

West Coast Tomato Growers Farm Worker Housing

Biological Technical Report
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ACRONYMS AND ABBREVIATIONS

AMEC	AMEC Earth & Environmental
AMSL	average mean sea level
BMP	Best Management Practices
Cal-IPC	California Invasive Plant Council
CBI	Conservation Biology Institute
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
City	City of Oceanside
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
FESA	Federal Endangered Species Act
GPS	Global Positioning System
HELIX	HELIX Environmental Planning, Inc.
HCP	Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MHCP	Multiple Habitat Conservation Program (North County Multiple Habitat Conservation Program)
MM	Mitigation Measure
NCCP	Natural Community Conservation Program
NPPA	Native Plant Protection Act
PAMA	Pre-approved Mitigation Area
project	West Coast Tomato Growers Farm Worker Housing Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SAP	Subarea Plan (draft Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation plan)
SF	square foot/square feet
SR	State Route

ACRONYMS AND ABBREVIATIONS (cont.)

USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Society
WCTG	West Coast Tomato Growers

1.0 INTRODUCTION

At the request of West Coast Tomato Growers (WCTG), HELIX Environmental Planning, Inc. (HELIX) completed this biological technical report for the proposed West Coast Tomato Growers Farm Worker Housing Project (project). The project, as proposed, is an approximately four-acre farm worker housing development, with three dormitories, a kitchen, dining hall, storage, and laundry, along with associated facilities such as visitor parking, an outdoor dining area, sports facilities, and various infrastructure improvements. The purpose of this report is to document the existing biological conditions within the study area and provide an analysis of potential impacts on sensitive biological resources with respect to local, state, and federal policy, and recommend mitigation measures (MMs) for potential impacts to sensitive biological resources, if necessary. This report provides the biological resources technical documentation necessary for review under the California Environmental Quality Act (CEQA) by the City of Oceanside (City) Planning Division.

2.0 PROJECT AND SITE DESCRIPTION

The project site is located in northern San Diego County in the City of Oceanside, north of State Route (SR) 76 (Figure 1, *Regional Location*). The site is situated within Section 1, Township 11 South, and Range 4 West of the U.S. Geological Survey (USGS) Morro Hill topographic quadrangle map (USGS 2022; Figure 2, *USGS Topography*). Specifically, the project will encompass approximately four acres of the Applicant's 20-acre agricultural packing plant facilities located at 5780 Mission Road, accessible via Singh Way, a private drive. An unpaved portion of Singh Way traverses the southern side of the project site. The site is bordered by a restoration project (the San Luis Rey Mitigation Bank) and the San Luis Rey River to the north, SR 76 to the south, West Coast Tomato Growers to the west, and Singh Way and undeveloped land to the east (Figure 3, *Aerial Vicinity*). The site occurs within the draft Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation Plan (Draft Subarea Plan [SAP]) within the North County Multiple Habitat Conservation Program (hereafter referred to as MHCP; Figure 4, *Regional Context*). The site occurs within the off-site mitigation zone within the MHCP. In January 2022, the City Council voted to abandon the pursuit of an adopted SAP, intending to incorporate provisions of the SAP into the General Plan Update. United States Fish and Wildlife Service (USFWS) critical habitat for multiple species occurs in and near the site (Figure 5, *Critical Habitat*).

The Applicant employs approximately 110 full-time employees from the local area who work in Applicant's packing plant and up to 500 seasonal farm workers from Central Mexico during the growing and harvesting season, which typically runs from March through November each year. For the past 10 years, Applicant has leased dormitory and modular housing for these seasonal farm workers nearby at 30041 North River Road, which is owned by UTR, LLC. Last year, the Applicant learned that UTR, LLC will not renew its lease, which expired on January 31, 2022. The loss of this housing jeopardizes the viability of the Applicant's future farming operations. Fortunately, temporary but expensive housing has been obtained by the Applicant for the 2022 season. In order to continue the Applicant's farming operations, an alternate site to house the seasonal farm workers is required.

The proposed project includes the construction of four buildings to accommodate up to 338 farm workers. The balance of the seasonal farm workers will be housed off-site in motels. The proposed buildings will consist of pre-fabricated modular units constructed on-site. Two buildings will be dormitory-style housing for male seasonal farm workers, and one building will be dormitory-style

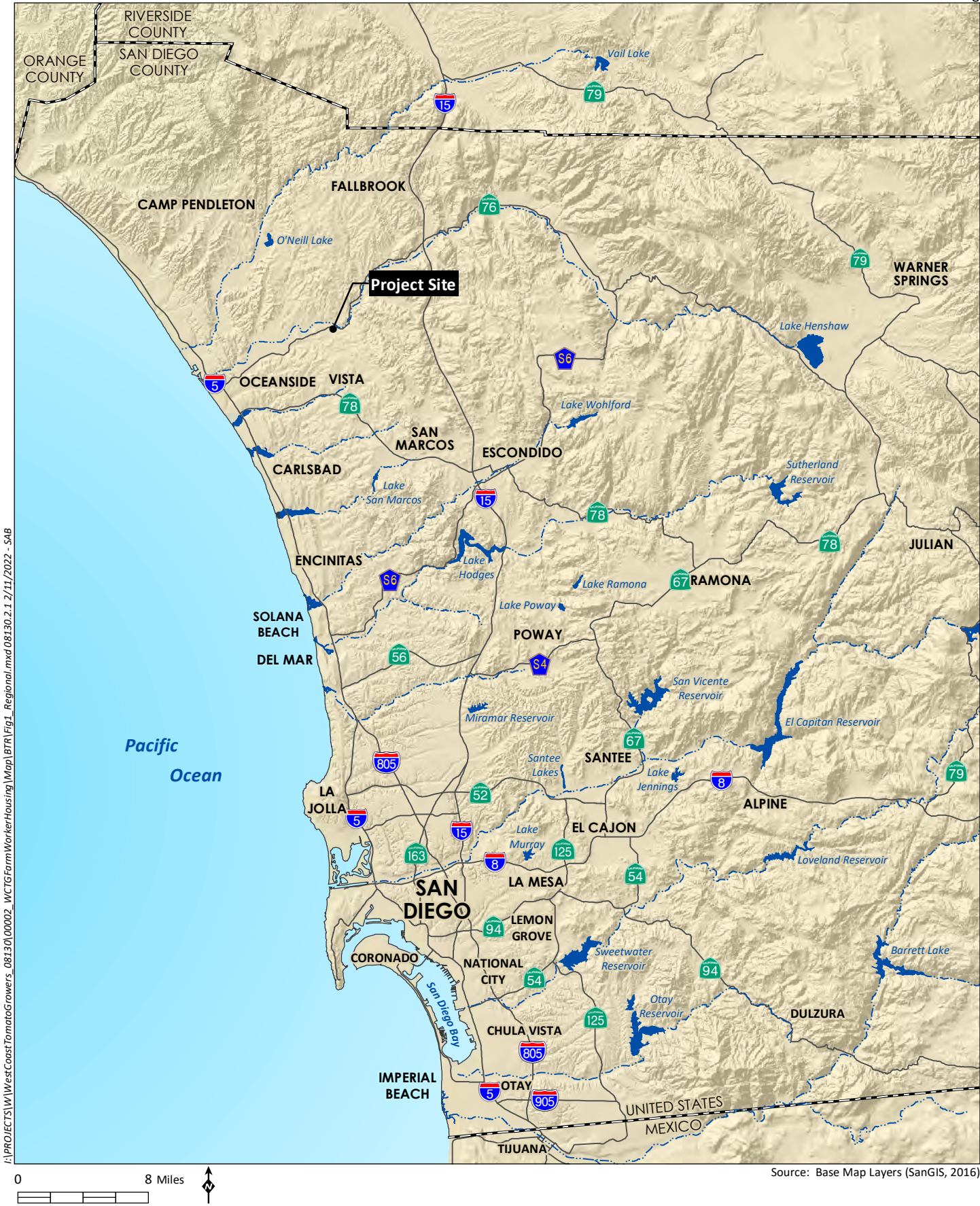
housing for female seasonal farm workers. In addition, the project will include a full-service kitchen/dining hall and office, storage, and laundry facilities. The buildings occupied by the male workers will be two-story 10,044-square foot (SF) buildings and will accommodate up to 288 workers (144 beds per building). The building occupied by female workers is a two-story 5,094 SF building that will accommodate up to 50 workers with the office, storage and laundry facilities located on the ground floor. The kitchen/dining hall building will be single-story and measure approximately 4,415 SF. The project site will also include 22 spaces of visitor parking, a biofiltration basin, an outdoor dining area, a soccer field, a basketball court, a volleyball court, internal traffic circulation, and infrastructure improvements.

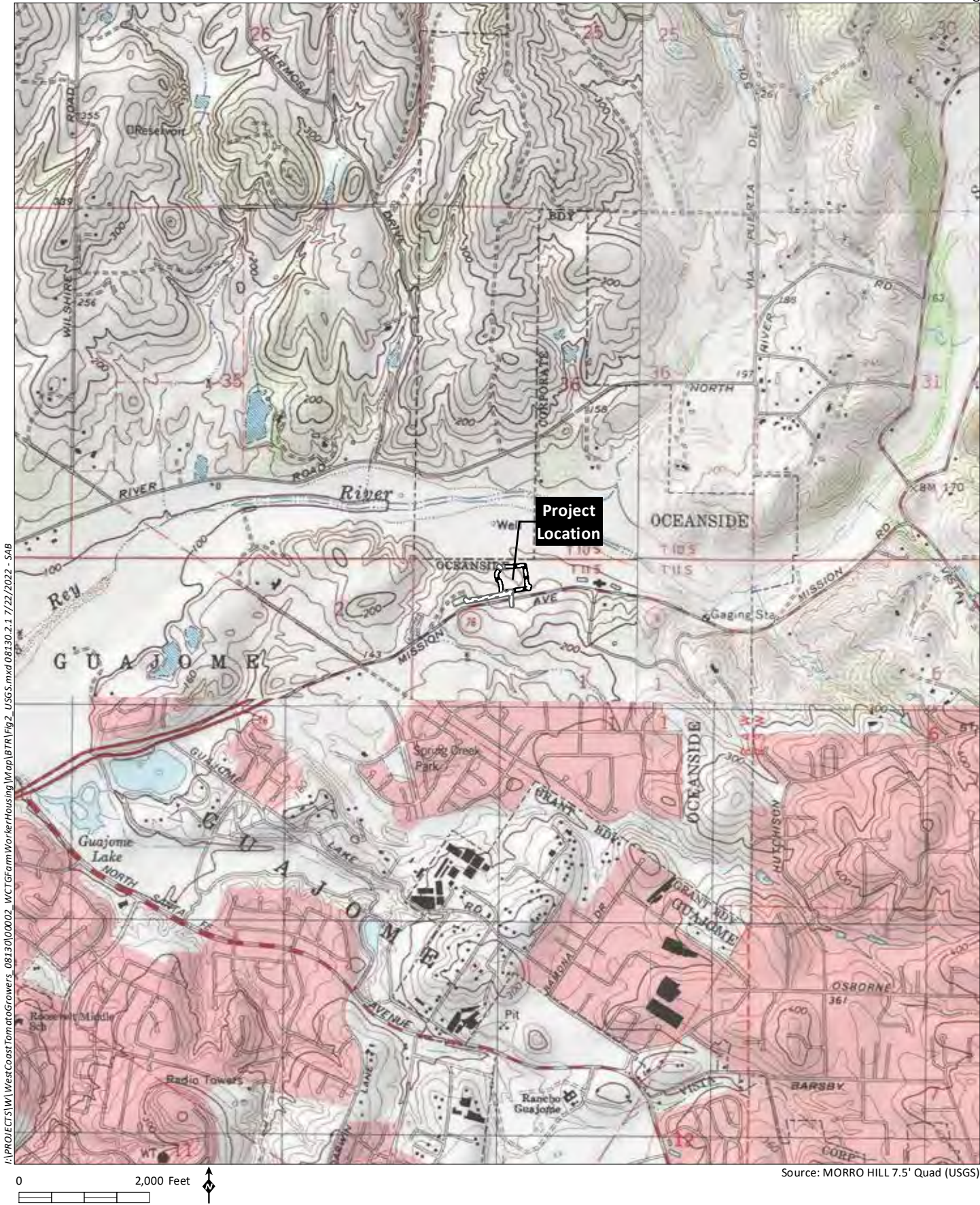
There will be no parking provided for the seasonal workers as they will be transported from Central Mexico to the project site during the growing season, and daily transportation will be provided to the fields via Applicant's buses. The farm workers have Sundays off and will be able to use Applicant's buses to travel for shopping and other activities. Workers will be at the site up to nine months out of the year (March through November), after which time they will return to Central Mexico.

The biofiltration basin would treat runoff from the project site and would be installed with a partly native plant palette that does not include any invasive plant species. An overflow outfall would be located to the north of this basin, and the project would connect to an existing storm drain to the northwest of the basin. A utility extension for water, fire, and sewer service is planned to the south and west of the proposed housing. Most of this extension would be located within existing development and ornamental landscaping, but fire and water service connections near SR 76 would pass through the Diegan coastal sage scrub adjacent to SR 76. The project site and project utilities together make up the study area for this report.

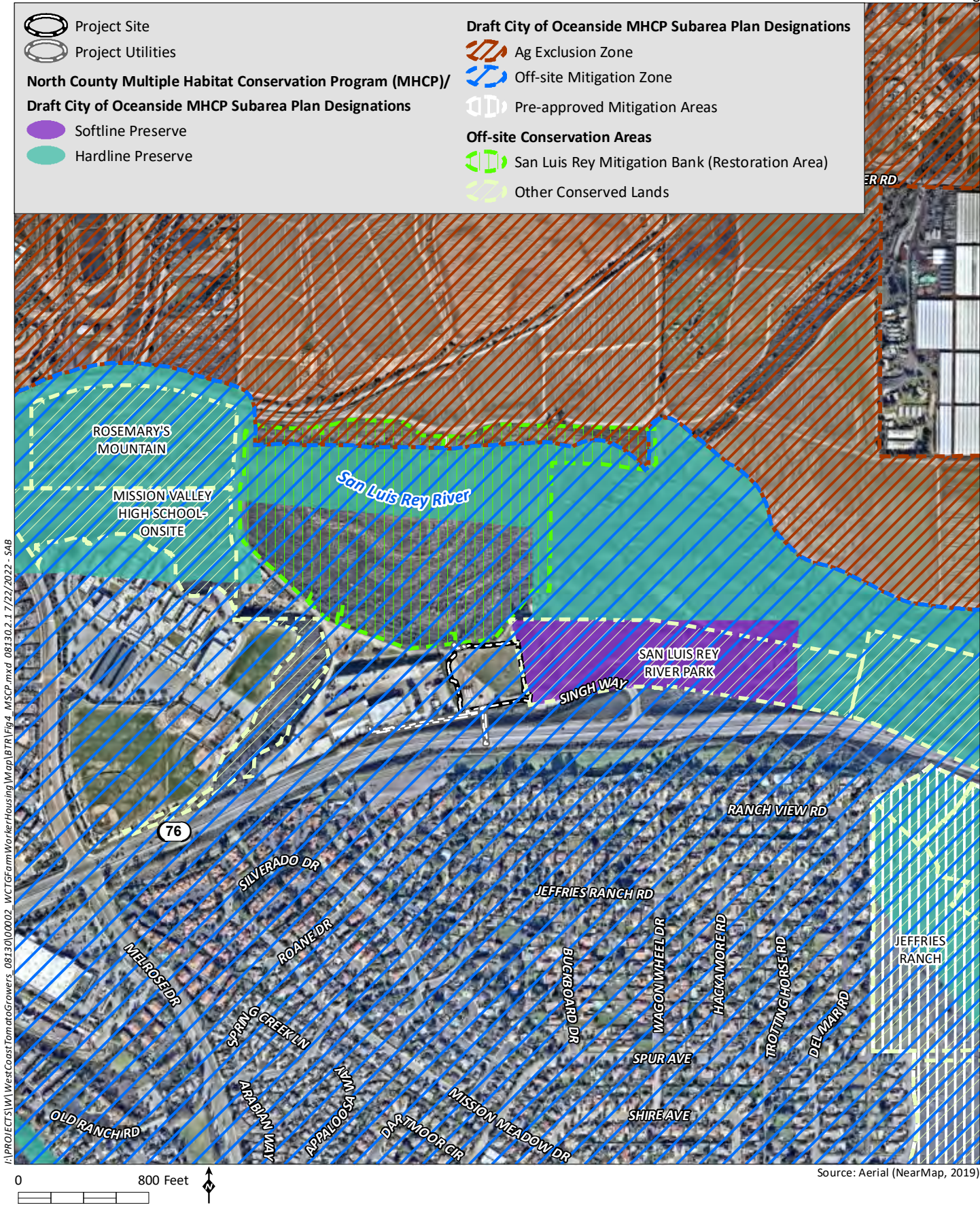
The project site was used for agriculture since at least 1967 (historicaerials.com). The northern side of the project site was maintained for agriculture through at least 2014, and the southern side was used for the storage of equipment and vehicles associated with WCTG's agricultural operations. (Google 2022). The site was approved as a soil placement site for use during the construction of the San Luis Rey Mitigation Bank; however, it was not utilized for permanent soil placement. The site has land use and zoning designations of agriculture, with an equestrian overlay. The project site is currently vacant. A fence is present along the south side of the lot. Portions of the lot, particularly the roads and in the vicinity of the trailer, have a graveled surface.

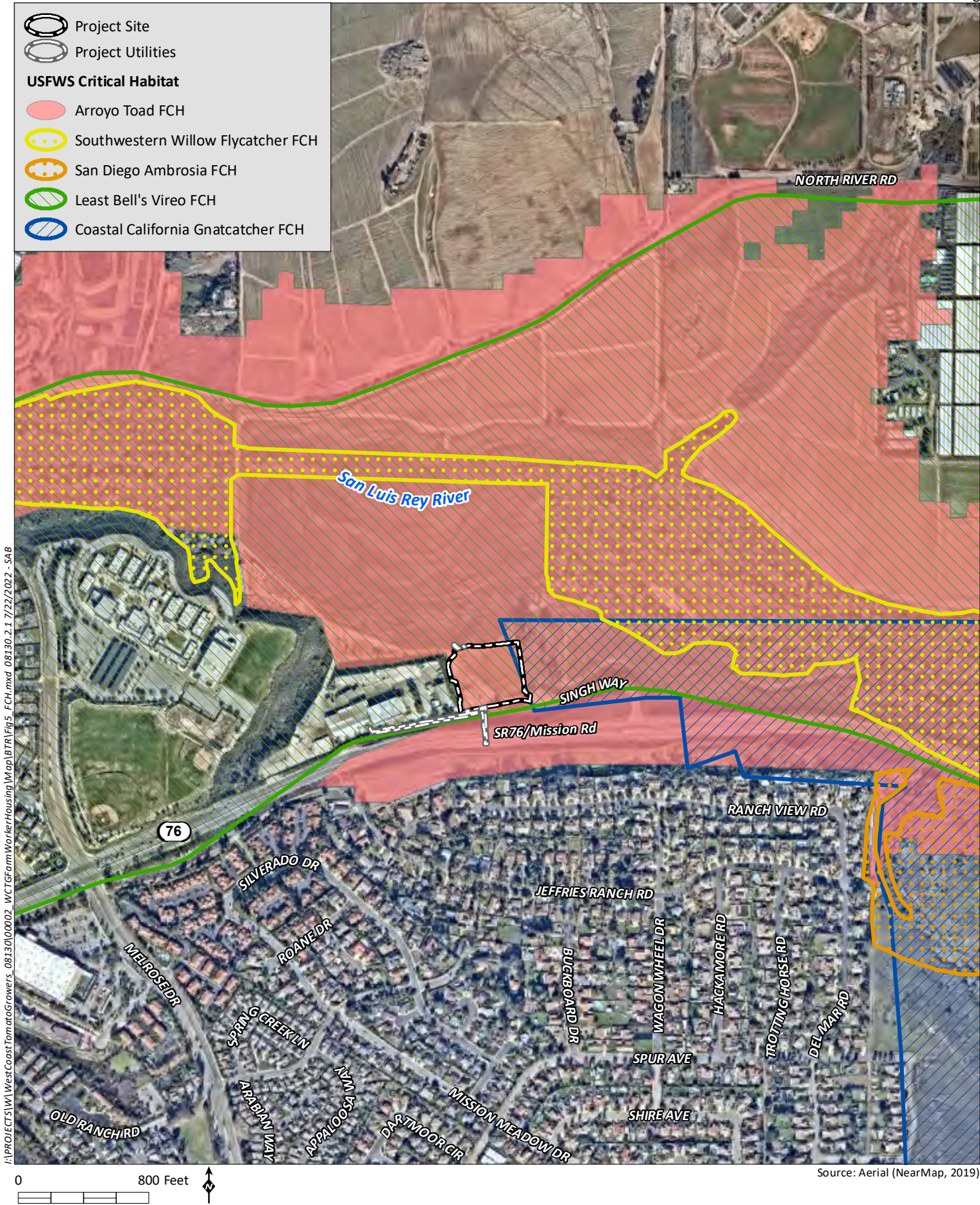
The northernmost end of the site supports some sparse goldenbush (*Isocoma menziesii*) plants and was mapped as coastal scrub, the umbrella category for a variety of scrub communities since it lacks species characteristic of Diegan coastal sage scrub. The western portion of the site was generally bare, with compact soils. The eastern portion of the site contained a variety of weedy plant species. To the south of the site is a row of landscaped trees, beyond which was Diegan coastal sage scrub along SR 76. To the north of the project site, previous agricultural land has been converted into riparian vegetation and an upland buffer for the San Luis Rey Mitigation Bank. Soils on-site include Placentia sandy loam, 9 to 15 percent slopes, eroded and Huerhuero loam, 9 to 15 percent slopes, eroded (U.S. Department of Agriculture [USDA] 2022; Figure 6, *Soils*).

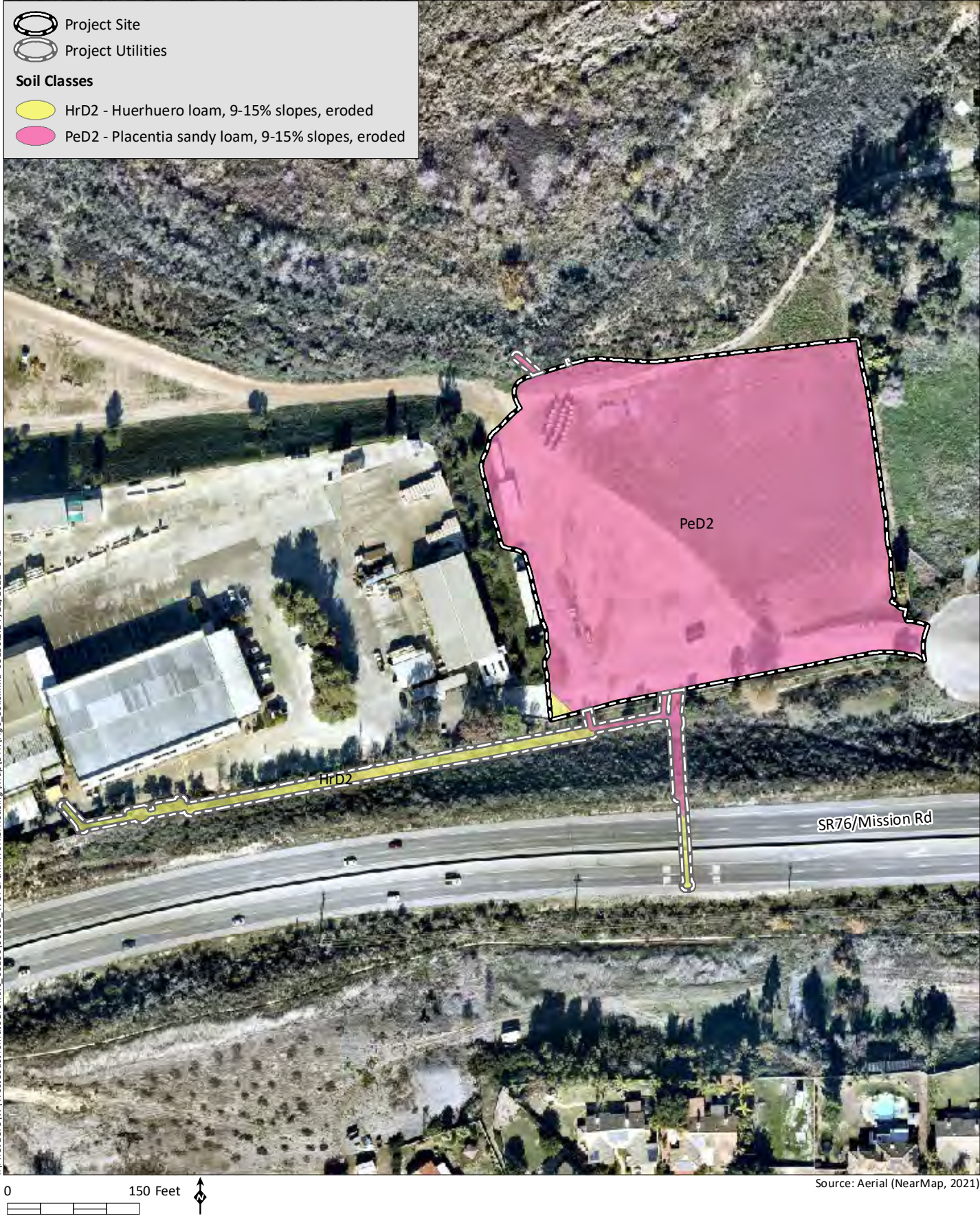












3.0 METHODS AND LIMITATIONS

3.1 LITERATURE REVIEW

Prior to conducting biological field surveys, HELIX performed a review of relevant maps, databases, and literature pertaining to biological resources known to occur within the study area and vicinity, as well as the biological assessment prepared for the adjacent San Luis Rey Mitigation Bank (CADRE Environmental 2012). Recent and historic aerial imagery (Google Earth 2022), soil survey data (USDA 2022), and USGS topographic maps (USGS 2022) were reviewed to obtain information on the natural environmental setting.

In addition, a query of sensitive species and habitats within a two-mile radius of the study area was conducted, including the USFWS species records (USFWS 2022a), California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB; CDFW 2022a), Calflora database (Calflora 2022), SanBIOS (San Diego Geographic Information Source 2022), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2022). The USFWS's critical habitat maps (USFWS 2022b) and National Wetlands Inventory (USFWS 2021), and the Review Draft: Final Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan (hereinafter referred to as the Draft Subarea Plan; AMEC Earth & Environmental [AMEC] and Conservation Biology Institute [CBI] 2009) were also reviewed. Recorded locations of species, habitat types, and other resources were mapped and overlain onto aerial imagery using Geographic Information Systems.

3.2 GENERAL BIOLOGICAL SURVEY

HELIX biologist Amy Mattson conducted a general biological survey of the site on January 27, 2022. Vegetation communities were classified and mapped in accordance with Holland (1986) and Oberbauer (1996). Survey mapping utilized a 1-inch = 75-foot scale aerial map with an overlay of the estimated study area. A Global Positioning System (GPS) was used during the survey to record the limits of vegetation and other resources on-site. Vegetation communities were mapped by HELIX to one-hundredth of an acre (0.01 acre). A list of all plant and animal species observed or detected within the study area was prepared. Plant species were identified in the field or later in the laboratory with the aid of voucher specimens or photographs. 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. The locations of special status plant and animal species incidentally observed or otherwise detected were mapped on an aerial photograph and/or using GPS technology.

3.3 FOCUSED SPECIES SURVEYS

HELIX biologists Dane van Tamelen and Ron Rizo conducted a single arroyo toad survey on March 29, 2022. Although not a protocol survey, the survey followed the arroyo toad survey protocol (USFWS 1999) in that the survey was conducted during the breeding season (March 15 to July 1), at least one hour after sunset, and the moon was not full or near full. The survey was conducted within 24 hours after a significant rain event, because arroyo toads are known to emerge during and after rain.

No other focused species surveys were conducted during the general biological survey. This report includes previously recorded species locations, as well as least Bell's vireo (*Vireo bellii pusillus*) locations provided by Wildlands for the San Luis Rey Mitigation Bank.

3.4 JURISDICTIONAL WETLAND DELINEATION

During the general biological survey conducted on January 27, 2022, Ms. Mattson 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. Potential aquatic resources evaluated within and near the study area included non-wetland areas associated with an un-named drainage ditch, concrete-lined channels, and culverts. The project was designed to avoid the un-named drainage ditch along the east side of the project. This report also incorporates riparian restoration boundaries provided by Wildlands for the San Luis Rey Mitigation Bank, to the north of the project site.

3.4.1 Waters of the U.S.

U.S. Army Corps of Engineers and Regional Water Quality Control Board

Waters of the U.S. are under the jurisdiction of the USACE and RWQCB and include both wetland and non-wetland waters. Potential wetland waters of the U.S. boundaries were determined using the three criteria (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008).

Areas were determined to be non-wetland waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank). Jurisdictional limits for these areas were defined by the ordinary high water mark, which is defined in 33 CFR Section 329.11 as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas.”

The RWQCB asserts regulatory jurisdiction over activities affecting wetland and non-wetland waters of the State pursuant to Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act. Waters of the State are mapped to the top of bank.

3.4.2 California Department of Fish and Wildlife Streambed and Riparian Habitat

Potential CDFW jurisdictional boundaries were determined based on the presence of riparian vegetation or regular surface flow. 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 supports riparian vegetation” (Title 14, Section 1.72). Riparian habitat is not defined in Title 14, but the section refers to vegetation and habitat associated with a stream. CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

3.5 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 utilize the project site and off-site impact area, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

3.6 NOMENCLATURE

Nomenclature follows Holland (1986), Oberbauer et al. (2008), Jepson eFlora (Jepson Herbarium 2022), and Baldwin et al. (2012) for plants. Nomenclature also follows the North American Butterfly Association (2020) for butterflies, American Ornithological Society (2021) for birds, Society for the Study of Amphibians and Reptiles (2017) for reptiles, Bradley et al. (2014) for mammals, and Oberbauer (2008) for vegetation communities. Plant species status is taken from the California Native Plant Society (CNPS 2022) and CDFW CNDDDB (2022b). Animal species status is from CDFW CNDDDB (2022c). Soils information was taken from the Natural Resource Conservation Service (USDA 2022).

4.0 EXISTING CONDITIONS

4.1 GENERAL LAND USES

The project site is currently undeveloped with moderate human visitation. Portions of the site contain low-growing vegetation, and the project utilities area includes landscaped trees.

4.2 DISTURBANCE

The project site has been subject to intense disturbance, with the site formerly used for agricultural production since at least 1967. The project site has been used in the past for the storage of equipment and vehicles associated with WCTG's agricultural operations. An access road extends from Singh Way to the northern edge of the site. In addition to these on-site uses, the site is subject to noise disturbance from SR 76 along its southern boundary.

4.3 TOPOGRAPHY AND SOILS

Elevations within the study area range from approximately 122 feet above mean sea level (AMSL) to 176 feet AMSL (124 to 142 feet AMSL within the project site). The project site slopes downward gradually to the northeast, with higher elevations in the southwest end of the project site. Two soil types are mapped on the project site (Figure 6): Placentia sandy loam (9 to 15 percent slopes, eroded) and Huerhuero loam (9 to 15 percent slopes, eroded). The site was not used as a soil placement site during the construction of the San Luis Rey Mitigation Bank, as was intended; however, it is not known whether previous agricultural operations have modified the soil types. Both Placentia sandy loam and Huerhuero loam soil series are moderately well-drained with very high runoff (USDA 2019).

4.4 VEGETATION COMMUNITIES

Five vegetation communities/land cover types occur in the study area: Diegan coastal sage scrub, coastal scrub, disturbed habitat, non-native vegetation, and developed land (Table 1, *Existing Vegetation Communities/Land Cover Types Within the Study Area*; Figure 7, *Vegetation and Sensitive Resources*).

Table 1
EXISTING VEGETATION COMMUNITIES/LAND COVER TYPES
WITHIN THE STUDY AREA

MHCP Habitat Group	Vegetation Community/ Land Cover Type	Acreage
Uplands		
C	Diegan Coastal Sage Scrub	0.06
C	Coastal Scrub	0.04
F	Disturbed Habitat	3.57
F	Non-native Vegetation	0.21
F	Developed Land	0.03
Uplands Subtotal		3.91
Total		3.91

4.4.1 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Diegan coastal sage scrub is dominated by subshrubs, with leaves that abscise during drought and are replaced by a lesser quantity of smaller leaves. This adaptation of drought evasion allows these species to better withstand the prolonged drought period in the summer and fall in areas of low precipitation. Coastal sage scrub occurs on a variety of soil types, both chemically and physically, from sandy lithosols on siliceous sandstone to clay-rich chernozems on volcanic ash. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*). Approximately 0.06 acre of Diegan coastal sage scrub occurs within the study area along SR 76 (Figure 7).

4.4.2 Coastal Scrub

Coastal scrub is a category encompassing a variety of shrub communities that occur near the coast, as opposed to desert communities. Coastal scrub includes maritime succulent scrub (which occurs within a few miles of the coast and has a leaf succulent component), Diegan coastal sage scrub (which is widespread and may vary in composition, but typically includes California sagebrush, California buckwheat, laurel sumac, and black sage), baccharis scrub (dominated by coyote brush [*Baccharis pilularis*]), and Riversidian sage scrub (similar to Diegan coastal sage scrub but typically more open and occurring in drier areas). At the northern end of the study area, sparse goldenbush, pygmy-weed (*Crassula connata*), and a variety of non-native plants were present. This area was mapped as coastal scrub since it lacked other species characteristic of Diegan coastal sage scrub. To the north of the study area closer to the San Luis Rey River, other species occurred intermixed with the goldenbush, including mule fat (*Baccharis salicifolia*) and coyote brush. Approximately 0.04 acre of coastal scrub occurs within the study area (Figure 7).



4.4.3 Disturbed Habitat

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), 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. The entirety of the project site was mapped as this land cover, although the disturbed habitat was not uniform throughout. An unpaved portion of Singh Way traverses the southern side of the site. The southwestern side of the site used for parking was mostly bare of vegetation. The northeast side of the project site was dominated by weedy non-native species: cheeseweed (*Malva parviflora*), filaree (*Erodium* spp.), and burclover (*Medicago polymorpha*). Approximately 3.57 acres of disturbed habitat occur within the study area (Figure 7).

4.4.4 Non-Native Vegetation

Non-native vegetation is a category describing stands of naturalized trees and shrubs such as acacia (*Acacia* sp.) and peppertree (*Schinus* sp.), which are also used in landscaping. A row of trees occurs along existing fencing in the southern portion of the study area to the west of the project site, and totals approximately 0.21 acre (Figure 7).

4.4.5 Developed

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. In the study area, developed land consists of the West Coast Tomato Growers facilities to the west of the project site and SR 76 to the south (Figure 7). Approximately 0.03 acre of developed land occurs within the study area.

4.5 PLANTS

A total of 42 plant species were observed during the general biological survey, of which 35 species (83 percent) were non-native. A list of plant species observed on the project site is provided in Appendix A.

4.6 ANIMALS

The following is a brief discussion of wildlife species detected on-site. In all, eight animal species were observed or detected during the general biological survey. Appendix B provides a list of these species.

4.6.1 Invertebrates

One invertebrate species was observed in the study area: European honeybee (*Apis mellifera*). The invertebrate diversity is expected to be highest in the coastal scrub habitat.

4.6.2 Vertebrates

One vertebrate group was detected during the general biological survey: birds. Bird species observed were red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltiriparus minimus*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), song sparrow (*Melospiza melodia*), and Cassin's kingbird (*Tyrannus vociferans*). Although no reptile or mammal species were detected in the study area, common species such as the common side-blotch lizard (*Uta*

stansburiana), desert cottontail (*Sylvilagus audubonii*), mice, and rats, may also occur. Larger mammals would not be expected to occur, as the study area lacks cover for these species. Nocturnal species, such as owls and bats, could be present but were undetected during the daytime surveys.

4.7 JURISDICTIONAL WETLANDS AND WATERS

No potentially jurisdictional resources were observed in the study area during the preliminary jurisdictional delineation, as the project was designed to avoid the un-named drainage ditch along the east side of the study area (Figure 8, *Potential Jurisdictional Waters*). The project also avoids the riparian restoration areas within the San Luis Rey Mitigation Bank to the north of the study area, as well as the concrete-lined brow ditches to the south of the study area.

5.0 SENSITIVE RESOURCES

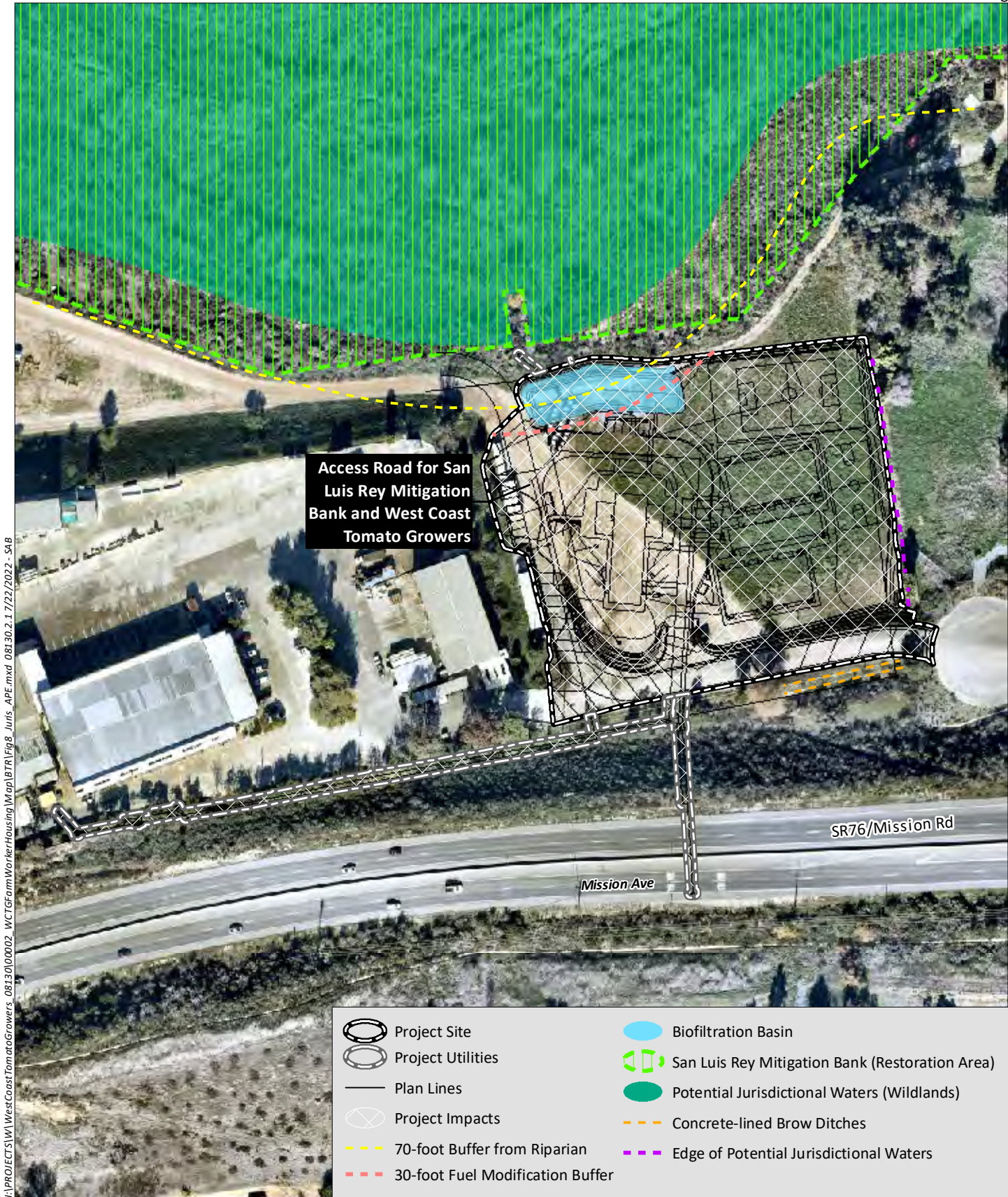
5.1 SENSITIVE VEGETATION COMMUNITIES

A habitat is considered sensitive if it 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, or is regulated by the USFWS, USACE, CDFW, or the City. One sensitive vegetation community (coastal scrub) occurs along the northern edge of the project site (including the storm drain connection and overflow outfall), and one sensitive vegetation community (Diegan coastal sage scrub) occurs in the project's proposed fire and water service connections near SR 76.

5.1.1 Wetland and Riparian Habitats

There are several reasons that wetland and riparian habitats are considered sensitive. Wildlife diversity is normally higher in these zones than in surrounding habitats. Wetland/riparian habitats serve as movement corridors, water sources, and shelter/shaded areas, and the unique microclimate supports a variety of wildlife at all taxonomic levels. Many bird, fish, and amphibian species are completely restricted to wetland and riparian habitats and are dependent on them for breeding. In addition, several insect and plant species are restricted to these habitats. Amphibians, reptiles, birds, and mammals also move back and forth across riparian habitats into adjacent upland or wetland habitats.

Wetland/riparian systems are intimately linked with adjacent upland areas; at the same time, many species that are restricted to these habitats for breeding use upland areas surrounding these habitats for foraging. No wetland or riparian habitats occur within the study area, as the project was designed to avoid the unnamed drainage along the eastern side of the project (Figure 8). Although there is no riparian habitat within the project site, the San Luis Rey River and the San Luis Rey Mitigation Bank, which restored agricultural land to extend riparian habitat and the floodplain along the southern side of the river, occur north of the proposed project. The Draft SAP stipulates conservation and buffer requirements for riparian habitat along the San Luis Rey River. Furthermore, the MHCP includes restrictions for projects occurring within 100 feet of riparian habitat that is occupied by least Bell's vireo. Since the City Council voted to abandon the pursuit of an adopted SAP, WCTG requested guidance from City Senior Planner Robert Dmohowski regarding the City's current implementation of riparian buffers. He indicated that recent projects were allowed a 100-foot riparian buffer consisting of a 70-foot habitat buffer and a 30-foot fuel modification buffer. Additionally, drainage facilities, such as the proposed biofiltration basin, are allowed within the buffer.



5.2 SPECIAL STATUS PLANT SPECIES

Special status plant species include species that are listed as threatened or endangered, proposed for listing, or are candidate species by the federal (USFWS) or state (CDFW) governments; those with a California Rare Plant Rank 1 through 4 as designated by the CNPS (CNPS 2022); and those listed as narrow endemic or covered species by the Draft SAP (AMEC and CBI 2009). Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be relatively abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations. Plant descriptions are from the Jepson eFlora (2022). No special status plant species were observed within the study area during the general biological survey.

5.2.1 Sensitive Plant Species with Potential to Occur

A search of USFWS, CDFW CNDDDB, and SanBIOS records (two-mile radius from the study area), along with Calflora data, was used to develop a matrix of sensitive plant species that may have the potential to occur in the study area 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 fourteen special status plant species, their favorable habitat conditions, and their potential to occur in the study area.

None of the special status plant species evaluated are expected to occur within the study area. The history of agriculture and the highly disturbed nature of the study area limits the potential for rare plants to occur.

5.3 SPECIAL STATUS ANIMAL SPECIES

Special status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City. 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 study area during the general biological survey.

5.4 SPECIAL STATUS ANIMAL SPECIES WITH POTENTIAL TO OCCUR

A total of 30 special status animal species known from within two miles of the project were analyzed for their potential to occur within the study area (Appendix D, *Special Status Animal Species Observed or with Potential to Occur*). Of these, three were considered to have a moderate or high potential to occur: orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), and coastal California gnatcatcher (*Poliophtila californica californica*). No other special status animal species have moderate or high potential to occur due to the lack of suitable habitat.

Orange-throated whiptail, coastal whiptail, and coastal California gnatcatcher are all species that use Diegan coastal sage scrub, which is present in the project's proposed fire and water service connections near SR 76. Marginally suitable coastal scrub is present along the northern edge of the study area.

Least Bell's vireo (*Vireo bellii pusillus*) uses riparian habitat along the San Luis Rey River, and the species locations within the San Luis Rey Mitigation Bank to the north, which were provided by Wildlands, are shown on Figure 7. No riparian habitat for this species occurs within the study area.

6.0 REGIONAL CONTEXT AND REGULATORY ISSUES

6.1 REGIONAL PLANNING CONTEXT

The study area was evaluated for its overall biological quality and regional importance under the North County MHCP and Oceanside's Draft SAP, although it is unclear how strictly these planning guidelines are being implemented. As noted above, the City Council voted to abandon the pursuit of an adopted SAP, intending to incorporate policies from the SAP into the General Plan Update. The MHCP is the basis upon which Oceanside's Draft SAP was prepared. The Draft SAP includes a proposed preserve design consistent with the MHCP's regional preserve design. The Draft SAP has not been adopted and is currently not expected to be.

The regional importance of habitats and species found on the study area was a factor under analysis in the preparation of this report. The project site supports a small amount of coastal sage scrub, which is a regionally important habitat type. However, the study area does not occur within one of the subregional focus areas for Diegan coastal sage scrub (CDFG and CRA 1993). Additionally, the Natural Community Conservation Program (NCCP) Evaluation Logic Flow Chart shows that Diegan coastal sage scrub on the project site has a lower potential value for long-term conservation, since it does not occur within a corridor between higher value blocks of Diegan coastal sage scrub. None of the Diegan coastal sage scrub or coastal scrub within the study area occurs within the USFWS critical habitat for coastal California gnatcatcher, which only covers the northeast corner of the study area (Figure 7).

Riparian habitats in any area are important due to their wildlife and habitat values. The study area lacks riparian habitat but occurs adjacent to the San Luis Rey River and the San Luis Rey Mitigation Bank. Riparian restoration areas within the San Luis Rey Mitigation Bank are known to support the federally and state listed endangered least Bell's vireo, which was also a covered species in the Draft SAP (Figure 7).

The MHCP identifies the study area as being located outside of a Focused Planning Area (i.e., outside of lands dedicated for open space and habitat conservation, such as a Hardline or Softline Preserve area). The Draft SAP identifies the study area as being located within an Off-site Mitigation Zone, but outside of a Pre-approved Mitigation Area (PAMA), Hardline Preserve, or Softline Preserve (AMEC and CBI 2009). The Off-site Mitigation Zone is a City planning zone that supports natural vegetation outside the Wildlife Corridor Planning Zone. Natural vegetation may be removed within the Off-site Mitigation Zone subject to plan guidelines, which include off-site mitigation. The Draft SAP requires that impacts to biological resources within the Off-site Mitigation Zone be mitigated within the Wildlife Corridor Planning Zone or within PAMA.

6.2 APPLICABLE REGULATIONS

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 or program are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the City) pursuant to CEQA Guidelines. Biological resources-related laws and regulations that apply include the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), CEQA, California Endangered Species Act (CESA), and CFG Code.

6.2.1 Federal Government

Federal Endangered Species Act

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species, in which case take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of a site and there is an associated federal action for a proposed impact (e.g., the USACE would initiate a Section 7 consultation with the USFWS for impacts proposed to USACE jurisdictional areas that may also affect listed species or their critical habitat). Critical habitat designations affect only Federal agency actions or federally funded or permitted activities. Critical habitat designations do not affect activities by private landowners if there is no Federal "nexus"—that is, no Federal funding or authorization. Section 10(a) allows the issuance of permits for incidental take of endangered or threatened species with the preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how the steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits.

Critical habitat for three federally listed species occurs in the study area: arroyo toad (federally endangered), coastal California gnatcatcher (federally threatened), and least Bell's vireo (federally endangered), the latter of which is also state-listed endangered. No federally listed species are known to occur on the project site, although coastal California gnatcatcher has the potential to occur within Diegan coastal sage scrub and coastal scrub within and adjacent to the study area, and least Bell's vireo is known to occur within riparian habitat along the San Luis Rey River. Arroyo toad is not known from the section of the San Luis Rey River adjacent to the study area (Wildlands pers com). Any impacts to federally listed as threatened or endangered species are considered a "take" and require permitting with federal agencies under the existing federal regulations.

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 1 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. A nesting season of January 15 to July 15 is typically used for raptors.

6.2.2 State of California

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 (or 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.

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 CFG 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 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 the CFG Code authorizes the CDFW to issue an Incidental Take Permit for state listed threatened and endangered species, if specific criteria are met.

As noted above, the least Bell’s vireo is a state-listed endangered species, and indirect noise impacts to the species would require conformance with the California ESA. For this project, mitigation measures are proposed to avoid indirect noise impacts to listed birds. If the project were to significantly impact state-listed species, conformance would be expected to occur through the issuance of a Section 2080.1 consistency determination by the CDFW.

Potential impacts to two sensitive lizards, orange-throated whiptail (CDFW watch list) and coastal whiptail (California species of special concern), would not require permitting. Impacts to these species would not be significant, as these species are highly mobile and should be able to move into adjacent habitat during construction, and habitat mitigation would compensate for losses to a small amount of habitat.

Native Plant Protection Act

Sections 1900–1913 of the CFG Code (Native Plant Protection Act; NPPA) direct the CDFW to carry out the state legislature’s intent to “...preserve, protect, and enhance endangered or rare native plants of this state.” The NPPA gives the CFG Commission the power to designate native plants as “endangered” or “rare” and protect endangered and rare plants from take.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Section 1600 of the 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.

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.

Natural Communities Conservation Planning Act

The 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 a 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 HCP process to provide take permits for state and federal listed species. Under the NCCP, local governments, such as the City, can take the lead in developing these NCCP plans and become the recipients of state and federal take permits. There is not an approved conservation planning vehicle for the City, as there is not an adopted subarea plan. Thus, take authorization for proposed covered species is not currently available for projects within the City.

7.0 IMPACT ANALYSIS

The proposed project involves the construction of dormitory-style housing for seasonal farm workers and associated facilities. Construction of the project would impact sensitive upland vegetation communities, habitat for federally listed animal species, and potentially special status animal species (Figure 9, *Vegetation and Sensitive Resources/Impacts*). No impacts are anticipated to potential jurisdictional waters or special status plant species.

7.1 DIRECT IMPACTS

7.1.1 Vegetation Communities

Direct impacts from the development of the project total 3.91 acres, which includes housing and facilities, roadways, a biofiltration basin and overflow outfall, storm drain connection, and other utilities (Figure 9). A utility extension for water, fire, and sewer service is planned to the south and west of the proposed housing. The utilities extension would occur within existing development and ornamental landscaping, except where fire and water service connections are required near SR 76. The fire and water service connections would impact 0.06 acre of restored Diegan coastal sage scrub that occurs along SR 76. The project would impact 0.04 acre of coastal scrub (Figure 9). In total, project impacts include 0.10 acre of sensitive upland vegetation communities, composed of 0.04 acre of coastal scrub and 0.06 acre of Diegan coastal sage scrub. Table 2, *Vegetation Community Impacts*, presents the impacts to the vegetation communities on the project site and the impacts for the utilities.

Table 2
VEGETATION COMMUNITY IMPACTS

MHCP Habitat Group	Vegetation Community	Existing in Study Area	Impacts		
			Project ¹	Utilities ²	Total ^{1,2}
Sensitive Uplands					
C	Diegan coastal sage scrub	0.06	--	0.06	0.06
C	Coastal scrub	0.04	--	0.04	0.04
Subtotal Sensitive Uplands		0.10	--	0.10	0.10
Non-Sensitive Uplands					
F	Non-native vegetation	0.21	<0.01	0.21	0.21
F	Disturbed habitat	3.57	3.56	0.01	3.57
F	Developed land	0.03	--	0.03	0.03
Subtotal Non-sensitive Uplands		3.81	3.56	0.25	3.81
Total		3.91	3.56	0.35	3.91

¹ Project impacts include housing and facilities, roadways, and a biofiltration basin.

² An overflow outfall and a stormwater connection to an existing storm drain are proposed north of the biofiltration basin, through coastal scrub (Figure 9). A 10-foot wide work area was assumed for the stormwater connection. A utility extension for water, fire, and sewer service is planned to the south and west of the proposed housing (Figure 9). This would occur within existing development and ornamental landscaping, except where fire and water service connections are required near State Route 76. The connections would pass through Diegan coastal sage scrub.

Impacts to coastal scrub and Diegan coastal sage scrub are considered significant because these natural communities are considered sensitive, and impacts would substantially affect them. Mitigation is required for impacts to these habitats.

7.1.2 Jurisdictional Wetlands and Waters

The project was designed to avoid impacting potential jurisdictional waters (waters of the U.S./state or CDFW-jurisdictional streambed or riparian; Figure 8). No significant impacts to jurisdictional wetlands and waters are anticipated.



7.1.3 Plant Species

No sensitive plant species were observed during the general biological survey, and none are known to occur or have a high potential to occur in the study area. Thus, no significant impacts to sensitive plant species are anticipated.

7.1.4 Animal Species

The coastal California gnatcatcher was not observed during the general biological survey or recorded within the study area. However, this species was evaluated as having a high potential to occur, given that Diegan coastal sage scrub and coastal scrub occur along the edges of and adjacent to the study area, and this species is known to occur within 0.2 mile. The study area also contains federal critical habitat for this species; however, none of the Diegan coastal sage scrub and coastal scrub present in the study area occurs within this critical habitat. Any direct impacts to the gnatcatcher or its habitat would be significant because the species is federally listed as threatened. Project construction is anticipated to start in April 2023 during the coastal California gnatcatcher breeding season (February 15 through August 31).

The least Bell's vireo is not expected to occur within the study area given the lack of suitable riparian habitat, but this species is known to occur within the San Luis Rey Mitigation Bank to the north. Direct impacts to this species are not anticipated, but indirect impacts are discussed below. Any impacts to the least Bell's vireo would be significant because the species is federally and state listed endangered. The study area also occurs within federal critical habitat for this species (Figure 5).

Any significant impacts to the coastal California gnatcatcher and least Bell's vireo (either direct impacts to habitat or indirect impacts such as noise) would require conformance with the FESA. Significant impacts to the least Bell's vireo would also require compliance with the CESA, which would likely occur through a Section 2080.1 consistency determination issued by the CDFW.

The project would also impact habitat used by two special status animal species: orange-throated whiptail (CDFW watch list) and coastal whiptail (California species of special concern). Impacts to these species would not be significant, as these species are highly mobile and should be able to move into adjacent habitat during construction, and habitat mitigation would compensate for losses to a small amount of habitat.

Arroyo toad is not expected to occur on-site, as suitable habitat for breeding and aestivation does not occur in the study area. This species breeds within streams and small backwater pools along stream margins, whereas the study area occurs in uplands. Burrowing is typically in sandy soil near riparian canopy, although arroyo toad may occur as far as 0.7 mile from riparian habitat (Holland and Sisk 2001). Although a suitable soil type is present (sand/loam), the study area does not contain areas of loose sandy soil where adult toads can burrow outside the breeding season, and completely lacks vegetation and detritus often associated with aestivating arroyo toad sites (willow and mulefat scrub). In addition to these site observations, the USFWS (Michelle Moreno) stated during consultations for the San Luis Rey Mitigation Bank that the site, which is designated as critical habitat for arroyo toad, had never been considered arroyo toad habitat (CADRE Environmental 2012). Furthermore, Wildlands, which manages the adjacent San Luis Rey Mitigation Bank, has said that arroyo toad is not known from the section of the San Luis Rey River adjacent to the study area (Wildlands pers com). The nearest recent observation of arroyo toad known to HELIX is from 2011, when an arroyo toad was observed just west of

Interstate 15, approximately six miles northeast of the site. In addition, the toad survey conducted by HELIX after a rain event was negative. A full protocol toad survey is not recommended for this site because the survey protocol is designed to detect breeding toads, and the project site does not contain suitable toad breeding habitat. Although arroyo toad is not expected to use the study area for breeding or aestivation, the species is known to travel, and any impacts to the arroyo toad would be significant because the species is federally endangered and state species of concern. Consequently, a toad exclusion fence is proposed to prevent any arroyo toad from moving into the study area during construction.

7.2 INDIRECT IMPACTS

Indirect impacts consist of secondary effects to biological resources that occur over short or long periods of time due to the implementation of a project. Although biological resources may not initially be directly impacted, over time, they may be affected indirectly due to the relative proximity of development. While the magnitude of an indirect impact may be the same as that of a direct impact, the effect usually takes longer to become apparent. Examples of indirect impacts expected to occur as a result of the project include those to regional habitat connectivity and those due to construction lighting, noise, and dust, as well as urban edge effects such as exotic species invasion, increased human intrusion, lighting, and noise impacts. This section discusses long-term, indirect project impacts in terms of regional preserve design, effects on individual species, and potential urban edge effects associated with the proposed residential development.

7.2.1 Draft Subarea Plan Consistency

The Draft SAP provides planning guidelines to avoid, minimize, and fully mitigate development-related impacts. The project site is located within an Off-site Mitigation Zone, which is outside of PAMA, Softline Preserve, Hardline Preserve, and the Wildlife Corridor Planning Zone (Figure 4). Development is allowed in an Off-site Mitigation Zone. Impacts to biological resources within the Off-site Mitigation Zone must be mitigated within the Wildlife Corridor Planning Zone or within PAMA. If mitigation occurs within PAMA, it shall include off-site protection within an approved mitigation bank.

The Draft SAP includes conservation and buffer requirements for projects along the San Luis Rey River. No riparian area and/or other wetlands and associated natural habitats, which would be required to be designated as biological open space and incorporated into the Preserve, occur within the study area. The Draft SAP also requires a minimum 100-foot biological buffer to be established for upland habitats, beginning at the outer edge of riparian vegetation. This is shown for the project on Figures 7 and 9, using riparian restoration limits provided by Wildlands for the San Luis Rey Mitigation Bank. The following uses are prohibited in the biological buffer: (1) new development, (2) new pedestrian and bike trails or passive recreation uses not already planned, and (3) fuel modification activities for new development. The Draft SAP further states that if natural habitats do not cover the 100-foot buffer area at the time of the proposed action, then native habitats appropriate to the location and soils shall be restored as a condition of project approval, and in most cases, coastal sage scrub vegetation shall be the preferred habitat to restore within the biological buffer.

As noted in Section 5.1.1 above, the City Council voted to abandon the pursuit of an adopted SAP. To understand the current regulatory landscape, WCTG requested guidance from City Senior Planner Robert Dmohowski regarding the City's current implementation of riparian buffers. He indicated that the project should provide a 100-foot riparian buffer, consisting of a 70-foot habitat buffer and a 30-foot

fuel modification buffer. He indicated that drainage facilities, such as the proposed biofiltration basin, would be permissible within the buffer.

The project was designed to fit within these parameters (Figure 9). A biofiltration basin, overflow outfall, and storm drain connection are proposed for the northwest corner of the site, which occur within the riparian buffer. This biofiltration basin would treat runoff from the project site and would be installed with a native coastal sage scrub seed mix and a container plant palette that does not include any invasive plant species. The basin would be regularly maintained, but human usage is not otherwise expected for this area. Given that the purpose of the biofiltration basin is to protect downstream areas from project runoff, it would be vegetated with native and non-invasive plants; there would be minimal human activity in this area, and the biofiltration basin is an allowable feature within the riparian buffer. The storm drain connection proposed for this area would also occur within the riparian buffer; however, in connecting to an existing storm drain, the project would avoid encroachment into wetlands associated with the San Luis Rey Mitigation Bank to the north. The access road that is proposed within the riparian buffer follows an existing unpaved road through the project site and would maintain Wildlands' access to the San Luis Rey Mitigation Bank, to the north. Lastly, fuel modification is allowed in the outer 30 feet of the 100-foot riparian buffer. The project was designed to reduce the number of buildings from twelve to six, and to relocate structures further from existing riparian areas. Subsequent project design reduced the number of buildings to four. Fuel modification is not proposed within 70 feet of the riparian buffer closest to the riparian areas.

7.2.2 Construction Effects

The extent of indirect construction impacts varies, but in general, potential indirect impacts are considered significant when they occur to sensitive animals (i.e., coastal California gnatcatcher, sensitive riparian birds including least Bell's vireo, and nesting raptors) or to sensitive vegetation communities, such as Diegan coastal sage scrub and wetland/riparian habitats.

Construction noise and its impact on nesting birds are dependent on the equipment used and the type of work being completed. In addition, topography, line-of-sight, and proximity can influence noise levels from construction equipment. In addition to noise, construction dust and human presence could disturb nesting birds. Construction-related noise impacts to the coastal California gnatcatcher and/or sensitive riparian birds are potentially significant. There is no conclusive evidence concerning the effects of noise on coastal California gnatcatchers, although there have been studies on this issue (Awbrey 1993; RECON 1993). The least Bell's vireo, however, is generally thought to be more sensitive to noise. For this report, a threshold limit of a 60 dBA or higher hourly average of construction-generated noise impacts to gnatcatcher or sensitive riparian bird habitat during the breeding season would be considered significant (the breeding season for the gnatcatcher is February 15 through August 31; the breeding season for the sensitive riparian birds is March 15 through September 15). Project construction is anticipated to occur during the breeding seasons for coastal California gnatcatcher and riparian birds.

Raptors and their nests are protected from direct take by the federal Migratory Bird Treaty Act. The non-native trees along the southern edge of the study area, as well as trees near the study area, have the potential to support tree-raptor nests. An impact from construction noise or dust, for example, to an active raptor nest would be considered significant if it affects a raptor's ability to finish its breeding cycle. Generally, construction activity occurring within 500 feet of an active raptor nest would constitute a significant effect.

Water quality within the riparian habitat to the north of the study area or the potential jurisdictional area to the east could be adversely affected by potential surface runoff and sedimentation during construction, if not controlled. Decreased water quality from these sources would adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these riparian resources. Degraded surface water quality has the potential to be a significant impact during construction. Additionally, the use of petroleum products during construction (i.e., fuels, oils, lubricants) could potentially contaminate surface water and adversely affect biological resources on the project site.

Human activity related to construction could result in the degradation or removal of adjacent vegetation. In addition, littering could occur during the construction process. Construction lighting could also be disruptive if aimed at sensitive habitat areas. These impacts would be significant.

7.2.3 Urban Edge Effects/Buffers

Implementation of the proposed project would result in the placement of project development near sensitive wetland habitats, Diegan coastal sage scrub, and coastal scrub. The Draft SAP recommends a 100-foot biological buffer from the outer edge of the riparian vegetation, and the North County MHCP has guidelines for a biological buffer related to least Bell's vireo. However, the SAP is not approved. Recent guidance from the City allows for a 100-foot riparian buffer consisting of a 70-foot habitat buffer and a 30-foot fuel modification buffer. Drainage facilities, such as the proposed biofiltration basin, overflow outfall, and storm drain connection, would be permissible within the buffer. As discussed in Section 7.2.2, the project was designed to meet these buffer guidelines. The project does not impact riparian vegetation to the north and maintains a 70-foot habitat buffer. Its biofiltration basin (which is partially within the buffer) will be installed with native and non-invasive vegetation, and an access road will be maintained for the San Luis Rey Mitigation Bank. Therefore, no significant impacts are assessed with respect to riparian buffers.

Development adjacent to the San Luis Mitigation Bank has the potential to impact sensitive resources due to the release of non-native plant (or animal) species, and potential predation (especially from domestic cats). Fixed lighting adjacent to the San Luis Rey Mitigation Bank poses concerns due to the effects on nocturnal wildlife activities. Non-native plant species invasion could occur primarily as a result of the use of invasive species in landscaping, although invasive species are not included in the proposed plant palette. These impacts would be significant if they were to occur in the San Luis Rey Mitigation Bank. Predation from pets is not anticipated because pets will not be allowed in the project.

8.0 MITIGATION MEASURES

The mitigation measures proposed in this section are for significant impacts to sensitive biological resources, as defined in Section 7.0 of this report. A biologist shall regularly monitor construction activities to help ensure that all of the mitigation measures are followed.

8.1 SENSITIVE VEGETATION COMMUNITIES

Impact 8.1.1 Impacts to Diegan coastal sage scrub and coastal scrub would be significant because these natural communities are considered sensitive. Table 3, *Proposed Mitigation for Impacts to Upland Vegetation Communities*, presents the overall proposed mitigation for all sensitive upland vegetation communities and the listed species that could occupy

these habitats, including the coastal California gnatcatcher. The mitigation ratio is based on the MHCP.

Table 3
PROPOSED MITIGATION FOR IMPACTS TO UPLAND VEGETATION COMMUNITIES

Vegetation Community	Acreage Impacts	Mitigation	
		Ratio	Acreage Required
Sensitive Uplands			
Diegan coastal sage scrub	0.06	1:1 ¹	0.06
Coastal scrub	0.04		0.04
Subtotal Sensitive Uplands	0.10	--	0.10
Non-Sensitive Uplands			
Disturbed habitat	3.57	No mitigation required	--
Non-native vegetation	0.21		
Developed land	0.03		
Subtotal Non-sensitive Uplands	3.81	--	--
Total	3.91	--	0.10

¹ In the MHCP, impacts to Group C (coastal sage scrub) outside the focused planning area are 1:1. The City is not planning to adopt the Draft SAP, making this the applicable mitigation ratio.

Mitigation Measure (MM) 8.1.1 Mitigation would be provided at a 1:1 ratio for impacts to 0.06 acre of Diegan coastal sage scrub and 0.04 acre of coastal scrub. Impacts to Diegan coastal sage scrub and coastal scrub would be mitigated through off-site restoration and/or purchase of sage scrub mitigation credits at an approved mitigation bank, or other location deemed acceptable by the City. Mitigation will occur within an approved mitigation bank, biological open space easement, or other protective mechanism. All mitigation agreements must be funded and completed prior to the approval of the grading plan.

Impact 8.1.2 Impacts to vegetation communities, such as riparian vegetation adjacent to the project, may be significant if these natural communities are considered sensitive, and impacts would substantially affect them.

MM 8.1.2 To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, environmental fencing (including silt fencing where determined necessary for stormwater pollution prevention), would be installed at the edges of the impact limits prior to initiation of grading. All construction staging shall occur within the approved limits of construction. A qualified biologist will monitor the installation of environmental fencing wherever it would abut sensitive vegetation communities, jurisdictional waters or wetlands, or conserved lands (i.e., the San Luis Rey Mitigation Bank and the San Luis Rey River Park). The biologist will conduct a pre-construction environmental training session for construction personnel to inform them of the sensitive biological resources on-site and avoidance measures to remain in compliance with project approvals. The biologist also will monitor vegetation clearing, grubbing, and grading activities on a regular basis to help ensure compliance with project approvals.

8.2 SENSITIVE ANIMAL SPECIES AND NESTING BIRDS

Impact 8.2.1 The proposed project could result in direct impacts to the federally listed threatened coastal California gnatcatcher, if the removal of occupied habitat is conducted during the species' breeding season (i.e., February 15 through August 31).

MM 8.2.1 Mitigation for impacts to coastal California gnatcatcher habitat (0.06 acre of Diegan coastal sage scrub and 0.04 acre of coastal scrub) shall occur as described in MM 8.1.1.

The preferred approach to site development would be for no grubbing or clearing of vegetation to occur within 500 feet of occupied Diegan coastal sage scrub or coastal scrub during the breeding season of the coastal California gnatcatcher (February 15 through August 31). All grading permits, improvement plans, and the final map shall state the same. If clearing or grubbing must occur during the gnatcatcher breeding season, a qualified gnatcatcher biologist shall conduct a pre-construction survey to determine whether gnatcatchers occur within the impact area(s). The pre-construction survey shall consist of three site visits, with each site visit occurring a minimum of seven days apart, and the third visit occurring no more than three days prior to the start of clearing and grubbing. To avoid take under the federal ESA, impacts to occupied habitat shall be avoided. If there are no gnatcatchers nesting (including nest building or other breeding/nesting behavior) within that area, grading and clearing shall be allowed to proceed upon receipt of concurrence from City. If any gnatcatchers are observed nesting or displaying breeding/nesting behavior during the pre-construction survey, clearing and grubbing of the area in which gnatcatchers have been observed shall be postponed until all nesting (or breeding/nesting behavior) has ceased or until after August 31. (See MM 8.3.1 for mitigation for indirect noise effects.) Any impacts to this species would require take authorization from the USFWS.

Impact 8.2.2 The proposed project could result in direct impacts to nesting raptors or migratory birds if the removal of suitable habitat is conducted during the species' breeding seasons (i.e., January 15 to July 15 for raptors and February 15 to August 31 for general nesting birds).

MM 8.2.2 The preferred approach to site development would be for no grubbing or clearing of vegetation to occur during the general avian breeding season (January 15 to July 15 for raptors and February 15 to August 31 for general nesting birds). All grading permits, improvement plans, and the final map shall state the same. If grubbing or clearing must occur during the general avian breeding season within 300 feet of general nesting bird habitat or 500 feet of nesting raptor habitat, a qualified biologist shall conduct a pre-construction survey no more than three days prior to the commencement of the activities to determine if active bird nests are present in the affected areas, with results submitted to the City. If there are no nesting birds (including nest building or other breeding/nesting behavior) within this area, clearing and grubbing shall be allowed to proceed. Furthermore, if grubbing and clearing activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted, with results submitted to the City. If active nests or nesting birds are observed within the area, the biologist shall submit the nesting bird survey results and proposed nest buffers to the City. The

biologist shall flag buffers around the active nest buffers, and clearing and grubbing activities shall avoid active nests until nesting behavior has ceased, nests have failed, or young have fledged, with results submitted to the City.

- Impact 8.2.3* Although suitable breeding and aestivation habitat are not present, the proposed project could result in direct impacts to the federally listed endangered arroyo toad if it travels through the site during construction. This species is generally active from the first substantial rains from January to March through August or September.
- MM 8.2.3* Temporary toad exclusionary fencing (silt fencing) will be installed along the project boundary prior to the initiation of clearing or grading activities. Following exclusionary fencing installation, an arroyo toad survey of the entire area inside the fence would be conducted by a qualified biologist to ensure no toads are present in the work area. Project activities (except for utilities extension outside of the project site) shall be confined within the fenced area. Ingress/egress locations will be resealed at the conclusion of each workday (prior to dusk) to ensure the exclusionary fencing is complete and fully functional. The fencing to be installed across the ingress/egress location each night should be installed at least two feet high, with one foot of material stretching outward along the ground and secured with a continuous line of sandbags (i.e., there should be no space between the sandbags). Once project activities begin, a qualified biological monitor will be on-site weekly or as necessary to ensure the integrity of the exclusionary fencing. If the arroyo toad exclusion fencing is found damaged during construction, the contractor is responsible for repairing the fence within 24 hours. If arroyo toad is found on-site, the project would require approval from the City and wildlife agencies to relocate arroyo toad individuals from within the impact area to the north of the project site along the San Luis Rey River. Any impacts to this species would require take authorization from the USFWS.

8.3 INDIRECT IMPACTS

- Impact 8.3.1* Construction noise impacts to the gnatcatcher, sensitive riparian birds (including the federally listed endangered least Bell's vireo), or raptors during the breeding season that meet or exceed 60 dBA hourly average or ambient levels (whichever is greater) could indirectly affect nesting success.
- MM 8.3.1* If the operation of grading and construction equipment occurs within 500 feet of suitable habitat during the breeding seasons for the coastal California gnatcatcher (February 15 to August 31), nesting raptors (January 15 to July 15), or least Bell's vireo (March 15 to September 15), a pre-construction survey shall be conducted by a qualified biologist, as applicable, to determine whether these species occur within the areas potentially impacted by noise, with the final survey occurring within three days of the proposed start of construction and results submitted to the City. The pre-construction survey conducted prior to clearing and grubbing will fulfill this requirement as long as less than seven days have elapsed between the end of clearing and grubbing and the start of the next construction activity. If construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted, with results submitted to the City. If it is determined at the completion of the pre-construction surveys that active

nests belonging to these sensitive species are absent from the potential noise impact area, construction shall be allowed to proceed. If the pre-construction surveys determine the presence of active nests belonging to these sensitive species, then construction shall: (1) be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) not occur until a temporary noise barrier or berm is constructed at the edge of the development footprint and/or around the piece of equipment to ensure that noise levels are reduced to below 60 dBA or ambient, whichever is greater. The type(s) and location(s) of noise barrier(s) will be provided to the City along with the associated noise measurements demonstrating compliance with required noise level reductions. The applicant may also choose to preemptively install noise barrier(s) prior to the start of the breeding season if the adjacent habitat is anticipated to be used by nesting sensitive species. Decibel output will be confirmed by a City-approved noise specialist, and intermittent monitoring will be conducted by a qualified biologist to ensure that conditions have not changed. In the unlikely event that blasting is required, if the pre-construction surveys identify coastal California gnatcatcher, nesting raptors, or least Bell's vireo, blasting will be restricted to the non-breeding season for the identified birds (September 1 to February 14 for coastal California gnatcatcher; July 16 to January 14 for nesting raptors; and September 16 to March 14 for least Bell's vireo), or be completed using wholly chemical means. All grading permits, improvement plans, and the final map shall state the same.

Impact 8.3.2 Degraded surface water quality has the potential to be a significant impact during construction. Additionally, the use of petroleum products during construction (i.e., fuels, oils, lubricants) could potentially contaminate surface water and adversely affect biological resources on the project site.

MM 8.3.2 Potential impacts from degraded surface water quality shall be minimized to the maximum extent practicable by using Best Management Practices (BMP) for erosion/sedimentation control during construction. These BMPs may include the use of a bonded fiber matrix, straw mulch, or erosion control blankets/mats to prevent erosion, and/or the installation of items such as silt fences or fiber rolls to catch any eroded material before it can reach the on-site riparian area.

Potential impacts from equipment maintenance, staging, and dispensing of petroleum products and/or coolant during construction shall be minimized by adding or changing such products, if necessary, only within a designated construction staging area, within the fenced limits of impact and greater than 100 feet from jurisdictional waters. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable, in such a manner as to prevent any runoff from entering jurisdictional waters, and shall be shown on the project construction plans. "No fueling" zones shall be designated on construction plans. The addition or change of such products shall occur over plastic tarps, which if contaminated, shall be disposed of in a safe and legal manner. Contractor equipment shall be checked for leaks prior to operation and repaired, as necessary. Furthermore, BMPs, such as those listed above for erosion/sedimentation control, will also be used at the staging areas. Disposal or temporary placement of fill, brush, or other debris shall not be allowed in jurisdictional waters or on their banks.

- Impact 8.3.3* Human activity related to construction could result in the degradation or removal of vegetation through the creation of unauthorized trails or roads. In addition, littering could occur during the construction process. Construction lighting could be disruptive if aimed at sensitive habitat areas.
- MM 8.3.3* The construction and construction staging area limits shall be clearly delineated with orange construction fencing and silt fencing to ensure that construction activity remains within the defined limits of work. A qualified biologist shall attend a pre-construction meeting and inspect the delineated work areas prior to the initiation of vegetation clearing/grading and during regularly scheduled construction monitoring visits.
- Employees shall be required to strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint. The project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the project site. Pets of project personnel shall not be allowed on the project site.
- Potential impacts from night lighting of construction staging areas shall be minimized through the use of the lowest illumination necessary for human safety. The lights shall be selectively placed, shielded, and directed away from natural habitats.
- Impact 8.3.4* Fixed lighting poses concerns adjacent to the conserved lands (i.e., the San Luis Rey Mitigation Bank and the San Luis Rey River Park) due to the potential effects on nocturnal wildlife activities.
- MM 8.3.4* Lighting for the project adjacent to the biological preserve shall be selectively placed, shielded, and directed away from the conserved habitat to the satisfaction of the City.
- Impact 8.3.5* Non-native plant species invasion may occur as a result of invasive species in landscaping. These impacts would be considered significant if they were to affect lands in the mitigation bank and conserved lands adjacent to the project.
- MM 8.3.5* Invasive plant species listed by the California Invasive Plant Council (Cal-IPC; 2021) shall not be used in any project landscaping. The currently proposed species palette does not include invasive plant species. Prior to the initiation of project grading, a qualified biologist shall review the landscape plan to confirm that the proposed species palette remains free of invasive species.

9.0 CERTIFICATION/QUALIFICATION

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

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Appendix A

Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Status ¹
Monocots			
Poaceae	<i>Avena</i> sp.*	oats	--
	<i>Bromus madritensis</i> *	foxtail chess	--
	<i>Cynodon dactylon</i> *	Bermuda grass	--
	<i>Festuca myuros</i> *	fescue	--
	<i>Festuca perennis</i> *	Italian ryegrass	--
	<i>Hordeum</i> sp.*	barley	--
	<i>Schismus barbatus</i> *	Mediterranean grass	--
	unidentified grass*	unidentified grass (immature)	--
Dicots			
Aizoaceae	<i>Mesembryanthemum nodiflorum</i> *	slender-leaved iceplant	--
Anacardiaceae	<i>Malosma laurina</i>	laurel sumac	--
Apiaceae	<i>Conium maculatum</i> *	poison-hemlock	--
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm	--
Asteraceae	<i>Baccharis salicifolia</i>	mule fat	--
	<i>Centaurea melitensis</i> *	totalote	--
	<i>Helminthotheca echinoides</i> *	bristly ox-tongue	--
	<i>Heterotheca grandiflora</i>	telegraph weed	--
	<i>Isocoma menziesii</i>	goldenbush	--
	<i>Lactuca serriola</i> *	wild lettuce	--
	<i>Sonchus oleraceus</i> *	common sow thistle	--
	<i>Baccharis salicifolia</i>	mule fat	--
	<i>Centaurea melitensis</i> *	totalote	--
	<i>Helminthotheca echinoides</i> *	bristly ox-tongue	--
	<i>Heterotheca grandiflora</i>	telegraph weed	--
Brassicaceae	<i>Brassica nigra</i> *	black mustard	--
	<i>Hirschfeldia incana</i> *	short-pod mustard	--
	<i>Raphanus sativus</i> *	wild radish	--
	<i>Sisymbrium irio</i> *	London rocket	--
	<i>Sisymbrium orientale</i> *	hare's ear cabbage	--
Chenopodiaceae	<i>Atriplex semibaccata</i> *	Australian saltbush	--
	<i>Chenopodium murale</i> *	nettle-leaf goosefoot	--
	<i>Salsola tragus</i> *	Russian thistle	--
Crassulaceae	<i>Crassula connata</i>	pygmy-weed	--
Euphorbiaceae	<i>Ricinus communis</i> *	castor bean	--
Fabaceae	<i>Medicago polymorpha</i> *	burclover	--
Geraniaceae	<i>Erodium cicutarium</i> *	redstem filaree	--
	<i>Erodium moschatum</i> *	green-stem filaree	--
Malvaceae	<i>Malva parviflora</i> *	cheeseweed	--
Polygonaceae	<i>Rumex crispus</i> *	curly dock	--
Portulacaceae	<i>Portulaca</i> sp.*	ornamental purslane	--
Scrophulariaceae	<i>Myoporum</i> sp.*	myoporum	--

Family	Scientific Name ^{*,†}	Common Name	Status ¹
Urticaceae	<i>Urtica urens</i> [*]	dwarf nettle	--
unidentified	unidentified [*]	horticultural trees	--

* Non-native Species

† Special Status Species

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare

CRPR = 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.

Appendix B

Animal Species Observed or Detected

Taxon		Scientific Name [†]	Common Name	Status ¹
Order	Family			
INVERTEBRATES				
Hymenoptera	Apidae	<i>Apis mellifera</i>	European honeybee	--
VERTEBRATES				
Birds				
Accipitriformes	Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk	--
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna's hummingbird	--
Passeriformes	Aegithalidae	<i>Psaltriparus minimus</i>	bushtit	--
	Fringillidae	<i>Haemorhous mexicanus</i>	house finch	--
		<i>Spinus psaltria</i>	lesser goldfinch	
	Passerellidae	<i>Melospiza melodia</i>	song sparrow	--
	Tyrannidae	<i>Tyrannus vociferans</i>	Cassin's kingbird	

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare; BCC = Federal Bird of Conservation Concern; SSC = State Species of Special Concern; FP = State Fully Protected; WL = Watch List

[†] Special Status Species

Appendix C

Special Status Plant Species
Observed or with Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FT/CE CRPR 1B.1 NE Proposed Oceanside SAP Covered Species	Annual herb. Typically grows on clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found in San Diego County. Flowering period: April to June. Elevation: below 30 to 3,150 feet (10 to 960 meters).	Not Expected. Suitable clay soils not recorded in the project site, and not expected to occur given the site's history of disturbance. The coastal scrub in the northern end of the project site was previously used for agriculture, and the southern coastal sage scrub appears to have been restored after construction of State Route 76.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CRPR 1B.1 NE Proposed Oceanside SAP Covered Species	Perennial herb. Occurs on sandy loam or clay, sometimes alkaline, soils within grasslands, dry drainages, stream floodplain terraces, and vernal pool margins. Also occurs on slopes, disturbed places, and in coastal sage scrub or chaparral. Found in Riverside and San Diego Counties. Flowering period: April to October. Elevation: 65 to 1,360 feet (20 to 415 meters).	Low. This species was not observed in marginal habitat (i.e., disturbed habitat) during the general biological survey. This species is not expected to occur given the site's history of disturbance. The coastal scrub in the northern end of the project site was previously used for agriculture, and the southern coastal sage scrub appears to have been restored after construction of State Route 76. Suitable habitat was not present during previous focused surveys for this species conducted for the San Luis Rey Mitigation Bank (CADRE Environmental 2012).
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CRPR 1B.1 NE Proposed Oceanside SAP Covered Species	Perennial bulbiferous herb. Occurs in valley grasslands and coastal scrub, particularly near mima mound topography or in the vicinity of vernal pools, on clay soils. Flowering period: March to June. Elevation: below 82 to 2,821 feet (25 to 860 meters).	Not Expected. Suitable clay soils not recorded in the project site, and not expected to occur given the site's history of disturbance. The coastal scrub in the northern end of the project site was previously used for agriculture, and the southern coastal sage scrub appears to have been restored after construction of State Route 76.

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
California black walnut (<i>Juglans californica</i>)	--/-- CRPR 4.2	Perennial tree. Grows in alluvial soils within coast sage scrub, chaparral, riparian woodlands, and cismontane woodlands. Found along the southern California coast from Monterey County south to San Diego County and east into western Transverse and Peninsular Ranges, including San Jacinto and San Gabriel Mountains. Flowering period: March to August. Elevation: 165 to 2,955 feet (50 to 900 meters).	Low. This conspicuous species would have been observed during the general biological survey, if present.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	--/-- CRPR 1B.2	Perennial shrub. Occurs on dry slopes within coastal sage scrub and chaparral within southern Orange County and San Diego County. Usually, conditions are quite xeric with only limited annual growth. Flowering period: April to May. Elevation: 540 to 3,280 feet (165 to 1,000 meters).	Low. This conspicuous species would have been observed during the general biological survey, if present.
prairie false oat (<i>Sphenopholis interrupta</i> ssp. <i>californica</i>)	--/-- CRPR 1B.1	Annual grass-like herb. Thought to be extinct but rediscovered near Carlsbad in 2020. Observed on small clay lenses in dense coastal chaparral with the endangered San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>), as well as fescue (<i>Festuca</i> sp.), fascicled tarplant (<i>Deinandra fasciculata</i>), blue-eyed grass (<i>Sisyrinchium bellum</i>), mock parsley (<i>Apiastrum angustifolium</i>), purple falsebrome (<i>Brachypodium distachyon</i>), and tocalote (<i>Centaurea melitensis</i>).	Not Expected. Suitable clay soils and chaparral not recorded in the project site, and not expected to occur given the site's history of disturbance. The coastal scrub in the northern end of the project site was previously used for agriculture, and the southern coastal sage scrub appears to have been restored after construction of State Route 76.

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare; NE Narrow Endemic (Oceanside Subarea Plan)
CRPR = 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.

² 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 in 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 in the project site; **Low:** Suitable habitat is present in the project site but no sign of the species was observed during surveys, however the species cannot be excluded with certainty; **High:** Suitable habitat occurs in the project site and the species has been recorded recently on or near the project site, but was not observed during project surveys; **Present:** The species was observed during biological surveys for the project and is assumed to occupy the project site; **Presumed Absent:** Species would be visible all year and would have been observed if present.

Appendix D

Special Status Animal Species
Observed or with Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Invertebrates			
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/--	Occurs in California from western Riverside County southwards to southern San Diego County. Inhabits open and sparsely vegetated areas that contain larval host plant species (principally dot-seed plantain [<i>Plantago erecta</i>], woolly plantain [<i>Plantago patagonia</i>] but also Coulter's snapdragon [<i>Antirrhinum coulterianum</i>], Chinese houses [<i>Collinsia</i> spp.], and rigid bird's beak [<i>Cordylanthus rigidus</i>]) and nectar sources. Often found on rounded hilltops, ridgelines, and occasionally rocky outcrops. Occurs within a wide range of open-canopied habitats including vernal pools, sage scrub, chaparral, grassland, and open oak and juniper woodland communities.	Not Expected. Suitable habitat (sparsely vegetated areas with host plants) was not observed within the project site during the general biological survey. The project site occurs outside of the Quino checkerspot butterfly survey area.
Vertebrates			
Reptiles and Amphibians			
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC Proposed Oceanside SAP Covered Species	Inhabits low gradient, medium to large streams and rivers with intermittent and perennial flow in coastal and desert drainages of central and southern California. Breeding habitat specialists that require slow-moving streams composed of sandy soils with sandy streamside terraces. In some areas, may occupy first-order streams, although most populations inhabit second-sixth-order streams that have extensive braided channels and sediment deposits of sand, gravel, or pebbles that are occasionally redistributed by flooding. Utilizes shallow pools (at least 1-inch deep) for breeding, egg-laying, and tadpole development. Vulnerable to habitat destruction and alteration due to changes in hydrology, including construction of dams and water diversions, and further impacted by the presence of non-native predators such as American bullfrog (<i>Lithobates catesbeianus</i>).	Not Expected. Suitable habitat (streambed) was not observed within the project site during the general biological survey, and breeding habitat was not observed in the larger area studied for the San Luis Rey Mitigation Bank (CADRE Environmental 2012). This species is not known from the adjacent San Luis Rey Mitigation Bank (Wildlands pers. Com. 2022). Critical habitat for this species occurs within the project site.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Western spadefoot (<i>Spea hammondi</i>)	--/SSC Proposed Oceanside SAP Covered Species	Occurs from northern California southward to San Diego County, west of the Sierra Nevada at elevations below 4,500 feet. Terrestrial species requiring temporary pools for breeding. Suitable upland habitats include coastal sage scrub, chaparral, and grasslands. Most common in grasslands with vernal pools or mixed grassland-coastal sage scrub areas. Breeds in temporary pools formed by heavy rains but may also be found in riparian habitats with suitable water resources. Breeding pools must lack exotic predators such as fish, bullfrogs, and crayfish for the species to successfully reproduce. Estivates in burrows within upland habitats adjacent to potential breeding sites.	Not Expected. Suitable habitat was not observed within the project site during the general biological survey. No evidence of temporary pools was observed. A historic record from 1927 overlaps the project site; however, it is likely that this western spadefoot was observed closer to the San Luis Rey River given that this record has a one-mile accuracy.
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	--/WL Proposed Oceanside SAP Covered Species	Found within the southwestern portion of California in southern San Bernardino, western Riverside, Orange, and San Diego Counties on the western slopes of the Peninsular ranges below 3,500 feet. Suitable habitat includes coastal sage scrub, chaparral, juniper woodland, oak woodland, and grasslands along with alluvial fan scrub and riparian areas. Occurrence of the species correlated with the presence of perennial plants (such as California buckwheat, California sagebrush, black sage, or chaparral) to provide a food base for its major food source, termites.	High. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76, with marginal habitat (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]) along the northern edge of the project site. A record from 1989 occurs within half a mile of the project site. This species was not observed during the general biological survey.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	--/SSC	Occurs along the coastal region of southern California from San Luis Obispo south to San Diego County. Inhabits a wide variety of habitats, primarily in hot and dry open areas with sparse vegetation, from sea level up to 4,900 feet. Suitable habitat includes coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas with sandy or gravelly substrates.	High. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76, with marginal habitat (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]) along the northern edge of the project site. A species record occurs within 0.7 mile of the project site. This species was not observed during the general biological survey.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Coronado skink (<i>Plestiodon skiltonianus interparietalis</i>)	--/WL	Occurs in coastal and inland portions of southern San Diego County; though can occur up into Riverside County where it intergrades with Skilton's skink (<i>Plestiodon skiltonianus skiltonianus</i>). Suitable habitats include grassland, woodlands, pine forests, and chaparral, especially in open sunny areas such as clearings and edges of creeks or rivers. Prefers rocky areas near streams with lots of vegetation but can also be found in areas away from water. Occasionally seen foraging in leaf litter but more commonly found underneath surface objects, such as bark or rocks, where it lives in extensive burrows	Not Expected. Suitable habitat was not observed within the project site during the general biological survey.
Birds			
Cooper's hawk (<i>Accipiter cooperii</i>)	--/WL Proposed Oceanside SAP Covered Species	In California, the species breeds from Siskiyou County south to San Diego County and east to the Owens Valley at elevations below 9,000 feet. Inhabits forests, riparian areas, and more recently suburban and urban areas nesting within dense woodlands and forests and isolated trees in open areas.	Not Expected. Suitable habitat (trees and riparian vegetation) was not observed within the project site during the general biological survey.
Tricolored blackbird (<i>Agelaius tricolor</i>)	BCC/ST, SSC	Highly colonial, nomadic species occurring as a year-round resident of California from Sonoma County to San Diego. Common locally in the Central Valley and sporadically throughout the State. Breeds in dense colonies. Breeding habitat typically characterized by emergent freshwater marsh dominated by tall, dense cattails (<i>Typha</i> spp.) and bulrush (<i>Schoenoplectus</i> spp.), though the species also utilizes willows (<i>Salix</i> spp.), blackberries (<i>Rubus</i> spp.), thistles (<i>Cirsium</i> and <i>Centaurea</i> spp.), nettles (<i>Urtica</i> sp.), and agricultural crops. Forages in grasslands and cropland habitats adjacent to breeding areas.	Not Expected. Suitable habitat was not observed within the project site during the general biological survey. Breeding habitat that includes freshwater marsh dominated by cattails and bulrush does not occur within the project site. Grassland and cropland for foraging also does not occur within the project site.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/WL Proposed Oceanside SAP Covered Species	Year-round resident of southwestern California occurring from Santa Barbara County south to San Diego County at elevations below 5,000 feet. Generally found on moderate to steep slopes vegetated with grassland, coastal sage scrub, and chaparral. Prefer areas with California sagebrush (<i>Artemisia californica</i>). Generally absent from areas with dense stands of coastal sage scrub or chaparral. May occur on steep grassy slopes without shrubs if rock outcrops are present.	Low. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76; however, this species was not observed during the general biological survey. The nearest record of this species is approximately 0.5 mile to the southeast.
Grasshopper sparrow (<i>Ammodramus savannarum parpallidus</i>)	--/SSC	Occurs west of the Cascade and Sierra Nevada Ranges from Mendocino County south to San Diego County at elevations below 5,000 feet. Prefers moderately open grasslands and prairies with scattered shrubs, generally avoiding grasslands with extensive shrub cover.	Not Expected. Suitable habitat (grassland) was not observed within the project site during the general biological survey.
Long eared owl (<i>Asio otus</i>)	--/SSC	Occurs throughout California, particularly in the Central Valley and southern California deserts. Found in dense riparian habitats and oak woodlands adjacent to open foraging areas. Typically nests in abandoned raptor nests in willows and oaks, and atop woodrat nests and accumulations of debris trapped in the crotches of large oaks. Winters in communal roosts in dense willow thickets, tamarisk groves, palo verde, and conifers.	Not Expected. Suitable habitat (dense trees and riparian habitat) was not observed within the project site during the general biological survey.
Western burrowing owl (<i>Athene cunicularia hypugaea</i>)	BCC/SSC	Found from central California east to the Mojave Desert and south to coastal San Diego County. Primarily a grassland species that prefers areas with level to gentle topography and well-drained soils. Also occupies agricultural areas, vacant lots, and pastures. Requires underground burrows for nesting and roosting that are typically dug by other species such as the California ground squirrel (<i>Spermophilus beecheyi</i>). Will also utilize natural rock cavities, debris piles, culverts, and pipes for nesting and roosting.	Low. Marginally suitable habitat, consisting of the lesser used eastern side of the project site; however, western burrowing owl, California ground squirrel, and suitable burrows were not observed during the general biological survey. The nearest record of this species is approximately 12.8 miles to the southeast.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Northern harrier (<i>Circus cyaneus hudsonius</i>)	--/SSC	Occurs as a year-round resident in California. Inhabits open areas including wetlands, marshes, marshy meadows, grasslands, riparian woodlands, desert scrub, and pastures and agricultural areas. Breeding populations in southern California from Ventura County to San Diego County are highly fragmented with many local populations extirpated mostly likely as a result of habitat loss and degradation. Nests on the ground in wetlands and uplands within patches of dense, often tall, vegetation in undisturbed areas.	Not Expected. Suitable habitat (tall dense vegetation for breeding) was not observed within the project site during the general biological survey. Foraging could occur in marginal disturbed habitat.
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, BCC/SE	Uncommon summer resident of California. Current breeding range is restricted to isolated sites in Sacramento, Amargosa, Kern, Santa Ana, and Colorado River Valleys. Riparian obligates that nest in riparian woodlands with native broadleaf trees and shrubs, such as cottonwoods (<i>Populus</i> spp.) and willows at least 50 acres or more in size within arid to semiarid landscapes. Most likely found in patches of riparian habitat greater than 200 acres.	Not Expected. Suitable riparian woodland habitat was not observed within the project site during the general biological survey.
White-tailed kite (<i>Elanus leucurus</i>)	--/FP	Year-long resident of California residing along the coasts and valleys west of the Sierra Nevada foothills and southeast deserts, though the species has also been documented breeding in arid regions east of the Sierra Nevada and within Imperial County. Inhabits low elevation grasslands, wetlands, oak woodlands, open woodlands, and is associated with agricultural areas. Breeds in riparian areas adjacent to open spaces nesting isolate trees or relatively large stands.	Not Expected. Suitable habitat (including riparian areas for breeding) was not observed within the project site during the general biological survey. Foraging could occur in marginal disturbed habitat.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/SE Proposed Oceanside SAP Covered Species	Breeds in southern California, Arizona, New Mexico, southwestern Colorado, and extreme southern portions of Nevada and Utah. Riparian obligates that breed in relatively dense riparian habitats along rivers, streams, or other wetlands where surface water is present, or soils are very saturated. Breeding habitat can consist of monotypic stands of willows (<i>Salix</i> spp.), a mixture of native broadleaf trees and shrubs, monotypic stands of exotics such as tamarisk (<i>Tamarix</i> spp.) or Russian olive (<i>Elaeagnus angustifolia</i>), or mixture of native broadleaf trees and shrubs with exotics. Restricted in San Diego County to two modest colonies at San Luis Rey River and Santa Margarita River, with a few scattered pairs.	Not Expected. Suitable habitat (including trees and shrubs for breeding) was not observed within the project site during the general biological survey.
Yellow-breasted chat (<i>Icteria virens</i>)	--/SSC Proposed Oceanside SAP Covered Species	Occurs throughout North America from Canada south to Baja California and Mexico. Breeds from southern British Columbia south to Baja California and winters in southern Baja California and south Texas south to Mexico and Panama. In California, the species occurs as a migrant and summer resident breeding from the coastal regions in northern California, east of the Cascades, and throughout the central and southern portions of the State. Breeds in early successional riparian habitats with well-developed shrub layer and an open canopy nesting on the borders of streams, creeks, rivers, and marshes.	Not Expected. Suitable riparian habitat was not observed within the project site during the general biological survey.
White-faced ibis (<i>Plegadis chihi</i>)	--/WL Proposed Oceanside SAP Covered Species	Uncommon summer resident in sections of southern California and a rare visitor in the Central Valley. Local wintering visitor along coast. Prefers to feed in fresh emergent wetlands, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland. In San Diego County, two nesting colonies documented at Guajome Lake and at a pond along the San Luis Rey located near Keys Canyon (southwest of the I-15 and SR-76 intersection).	Not Expected. Suitable habitat (emergent wetland vegetation for breeding, and wet areas) was not observed within the project site during the general biological survey.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT/SSC Proposed Oceanside SAP Covered Species	Year-round resident of California occurring from Ventura County south to San Diego County, and east to the western portions of San Bernardino and Riverside Counties. Typically occur in arid, open sage scrub habitats on gently slopes hillsides to relatively flat areas at elevations below 3,000 feet. The composition of sage scrub in which gnatcatchers are found varies; however, California sagebrush is at least present as dominant or co-dominant species. The species is mostly absent from areas dominated by black sage, white sage, or lemonadeberry, though the species may occur more regularly in inland regions dominated by black sage.	High. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76, with marginal habitat (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]) along the northern edge of the project site. The nearest record of this species is approximately 0.2 mile to the west at Mission Vista High School. Critical habitat for this species occurs within the project site; however, no suitable habitat for gnatcatcher occurs within this critical habitat.
Light-footed ridgeway's rail (<i>Rallus obsoletus levipes</i> , formerly <i>Rallus longirostris levipes</i>)	FE/SE, FP Proposed Oceanside SAP Covered Species	One of six recognized subspecies occurring as a resident in coastal salt marshes and lagoons from Santa Barbara County south to Baja California. The species is found primarily in tall, dense cordgrass (<i>Spartina foliosa</i>) and occasionally pickleweed (<i>Salicornia pacifica</i>) in the low marsh zone. Also found in freshwater marshes in winter.	Not Expected. Suitable marsh and lagoon habitat was not observed within the project site during the general biological survey.
Yellow warbler (<i>Setophaga petechia</i>)	BCC/SSC	Common to locally abundant species breeding throughout California at elevations below 8,500 feet, excluding most of the Mojave Desert, and all of the Colorado Desert. Breeds in riparian areas dominated by willows (<i>Salix</i> spp.) and cottonwoods (<i>Populus</i> spp.), near rivers, streams, lakes, and wet meadows. Also breeds in montane shrub and conifer forests in higher elevation areas.	Not Expected. Suitable riparian and forest habitat was not observed within the project site during the general biological survey.
California least tern (<i>Sternula antillarum browni</i>)	FE/SE, FP Proposed Oceanside SAP Covered Species	Occurs locally along California coastal regions breeding in colonies from San Francisco Bay south to San Diego County. Wintering areas in unknown areas of South America. Nests on relatively bare or sparsely vegetation beaches and mudflats near water. Forage in the bays and estuaries near their colonies, on the ocean near shore, and at inland lakes in the coastal lowland.	Not Expected. Suitable beaches and mudflats were not observed within the project site during the general biological survey. The project site is situated inland lacking suitable coastal and nesting habitats where the species is most commonly found.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE Proposed Oceanside SAP Covered Species	Breeds within California and northern Baja California, wintering in southern Baja California. In California, breeds along the coast and western edge of the Mojave Desert from Santa Barbara County south to San Diego County, and east to Inyo County, San Bernardino, and Riverside Counties. Breeding habitat consists of early to mid-successional riparian habitat, often where flowing water is present, but also found in dry watercourses within the desert. A structurally diverse canopy and dense shrub cover is required for nesting and foraging. Dominant species within breeding habitat includes cottonwood and willows with mule fat, oaks, and sycamore, and mesquite (<i>Prosopis glandulosa</i>) and arrowweed (<i>Pluchea sericea</i>) within desert habitats. The species can be tolerant of the presence of non-native species such as tamarisk.	Not Expected. Suitable riparian habitat and watercourses were not observed within the project site during the general biological survey, but species known to occur in the San Luis Rey Mitigation Bank to the north (Figure 6). Critical habitat for this species occurs within the project site.
Mammals			
Pallid bat (<i>Antrozous pallidus</i>)	--/SSC	Locally commonly found at low elevations in California. Associated with arid and open habitats including grasslands, shrublands, woodlands, and forests, often with open water nearby. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts in caves, crevices, mines, and occasionally hollow trees and buildings. Appears to be intolerant of most human disturbances, being mostly absent from urban and suburban areas.	Not Expected. Suitable habitat was not observed within the project site during the general biological survey (including suitable roosting locations above the ground on vertical cliffs, rock outcrops, caves, or tall buildings). Human disturbance also likely to deter this species.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	--/SSC	Occurs in the foothills and mountains of San Diego County, although can also be found on the upper portions of mountain slopes extending into the desert regions. Ranges from the coastal regions (Oceanside to Del Mar, and possibly south to the Tijuana River Valley), eastwards to the Palomar and Cuyamaca Mountains, and extends to the desert slopes of San Felipe Valley, Cigarette Hills, and McCain Valley. Prefers gravelly substrates with sun exposure and can be found within open to dense vegetation. Inhabits chaparral habitats, but occurs within coastal sage scrub, oak woodland, and at the edge of grasslands.	Low. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76, and marginal habitat (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]) occurs along the northern edge of the project site. Nearest record of this species is approximately 5.2 miles to the northwest.
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	--/SSC Proposed Oceanside SAP Covered Species	Occurs throughout southwestern California from western Riverside County to northern Baja California at elevations below 6,000 feet. Inhabits coastal sage scrub, grasslands, and chaparral communities, and generally exhibits a strong microhabitat affinity for moderately gravelly and rocky substrates. Forage for seeds from California sagebrush, California buckwheat, lemonade berry, and grasses under shrub and tree canopies, or around rock crevices.	Low. Suitable habitat (Diegan coastal sage scrub) occurs within the project site along State Route 76, and marginal habitat (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]) occurs along the northern edge of the project site. Nearest record of this species is approximately 7.2 miles to the north.
Stephen's kangaroo rat (<i>Dipodomys stephensi</i>)	FE/ST Proposed Oceanside SAP Covered Species	Occurs in southern California within the San Jacinto Valley, western Riverside County, and southwestern San Bernardino County, and northwestern San Diego county at elevations between 180 to 4,100 feet. Inhabits native to open grasslands and sparse coastal sage scrub (less than 30 percent cover) on relatively flat or gently sloping ground with loose, friable, well-drained soil. Dominant species include native and non-native herbaceous species such as filaree (<i>Erodium</i> spp.), non-native grasses (<i>Bromus</i> spp.), California sagebrush, and California buckwheat.	Low. Marginally suitable habitat (dense Diegan coastal sage scrub) occurs within the project site along State Route 76, and along the northern edge of the project site (comprised of sparse goldenbush [<i>Isocoma menziesii</i>]). Nearest record of this species is approximately 0.5 miles to the north, to the north of the San Luis Rey River, but is assumed extirpated (last documented in 1988). A population was recorded approximately 0.9 mile to the southwest in 1988.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Western mastiff bat (<i>Eumops perotis californicus</i>)	--/SSC	In California, occurs from Monterey County to San Diego County from the coast eastward to the Colorado Desert. Found in open, semi-arid to arid habitats including coastal and desert scrub, grasslands, woodlands, and palm oases. Prefers to roost in high situations above the ground on vertical cliffs, rock quarries, outcrops of fractured boulders, and occasionally tall buildings.	Not Expected. Suitable roosting habitat was not observed within the project site during the general biological survey, although marginal coastal scrub and Diegan coastal scrub habitats are present
Western red bat (<i>Lasiurus blossevillii</i>)	--/SSC	In California, locally common occurring from Shasta County south to San Diego County and west of the Cascade and Sierra Nevada Ranges and deserts. Mainly occurs in riparian woodlands populated by willows, cottonwoods, sycamores, and oak trees but can be found in non-native vegetation such as tamarisk, eucalyptus, and orchards. Primarily roosts in trees preferring heavily shaded areas which are open underneath.	Not Expected. Suitable riparian habitat and trees were not observed within the project site during the general biological survey.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC	Rare in California occurring from Los Angeles County east to San Bernardino County and south to San Diego County. Closely associated with their preferred roosting habitats consisting of vertical cliffs, quarries, and rocky outcrops. Sometimes roosts under tiled roofs and observed utilizing bat boxes. Habitat generalists foraging in grasslands, shrublands, riparian areas, oak woodlands, forests, meadows, and ponds favoring larger water bodies for drinking.	Not Expected. Suitable roosting habitat was not observed within the project site during the general biological survey, although marginal coastal scrub and Diegan coastal scrub habitats are present for foraging.

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare; BCC = Federal Bird of Conservation Concern; SSC = State Species of Special Concern; FP = State Fully Protected; WL = Watch List; NE Narrow Endemic (Oceanside Subarea Plan)

² Potential to Occur is assessed as follows. **None:** Species is so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur in 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 in the project site; **Low:** Suitable habitat is present in the project site but no sign of the species was observed during surveys, however the species cannot be excluded with certainty; **High:** Suitable habitat occurs in the project site and the species has been recorded recently on or near the project site, but was not observed during project surveys; **Present:** The species was observed during biological surveys for the project and is assumed to occupy the project site