

Appendix D
Biological Resources Report

2085 North Iris Project

Biological Technical Report

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ACRONYMS AND ABBREVIATIONS

BCLA	biological core and linkage area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Code
City	City of Escondido
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of San Diego
CWA	Clean Water Act
DBH	diameter at breast height
Draft Escondido SAP	Draft Escondido Subarea Plan
FESA	Federal Endangered Species Act
FPA	Focused Planning Area
G	Global
GPS	Global Positioning System
Hallmark	Hallmark Development Corporation
HELIX	HELIX Environmental Planning, Inc.
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
MHCP	Multiple Habitat Conservation Program
NCCP	Natural Communities Conservation Planning
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High Water Mark
PAMA project	Pre-Approved Mitigation Area 2085 North Iris Project
RWQCB	Regional Water Quality Control Board

ACRONYMS AND ABBREVIATIONS (cont.)

S	State
SAA	Streambed Alteration Agreement
SAP	Subarea Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WELO	Water Efficient Landscape Ordinance

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EXECUTIVE SUMMARY

This biological technical report was prepared to evaluate the proposed 2085 North Iris Project. The project site is located within unincorporated County of San Diego (County), California; however, the project will be annexed to the City of Escondido (City) once completed. The purpose of this report is to document the existing biological conditions within the project site and to analyze potential project impacts to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for review under the California Environmental Quality Act (CEQA) by the City.

The project consists of the development of 102 multi-family residential units and associated open space. HELIX Environmental Planning, Inc. (HELIX) conducted biological surveys for the project site and immediate surrounding areas in August 2020 to record biological resources on-site, to map extents of current vegetation communities, assess habitat for species to occur, and preliminarily delineate the extents of potential jurisdictional aquatic resources. A total of five vegetation communities and land cover types occur within the project site: disturbed wetland, non-native grassland, non-native vegetation, disturbed habitat, and developed lands.

A follow up survey was conducted by HELIX on November 3, 2021, to address a comment related to the project's effect on mature and protected oak trees located on- and off-site. Eleven protected oak trees and twelve mature oak trees will be impacted by the project.

No special status plant or animal species were observed within the project site during biological surveys, which include focused rare plant surveys. Due to a lack of suitable habitat, there are no special status plant or animal species with a moderate or high potential to occur within the project site. The project site supports nesting habitat for bird species protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

The central portion of the project site includes potential non-wetland waters of the United States under the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the CWA, potential non-wetland waters of the State under the regulatory jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to CWA Section 401, and potential streambed and disturbed wetland under the regulatory jurisdiction of California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600-1603 of the California Fish and Game Code (CFG Code).

The project occurs within the boundaries of the Multiple Habitat Conservation Program (MHCP). Within the MHCP, the project is located in the Escondido Draft Subarea Plan. The Escondido Draft Subarea Plan has not been finalized or adopted. In the context of the MHCP, the project is located outside of areas targeted for conservation. The project site is not located within U.S. Fish and Wildlife Service (USFWS) designated or proposed critical habitat.

Potential significant impacts were identified for sensitive natural communities/habitats, potentially jurisdictional resources, and mature and protected trees. The mitigation measures proposed would mitigate potential significant impacts to sensitive natural communities/habitats, potential jurisdictional resources, and mature and protected trees. Implementation of these mitigation measures would mitigate the potential impacts to below a level of significance.

As currently planned, the project would require the submittal of regulatory permit applications to the USACE, RWQCB, and CDFW for potential impacts to jurisdictional aquatic resources. Potential impacts to sensitive communities/habitats present within the planned impact area would be mitigated at a minimum 1:1 ratio (i.e., no net loss obligation). Project impacts to USACE, RWQCB, and CDFW jurisdictional aquatic resources shall be mitigated at a minimum 1:1 ratio provided through off-site establishment/re-establishment, rehabilitation, enhancement, and/or preservation mitigation. Project impacts to mature and protected trees shall be mitigated at a 1:1 replacement or 2:1 replacement, respectively, through preparation and implementation of a tree survey and tree replacement and/or protection plan. Per CDFW recommendation, an infectious tree disease management plan should be prepared for the project.

1.0 INTRODUCTION

This report describes the results of a biological resources study conducted by HELIX Environmental Planning, Inc. (HELIX) for the proposed 2085 North Iris Project (project), which includes the development of 102 multi-family residential units and associated open space. Hallmark Development Corporation (Hallmark) intends to annex the project site into the City of Escondido (City).

The purpose of this report is to document the existing biological conditions within the proposed project site and provide an analysis of potential impacts on sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for review under California Environmental Quality Act (CEQA) by the City of Escondido Planning Division.

The study area for this biological technical report includes the project site. The information and discussions in this report primarily describe the project site, which is defined by the proposed project development areas; additional areas within the 150-foot surrounding buffer (i.e., study area) were reviewed for adjacency context only and are not discussed in detail herein.

1.1 PROJECT LOCATION

The proposed project site is currently located within unincorporated San Diego County, California (Figure 1, *Regional Location*). The project site occurs within Section 4, Township 12 South, Range 2 West, on the U.S. Geological Survey (USGS) 7.5-minute Valley Center quadrangle (Figure 2, *USGS Topography*). The project site is located immediately west of North Iris Lane, north of Cheyenne Lane, and south of Robin Hill Lane. (Figure 3, *Project Vicinity*). The project site includes various privately owned parcels and an approximately 0.02-acre area along North Iris Lane that is outside of parcel boundaries. The project site is not located in the Coastal Zone.

If annexed, the project site would occur within City boundaries. As such, it is subject to the North County Multiple Habitat Conservation Program (MHCP; AMEC 2003). The North County MHCP is divided into sub-regional plans, with the project site located within the Escondido subarea. The Public Review Draft Escondido Subarea Plan (Draft Escondido SAP 2001) has not yet been approved or adopted and remains in draft form as of the date of this document (Ogden and Conservation Biology Institute 2001). This report evaluates the project site under the Draft Escondido SAP, which will ultimately regulate the project site.

The project site is not located within a Pre-Approved Mitigation Area (PAMA) targeted for conservation by the North County MHCP (Figure 4, *Regional Context MHCP*). Within the Draft Escondido SAP, the project site is not mapped as a Focused Planning Area (FPA) or designated as Constrained Lands outside the FPA. Additionally, the project site is not located within the biological core and linkage area (BCLA).

The project site does not include any areas designated as critical habitat for listed species, and it is not included in the Quino checkerspot butterfly (*Euphydryas editha quino*) survey area.

1.2 PROJECT DESCRIPTION

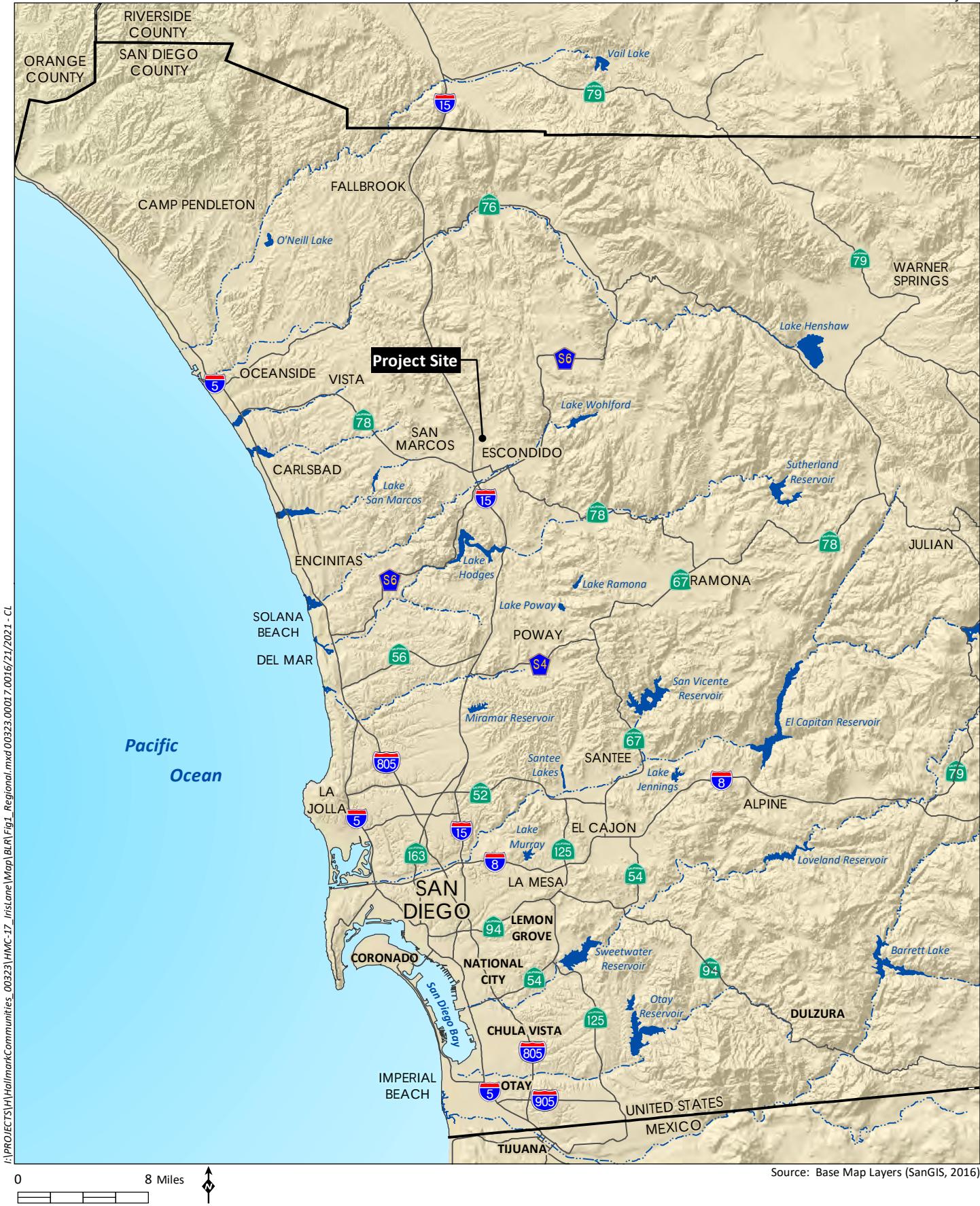
1.2.1 Project Components

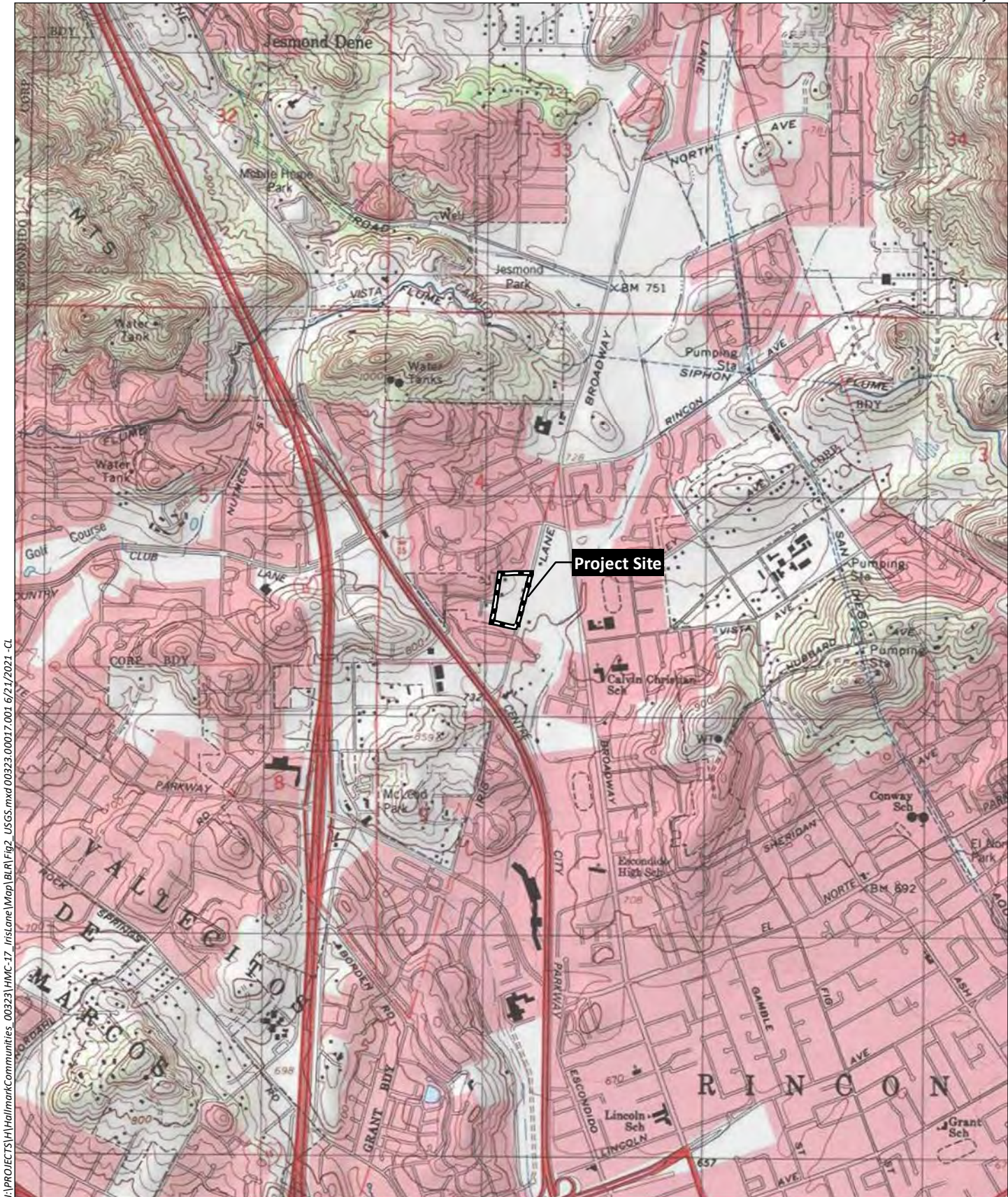
The project proposes 102 multi-family residential units. The private and gated residential land uses comprise approximately 2.4 acres of the 7.50-acre project site. Multi-family residential dwelling units are comprised of one, two, and three-story townhomes with seven dwelling unit types interspersed throughout the project.

- **Open Space Land Use.** Open space will total approximately 2.2 acres of the 7.50-acre project site. Open space within the plan is categorized as common open space, which includes open space with grades less than ten percent, a water quality basin, a 10-foot setback along the southern boundary, and recreational areas. The other type of open space is private open space, which is associated with private patio and deck areas on the residential units.
 - **Common Open Space.** Common open space is divided into two areas: a common open space area with grades less than 10 percent; and the basin area. The common open space area with grades less than 10 percent includes usable open space areas, which encourage relaxation activities such as observing nature, bird watching, painting, photography, and picnicking as well as recreational open space areas such as open turf area, playgrounds, open turf areas, and firepits. The basin areas are passive open space areas that are used to direct water during rain events to control for flooding and to treat water before it is discharged from the project site.

The Project includes six common-area recreation spaces totaling 10,543 square feet, inclusive of multi-age play areas, tot lots, seating, barbeque stations, open turf areas, and patio areas. The Homeowners Association will ultimately maintain these areas.

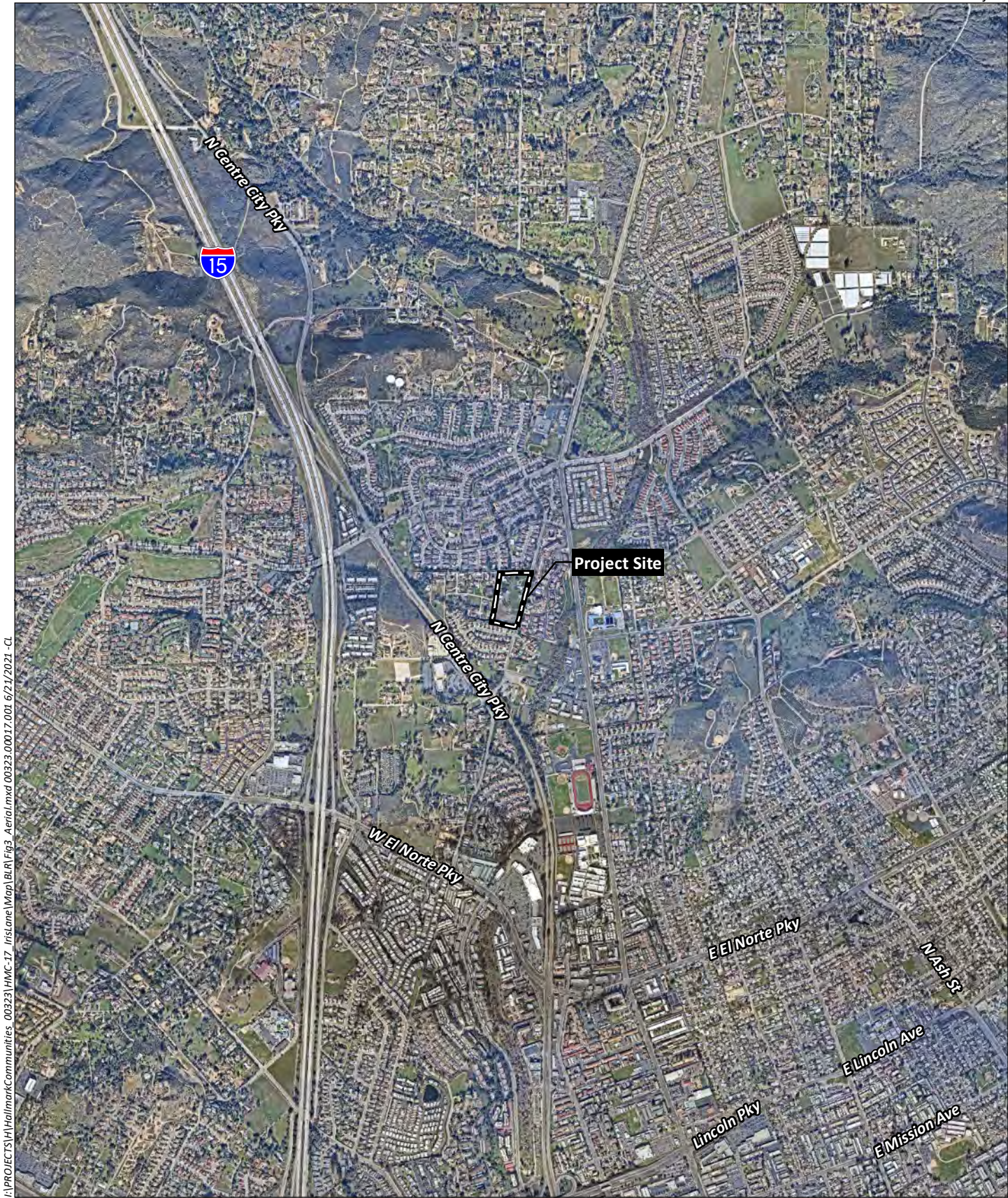
- **Private Open Space.** Private open space within the Project area consists of private patio space and private balcony/deck space. The project provides a total of 21,434 square feet of outdoor private space.
- **Access and Circulation.** Access to the project site will be via two driveways on Robin Hill Lane which will provide a private gated circular bulb turnaround entry with access to ingress and egress which will connect to the project site and provide access to alleys. A secondary exit-only access is provided through the eastern boundary of the project site to connect with North Iris Lane. This access point is intended for exit only and will also have a gate in place. Driveways and alleys within the project site will be private. In addition, the project provides an accessible path of travel through the project site and to each residence via pedestrian pathways.
- **Parking.** The project proposes a total of 230 parking spaces. This includes 204 garage spaces associated with the units, which will be pre-wired for electric vehicle charging stations. An additional 27 guest spaces (22 open spaces, two ADA spaces, and three EV spaces) will also be included.
- **Landscape Plan.** The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover, and the plant selection emphasizes, and moderates water use species. The project will also comply with the City's Model Water Efficient Landscape Ordinance (WELO).



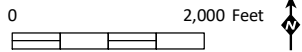


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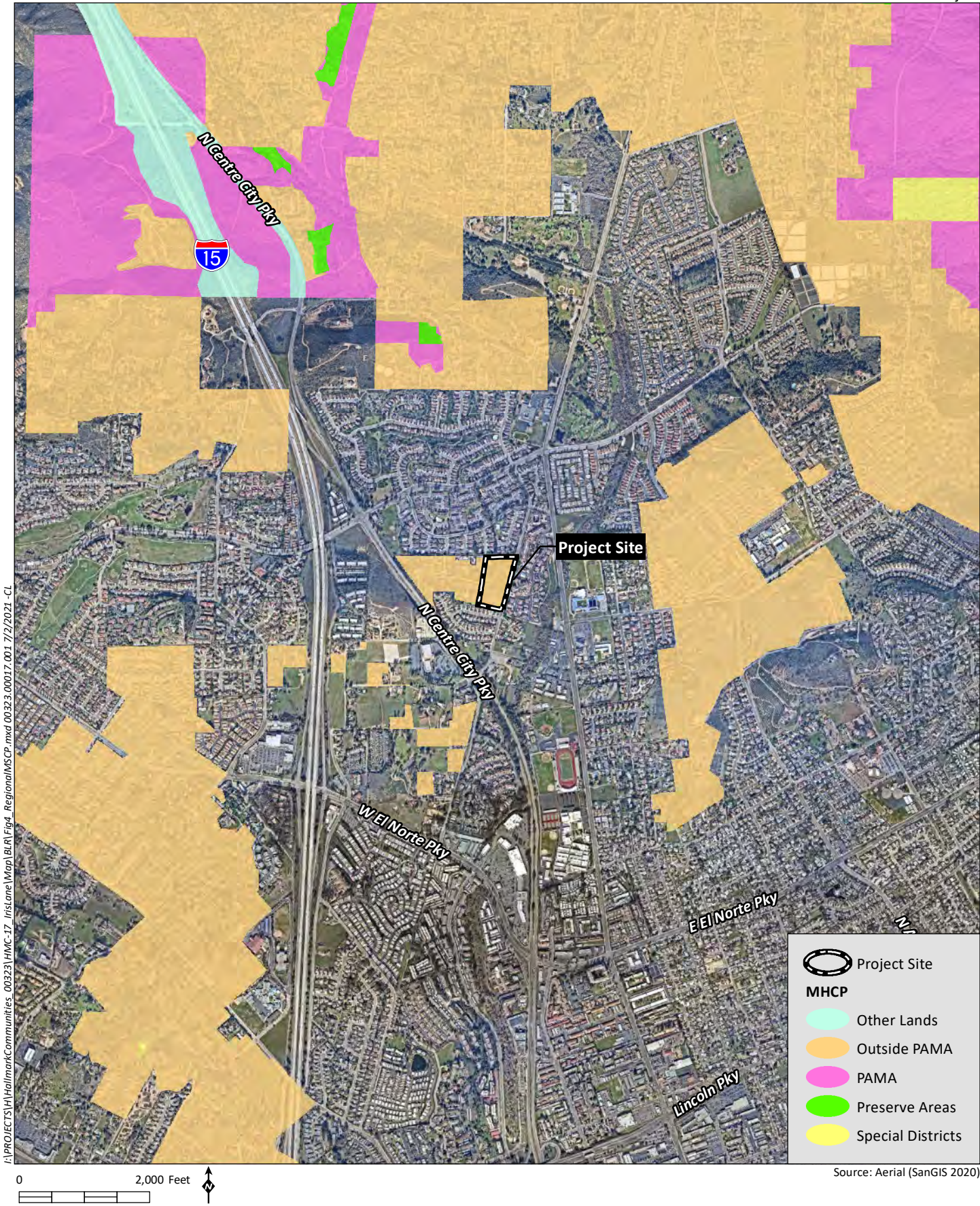
Source: Valley Center 7.5' Quad (USGS)



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Source: Aerial (SanGIS 2020)



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1.2.2 Construction Activities

Construction activities would occur over an approximately two-year period and are anticipated to begin as early as 2022 and end in 2023. Construction timing would be arranged to avoid the bird nesting season. Construction activities would involve existing structure demolition, site preparation, grading and debris removal, paving, new building construction, and architectural coating that would occur consecutively. Demolition equipment would consist of concrete/industrial saws, excavators, and tractors, loaders, and/or backhoes; site preparation equipment would include rubber-tire loaders and tractors, loaders, and/or backhoes; grading equipment would consist of excavators, graders, rubber-tire dozers, and tractors, loaders, and/or backhoes; paving equipment would include pavers, paving equipment, and rollers; building construction equipment would include cranes, forklifts, generator sets, tractors, loaders, and/or backhoes, and welders; and architectural coating equipment would include air compressors.

Temporary erosion control measures, such as sandbag barriers, fiber rolls, wood mulching, soil binders, geotextiles, plastic covers, erosion control blankets/mats, silt fencing, native habitat revegetation, and construction personnel training are among the best management practices that would be implemented during, and immediately following, construction to minimize impacts to biological resources and water quality. Further, a biologist would be present on-site throughout the project to monitor construction for environmental compliance.

2.0 METHODS

2.1 LITERATURE REVIEW

Prior to conducting biological field surveys, HELIX conducted a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project site. HELIX also reviewed a previous biological due diligence completed for the project area by others in 2020 (HELIX 2020). Recent and historical aerial imagery, USGS topographic maps, soils maps (Natural Resource Conservation Service [NRCS] 2021), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

In addition, a query of special status species and habitats databases was conducted, including the USFWS species records (USFWS 2021a), California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB; CDFW 2021a), Calflora database (Calflora 2021), SanBIOS and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2021). The USFWS' National Wetlands Inventory was also reviewed (USFWS 2021b). Any recorded locations of species, habitat types, wetlands, and other resources were mapped and overlain onto aerial imagery using Geographic Information Systems. Data pertaining to the MHCP was also reviewed.

2.2 BIOLOGICAL SURVEYS

2.2.1 General Biological Survey

HELIX biologist Amy Mattson conducted a general biological survey of the project study area (i.e., project site and surrounding areas within 150 feet) on August 12, 2020, to map existing vegetation communities, evaluate habitats for the potential to support sensitive species, and note other potentially

sensitive biological resources that occur or may occur on-site and in the immediate vicinity. Rare plant surveys were conducted on April 21, 2021 and June 15, 2021 by Ms. Mattson; oak trees were also mapped during the June 2021 site visit. A follow up survey was conducted by HELIX on November 3, 2021, to address a comment related to the project's effect on mature and protected oak trees located on- and off-site. Coast live oaks along the southern boundary of the study area were assessed to determine if they constitute a coast live oak woodland. During this survey it was noted that several trees adjacent to the southern edge of the study area had been cut down since the previous survey. These trees occur within a Vallecitos Water District easement. This report reflects trees present as of November 3, 2021. The project site was surveyed on foot with the aid of a Global Positioning System (GPS) unit and a color aerial photograph. Incidental wildlife observations and inaccessible areas of the project site and in the immediate vicinity were visually inspected using binoculars. Representative photographs of the project site were taken and are provided as Attachment A (*Representative Photos*) hereto. Vegetation communities were classified and mapped in accordance with Holland (1986) and Oberbauer (1996).

Vegetation was mapped by HELIX on a 150-foot (1 inch = 150 feet) aerial photograph of the project site with an overlay of the study area boundary and were mapped to one-tenth of an acre (0.1 acre) for uplands and one-hundredth of an acre (0.01 acre) for wetlands. A list of all plant and animal species observed or detected within the project site was prepared. Plant species were identified in the field or later in the laboratory with the aid of voucher specimens. Animals were identified in the field by direct visual observation with the aid of binoculars or indirectly by detection of calls, tracks, burrows, or scat.

A formal jurisdictional delineation was conducted by HELIX biologists Jason Kurnow and Stacy Nigro on August 24, 2020, to map potential jurisdictional resources. Areas on-site considered to be potentially jurisdictional to the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW were preliminarily delineated based on the presence of bed and bank features, ordinary high water mark, drainage patterns, and riparian and wetland habitat types. Table 1, *Biological Surveys for the 2085 North Iris Project*, provides a summary of biological surveys conducted for the project.

Table 1
BIOLOGICAL SURVEYS FOR THE 2085 NORTH IRIS PROJECT

Survey Date	Personnel	Survey Type
August 12, 2020	Amy Mattson	General Biological
August 24, 2020	Jason Kurnow Stacy Nigro	Jurisdictional Delineation
April 21, 2021	Amy Mattson	Rare Plant
June 15, 2021	Amy Mattson	Rare Plant and Oak Tree Mapping
November 3, 2021	Amy Mattson	Oak Tree Mapping and Coast Live Oak Woodland Assessment

2.2.2 Jurisdictional Delineation

HELIX biologists Jason Kurnow and Stacy Nigro preliminarily identified and mapped jurisdictional aquatic resources potentially subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the Clean Water Act and State Porter-Cologne Water Quality Control Act, and streambed and riparian habitat potentially subject to CDFW jurisdiction pursuant to Sections 1600 et

seq. of the California Fish and Game (CFG) Code on August 24, 2020. Jurisdictional aquatic resources were identified and mapped based on vegetation communities and hydrologic characteristics, in accordance with current guidelines. The extents of potentially jurisdictional resources were recorded on-site using a GPS. Prior to the delineation, recent aerial photographs (1"=80'), topographic maps (1"=80'), soil mapping, National Wetlands Inventory mapping, and USGS topographical maps were reviewed to determine the location of potential jurisdictional areas. The delineation was conducted on foot with the aid of 1"=80' scale aerials and topographic maps. Potential aquatic resources evaluated within the project site included drainage features, depressions, and/or wetland vegetation that crossed or were adjacent to the proposed project.

Waters of the United States

Potential USACE-jurisdictional waters of the United States were generally determined based on the presence of ponded water, a discernible ordinary high-water mark (OHWM), and/or wetland conditions expressed by three parameters (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Arid West Regional Supplement (USACE 2008). The OHWM was identified according to "A Field Guide to the Identification of the Ordinary High-Water Mark in the Arid West Region of the Western United States" (Lichvar and McColley 2010). Mapping of drainage features was performed in the field based on the OHWM and surface indications of hydrology. No soil pits were dug as hydrology and aquatic vegetation extents were evident. Areas were determined to be potential wetland waters of the United States if there was a dominance of hydrophytic vegetation, hydric soils, and wetland hydrology indicators. Areas were determined to be non-wetland waters of the United States if there was evidence of regular surface flow within an OHWM, but the vegetation criterion was not met. Hydric soils were presumed present aquatic vegetation was mapped.

Waters of the State

Potential RWQCB-jurisdictional areas were delineated in the same manner as potential waters of the United States. All waters of the United States were considered waters of the State subject to RWQCB jurisdiction pursuant to CWA Section 401. Ephemeral features, while not considered waters of the United States, were determined to be waters of the State under regulatory jurisdiction of the RWQCB pursuant to the State Porter-Cologne Water Quality Control Act.

Streambed and CDFW Jurisdictional Habitat

Potential CDFW-jurisdictional streambed and CDFW-jurisdictional habitat were determined based on the presence of wetland vegetation or regular surface flow within a measurable bed and bank. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that support riparian vegetation" (Title 14, Section 1.72). Potential CDFW-jurisdictional unvegetated streambed encompasses the top-of-bank to top-of-bank width for the features within the project site. Jurisdictional habitat is not defined in Title 14, but the section refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all disturbed wetland habitat located within, and extending beyond the banks of a stream. Definitions of CDFW jurisdictional areas are presented in Appendix G of this report.

2.3 SURVEY LIMITATIONS

Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that use the project site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. Those species that are of special status and have potential to occur in the project site; however, are still addressed in this report.

2.4 NOMENCLATURE

Nomenclature for this report is taken from Holland (1986) and Oberbauer (2008) for vegetation communities; Jepson eFlora (2021) and Baldwin et al. (2012) for plants; North American Butterfly Association (2021) for butterflies; Society for the Study of Amphibians and Reptiles (2021) for reptiles and amphibians; American Ornithological Society (2021) for birds; and Bradley et al. (2014) for mammals. Plant species status is from the CNPS Rare Plant Inventory (2021) and CDFW (2021a). Animal species status is from CDFW (2021b).

3.0 EXISTING CONDITIONS

3.1 GENERAL LAND USES

The project site is bounded on all sides by residential development. Land uses further south and west of the project site include commercial development.

3.2 TOPOGRAPHY AND SOILS

Elevations within the project site range between approximately 705 and 775 feet above mean sea level. Three soil types are mapped on the project site, belonging to two soil series: Escondido very fine sandy loam, 5 to 9 percent slopes; Escondido very fine sandy loam, 9 to 15 percent slopes, eroded; and Placentia sandy loam, thick surface, 2 to 9 percent slopes (Figure 5, *Soils*). Of these soil mapping unit types, no series is known to support sensitive plant species in the region.

3.3 VEGETATION COMMUNITIES

A total of five vegetation communities or land use types occur within the project site: disturbed wetland, non-native grassland, non-native vegetation, disturbed habitat, and urban/developed land (Table 2, *Existing Vegetation Communities and Land Covers within the Project Site*; Figure 6, *Existing Vegetation Communities and Land Cover Types*).

Table 2
EXISTING VEGETATION COMMUNITIES AND LAND COVERS WITHIN THE PROJECT SITE¹

Vegetation Community or Land Cover Type¹	Acres²
<i>Sensitive</i>	
Disturbed Wetland (11200)	0.10
Non-native Grassland (42200)	2.5
<i>Subtotal Sensitive Communities</i>	<i>2.60</i>

Vegetation Community or Land Cover Type ¹	Acres ²
<i>Non-Sensitive</i>	
Non-native Vegetation (11000)	0.1
Disturbed Habitat (11300)	0.9
Urban/Developed (12000)	3.9
<i>Subtotal Non-Sensitive Communities</i>	<i>4.9</i>
TOTAL	7.50

¹ Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008) and are listed by Habitats and Tiers within the MHCP.

² Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01; thus, total reflects rounding.

3.3.1 Disturbed Wetland (11200)

This vegetation community is dominated by exotic wetland species that invade areas that have been previously disturbed or undergone periodic disturbances. These non-natives become established more readily following natural or human-induced habitat disturbance than the native wetland flora. Characteristic species of disturbed wetlands include giant reed (*Arundo donax*), ox tongue (*Helminthotheca echioides*), cocklebur (*Xanthium strumarium* var. *canadense*), and tamarisk (*Tamarix* sp.). Dominant species in this vegetation community within the project site include curly dock (*Rumex crispus*), dallisgrass (*Paspalum dilatatum*), tall flatsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), and fat-hen (*Atriplex prostrata*). Disturbed wetland on-site is associated with a channelized drainage traversing the southern portion of the project site from west to east.

Disturbed Wetland occupies approximately 0.10 acre of the project site.

3.3.2 Non-native Grassland (42200)

Non-native grassland is a dense to sparse cover of annual grasses, often associated with numerous species of showy-flowered native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oats (*Avena* sp.), red brome (*Bromus rubens*), ripgut (*B. diandrus*), ryegrass (*Lolium* sp.), and mustard (*Brassica* sp.). Dominant species in this vegetation community within the project site include Bermuda grass and English plantain.

Non-native grassland occupies approximately 2.5 acres of the project site.

3.3.3 Non-native Vegetation (11000)

Non-native vegetation is a category describing stands of naturalized trees and shrubs (e.g., acacia [*Acacia* sp.], pepper tree [*Schinus* sp.]), many of which are also used in landscaping. Dominant species in this vegetation community within the project site include Peruvian pepper tree (*Schinus molle*) with an understory of oats.

Non-native Vegetation occupies approximately 0.1 acre of the project site.

3.3.4 Disturbed Habitat (11300)

Disturbed habitat includes land cleared of vegetation, land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage

that removes any capability of providing viable habitat. Disturbed habitat resembles the non-native grassland on-site but contains less non-native grass, has a higher predominance of bare ground, and/or disturbance-related plant species. Dominant species in this plant community within the project site include Bermuda grass (*Cynodon dactylon*), tarplant (*Deinandra fasciculata*), dove weed (*Croton setigerus*), and horseweed (*Erigeron canadensis*).

Disturbed Habitat occupies approximately 0.9 acre of the project site.

3.3.5 Urban/Developed Lands (12000)

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, where landscaping is clearly tended and maintained, and land experiencing heavy usage. Within the project site, urban/developed land consists of roads, residential housing, landscaping, ornamental plantings, and a horse corral. Landscaping associated with developed land also includes areas planted with coast live oak trees. Within the project site, coast live oak trees occur as a cluster of oak trees at/adjacent to 2039 North Iris Lane and scattered individuals. This cluster of oak trees occurs on historic aerial imagery only after construction of the residence in 1959 (NETROnline 2021; Zillow 2021). This area does not include typical understory species associated with coast live oak woodland habitat. Because the oak trees appear to have been installed as landscaping and do not function as coast live oak woodland, these areas have been categorized as developed land. The row of coast live oak trees along Robin Hill Lane, which overhang the western side of the property at 2039 North Iris Lane, also occurs on historic imagery after residential construction and does not include understory species associated with coast live oak woodland habitat. There are coast live oak trees on a narrow strip of land associated with a Vallecitos Water District easement to the south of the project site, between the project site and a wooden fence bordering houses built along Cheyenne Lane. These oak trees overhang the southern edge of the project site. These trees appear on historic aerial imagery after 1985 when grading occurred for residential development (Google Earth 2021) and do not include understory species associated with coast live oak woodland habitat. Because oak trees overhanging the project site (on both the southern and western edges) appear to be associated with residential development and these areas do not function as coast live oak woodland, these areas have been categorized as developed land.

Urban/Developed land occupies approximately 3.9 acres of the project site.

3.4 PLANTS

A total of 86 plant species were observed within, or adjacent to, the project study area during the biological surveys for the project, of which 58 (67 percent) are non-native species (Appendix A, *Plant Species Observed*).

3.5 ANIMALS

A total of 14 animal species were observed/detected within, or adjacent to, the project study area during the biological surveys for the project, including three invertebrates, one amphibian, one mammal, and nine bird species (Appendix B, *Animal Species Observed or Detected*).

Project Site

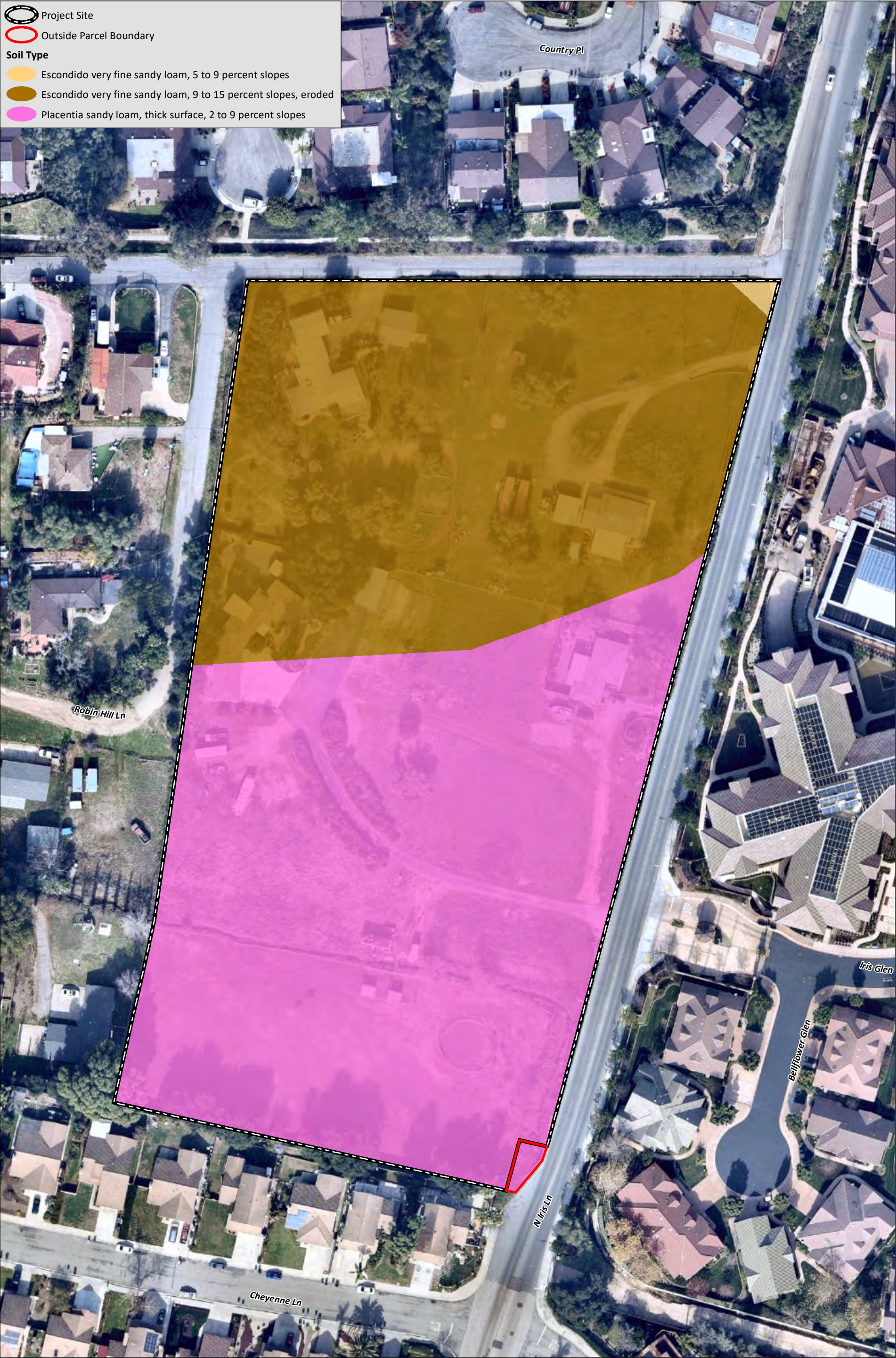
Outside Parcel Boundary

Soil Type

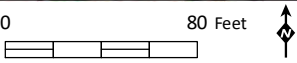
Escondido very fine sandy loam, 5 to 9 percent slopes

Escondido very fine sandy loam, 9 to 15 percent slopes, eroded

Placentia sandy loam, thick surface, 2 to 9 percent slopes



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Source: Aerial (SanGIS, 2019)

 Project Site

 Outside Parcel Boundary

Vegetation

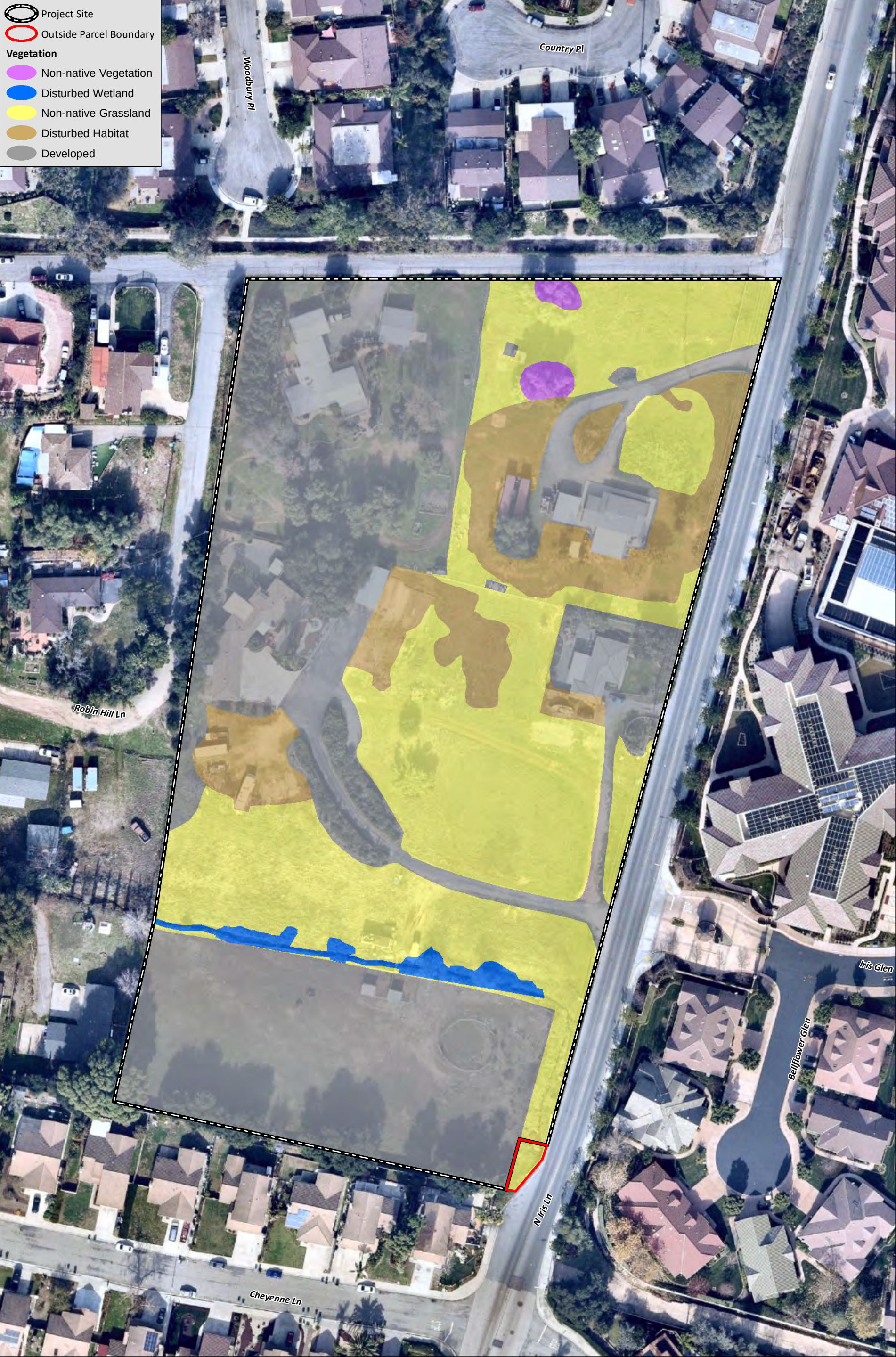
 Non-native Vegetation

 Disturbed Wetland

 Non-native Grassland

 Disturbed Habitat

 Developed



I:\PROJECTS\H\HollmarkCommunities_00323\HMC-17_Irislane\Map\BLR\Fig6_Veg.mxd 00323_00017_001_11/23/2021 - CL



Source: Aerial (SanGIS, 2019)

3.6 SENSITIVE RESOURCES

3.6.1 Sensitive Vegetation Communities/Habitats

Sensitive vegetation communities/habitat types are defined as land areas that support unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines.

The rarity of natural communities is evaluated by CDFW using the NatureServe's Heritage Methodology (Faber-Langendoen et al 2012), in which communities are given a G (global) and S (State) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities are assigned an overall rank of 1 through 5, with 1 being considered very rare and threatened and 5 being considered demonstrably secure. Communities with a Rarity Ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by the CDFW.

Sensitive vegetation communities/habitat types are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines. Two sensitive vegetation communities/habitat types were mapped within the project site: disturbed wetland and non-native grassland. Non-native vegetation, disturbed habitat, and developed lands do not meet the definition of sensitive habitat under CEQA.

3.6.2 Special Status Plant Species

Special status plant species have been afforded special status and/or recognition by the USFWS and/or CDFW. They may also be included in the CNPS' Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. Sensitive species are those considered unusual or limited in that they are: (1) only found in the region; (2) a local representative of a species or association of species not otherwise found in the region; or (3) severely depleted within their ranges or within the region. No sensitive plant species have been recorded on-site or were observed within the project site during the general biological surveys for the project.

Special Status Plant Species with Potential to Occur

A search of CNPS and CNDDDB records (one-mile radius from the project site) was used to develop a matrix of sensitive plant species that may have potential to occur on-site due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). The matrix is presented in Appendix C, *Special Status Plant Species Observed or with Potential to Occur*, and includes 24 special status plant species, their favorable habitat conditions, and their potential to occur on-site.

No special status plant species were observed within the project site during general biological surveys occurring in 2020 and rare plant surveys occurring in 2021. No special status plant species were determined to have a high or moderate potential to occur due to the lack of suitable habitat within the project site. None of the 24 special status plant species are expected to occur at the project site.

3.6.3 Special Status Animal Species

Special status animal species include those that have been afforded special status and/or recognition by the USFWS and/or CDFW. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss. No special status animal species were observed within the project site during the 2020 biological surveys.

Special Status Animal Species with Potential to Occur

A search of CNDDDB and USFWS records (one-mile radius from the project site) was used to develop a matrix of sensitive animal species that may have potential to occur on-site due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, geographic range, etc.). The matrix is presented in Appendix D, *Special Status Animal Species Observed or with Potential to Occur*, and includes eight special status animal species, their favorable habitat conditions, and their potential to occur on-site.

No special status animal species were observed within or adjacent to the project. No special status animal species were determined to have a high or moderate potential to occur due to the lack of suitable habitat within the project site. All eight special status animal species have low potential to occur, or are presumed to be absent, are not expected, or have no to occur at the project site.

3.6.4 Nesting Birds

Trees and shrubs both within and adjacent to the project site could provide suitable nesting habitat for bird species, including raptors, known to occur in the region.

3.7 JURISDICTIONAL AQUATIC RESOURCES

Results of the delineation concluded there are potentially jurisdictional resource types on-site, described in Sections 3.7.1 and 3.7.2. A summary of the acreages is provided below in Table 3, *Waters of the United States within the Project Site* and Table 4, *CDFW Jurisdiction within the Project Site*, and presented on Figure 7, *Potential CDFW Jurisdictional Resources*, Figure 8, *Potential USACE Jurisdictional Resources*, and Figure 9, *Potential RWQCB Jurisdictional Resources*.

3.7.1 USACE and RWQCB Jurisdiction

USACE and RWQCB jurisdictional areas identified within the project site are associated with the unnamed drainage located adjacent to the horse stables, including 0.05 acre and 494 linear feet of non-wetland waters of the United States (Figure 8; Table 3, *Waters of the United States Within the Project Site*). The project site does not contain wetland waters of the United States/State.

Project Site

Outside Parcel Boundary

Area of Potential Impact

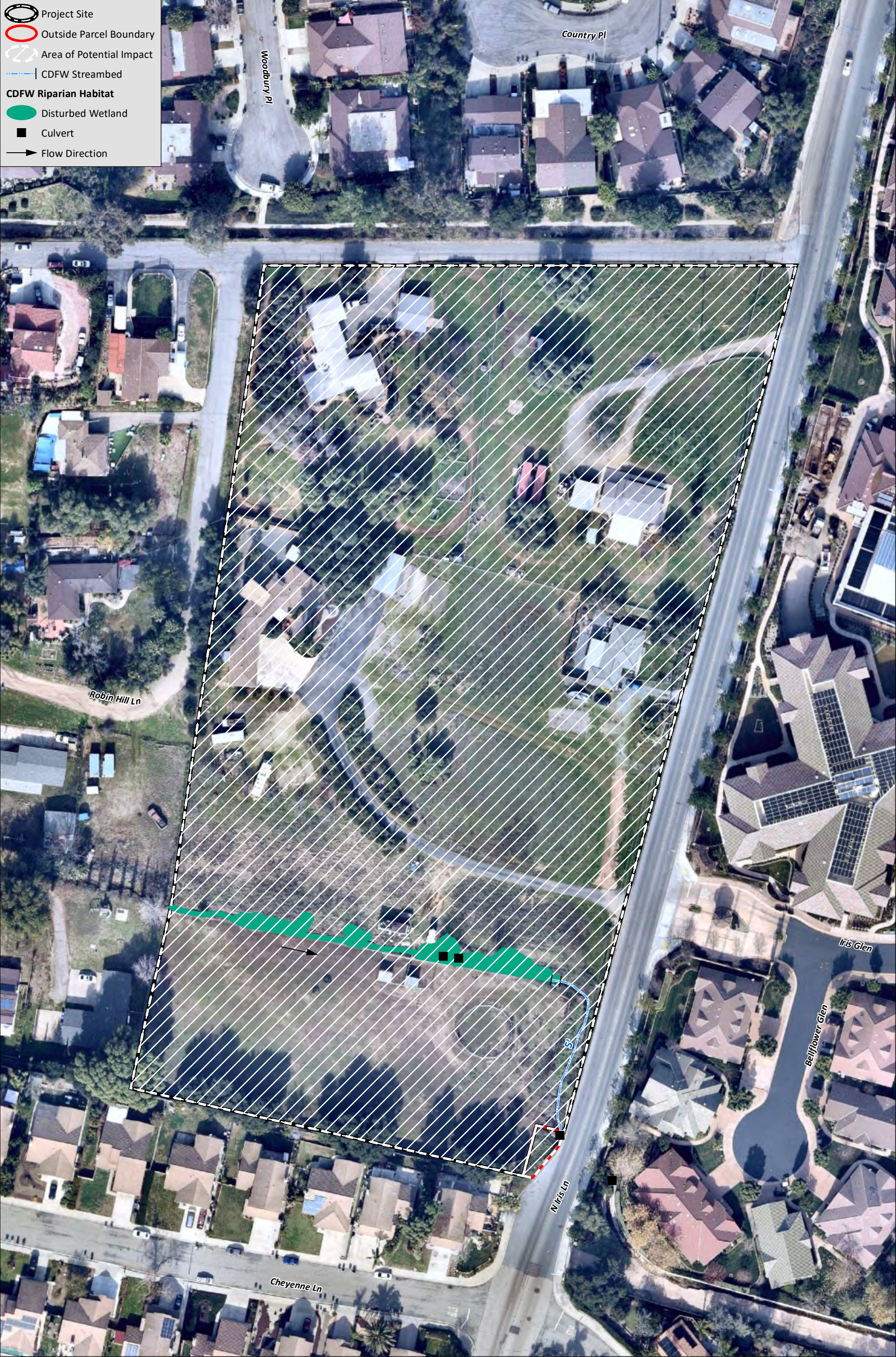
CDFW Streambed

CDFW Riparian Habitat

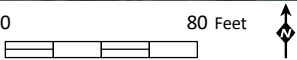
Disturbed Wetland

Culvert

Flow Direction



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Source: Aerial (SanGIS, 2019)

Project Site

Outside Parcel Boundary

Area of Potential Impact

Non-wetland Waters

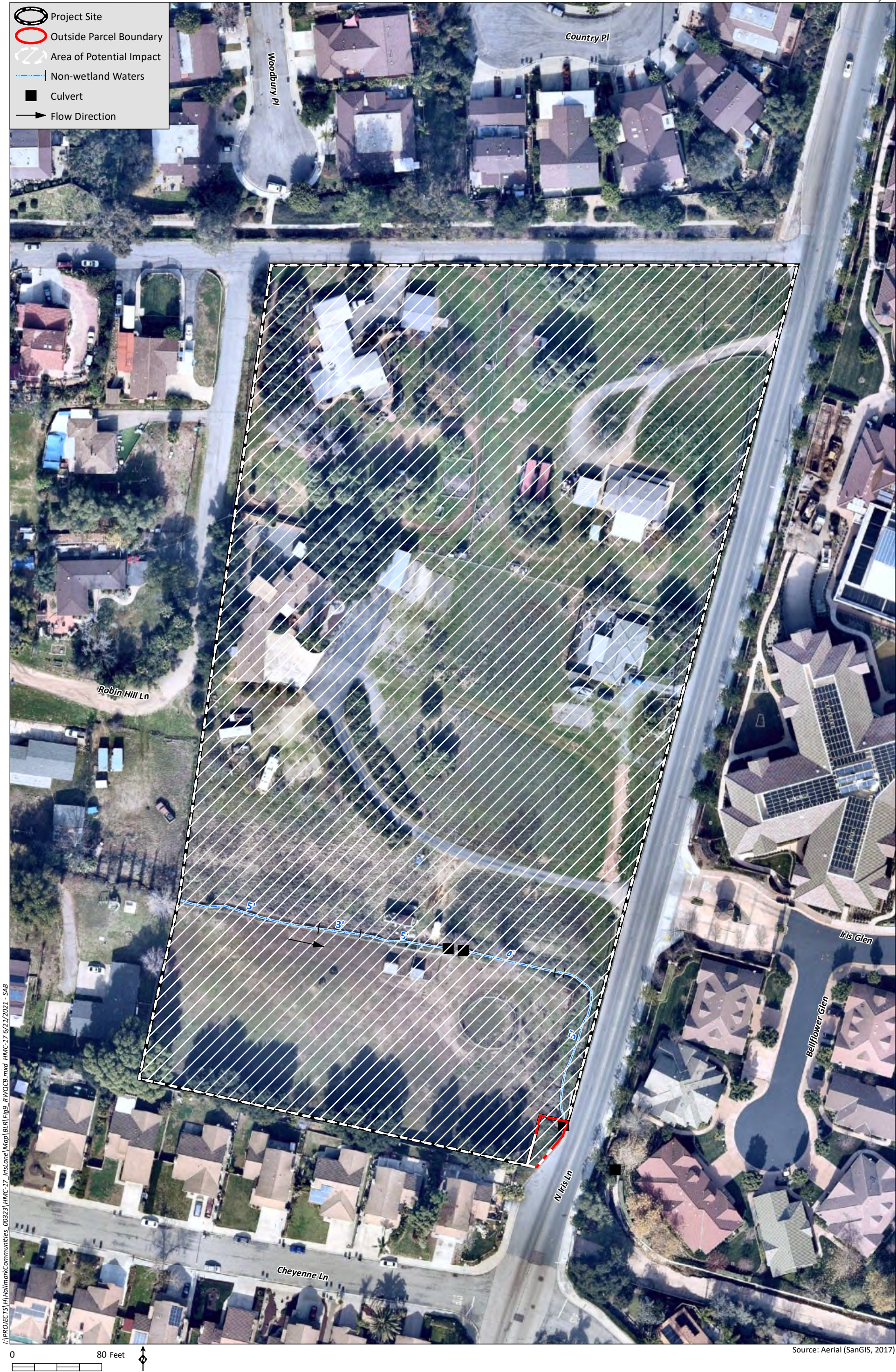
Culvert

Flow Direction



I:\PROJECTS\H\HallmarkCommunities_00323\HMC-17_Irislane\Map\BLR\Fig8_USACE.mxd 00323.00017.001 6/21/2021 - CL

Source: Aerial (SanGIS, 2019)



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Table 3
WATERS OF THE UNITED STATES WITHIN THE PROJECT SITE

Habitat	Acreage ¹	Linear Feet
Non-wetland Waters of the United States		
Streambed	0.05	494
Total	0.05	494

¹ Habitat rounded to the nearest 0.01 acre; total reflects rounding.

3.7.2 CDFW Jurisdiction

CDFW jurisdictional areas within the project site area are also associated with the unnamed drainage located adjacent to the horse stables (Figure 7) and includes 0.10 acre of jurisdictional habitat (disturbed wetland) and 0.02 acre of streambed (Figure 7; Table 4, *CDFW Jurisdictional Impacts Within the Project Site*). The portion of the unnamed drainage occurring within jurisdictional habitat is classified as jurisdictional habitat and not streambed since the species composition within the drainage is the same as the adjacent disturbed wetland areas.

Table 4
CDFW JURISDICTION WITHIN THE PROJECT SITE

Habitat	Acreage ¹
Disturbed Wetland	0.10
Streambed	0.02
Total	0.12

¹ Habitat rounded to the nearest 0.01 acre; total reflects rounding.

3.8 WILDLIFE CORRIDOR/CORE WILDLIFE AREAS

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are made up of a fragmented archipelago arrangement of habitat over a linear distance.

The project site is not located within the BCLA, the regional area identified as important to the conservation of species within the Draft Escondido SAP. Furthermore, the project site's location within residential development, the highly disturbed nature of the vegetation communities within the project site, and the limited size of resources or sensitive vegetation communities on-site would provide only marginal-quality foraging or breeding habitat for native species. Small terrestrial wildlife species (i.e., birds, mammals, reptiles, etc.) would use the project site. Given the project site location is immediately surrounded by residential development, the project site itself does not serve as a wildlife corridor or habitat linkage for the region.

4.0 REGULATORY FRAMEWORK

Biological resources in the project site are subject to regulatory review by federal, State, and local agencies. Under CEQA, impacts associated with a proposed project are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the City of Escondido, pursuant to CEQA Guidelines). Biological resources-related laws and regulations that apply to the project include the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), CWA, CEQA, California Endangered Species Act (CESA), and CFG Code.

4.1 FEDERAL

4.1.1 Federal Endangered Species Act

Administered by the USFWS, the federal ESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered take under the ESA. Section 9(a) of the ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

Sections 7 and 4(d) of the Federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7, administered by the USFWS, describes a process of Federal interagency consultation for use when Federal actions may adversely affect listed species. A Section 7 Consultation (formal or informal) is required when there is a nexus between a listed species’ use of a site and if the project is funded (wholly or in part) by the State Revolving Fund. A biological assessment is required for any major construction activity if it may affect listed species. Take can be authorized via a letter of Biological Opinion, issued by the USFWS, for non-marine related listed species issues. The project would be funded in part by the State Revolving Fund. A Section 7 Consultation would be required if impacts to a federally listed species would occur.

Identified by the USFWS, critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat, so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat.

4.1.2 Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on the disturbance of active bird nests during the nesting season (generally February 15 to August 31, but as early as January 1 for some raptors). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

4.1.3 Clean Water Act and Rivers and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the United States. Permitting for projects filling waters of the United States is overseen by the USACE under Section 404 of the CWA. Most development projects are permitted using Individual Permit or Nationwide Permit instruments.

4.2 STATE

4.2.1 California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (i.e., impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

As part of the CEQA process, a variety of agencies and the public are invited to comment on the project. Upon receipt of the Notice of Preparation of the project's Draft Environmental Impact Report (DEIR), the CDFW provided some recommendations for tree removal. CDFW recommendations are presented in this report, which informs the DEIR. First, the CDFW recommends replacing all mature trees removed as a result of the proposed work activities (including non-native trees) with native trees at a minimum 1:1 ratio. This recommendation is intended to prevent habitat loss for native fauna and any resulting loss of biodiversity. To address the loss of trees, the project will comply with the City of Escondido's tree regulations.

Secondly, the project's removal of trees has the potential to result in the spread of tree insect pests and disease into areas not currently exposed to these stressors. This could result in expediting the loss of oaks, alders, sycamore, and other trees in California which support a high biological diversity including special status species. The CDFW recommends an infectious tree disease management plan be prepared for the project. This plan should include description of how the infectious tree disease management plan will be implemented. All trees that would be removed by the project should be inspected for contagious tree diseases including, but not limited to thousand canker fungus (*Geosmithia morbida*), polyphagous shot hole borer (*Euwallacea* spp.), and goldspotted oak borer (*Agrilus auroguttatus*). To avoid the spread of infectious tree diseases, diseased trees should not be transported from the project site without first being treated using best available management practices relevant for each tree disease observed. This recommendation is incorporated into Mitigation Measure BIO-5, below.

4.2.2 California Endangered Species Act

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit (ITP) if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for state listed

threatened and endangered species if specific criteria are met. The MHCP is a regional Natural Communities Conservation Plan that was granted take coverage under Section 2081 of the CESA.

4.2.3 California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Section 1600 of CFG Code requires a Streambed Alteration Agreement (SAA) for any activity that would alter the flow, change, or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require an SAA include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities.

If the project could result in adverse impacts to a state-listed species that is not also federally listed, Section 2081(b) of the California Fish and Game Code provides a mechanism for CDFW to permit, on a project-specific basis, incidental take of species listed under CESA. Preparation and submittal of an ITP application with CDFW by the project proponent is required. The application must include project details, potential project impacts, an analysis of “jeopardy” for the continued existence of the impacted species, and species-specific mitigation and avoidance measures that would fully mitigate for the project impacts.

Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

4.2.4 Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning (NCCP) program is a cooperative effort to protect habitats and species. It began under the state's NCCP Act of 1991, legislation broader in its orientation and objectives than the CESA or FESA. These laws are designed to identify and protect individual species that have already declined significantly in number. The NCCP Act of 1991 and the associated Southern California Coastal Sage Scrub NCCP Process Guidelines (1993), Southern California Coastal Sage Scrub NCCP Conservation Guidelines (1993), and NCCP General Process Guidelines (1998) have been superseded by the NCCP Act of 2003.

The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

This voluntary program allows the state to enter into planning agreements with landowners, local governments, and other stakeholders to prepare plans that identify the most important areas for a

threatened or endangered species, and the areas that may be less important. These NCCP plans may become the basis for a state permit to take threatened and endangered species in exchange for conserving their habitat. The CDFW and USFWS worked to combine the NCCP program with the federal habitat conservation plan process to provide take permits for state and federal listed species. Under the NCCP, local governments, such as the County, can take the lead in developing these NCCP plans and become the recipients of state and federal take permits.

4.3 LOCAL

North County Multiple Habitat Conservation Program

The North County MHCP is a comprehensive, multiple jurisdictional planning program designed to develop an ecosystem preserve in northwestern San Diego County. This report acknowledges the MHCP; however, as stated previously, the MHCP is not fully adopted. Thus, the MHCP is not discussed further herein.

Escondido Draft Subarea Plan

This report acknowledges the City's Draft SAP; however, as stated previously, the SAP is a draft and is not formally adopted. Thus, the MHCP is not discussed further herein.

Escondido Municipal Code—Vegetation and Tree Removal

The City establishes regulations and standards for the preservation, protection, and selected removal of vegetation, including mature and protected trees, which are defined below. A City-issued vegetation removal permit or a grading permit is required prior to clearing, pruning, or destroying vegetation and prior to any encroachments by construction activities that disturb the root system within the dripline (e.g., the outer extent margin of a tree's canopy) of any mature and protected trees. Issuance of a vegetation removal permit requires the submittal of a tree survey and, as applicable, a tree protection and/or replacement mitigation plan. Issuance of a grading permit would also require location and identification of any existing sensitive biological habitat, mature trees, and protected trees. The grading permit would state any required mitigation for loss of these resources. Tree protection, removal, and replacement standards are outlined in the City's General Plan and in Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City's Municipal Code (Ordinance 2001-21). The City's General Plan recognizes any oak tree species and other mature trees, as defined below, as significant aesthetic and ecological resources deserving protection within the boundaries of the City. Section 33-1052 and 33-1068 of the City's Municipal Code sets forth rules and standards related to mature tree removal, protection, and replacement.

Section 33-1502 (Definitions)

A mature tree is any self-supporting woody perennial plant, native or ornamental, with a single well-defined stem or multiple stems supporting a crown of branches. The single stem, or one of multiple stems of any mature oak tree (genus *Quercus*), shall have a diameter four inches or greater when measured at 4.5 feet diameter at breast height (DBH) above the tree's natural grade. All other mature trees shall have a DBH of eight inches, or greater, for a single stem or one of the multiple stems.

A protected tree is any oak that has a 10 inch or greater DBH, or any other tree species or individual specimen listed on the historic register, or determined to substantially contribute to the historic

character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code.

Section 33-1068 (Vegetation Clearing and Protection)

Pursuant to this section regulations and standards are established to safeguard life and property and the public welfare concerning the preservation, protection, and selected removal of mature trees, protected trees, and historically significant trees which are located within the boundaries of the City.

A vegetation removal permit (or grading permit, as discussed above) and appropriate standards for the replacement of vegetation approved for removal is required prior to clearing, pruning, or destroying City regulated vegetation, and prior to any encroachments by construction activities that destroy or disturb the root system within the dripline of regulated trees. Issuance of a vegetation removal permit requires the submittal of a tree survey and if possible, a tree replacement and/or protection plan.

Section 33-1069 (Vegetation Protection and Replacement)

Pursuant to this section, every feasible effort shall be made to preserve sensitive habitat, sensitive species, mature trees, and protected trees in-place. Removal of sensitive biological habitat and sensitive species shall be mitigated either on-site or off-site by the planting of the same habitat species at a minimum 1:1 ratio. Higher replacement ratios, or different plant species, may be required by the director for conformance with other federal, state, or local codes and agreements in effect at the time of the review of the application. If replacement of sensitive biological species and/or habitat is not feasible on-site or off-site, other equivalent mitigation measures may be considered by the director.

If mature trees cannot be preserved on-site, they shall be replaced at a minimum ratio of one to one (1:1). If protected trees cannot be preserved on-site, they shall be replaced at a minimum ratio of two to one (2:1). However, the number, size, and species of replacement trees can be determined on a case-by-case basis by the City's Director of Planning and Building.

5.0 SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

This section describes potential direct and indirect impacts on biological resources associated with the proposed project. Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. Indirect impacts can be short-term or long-term and incorporate areas adjacent to the project (i.e., edge effects). Examples of short-term indirect impacts include construction-related noises, dust, increased human presence, and hydrology modifications. Long-term indirect impacts primarily result from anthropogenic disturbances by humans such as noise, lighting, domesticated animals, spread of non-native ornamental and weedy plant species, and urban run-off (including potentially toxic or hazardous contaminants). The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

5.1 CRITERIA FOR DETERMINING IMPACT SIGNIFICANCE

The significance of impacts to biological resources present or those with potential to occur was determined based upon the sensitivity of the resource and the extent of the anticipated impacts. For certain highly sensitive resources (e.g., a federally listed species), any impact would be significant. Conversely, other resources that are of low sensitivity (e.g., species with a large, locally stable population in the County but declining elsewhere) could sustain some impact with a less than significant effect.

According to Appendix G of the CEQA Guidelines, project impacts to biological resources would be considered significant if they would:

- (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- (b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified by local or regional plans, policies, regulations, or by CDFW or USFWS.
- (c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means.
- (d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- (e) Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- (f) Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 ISSUE 1: SPECIAL-STATUS SPECIES

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

5.2.1 Impact Analysis

5.2.1.1 Special Status Plant Species

Less than Significant. The project would have no impact on federal or State listed plant species (Figure 10, *Proposed Project Impacts*). No sensitive plant species have been recorded on-site, and none were observed within the project site during general biological surveys occurring in 2020 and rare plant surveys occurring in 2021. Additionally, no sensitive plant species have a high or moderate potential to occur on-site. Therefore, project impacts would not be considered significant.

5.2.1.2 Special Status Animal Species

Less than Significant with Mitigation. The project would result in no direct and/or indirect impacts on special status animal species during construction. No sensitive animal species have been recorded on-site, and none were observed within the project site during any of the biological surveys. Additionally, no sensitive animal species have a high or moderate potential to occur on-site. However, there is potential for general bird species or raptor species to nest within suitable habitat on the project site. Impacts to general nesting birds or raptors would be considered significant.

5.2.2 Mitigation Measures

BIO-1 Nesting Bird and Raptor Avoidance: Trimming, grubbing, and clearing of vegetation shall be avoided during the avian breeding season, which generally runs from February 15 to August 31 (as early as January 1 for some raptors) to the extent feasible. If trimming, grubbing, or clearing of vegetation is proposed to occur during the general avian breeding season, a qualified biologist shall conduct a pre-construction survey no more than seven days prior to vegetation clearing to determine if active bird nests are present in the affected areas. If there are no nesting birds (including nest building or other breeding/nesting behavior) within this area, trimming, grubbing, and clearing of vegetation shall be allowed to proceed. If active bird nests are confirmed to be present during the pre-construction survey, the biologist will establish a buffer zone. Construction activities shall avoid any active nests until a qualified biologist has verified that the young have fledged, or the nest has otherwise become inactive.

5.2.3 Conclusion

Project implementation would potentially result in significant impacts to general nesting birds and raptors, within or adjacent to the project site. However, implementation of mitigation measures **BIO-1** would ensure that potential impacts are avoided by the project or are reduced to below significant.

5.3 ISSUE 2: RIPARIAN HABITAT AND SENSITIVE NATURAL COMMUNITIES

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

5.3.1 Impact Analysis

Less than Significant with Mitigation. The proposed project would result in impacts to disturbed wetland and non-native grassland, which are considered sensitive natural communities and require mitigation. The project would also result in impacts to non-native vegetation, disturbed habitat, and developed land, which are not considered sensitive natural communities. Impacts to non-sensitive vegetation communities are not considered significant and, therefore, do not require mitigation.

Project impacts are depicted on Figure 10, and are summarized below within Table 5, *Proposed Project Impacts to Vegetation Communities/Land Cover Types*.

 Project Site

 Outside Parcel Boundary

Vegetation

 Non-native Vegetation

 Disturbed Wetland

 Non-native Grassland

 Disturbed Habitat

 Developed



I:\PROJECTS\H\HallmarkCommunities_00323\HMC-17_Irislane\Map\BLR\Fig10_ProjectImpacts.mxd 00323.17.1 4/19/2022 - SAB

Source: Aerial (SanGIS, 2019)

Table 5
PROPOSED PROJECT IMPACTS TO VEGETATION COMMUNITIES/LAND COVER TYPES¹

Vegetation Community or Land Cover Type	Project Impacts ²	
	Permanent (Acres)	Temporary (Acres)
<i>Sensitive</i>		
Disturbed Wetland (11200)	0.10	--
Non-native Grassland (42200)	2.5	--
<i>Subtotal Sensitive Communities</i>	<i>2.60</i>	<i>--</i>
<i>Non-Sensitive</i>		
Non-native Vegetation (11000)	0.1	--
Disturbed Habitat (11300)	0.9	--
Developed Land (12000)	3.9	--
<i>Subtotal Non-Sensitive Communities</i>	<i>4.9</i>	<i>--</i>
TOTAL	7.50	--

¹ Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

² Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01.

5.3.2 Mitigation Measures

BIO-2 Sensitive Habitat Mitigation: To mitigate potential impacts to sensitive habitat types (disturbed wetland and non-native grassland), the applicant shall purchase off-site mitigation credits at a mitigation bank approved by the City. Mitigation ratios shall be consistent with regional standards (i.e., the Escondido Draft Subarea Plan): non-native grassland minimum 0.5:1 and disturbed wetland minimum 1:1. The disturbed wetland mitigation shall consist of establishment/re-establishment mitigation to achieve regional no-net-loss standards for potential wetlands.

5.3.3 Conclusion

The project would result in permanent impacts to 2.60 acres of sensitive natural communities (i.e., disturbed wetland and non-native grassland) that occur within the project site. Purchase of applicable credits in a City-approved mitigation bank would fully compensate for the loss of habitat and reduce impacts to below a level of significance. With the implementation of mitigation measure **BIO-2**, impacts on sensitive natural communities would be reduced to less than significant.

5.4 ISSUE 3: JURISDICTIONAL WETLANDS AND WATERWAYS

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the federal CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

5.4.1 Impact Analysis

Less than Significant with Mitigation. The project would impact potential non-wetland waters of the United States subject to the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA. The project would also impact potential non-wetland waters of the State subject to the regulatory

jurisdiction of the RWQCB pursuant to Section 401 of the CWA, and potential streambed and CDFW jurisdictional habitat subject to the regulatory jurisdiction of CDFW per Section 1602 of the CDFW Game Code. Project impacts to jurisdictional features are summarized below within Table 6, *Impacts to USACE/RWQCB Jurisdiction within the Project Site*, and Table 7, *Impacts to CDFW Jurisdiction within the Project Site*.

Table 6
IMPACTS TO USACE/RWQCB JURISDICTION WITHIN THE PROJECT SITE

Habitat	Project Impacts	
	Permanent (Acres) ¹	Linear Feet
Non-wetland Waters of the United States/State		
Streambed	0.05	494
Total	0.05	494

¹ Habitat rounded to the nearest 0.01 acre; total reflects rounding.

Table 7
IMPACTS TO CDFW JURISDICTION WITHIN THE PROJECT SITE

Habitat	Project Impacts
	Permanent (Acres) ¹
Disturbed Wetland	0.10
Streambed	0.02
Total	0.12

¹ Habitat rounded to the nearest 0.01 acre; total reflects rounding

As presented in Table 6 above, the project would result in impacts to a total of 0.05 acre (494 linear feet) of USACE/RWQCB jurisdiction consisting of non-wetland waters of the United States/waters of the State. As presented in Table 7, the project would impact 0.12 acre of CDFW jurisdiction consisting of 0.10 acre of jurisdictional habitat (disturbed wetland) and 0.02 acre of streambed. The USACE/RWQCB impacts occur within the CDFW jurisdictional limits. Impacts to 0.12 acre of jurisdictional areas would be considered significant, and mitigation would be required. Impacts to jurisdictional resources (i.e., non-wetland waters of the United States/State, CDFW jurisdictional habitat and streambed), would be mitigated as described in **BIO-3** below.

5.4.2 Mitigation Measures

BIO-3 Jurisdictional Resource Permitting: Prior to any project impacts to potentially jurisdictional resources, demonstration that regulatory permits from USACE, RWQCB, and CDFW have been issued or that no such permits are required shall be provided to the City. Permanent impacts to 0.05 acre of USACE/RWQCB jurisdictional non-wetland waters of the United States/State, 0.10 acre of CDFW jurisdictional habitat, and 0.02 acre of CDFW jurisdictional streambed shall be mitigated at a minimum 1:1 ratio through one or a combination of the following off-site options, unless otherwise required by the USACE, RWQCB, and/or CDFW during the regulatory permitting process:

- Purchase of establishment/re-establishment, rehabilitation, enhancement, and/or preservation credits from an off-site mitigation bank with a service area that overlaps the project and that is approved by the USACE, RWQCB, and CDFW, such as the San Luis Rey Mitigation Bank, and Brook Forest Conservation/Mitigation Bank; and/or
- Acquisition or use of other off-site mitigation lands in the region to include establishment/re-establishment, rehabilitation, enhancement, and/or preservation of USACE, RWQCB, and CDFW jurisdictional resources.

Mitigation for RWQCB-jurisdictional waters shall include a minimum 1:1 establishment/re-establishment to ensure no-net-loss. Final mitigation requirements shall be determined during the permitting process in coordination with the USACE, RWQCB, and CDFW, as appropriate.

5.4.3 Conclusion

The project would result in potentially significant impacts to USACE, RWQCB, and CDFW jurisdictional resources. Mitigation is proposed at minimum standard ratios consistent with those typically required by the Resource Agencies; thus, would fully compensate the loss and reduce impacts to below a level of significance. With the implementation of mitigation measure BIO-3, impacts on potentially jurisdictional resources would be less than significant. Notification for securing necessary regulatory permits prior to impacts would be required for the project per BIO-3. If the potential wetlands or waters of the United States are ruled jurisdictional by the Resource Agencies, the anticipated permits would be a 404 permit from the USACE, 401 Certification from the RWQCB, and a 1602 agreement from CDFW. Final permit requirements would be determined through consultation with the Resource Agencies.

5.5 ISSUE 4: WILDLIFE MOVEMENT AND NURSERY SITES

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

5.5.1 Impact Analysis

Less than Significant. The project site does not occur within a BCLA and is located within a fully developed residential area. The project site may be used by smaller urban-adapted mammal species and bird species, but is not considered refuge as a wildlife corridor or habitat linkage. Although native habitat occurs on-site, the area is small and isolated from other areas with native habitat that may be used for urban wildlife movements, foraging, or breeding. Additionally, as evidenced by biological surveys discussed herein, the project site does not support critical populations of animal species. Based on the analysis above, project impacts to wildlife movement and nursery sites would be less than significant, no mitigation is required or proposed, and as such is not discussed further.

5.5.2 Mitigation Measures

No mitigation is required.

5.5.3 Conclusion

Project impacts would be less than significant and no additional mitigation measures are required.

5.6 ISSUE 5: LOCAL POLICIES AND ORDINANCES

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

5.6.1 Impact Analysis

Less than Significant Impact with Mitigation. The City establishes regulations and standards for the preservation, protection, and selected removal of vegetation, including mature and protected trees. Specifically, Sections 33-1066, -1068, and -1069 of Article 55 (Grading and Erosion Control) of the City of Escondido Zoning Code regulate impacts to historically significant and/or mature trees, with a focus on oak tree protection. A total of seven mature coast live oak trees and six protected coast live oak trees occur within the project site and would be subject to removal during the proposed development (Figure 11, *Oak Tree Impacts*). An additional ten mature and eleven protected coast live oak trees occur just outside of the project site and are being counted as impacts, with exception of the subset occurring within a Vallecitos Water District easement (Figure 11; Table 8, *Protected and Mature Oak Trees Located within and Adjacent to the Project Site*). The subset located within the Vallecitos Water District easement will be protected by a 10-foot grading setback along the southern project boundary. The arborist report (Lightfoot Planning Group dated, March 15, 2022) suggests a 10-foot buffer is a sufficient distance to protect these oaks and recommends establishing root protection zones and fencing during construction. For all other adjacent oaks, the intent is to avoid impacts; however, their root zones may encroach onto the project site and could be damaged. If unmitigated, impacts to mature and/or protected trees would be considered significant. Project impacts to mature and protected trees would be mitigated with the implementation of mitigation measure **BIO-4**, which requires that a vegetation removal permit or grading permit and appropriate standards for the replacement of vegetation approved for removal be followed, and mature and protected tree preservation or replacement would occur. With the implementation of measure **BIO-4**, impacts to mature and protected trees would be less than significant.

Table 8
PROTECTED AND MATURE OAK TREES LOCATED WITHIN AND ADJACENT TO THE PROJECT SITE

Oak Trees	On-Site	Off-Site	
		Outside Easement	Within Easement ¹
Protected	6	5	6
Mature	7	5	5
Total	13	10	11

¹Not associated with project impacts. Mitigation not required.

In addition to City regulations, the CDFW has recommended preparation of an infectious tree disease management plan. Project impacts related to the spread of tree insect pests and disease into areas not currently exposed to these stressors (and the resulting loss of native trees that support a high biological diversity) would be mitigated with the implementation of mitigation measure **BIO-5**. With implementation of mitigation measure **BIO-5**, impacts related to infectious disease would be less than significant.



Project Site



Outside Parcel Boundary



Impact Area*



Vallecitos Water District Easement

*There will be a 10-foot grading setback along the southern property line.

Oak Tree



Mature Off-site



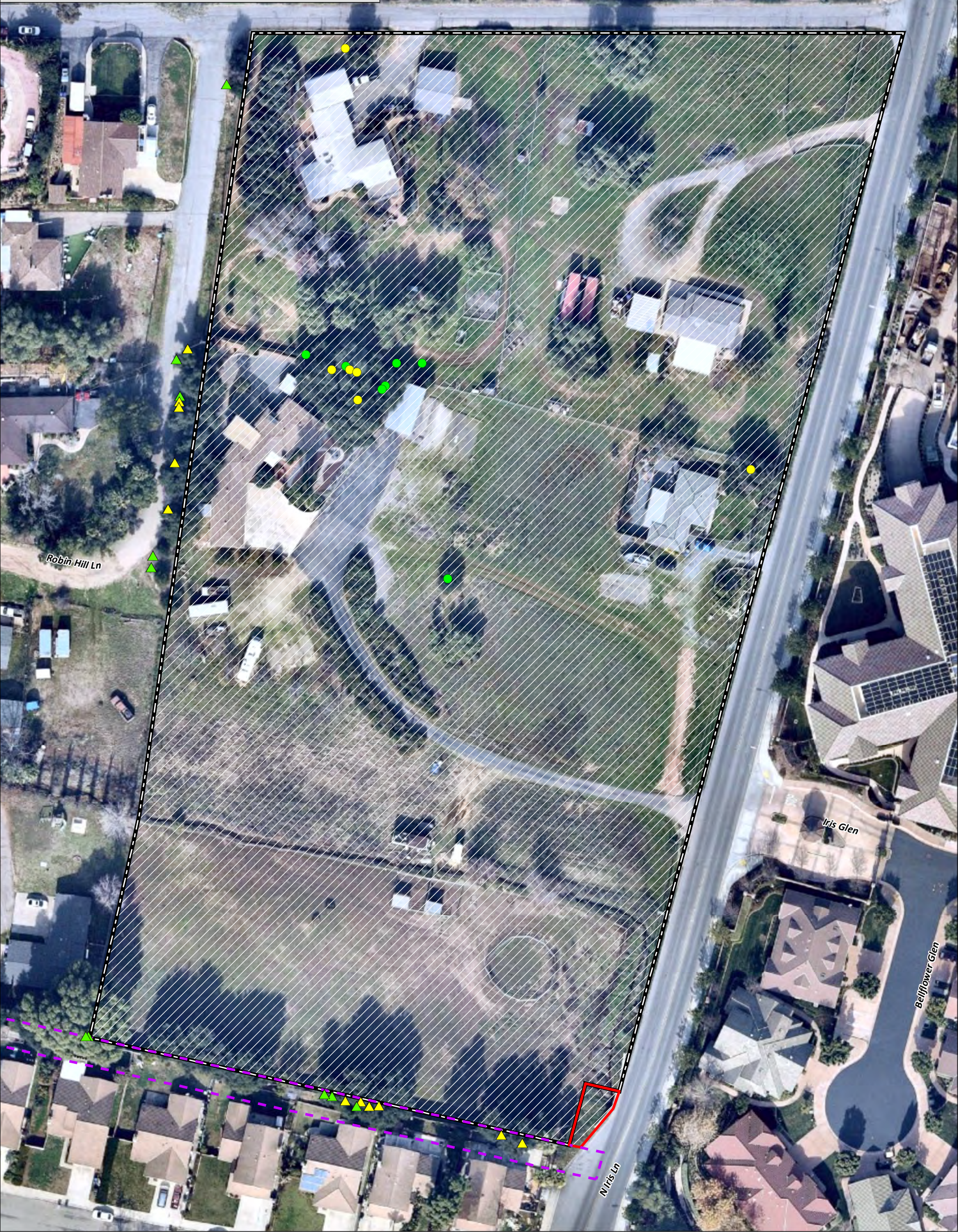
Protected Off-site



Mature On-site



Protected On-site



Source: Aerial (SanGIS, 2019)

5.6.2 Mitigation Measures

BIO-4 Mature and Protected Tree Replacement: The project applicant shall replace impacted mature trees at a minimum 1:1 ratio, unless otherwise determined by the City. The project applicant shall replace protected trees at a minimum 2:1 ratio, unless otherwise determined by the City. The number, size, and species of replacement trees shall be determined on a case-by-case basis by the City's Director of Community Development. This condition can be satisfied on-site if the project's landscape plans include the appropriate number of oak trees and other tree species.

BIO-5 Infectious Tree Disease Management Plan: The project applicant shall prepare an infectious tree disease management plan for the project. This plan should include a description of how the infectious tree disease management plan will be implemented. All trees that would be removed by the project should be inspected for contagious tree diseases including, but not limited to, thousand canker fungus (*Geosmithia morbida*), polyphagous shot hole borer (*Euwallacea* spp.), and goldspotted oak borer (*Agrilus auroguttatus*). To avoid the spread of infectious tree diseases, diseased trees should not be transported from the project site without first being treated using best available management practices relevant for each tree disease observed.

5.6.3 Conclusion

The project would result in permanent impacts to mature and protected trees that occur within the project site. With the implementation of mitigation measure **BIO-4**, impacts to mature and protected trees would be reduced to less than significant. By removing trees, the project could result in the spread of tree insect pests and disease into areas not currently exposed to these stressors (and potentially result in a loss of native trees that support a high biological diversity). With the implementation of mitigation measure **BIO-5**, project impacts related to the spread of tree insect pests and disease would be reduced to less than significant.

5.7 ISSUE 6: ADOPTED CONSERVATION PLANS

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.7.1 Issue 6 Impact Analysis

No Impact. The project would occur within the boundaries of the County MHCP, particularly within the Draft Escondido Subarea. However, the Draft Escondido Subarea Plan was not approved or adopted and remains in draft form as of the date of this report. Therefore, the draft policies and guidelines of these plans are not applicable to the proposed project. The project, however, considered the context of such draft plans, and implementation of the proposed project would not preclude or prevent finalizing and adoption of the plan. The proposed project impacts would be less than significant; no mitigation is required or proposed. No conflict would occur.

5.7.2 Mitigation Measures

Compliance with existing regulations and implementation of Mitigation Measures **BIO-1** through **BIO-5** would ensure project consistency with the MHCP.

5.7.3 Conclusion

The project could result in potential significant impacts to sensitive biological resources addressed under the MHCP; however, compliance with existing regulations and implementation of measures **BIO-1** through **BIO-5** would help ensure that impacts are avoided and the project activities are not in conflict with the MHCP.

6.0 CERTIFICATION/QUALIFICATION

The following individuals contributed to the fieldwork and/or preparation of this report.

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Appendix A

Plant Species Observed

Appendix A

Plant Species Observed

Family	Scientific Name*†	Common Name	Habitat ¹
Dicots			
Anacardiaceae	<i>Schinus molle</i> *	Peruvian pepper tree	NNG, NNV
Apiaceae	<i>Apiastrum angustifolium</i>	mock parsley	NNG
	<i>Apium graveolens</i> *	celery	DW
Araliaceae	<i>Hedera canariensis</i> *	Algerian ivy	CLOW
Asteraceae	<i>Ambrosia psilostachya</i>	western ragweed	CLOW, NNG, DH
	<i>Baccharis pilularis</i>	coyote brush	DW, NNG
	<i>Carduus pycnocephalus</i> *	Italian thistle	DW, NNG, NNV
	<i>Centaurea melitensis</i> *	tootalote	DH
	<i>Corethrogyne filaginifolia</i>	sand aster	NNG, DH
	<i>Cotula coronopifolia</i> *	common brassbuttons	DW
	<i>Dittrichia graveolens</i> *	stinkwort	DW, DH
	<i>Erigeron canadensis</i>	horseweed	DW, DH
	<i>Hedypnois cretica</i> *	Crete hedypnois	NNG, DH
	<i>Helminthotheca echioides</i> *	bristly ox-tongue	DW, NNG, DH
	<i>Heterotheca grandiflora</i>	telegraph weed	DH
	<i>Isocoma menziesii</i>	goldenbush	NNG, DH
	<i>Lactuca serriola</i> *	wild lettuce	DW, NNG
	<i>Logfia gallica</i> *	narrow-leaf filago	DH
	<i>Matricaria matricarioides</i> *	common pineapple-weed	DH
	<i>Pseudognaphalium californicum</i>	California everlasting	DH
	<i>Pseudognaphalium</i> sp.	everlasting	DW, DH
	<i>Silybum marianum</i> *	milk thistle	NNG, NNV
	<i>Sonchus asper</i> *	prickly sow thistle	DW, NNG, DH
	<i>Sonchus oleraceus</i> *	common sow thistle	NNG, DH
	<i>Xanthium strumarium</i>	cocklebur	DW
Boraginaceae	<i>Amsinckia intermedia</i>	rancher's fiddleneck	NNG
	<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	salt heliotrope	NNG, DH
	<i>Pectocarya</i> sp.	pectocarya	DH
Brassicaceae	<i>Brassica nigra</i> *	black mustard	DW, CLOW, NNG
	<i>Capsella bursa-pastoris</i> *	shepherd's purse	NNG, DH
	<i>Hirschfeldia incana</i> *	short-pod mustard	DH, NNG
	<i>Lepidium didymium</i> *	wart cress, spine cress	CLOW, DH
	<i>Nasturtium officinale</i>	water cress	DW
	<i>Raphanus sativus</i> *	wild radish	DW, NNG
	<i>Sisymbrium orientale</i> *	hare ear's cabbage	CLOW, DH, NNG
Cactaceae	<i>Opuntia ficus-indica</i> *	Indian-fig	DW, DH
	<i>Opuntia littoralis</i>	coastal prickly pear	DH
Caryophyllaceae	<i>Polycarpon tetraphyllum</i> *	four-leaved allseed	DH
	<i>Spergularia</i> sp.*	sand-spurrey	NNG, DH
	<i>Stellaria media</i> *	common chickweed	CLOW, NNG
Chenopodiaceae	<i>Amaranthus albus</i> *	white tumbleweed	DH
	<i>Atriplex semibaccata</i> *	Australian saltbush	NNG
	<i>Atriplex</i> sp.	atriplex	DW
	<i>Chenopodium album</i> *	pigweed	DH
	<i>Chenopodium murale</i> *	nettle-leaf goosefoot	NNG, NNV, DH
	<i>Salsola tragus</i> *	Russian thistle	NNG, DH

Appendix A (cont.) Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Euphorbiaceae	<i>Chamaesyce maculate</i> *	spotted spurge	NNG
	<i>Croton setigerus</i>	dove weed	NNG, DH
	<i>Euphorbia lathyris</i> *	caper spurge	DW, NNG
	<i>Euphorbia peplus</i> *	petty spurge	CLOW, DH
Fabaceae	<i>Acmispon micranthus</i>	grab lotus	DH
	<i>Lotus corniculatus</i>	birdfoot trefoil	DW, NNG
	<i>Medicago polymorpha</i> *	burclover	CLOW, NNG
	<i>Melilotus indicus</i> *	Indian sweet clover	DW, NNG
Fagaceae	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	CLOW, NNG
Geraniaceae	<i>Erodium botrys</i> *	long-beak filaree	NNG
	<i>Erodium moschatum</i> *	green-stem filaree	NNG, NNV, DH
	<i>Geranium dissectum</i> *	cutleaf geranium	DW
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut	DW, NNG, DH
Lamiaceae	<i>Lamium amplexicaule</i>	henbit*	NNG
	<i>Salvia apiana</i>	white sage	NNG
Lythraceae	<i>Lythrum hyssopifolia</i> *	grass poly	CLOW
Malvaceae	<i>Malva parviflora</i> *	cheeseweed	NNG
Myrsinaceae	<i>Anagallis arvensis</i> *	scarlet pimpernel	DW, DH
Myrtaceae	<i>Eucalyptus</i> sp.*	gum	NNG, DH
Onagraceae	<i>Camissoniopsis</i> sp.	sun cup	DH
	<i>Oenothera elata</i>	great marsh evening-primrose	DW
Oxalidaceae	<i>Oxalis pes-caprae</i> *	Bermuda buttercup	DW
Pinaceae	<i>Pinus</i> sp.*	pine	NNG
Plantaginaceae	<i>Plantago lanceolata</i> *	English plantain	DW, NNG
Polygonaceae	<i>Rumex crispus</i> *	curly dock	DW, CLOW, NNG
Portulacaceae	<i>Calandrinia ciliata</i>	red maids	NNG, DH
Salicaceae	<i>Salix lasiolepis</i>	arroyo willow	DW
Solanaceae	<i>Solanum</i> sp.	nightshade	NNG, NNV, DH
Urticaceae	<i>Urtica urens</i> *	dwarf nettle	NNG, DH
Monocots			
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm	DW, DH
Asparagaceae	<i>Asparagus asparagoides</i> *	bridal creeper	NNG
Cyperaceae	<i>Cyperus eragrostis</i>	tall flatsedge	DW
	<i>Cyperus</i> sp.*	flatsedge	DW, NNG
	<i>Eleocharis macrostachya</i>	pale spike-rush	DW
Iridaceae	<i>Iris</i> sp.*	iris	DW
Juncaceae	<i>Juncus bufonius</i>	toad rush	NNG
Poaceae	<i>Avena</i> sp.*	oats	DW, NNG, NNV, DH
	<i>Bromus diandrus</i> *	common ripgut grass	DW, NNG, DH
	<i>Bromus hordeaceus</i> *	soft brome	DW, NNG
	<i>Bromus madritensis</i> *	foxtail chess	NNG, DH
	<i>Cynodon dactylon</i> *	Bermuda grass	DW, NNG, DH
	<i>Festuca myuros</i> *	fescue	DW, NNG
	<i>Festuca perennis</i> *	Italian ryegrass	DW, NNG
	<i>Hordeum</i> sp.*	barley	NNG, NNV, DH
	<i>Lamarckia aurea</i> *	goldentop	NNG

Appendix A (cont.)

Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Poaceae (cont.)	<i>Paspalum dilatatum</i> *	Dallis grass	DW, NNG
	<i>Phalaris</i> sp.*	canary grass	NNG
	<i>Poa annua</i> *	annual bluegrass	DW, CLOW
	<i>Polypogon monspeliensis</i> *	annual beardgrass	DW, NNG
	<i>Schismus barbatus</i> *	Mediterranean grass	DW
	Unknown*	unidentified grass	DW, NNG
Unidentified	Unknown*	unidentified tree	DH

* Non-native

† Sensitive

¹ CLOW=Coast live oak woodland; DH=Disturbed habitat; DW=Disturbed wetland; NNG=Non-native grassland; NNV=Non-native vegetation

Appendix B

Animal Species Observed or Detected

Appendix B

Animal Species Observed or Detected

Taxon		Scientific Name†	Common Name
Order	Family		
INVERTEBRATES			
Coleoptera	Coccinellidae	Unknown	lady beetle
Hymenoptera	Apidae	<i>Bombus</i> sp.	bumblebee
	Formicaceae	Unknown	red ant
VERTEBRATES			
Amphibians			
Anura	Hylidae	<i>Pseudacris cadaverine</i>	California treefrog
Birds			
Accipitriformes	Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna’s hummingbird
Columbiformes	Columbidae	<i>Zenaida macroura</i>	mourning dove
Passeriformes	Corvidae	<i>Aphelocoma californica</i>	California scrub-jay
		<i>Corvus corax</i>	common raven
	Fringillidae	<i>Haemorhous mexicanus</i>	house finch
	Sylviidae	<i>Chamaea fasciata</i>	wrentit
	Tyrannidae	<i>Tyrannus vociferans</i>	Cassin’s kingbird
Piciformes	Picidae	Unknown	woodpecker
Mammals			
Rodentia	Sciuridae	<i>Otospermophilus beecheyi</i>	California ground squirrel

† Sensitive

Appendix C

Special Status Plant Species
Observed or with Potential to Occur

Appendix C

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/-- CRPR 1B.1	Perennial herb. Occurs on sandy loam or clay, sometimes alkaline, soils. Found in native grassland, valley bottoms, dry drainages, stream floodplain terraces, and vernal pool margins. Also occurs on slopes, disturbed places, and in coastal sage scrub or chaparral. Flowering period: April to July. Elevation: 164 to 1,969 feet (50 to 600 meters).	Not Likely to Occur. The study area lacks suitable habitat to support this species. Furthermore, this perennial herb would have been observed during biologicals surveys if present. Finally, this species has not been reported within the project vicinity.
<i>Arctostaphylos otayensis</i>	Otay manzanita	--/-- CRPR 1B.2	Perennial shrub. Found in chaparral and cismontane woodland on metavolcanics soils. Flowering period: January to April. Elevation: 900 to 5,580 feet (275 to 1,700 meters).	Not Likely to Occur. The study area lacks suitable habitat and metavolcanics soils to support this species. Furthermore, this conspicuous perennial shrub would have been observed during biologicals surveys if present. Finally, this species has not been reported within the project vicinity.
<i>Baccharis vanessae</i>	Encinitas baccharis	FT/SE CRPR 1B.1	Perennial shrub. Relatively low-growing mature chaparral is the primary habitat. Also found in southern maritime and southern mixed chaparrals. Flowering period: August to December. Elevation: 197 to 984 feet (60 to 300 meters).	Not Likely to Occur. The study area lacks suitable habitat to support this species. This perennial shrub would have been observed during biological surveys is present. Finally, this species has not been reported within the project vicinity.
<i>Bloomeria clevelandii</i>	San Diego goldenstar	--/-- CRPR 1B.1	Perennial bulbiferous herb. Occurs on clay soils in valley grasslands and coastal scrub, particularly near mima mound topography or in the vicinity of vernal pools. Flowering period: April to May. Elevation: 164 to 1,526 (50 to 465 meters).	Not Likely to Occur. The study area lacks suitable valley grasslands or coastal scrub habitat to support this species. Furthermore, this species has not been reported within the project vicinity.

Appendix C (cont.)

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	--/-- CRPR 1B.1	Perennial bulbiferous herb. Occurs within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Prefers mesic or clay soils. Flowering period: May to July. Elevation: 98 to 5,550 feet (30 to 1,692 meters).	Not Expected to Occur. The study area lacks clay soils and suitable coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grasslands, and vernal pools that would support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Calochortus dunnii</i>	Dunn's mariposa lily	--/SR CRPR 1B.2	Perennial bulbiferous herb. Found in closed-cone coniferous forest, chaparral, and valley and foothill grassland, typically on gabbroic, metavolcanics, or rocky soils. Blooms February to June. Elevation: 600 to 6,000 feet (185 to 1,830 meters).	Not Likely to Occur. The study area lacks suitable habitat and soils to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	--/-- CRPR 1B.2	Perennial shrub. Occurs on slopes and ridgelines in closed cone coniferous forest and chaparral. Flowers April to June. Elevation: 770 to 2,540 feet (235 to 755 meters).	Not Likely to Occur. The study area lacks suitable coniferous or chaparral habitat to support this species. Furthermore, this perennial shrub would have been observed during biological surveys if present. Finally, this species has not been reported within the project vicinity.

Appendix C (cont.)

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Ceanothus verrucosus</i>	Wart-stemmed ceanothus	--/-- CRPR 2B.2 County List B	Perennial shrub. Occurs on rocky slopes within chaparral. Flowering Period: December to May. Elevation: below 416 feet (below 380 meters).	Not Likely to Occur. The study area lacks suitable chaparral habitat to support this species. Furthermore, this perennial shrub would have been observed during biological surveys is present. Finally, this species has not been reported within the project vicinity.
<i>(Clinopodium chandleri)</i>	San Miguel savory	--/-- CRPR 1B.2	Perennial shrub. Occurs within chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland on rocky, gabbroic, or metavolcanic soils. Flowering period: March to July. Elevation: 390 to 3,530 feet (120 to 1,075 meters).	Not Likely to Occur. The study area lacks suitable gabbroic or metavolcanic soils to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand aster	--/-- CRPR 1B.1	Perennial herb. Occurs within grasslands, coastal bluff scrub, coastal scrub, and chaparral. Flowering period: June to September. Elevation: 15 to 2,362 feet (5 to 720 meters).	Not Likely to Occur. The study area lacks suitable grassland, coastal bluff scrub, coastal scrub, or chaparral to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Cylindropuntia californica</i> var. <i>californica</i>	Snake cholla	--/-- CRPR 1B.1	Perennial herb (stem succulent). Occurs within coastal sage scrub and coastal chaparral communities. Flowering period: April to July. Elevation: below 820 feet (250 meters).	Not Likely to Occur. The study area lacks suitable coastal sage scrub or coastal chaparral communities to support this species. Furthermore, this species has not been reported within the project vicinity.

Appendix C (cont.)

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Deinandra conjugens</i>	Otay tarplant	FT/SE CRPR 1B.1	Annual herb. Grows in clay soils within coastal scrub openings and grasslands. Flowering period: May to June. Elevation: 65 to 980 feet (20 to 300 meters).	Not Likely to Occur. Although the study area partially consists of suitable clay soils, the study area lacks coastal scrub or grassland habitat to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Dicranostegia orcuttiana</i>	Orcutt's bird's-beak	--/-- CRPR 2B.1	Annual herb. Found coastally within coastal sage scrub. Flowering period: March to August. Elevation: below 1,148 feet (350 meters).	Not Likely to Occur. The study area lacks suitable coastal sage scrub habitat to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Dudleya variegata</i>	Variegated dudleya	--/-- CRPR 1B.2	Perennial herb succulent. Occurs on clay soils of dry hillsides and mesas within chaparral, valley grassland, foothill woodland and coastal sage scrub communities. Flowering period: April to June. Elevation: below 984 feet (300 meters).	Not Likely to Occur. Although portion of the study area consist of clay soils, the study area lacks suitable chaparral, valley grassland, foothill woodland, or coastal sage scrub habitat to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	--/-- CRPR 1B.1	Perennial Shrub. Found in mesic areas within coastal sage scrub and chaparral. Occasionally occurs as a hillside element (usually at higher elevations inland on north-facing slopes). Flowering period: September to November. Elevation: below 1,968 feet (600 meters).	Not Likely to Occur. The study area lacks suitable coastal sage scrub or chaparral habitat to support this species. Furthermore, this perennial shrub would have been observed during biological surveys if present.

Appendix C (cont.)
Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Eryngium aristulatum</i> <i>var. parishii</i>	San Diego button-celery	FE/SE CRPR 1B.1	Annual or perennial herb. Grows in vernal pools and other mesic areas, such as marshes. Flowering period: May to June. Elevation: below 2,313 feet (705 meters).	Not Likely to Occur. Suitable vernal pools are absent from the study area and this species has not been reported within the project vicinity.
<i>Ferocactus viridescens</i>	San Diego barrel cactus	--/-- CRPR 2B.1	Perennial (stem succulent) shrub. Grows in sandy to rocky areas within chaparral, valley grassland and coastal sage scrub communities. Flowering period: May to June. Elevation: 33 to 492 feet (10 to 150 meters).	Not Likely to Occur. Although portion of the study area consist of sandy soils, the study area lacks suitable chaparral, valley grassland, or coastal sage scrub habitat to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Hesperocyparis forbesii</i>	Tecate cypress	--/-- CRPR 1B.1	Perennial tree. Found within closed-cone coniferous forest and chaparral on clay, gabbroic, or metavolcanics soils. Elevation: 262 to 4,900 feet (80 to 1500 meters).	Not Likely to Occur. The study area lacks coniferous forests or chaparral habitat and soils to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Horkelia truncata</i>	Ramona horkelia	--/-- CRPR 1B.3	Perennial herb. Occurs within gabbroic and dry, red clay soils of chaparral and woodland communities. Flowering period: March to June. Elevation: 1,312 to 4,300 (400 to 1,300 meters).	Not Likely to Occur. Although the study area partially consists of clay soils, the study area lacks suitable chaparral or woodland communities within gabbroic soils to support this species. Furthermore, this species has not been reported within the project vicinity.

Appendix C (cont.)

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Lepechinia ganderi</i>	Gander's pitcher sage	--/-- CRPR 1B.3	Perennial shrub. Occurs on gabbroic and metavolcanic soils within coastal sage scrub, chaparral, coniferous forests, and grasslands. Flowering time: June to July. Elevation: 980 to 3600 feet (300 to 1,100 meters).	Not Likely to Occur. The study area lacks suitable gabbroic or metavolcanics soils and lacks suitable habitat for this species. Furthermore, this species has not been reported within the project vicinity.
<i>Monardella hypoleuca</i> <i>ssp. lanata</i>	Felt-leaved monardella	--/-- CRPR 1B.2	Perennial (rhizomatous) herb. Found within chaparral understory, typically beneath mature stands of chamise in xeric, rocky, granitic slopes. Flowering period: May to October. Elevation: 985 and 5,000 feet (300 to 1500 meters).	Not Likely to Occur. The study area lacks suitable chaparral habitat and xeric, rocky, granitic slopes to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Monardella viminea</i>	Willow monardella	FE/SE CRPR 1B.1	Perennial herb. Associated with riparian scrub, usually at sandy locales in seasonally dry washes is habitat of this small subshrub. Generally, there is no canopy cover, and river cobbles may lie in close proximity. Flowering period: June to August. Elevation: below 1,300 feet (below 400 meters).	Not Likely to Occur. The study area lacks suitable riparian scrub habitat to support this species. Furthermore, this species has not been reported within the project vicinity.
<i>Nolina interrata</i>	Dehesa beargrass	--/SE CRPR 1B.1	Perennial herb. Always associated with gabbro or peridotite soils, open southern mixed chaparral and chamise chaparral. Flowering period: June to July Elevation: 656 to 2,300 feet (200 to 700 meters).	Not Likely to Occur. The study area lacks suitable gabbro or peridotite soils and chaparral habitat to support this species. Furthermore, this species has not been reported within the project vicinity.

Appendix C (cont.)

Special Status Plant Species Observed or with Potential to Occur

Species Name	Common Name	Status ^{1,2}	Habit, Ecology and Life History	Potential to Occur
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	--/-- CRPR 1B.2	Perennial shrub. Occurs on dry slopes within coastal sage scrub and chaparral. Usually, conditions are quite xeric with only limited annual growth. Flowering period: April to May. Elevation: below 3,281 feet (1,000 meters).	Not Likely to Occur. The study area lacks dry slopes within coastal sage scrub or chaparral habitat to support this species. Furthermore, this species has not been reported within the project vicinity.

¹ Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; R = Rare

² CNPS = California Native Plant Society Rare Plant Rank: 1A—presumed extirpated in California and either rare or extinct elsewhere; 1B—rare, threatened, or endangered in California and elsewhere; 2A—presumed extirpated in California, but more common elsewhere; 2B—rare, threatened, or endangered in California, but more common elsewhere; 3—more information needed; 4—watch list for species of limited distribution. Extension codes: .1—seriously endangered; .2—moderately endangered; .3—not very endangered.

Not Likely to Occur—There are no present or historical records of the species occurring on or in the immediate vicinity, (within one mile) of the Project Site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the Site.

Low Potential to Occur—There is a historical record of the species in the vicinity of the Project Site and potentially suitable habitat on Site, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The Site is above or below the recognized elevation limits for this species.

Moderate Potential to Occur—The diagnostic habitats associated with the species occur on or in the immediate vicinity of the Project Site, but there is not a recorded occurrence of the species within the immediate vicinity (within one mile). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.

High Potential to Occur—There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the Project Site (within one mile).

Species Present—The species was observed on the Project Site at the time of the survey or during a previous biological survey.

Appendix D

Special Status Animal Species
Observed or with Potential to Occur

Appendix D

Special Status Animal Species Observed or with Potential to Occur

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS				
Amphibians and Reptiles				
<i>Crotalus ruber</i>	red diamond rattlesnake	--/-- SSC	Occurs in chaparral, coastal sage scrub, along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey.	Not Expected. Suitable habitat does not occur on the site.
Birds				
<i>Accipiter cooperii</i>	Cooper's hawk	--/-- WL (nesting) MHCP Covered Proposed Subarea Plan Covered	Occurs in oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests.	Low. Suitable habitat is present on the project site but of low quality and no sign of the species was observed. Oak trees on site are in close proximity to houses and generally occur singly or in rows. No sign of the species was observed.
<i>Agelaius tricolor</i>	tricolored blackbird	--/ST BCC SSC MHCP Covered	Generally found in large freshwater marshes with dense stands of cattails or bulrushes. Forages in open habitats such as farm fields, pastures, and large lawns.	Low. Suitable foraging habitat is present on the project site, but breeding habitat does not occur. No sign of the species was observed.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	--/-- WL MHCP Covered Proposed Subarea Plan Covered	Occurs in coastal sage scrub and sparse mixed chaparral on rocky hillsides and in canyons; also found in open sage scrub/grassy areas of successional growth.	Not Expected. Suitable habitat does not occur on the site. Non-native grassland on site is regularly managed and is not shrubby.
<i>Ammodramus savannarum parpallidus</i>	grasshopper sparrow	--/-- SSC MHCP Covered	Occurs in grasslands. Favors native grasslands with a mix of grasses and forbs and few or no shrubs.	Low. Suitable habitat is present on the project site but of low quality. Grasslands on site are non-native and regularly maintained. No sign of the species was observed.
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	FT/-- SSC MHCP Covered Proposed Subarea Plan Covered ⁴	Occurs in coastal sage scrub.	Not Expected. Suitable habitat does not occur on the site.

Appendix D (cont.)

Special Status Animal Species Observed or with Potential to Occur

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE/SE MHCP Covered Proposed Subarea Plan Covered ⁵ (nesting)	Occurs in riparian thickets, usually willow and cottonwood.	Not Expected. Suitable habitat does not occur on the site.
Mammals				
<i>Chaetodipus fallax</i>	San Diego pocket mouse	--/-- SSC MHCP Covered	Occurs in open areas of coastal sage scrub and weedy growth, often on sandy substrates.	Not Expected. Suitable habitat does not occur on the site.

¹ Sensitive species reported within 1 mile of the project site.

² Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; R = Rare; BCC = Federal Birds of Conservation Concern; FP = State Fully Protected; SSC = State Species of Special Concern; WL = Watch List.

³ Potential to Occur is assessed as follows. **None:** Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur on the project site; **Not Expected:** Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur on the project site; **Low:** Suitable habitat is present on the project site but of low quality and no sign of the species was observed during surveys, however the species cannot be excluded with certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the project site, however protocol-level focused surveys conducted for the current project were negative; **High:** Suitable habitat occurs on the project site and the species has been recorded recently on or near the project site, but was not observed during surveys for the current project; **Presumed Present:** The species was observed during biological surveys for the current project and is assumed to occupy the project site.

⁴ Coverage in the Escondido Subarea Plan contingent upon approved subarea plan in Carlsbad and Oceanside.

⁵ Coverage in the Escondido Subarea Plan contingent upon approved subarea plan in Oceanside.

Appendix E

Explanation of Codes

Appendix E

Explanation of Codes

California Rare Plant Rank (CRPR)

CRPR

- 1A = Presumed extinct.
- 1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
- 2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
- 3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.
- 4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

Threat Code Extension

- .1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- .2 = Fairly endangered in California (20 to 80 percent occurrences threatened)
- .3 = Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A CA Endemic entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no threat code extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.