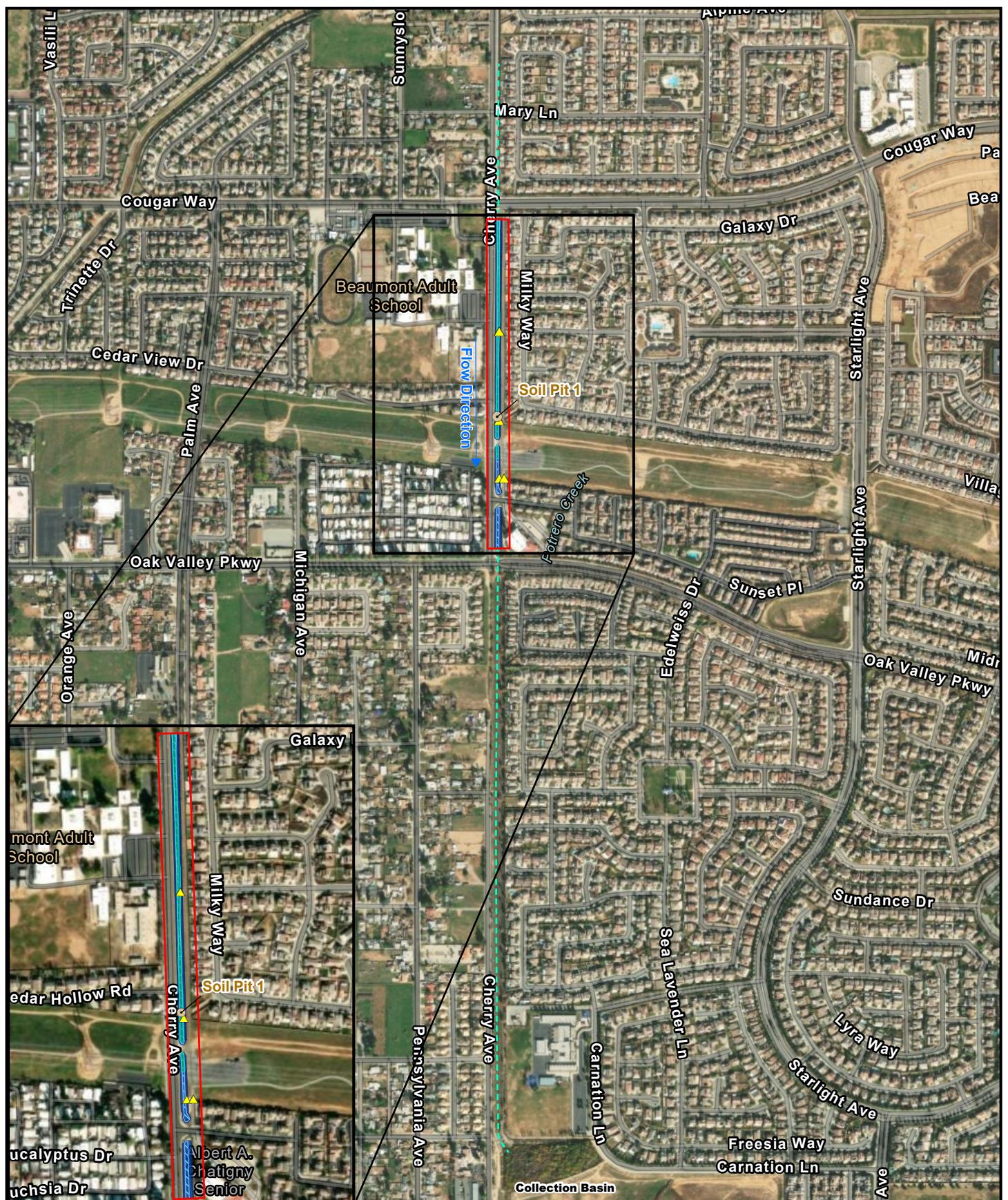


Figure 5
Cherry Channel Drainage
Jurisdictional Delineation Results

4.7. SUMMARY OF JURISDICTIONAL FINDINGS

The Project site consists of one man-made drainage that contains both riparian and upland vegetation. These areas are subject to USACE, RWQCB, and CDFW jurisdiction. The results of this JD document the investigation, best professional judgement, and conclusions of Chambers Group. However, this delineation would need to be verified and determined by the regulatory agencies. As the project involves the replacement of the entire portion of the channel with cement, this delineation considers all impacts to be permanent with no temporary impacts identified. Table 1 provides a summary of acreages of Jurisdictional Waters and the potential impacts to waters that occur within the Project site.

Table 1. Summary of Acreages of Potential Jurisdictional Waters that Occur Within the Impact Areas of the Project Site

Potential Waters	Jurisdictional	Temporary Impact (Acres)	Temporary Impact (Square Feet)	Permanent Impact (Acres)	Permanent Impact (Square Feet)
USACE Jurisdiction Total		N/A	N/A	0.69	30,011
<i>Total Non-Wetland Waters of the US</i>		N/A	N/A	0.69	30,011
<i>Total Wetland Waters of the US</i>		N/A	N/A	0	0
RWQCB Jurisdictional Total		N/A	N/A	0.69	30,011
<i>Total Non-Wetland Waters of the State</i>		N/A	N/A	0.04	1,697
<i>Total Wetland Waters of the State</i>		N/A	N/A	0.65	28,314
CDFW Jurisdictional Total		N/A	N/A	1.80	78,316
<i>Total Non-Wetland Waters</i>		N/A	N/A	1.15	50,002
<i>Total Wetland Waters</i>		N/A	N/A	0.65	28,314
<i>MSHCP Riparian</i>		N/A	N/A	0.65	28,314

4.7.1 Potential USACE Jurisdiction

The USACE asserts jurisdiction over the San Jacinto River as a Traditionally Navigable Water (TNW). Therefore, USACE will likely take jurisdiction over the Cherry Channel. The site contains two of the three wetland parameters; however, the lack of hydric soils indicates that no jurisdictional wetlands under the

jurisdiction of the USACE are present within the Project limits. For individual impacts, refer to Table 1. Total USACE jurisdictional acreage for the Project, as defined by the OHWMs, amounts to 0.69 acre of permanent impacts. A Clean Water Act (CWA) Section 404 Permit will be required for this Project.

4.7.2 Potential RWQCB Jurisdiction

RWQCB jurisdiction includes all USACE jurisdictional areas, OHWMs, and any other features that influence surface or subsurface water quality within California. The RWQCB would have jurisdiction over surface waters, which may be identified as ephemeral waters, including those indicated by a change in the average sediment texture, a change in vegetation cover, and/or a break in bank slope. A total of 0.04 acre of non-wetland waters of the State and 0.65 acre of wetland waters of the State under the potential jurisdiction of the RWQCB occur in the Project site. The limits of RWQCB jurisdiction were defined by the OHWM and surface waterbody features within the Project site. Therefore, a 401 Water Quality Certification will be required from the RWQCB for this Project.

4.7.3 Potential CDFW jurisdiction

There are 0.65 acre that have wetland vegetation and 0.04 acre within the Project site that have upland vegetated bank to bank within the Project site that are potentially regulated by CDFW's Lake and Streambed Alteration Agreement program. CDFW's jurisdiction extends from the top of bank to top of bank and any adjacent wetlands or riparian canopies. Cherry Channel provides surface waters when water is present and would be considered State waters.

Due to the presence of the irrigational system, both hydrophytic vegetation and evidence of hydrology are present within this area; therefore, this area is considered a wetland. While direct impacts to wetland vegetation will occur as a result of Project activities, this area is routinely maintained throughout the year and all of the wetland vegetation is removed. Project activities involve the placement of cement throughout the entire channel and banks, which will result in the removal of the irrigational system and the channel will no longer support hydrophytic vegetation. Therefore, a Streambed Alteration Agreement (SAA) is likely to be required from CDFW for this Project.

4.7.4 MSHCP Riparian

A total of 0.69 acre of vegetated streambed was mapped within the Project impact area. The Channel does support native riparian vegetation throughout the northern portion of the Channel. However, as stated previously, the riparian vegetation is regularly maintained by the City and is considered early successional, lacking the mature forest and canopy required by the riparian species listed in Section 6.1.2 of the MSHCP. Therefore, the vegetated streambed does not meet the MSHCP definition of Riverine as it cannot support the covered species within the site. While a portion of the site does contain habitat dominated by emergent trees, shrubs, and forbs, which occur close to or which depend upon soil moisture from a nearby fresh water source, this area is supported solely by the presence of the sprinkler system and would not exist without it. Additionally, the drainage has no direct connectivity to downstream MSHCP Conservation areas, thus does not contribute to the biological functions and values of downstream habitat for covered species within the MSHCP Conservation Area. Additionally, species listed in Section 6.1.2 of the MSHCP are not present and are not expected to occur within the Project area. For these reasons, the City, as a Permittee to the MSHCP, has determined that a Determination of Biologically Equivalent or Superior Preservation (DBESP) is not warranted for this Project.

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APPENDIX A – REGULATORY FRAMEWORK

1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Pursuant to Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into waters of the United States. The term “waters of the United States” is defined by 33 Code of Federal Regulations (CFR) Part 328 and currently includes: (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above. Waters of the United States do not include (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA), and (2) prior converted cropland. Waters of the United States typically are separated into two types: (1) wetlands and (2) “other waters” (non-wetlands) of the United States.

Wetlands are defined by 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support ... a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987, USACE published a manual (1987 Wetland Manual) to guide its field personnel in determining jurisdictional wetland boundaries. This manual was amended in 2008 to the USACE 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (2008 Arid West Supplement). Currently, the 1987 Wetland Manual and the 2008 Arid West Supplement provide the legally accepted methodology for identification and delineation of USACE-jurisdictional wetlands in southern California.

In the absence of wetlands, the limits of USACE jurisdiction in nontidal waters, including intermittent Relatively Permanent Water (RPW) streams, extend to the Ordinary High Water Mark (OHWM), which is defined by 33 CFR 328.3(e) as:

... that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

On January 9, 2001, the U.S. Supreme Court ruled (in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*) (SWANCC) that USACE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include vernal pools, stock ponds, lakes (without outlets), playa lakes, and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters. A joint legal memorandum by EPA and USACE was signed on January 15, 2003.

In May 2007, USACE and EPA jointly published and authorized the use of the *Jurisdictional Determination Form Instructional Guidebook* (USACE 2007). The form and guidebook define how to determine if an area is USACE jurisdictional and if a significant nexus exists per the Rapanos decision. A nexus must have more than insubstantial and speculative effects on the downstream TNW to be considered a significant nexus. This guidebook is updated by the 2008 Arid West Supplement, the 2010 *Updated Datasheet for the*

Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, and the 2011 Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region.

A joint guidance by EPA and USACE was issued on June 5, 2007, and revised on December 2, 2008, is consistent with the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208 [2006]) (*Rapanos*), which addresses the jurisdiction over waters of the United States under the CWA (33 U.S.C. §1251 et seq.). A draft guidance was circulated in April 2011 to supersede both the 2003 SWANCC guidance and 2008 *Rapanos* decision; however, this guidance is not finalized and lacks the force of law.

USACE will continue to assert jurisdiction over Traditionally Navigable Waters (TNWs), wetlands adjacent to TNW, non-navigable tributaries of TNW that are Relatively Permanent Waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries.

USACE generally will not assert jurisdiction over swales or erosional features (e.g., gullies or small washes characterized by low volume, infrequent, or short duration flow) or nontidal drainage ditches (including roadside ditches) that are (1) excavated wholly in and draining only uplands and (2) that do not carry a relatively permanent flow of water. USACE defines a drainage ditch as:

A linear excavation or depression constructed for the purpose of conveying surface runoff or groundwater from one area to another. An "upland drainage ditch" is a drainage ditch constructed entirely in uplands (i.e., not in waters of the United States) and is not a water of the United States, unless it becomes tidal or otherwise extends the ordinary high water line of existing waters of the United States.

Furthermore, USACE generally does not consider “[a]rtificially irrigated areas which would revert to upland if the irrigation ceased” to be subject to their jurisdiction. Such irrigation ditches are linear excavations constructed for the purpose of conveying agricultural water from the adjacent fields. Therefore, such agricultural ditches are not considered to be subject to USACE jurisdiction.

USACE will use fact-specific analysis to determine whether waters have a significant nexus with (1) TNW for nonnavigable tributaries that are not relatively permanent (non-RPW); (2) wetlands adjacent to nonnavigable tributaries that are not relatively permanent; and (3) wetlands adjacent to, but that do not directly abut, a relatively permanent nonnavigable tributary. According to USACE, “*a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters*,” including consideration of hydrologic and ecologic factors. A primary component of this determination lies in establishing the connectivity or lack of connectivity of the subject drainages to a TNW.

1.2 STATE JURISDICTION

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water

Code Section 13050(e)). Waters of the State broadly includes all waters within the State's boundaries (public or private), including waters in both natural and artificial channels.

1.2.1 Regional Water Quality Control Board

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include “fill, any material resulting from human activity, or any other ‘discharge’ that may directly or indirectly impact ‘waters of the state.’” Porter-Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

1.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body. CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands, but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS-accepted definition of a wetland:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In *A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition* (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

APPENDIX B – ORDINARY HIGH WATERMARK DATA SHEET

AGENCY DISCLOSURE NOTICE

The public reporting burden for this collection of information, 0710-OHWM, is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

Project ID #:	21492	Site Name:	Cherry Channel Drainage	Date and Time:	7-25-24 /0900
Location (lat/long):	33.948971N, 116.964117W	Investigator(s):	Heather E., Austin B.		
Step 1 Site overview from remote and online resources Check boxes for online resources used to evaluate site:			Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)? NO extreme events. Man made v-ditch with geomat lining. Looks to facilitate runoff and nuisance water from surrounding neighborhood.		
<input type="checkbox"/> gage data <input type="checkbox"/> LiDAR <input type="checkbox"/> geologic maps <input type="checkbox"/> climatic data <input checked="" type="checkbox"/> satellite imagery <input checked="" type="checkbox"/> land use maps <input checked="" type="checkbox"/> aerial photos <input checked="" type="checkbox"/> topographic maps <input type="checkbox"/> Other:					
Step 2 Site conditions during field assessment. First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc. Man-made trapezoidal channel, geo-mat lined, with some rip-rap, and sprinklers lined on both sides (top and bottom).					
Step 3 Check the boxes next to the indicators used to identify the location of the OHWM. OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below 'b', at 'x', or just above 'a' the OHWM. OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.					
Geomorphic indicators					
<input checked="" type="checkbox"/> Break in slope: a <input checked="" type="checkbox"/> on the bank: Top of bank where geo-mat begins as undercut bank: well as sprinklers. <input type="checkbox"/> valley bottom: flattens and veg change <input type="checkbox"/> Other: _____					
<input type="checkbox"/> Channel bar: <input type="checkbox"/> shelving (berms) on bar: <input type="checkbox"/> unvegetated: <input type="checkbox"/> vegetation transition (go to veg. indicators) <input type="checkbox"/> sediment transition (go to sed. indicators) <input type="checkbox"/> upper limit of deposition on bar: <input type="checkbox"/> Instream bedforms and other bedload transport evidence: <input type="checkbox"/> deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.) <input type="checkbox"/> bedforms (e.g., poofs, ripples, steps, etc.):					
<input type="checkbox"/> erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) <input type="checkbox"/> Secondary channels: Sediment indicators <input type="checkbox"/> Soil development: <input type="checkbox"/> Changes in character of soil: <input type="checkbox"/> Mudcracks: <input type="checkbox"/> Changes in particle-sized distribution: <input type="checkbox"/> transition from _____ to _____ <input type="checkbox"/> upper limit of sand-sized particles <input type="checkbox"/> silt deposits:					
Vegetation Indicators					
<input checked="" type="checkbox"/> Change in vegetation type and/or density: Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.					
<input type="checkbox"/> forbs to: above OHWM and at OHWM. <input checked="" type="checkbox"/> b graminoids to: At and below OHWM. <input type="checkbox"/> woody shrubs to: <input checked="" type="checkbox"/> b deciduous trees to: Below OHWM willows <input type="checkbox"/> coniferous trees to: <input checked="" type="checkbox"/> Vegetation matted down and/or bent: Some dead veg.					
<input type="checkbox"/> Exposed roots below intact soil layer: Ancillary indicators <input type="checkbox"/> Wracking/presence of organic litter: <input type="checkbox"/> Presence of large wood: <input type="checkbox"/> Leaf litter disturbed or washed away: <input type="checkbox"/> Water staining: <input type="checkbox"/> Weathered clasts or bedrock:					
Other observed indicators? Describe: located in middle of channel bent downward, showing flow goes north to south.					

Project ID #: 21492

Step 4 Is additional information needed to support this determination? Yes No If yes, describe and attach information to datasheet:

Step 5 Describe rationale for location of OHWM

Vegetation change shows where the OHWM occurs. Cut in bank and vegetation that was matted down are also indicators

Additional observations or notes

Where water was present at the bottom of the channel wetland vegetation was present. Channel also is being fed water from sprinkler system and nuisance water from surrounding neighborhood.

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? Yes No If no, explain why not:

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach to the back of this page.

APPENDIX C – SITE PHOTOGRAPHS

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Photo 1.

Overview photo of Cherry Channel drainage from the north end. The northern half of the drainage is dominated by young Goodding's Willow Riparian habitat. Photo is facing south.



Photo 2.

Overview photo of Cherry Channel drainage from the middle of the Project site. Disturbed Goodding's Willow Riparian habitat begins to transition into cattail marsh habitat. Photo is facing south.



Photo 3.
Cattail marsh habitat with Ruderal vegetation lining the slopes located near the middle of the drainage. Photo is facing southwest.



Photo 4.
Section on the southern half of the drainage that is dominated by Disturbed Wild Tarragon habitat. Slopes of the drainage are Ruderal with scattered natives including horseweed and California buckwheat. Photo is facing north.



Photo 5.

Overview of the southern portion of the drainage. This area is dominated with Ruderal vegetation. Ornamental vegetation lines the outsides of the channel. Photo is facing north.



Photo 6.

Overview photo of the parking lot located east of the drainage. More Ruderal vegetation is located on both sides of the Parking lot. Photo is facing southwest.



Photo 7.

Overview of the open space located along the SCE power lines. This area has a low potential for BUOW. Soils look freshly tilled/mowed. Photo is facing east.



Photo 8.

Overview photo of the natural drainage (Potrero Creek) located south, outside of the Project site boundary. This drainage leads to San Jacinto River which is a NWI mapped waterway. Photo is facing southwest.

APPENDIX D – PLANT SPECIES OBSERVED

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Scientific Name	Common Name
ANGIOSPERMS (EUDICOTS)	
SALICACEAE	WILLOW FAMILY
<i>Populus fremontii</i> subsp. <i>fremontii</i>	fremont cottonwood
<i>Salix gooddingii</i>	black willow
<i>Salix exigua</i>	narrow-leaved willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
EUPHORBIACEAE	SPURGE FAMILY
<i>Croton setiger</i>	turkey-mullein
<i>Chamaesyce maculata</i> *	spotted spurge
ASTERACEAE	SUNFLOWER FAMILY
<i>Cirsium vulgare</i> *	bull thistle
<i>Erigeron bonariensis</i> *	flax-leaved horseweed
<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule fat
<i>Erigeron canadensis</i>	horseweed
<i>Stephanomeria pauciflora</i>	wire lettuce
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Artemisia dracunculus</i>	tarragon
<i>Isocoma menziesii</i>	coast goldenbush
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Veronica anagallis-aquatica</i> *	water speedwell
SOLANACEAE	NIGHTSHADE FAMILY
<i>Datura wrightii</i>	jimson weed
<i>Solanum americanum</i>	small-flowered nightshade
CHENOPodiaceae	GOOSEFOOT FAMILY
<i>Salsola australis</i> *	Russian-thistle
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Epilobium brachycarpum</i>	parched fireweed
<i>Epilobium ciliatum</i> subsp. <i>ciliatum</i>	epilobium cilatum
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Polygonum arenastrum</i> *	common knotweed
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Rumex crispus</i> *	curly dock
<i>Persicaria hydropiperoides</i>	water pepper
APOCYNACEAE	DOGBANE FAMILY
<i>Trachelospermum jasminoides</i> *	star jasmine
TAMARICACEAE	TAMARISK FAMILY
<i>Tamarix chinensis</i> *	tamarisk
PITTOSPORACEAE	TOBIRA FAMILY

<i>Pittosporum</i> sp.	pittosporum
OLEACEAE	OLIVE FAMILY
<i>Ligustrum japonicum</i> *	Japanese privet
BRASSICACEAE	MUSTARD FAMILY
<i>Hirschfeldia incana</i> *	shortpod mustard
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Schinus molle</i> *	Peruvian pepper tree
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus albus</i> *	tumbling pigweed
FABACEAE	LEGUME FAMILY
<i>Melilotus albus</i> *	white sweetclover
<i>Melilotus indicus</i> *	sourclover
<i>Vicia</i> sp.	vetch
PORTULACACEAE	PURSLANE FAMILY
ZYGOPHYLLACEAE	CALTROP FAMILY
<i>Tribulus terrestris</i> *	puncture vine
ANGIOSPERMS (MONOCOTS)	
TYPHACEAE	CATTAIL FAMILY
<i>Typha</i> sp.	cattail
ARECACEAE	PALM FAMILY
<i>Washingtonia robusta</i> *	Mexican fan palm
CYPERACEAE	SEDGE FAMILY
<i>Cyperus eragrostis</i>	tall cyperus
<i>Cyperus</i> sp.	sedge
POACEAE	GRASS FAMILY
<i>Bromus tectorum</i> *	cheat grass
<i>Echinochloa crus-galli</i> *	barnyard grass
<i>Bromus diandrus</i> *	ripgut grass
<i>Leptochloa fusca</i> subsp. <i>uninervia</i>	Mexican sprangletop
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Avena fatua</i> *	wild oat

*Non-Native Species