

April 21, 2026

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Taylor Leseth
Caprock Partners
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Newport Beach, CA 92660

Subject: Biological Letter Report for the Mission San Marcos Industrial Park Project, City of San Marcos, San Diego County (SDP22-0009)

Dear Taylor Leseth:

Caprock Partners (Applicant) contracted HELIX Environmental Planning, Inc. (HELIX) to prepare this biological resources letter report for the Mission San Marcos Industrial Park Project (project) in the City of San Marcos, San Diego, California. The 10.8-acre project site (project site) is located within Assessor's Parcel Number (APN) 220-210-26-00 and is dominated by existing developed land, Diegan coastal sage scrub, and disturbed land. The proposed project would develop 8.44 acres of the site. Additionally, 0.1 acre of off-site impacts associated with storm drain improvements would occur northeast of the project boundary. The purpose of this report is to document the existing biological resources within the project, analyze potential impacts to sensitive biological resources, and provide practicable mitigation measures with respect to local, state, and federal policy. This letter report provides the technical documentation necessary for review under the California Environmental Quality Act (CEQA) by the City of San Marcos Development Services Department.

INTRODUCTION

Project Description

The project proposes the demolition of two existing structures and the development of three warehouse buildings on the project site. The proposed project involves the development of three warehouse buildings totaling 132,810 square feet (sf). Building 1 is proposed in the southwestern portion of the project site and would include 54,700 sf of warehouse space and 5,000 sf of ancillary office space over two stories. Six loading docks would be provided at the northeastern corner of Building 1. Building 2 is proposed at the southeastern side of the project site and would comprise 33,610 sf of warehouse space and 5,000 sf of ancillary office space over two stories. Five loading docks for Building 2 would be located at the northwestern corner of the building, opposite those proposed for Building 1. Building 3 would include 30,500 sf of warehouse space and 4,000 sf of ancillary office space over two

stories, located in the northeastern portion of the project site. Three loading docks would be provided at the southwestern corner of Building 3.

The project also includes approximately 0.1 acre of off-site area adjacent to the northeastern boundary of the project site for storm drain improvements associated with the project. For the purposes of this report, the project site and the off-site area are collectively referred to as the study area.

Location

The project is in the City of San Marcos (City) in northwestern San Diego County (Figure 1, *Regional Location*). The project is located north of State Route 78 and approximately one-half mile northwest of the intersection of East Mission Road and Woodland Parkway within unsectioned lands of the Los Vallecitos land grant, on the U.S. Geological Survey (USGS) 7.5' San Marcos quadrangle (Figure 2, *USGS Topography*). The approximately 10.9-acre study area is bordered by East Mission Road on the south, Mulberry Drive to the east, and Falcon Place to the west (Figure 3, *Aerial Photograph*).

ENVIRONMENTAL SETTING

The study area primarily consists of developed and disturbed land. Developed land is located in the southern and eastern portions of the project site and the off-site area, while the northwest corner of the project site is undeveloped and separated from the developed portion by a chain link fence. The study area is surrounded by commercial and residential development, except the northwest corner, which connects the undeveloped land to a larger undeveloped area (Figure 3). The study area is generally flat, with the undeveloped portion of the project site consisting of a gentle southeast-facing slope. Elevation ranges from 600 to 650 feet above mean sea level. Soils found on the study area are Escondido very fine sandy loam and Huerhuero loam (Figure 4, *Soils*).

No aquatic resources occur within the project site; however, the northeast and eastern portions of the project site are subject to temporary flooding during heavy rain events due to the presence of a large, double-culvert outfall immediately north of the site that directs storm flows into an undersized culvert below the site, causing overtopping of storm water onto the site. The runoff volume is further exacerbated by a third storm drain outfall coming into this area from the west behind the retaining wall that abuts the residential development to the north, as well as a brow ditch outfall. The project's proposed off-site storm drain improvements are intended to address this issue.

The project site, including the off-site area, is located outside of the Multi-Habitat Planning Area and does not occur within any designated critical habitat (Figure 5, *Regional Context*).

SURVEY METHODS

Before conducting the initial biological field surveys, HELIX conducted a search of sensitive species databases for information regarding special-status species known to occur within the vicinity of the project site, including the U.S. Fish and Wildlife Service (USFWS) species records (USFWS 2024), Information for Planning and Consulting database (IPaC; USFWS 2024), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDb; CDFW 2024), and California Native Plant Society (CNPS) Electronic Inventory (CNPS 2024). Aerial imagery, topographic maps, soils maps (U.S. Department of Agriculture [USDA] 2024), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

Nomenclature used in this report follows the Jepson Flora Project (2024) for plants with vegetation community classification information from Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) and Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions (Oberbauer 2008). Animal nomenclature follows the North American Butterfly Association (NABA) for butterflies (NABA 2020), the Society for the Study of Amphibians and Reptiles (SSAR) for reptiles and amphibians (SSAR 2024), the American Ornithological Society (AOS) for birds (AOS 2024), and Bradley et al. (2014) for mammals. Sensitive plant and animal status are from the CDFW (CDFW 2024a and 2024b), CNPS (2024), and City (2001).

General Biological Survey

HELIX biologist Mandy Mathews conducted a general biological survey of the study area (and immediate surrounding areas) on December 1, 2023. Vegetation communities were classified and mapped in accordance with Holland (1986) and Oberbauer (1996). Survey mapping utilized a 1-inch = 50-foot scale aerial map with an overlay of the project site and previous resource mapping. A Global Positioning System (GPS) unit 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 project site was prepared (Attachment A, *Plants Observed*; Attachment B, *Animal Species Observed or Detected*). Plant species were identified in the field or later in the laboratory with the aid of voucher specimens. Animals were identified in the field by direct visual observation with the aid of binoculars or indirectly by detection of calls, tracks, burrows, or scat.

Jurisdictional Delineation

HELIX conducted a jurisdictional delineation within the proposed impact area on February 14, 2024, to identify and map areas under potential U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (33 USC 1344), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the Clean Water Act, and CDFW jurisdiction pursuant to Section 1600 of the California Fish and Game (CFG) Code.

Potential USACE wetland 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 the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Areas were determined to be potential non-wetland Waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank), but either the vegetation or soils criterion was not met. Jurisdictional limits for these areas were defined by the ordinary high water mark (OHWM), 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."

Potential RWQCB jurisdictional extents were based on the USACE delineation above and the State Wetland Definition and Procedures (State Water Resources Control Board [SWRCB] 2019). 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.

Focused Species Survey - Coastal California Gnatcatcher

In support of the project, protocol-level surveys were conducted for coastal California gnatcatcher (*Polioptila californica californica*). The survey consisted of six visits that were performed by HELIX biologist Mandy Mathews (ES-778195-15) between April 12 and May 20, 2024, in accordance with the current USFWS protocol (USFWS 1997). The visits were conducted at least seven days apart, between 6 a.m. and 12 p.m., pursuant to survey protocol. The project is located outside of the Natural Communities Conservation Plan program. For non-participating areas, the USFWS requires that a minimum of six surveys be conducted, at least one week apart, during the breeding season (March 15 and June 30) or a minimum of nine surveys be conducted, at least two weeks apart, during the non-breeding season (July 1 and March 14). The survey area encompassed approximately 3.1 acres of potential CAGN habitat within the proposed project site and within 300 feet from the project site.

VEGETATION COMMUNITIES/LAND COVER TYPES

Three vegetation communities or land cover types occur within the study area: Diegan coastal sage scrub (including disturbed), disturbed habitat, and developed land (Table 1, *Existing Vegetation and Habitat Groups*; Figure 6, *Vegetation Communities/Land Cover Types*). A brief description of each vegetation community and land use mapped on the study area is provided below. The Oberbauer Element Codes are provided in parentheses next to each community name.

Table 1
EXISTING VEGETATION AND HABITAT GROUPS

Vegetation Community	Multiple Habitat Conservation Program (MHCP) Habitat Group	Project site (acres)	Off-site Improvements (acres)
Upland			
Diegan coastal sage scrub (32500)	C	1.8	--
Diegan coastal sage scrub – disturbed (32500)	C	1.3	--
Disturbed habitat (11300)	F	0.7	--
Developed (12000)	F	7.0	0.1
Upland Subtotal		10.8	0.1
TOTAL		10.8	0.1

¹ Acres rounded to the nearest 0.01 acre.

Diegan Coastal Sage Scrub (Including Disturbed; 32500)

Diegan coastal sage scrub may be dominated by a variety of species depending on soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*). Disturbed Diegan coastal sage scrub contains many of the same shrub species as undisturbed Diegan coastal sage scrub but has a higher proportion (above 25 percent) of non-native species. Within the project site, Diegan coastal sage scrub is dominated by California sagebrush, California buckwheat, and black sage. Disturbed Diegan coastal sage scrub within the north-central and northwestern portions of the project site is dominated by shortpod mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), California sagebrush, and California buckwheat, and coyote brush (*Baccharis pilularis*), cheeseweed (*Malva parviflora*), and bristly ox-tongue (*Helminthotheca echioides*) in the northeast corner of the site. Approximately 1.8 acres of Diegan coastal sage scrub and 1.3 acres of disturbed Diegan coastal sage scrub occur within the project site.

Disturbed Habitat (11300)

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. Disturbed habitat within the project site is dominated by shortpod mustard, tocalote, cheeseweed, bristly ox-tongue, and stinkwort (*Dittrichia graveolens*) and is found along the northeastern and western perimeter of the project site. Multiple mature non-native trees occur within disturbed habitat as well, including sweetgum (*Liquidambar styraciflua*), jacaranda (*Jacaranda mimosifolia*), Chinese flame tree (*Koelreuteria bipinnata*), Tasmanian blue gum (*Eucalyptus globulus*), and Peruvian pepper (*Schinus molle*). Approximately 0.7 acre of disturbed habitat occurs within the project site.

Urban/Developed Land (12000)

Urban/developed land includes areas that have been constructed upon or otherwise covered with a permanent, unnatural surface and may include, for example, structures, pavement, irrigated landscaping, or hardscape to the extent that no natural land is evident. These areas no longer support native or naturalized vegetation. Urban/developed land in the study area consists of two structures, their associated paved parking areas, a dirt lot, and an off-site storm drain immediately adjacent to the northeast corner of the project site. Approximately 7.1 acres (7.0 acres on-site and 0.1 acre off-site) of developed land occurs in the study area.

AQUATIC RESOURCES

No aquatic resources were identified during the jurisdictional delineation conducted on February 14, 2024. Temporary flooding of portions of the site occurs during heavy rainfall events, such as the large storms occurring in San Diego in December 2023, and January and February 2024; however, the flooding is due to inadequate stormwater infrastructure and has not resulted in the formation of wetland habitat or other potentially jurisdictional features. All stormwater runoff is intended to be carried below the site in an existing pipe that runs from the northern to the southern property boundary and then off-site into the municipal stormwater system. This single culvert is undersized for the amount of runoff directed toward the site in a large storm event, which includes runoff from two large culverts that outfall

approximately 25 feet north of the site, a third storm drain outfall coming into this area from the west behind the retaining wall that abuts the residential development to the north, as well as brow ditch flows that come in from the north and east. Runoff and storm flows from all these sources outfall within a small, constrained area immediately north of the site and are directed to the smaller culvert under the site. When the volume of runoff is too high for the culvert, the flows overtop onto the project site, resulting in temporary flooding and ponding of stormwater flows. The project's proposed off-site storm drain improvements are intended to address this issue.

SPECIAL-STATUS SPECIES

Special-Status Plant Species

Special-status plant species have been afforded special status and/or recognition by the USFWS and/or CDFW. They may also be included in the CNPS Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. Sensitive species are those considered unusual or limited in that they are: (1) only found in the region; (2) a local representative of a species or association of species not otherwise found in the region; or (3) severely depleted within their ranges or the region.

Special-Status Plant Species Observed

No special-status plant species were observed during the 2023 general biological survey.

Special-Status Plant Species with Potential to Occur

A search of CNPS and CNDDDB records (a two-mile radius from the project site), along with CalFlora data, was used to develop a matrix of sensitive plant species that may have the potential to occur on the project site due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). The matrix is presented in Attachment C, *Special-Status Plant Species Observed or with Potential to Occur*, and includes 32 special-status plant species, favorable habitat conditions, and potential to occur on the project site. No special-status plant species were found to have moderate or high potential to occur within the project site.

Special-Status Animal Species

Special-status animal species include those that have been afforded special status and/or recognition by the USFWS and/or CDFW. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

Special-Status Animal Species Observed or Otherwise Detected

Coastal California gnatcatcher was detected during protocol-level surveys conducted in 2024. Further information can be found in Attachment D, *2024 Coastal California Gnatcatcher (*Polioptila californica californica*) Survey Report for the Mission San Marcos Industrial Park Project*.

Coastal California gnatcatcher (*Polioptila californica californica*)

Status: FT/SSC; MSCP Covered

Distribution: In San Diego County, occurs throughout coastal lowlands.

Habitat(s): Coastal sage scrub.

Status on-site: Although coastal California gnatcatcher was not observed within the project site during the general biological survey, the Diegan coastal sage scrub on-site is considered suitable habitat for the species. Protocol surveys were conducted during spring 2024 and results were positive, with one coastal California gnatcatcher observed along the northern edge of the property line.

Special-Status Animal Species with Potential to Occur

A search of CNDDDB and USFWS records (a two-mile radius from the project site) was used to develop a matrix of sensitive animal species that may have the potential to occur on-site due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, geographic range, etc.). The matrix is presented in Attachment E, *Special-Status Animal Species Observed or with Potential to Occur*, and includes 20 special-status animal species, preferred habitat conditions, and potential to occur on-site. One special-status animal species was found to have moderate potential to occur within the project site: Crotch's bumble bee (*Bombus crotchii*) due to the presence of suitable habitat (Diegan coastal sage scrub). No other animal species were found to have moderate or high potential to occur within the project site.

Crotch's bumble bee (*Bombus crotchii*)

Status: --/State Candidate Endangered

Distribution: Southwestern California from the Central Valley south to the U.S./Mexico border.

Habitat: Inhabits open grassland and scrub habitats near the coast. Primarily nests underground, generally in abandoned rodent nests. Forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. Most commonly observed on flowering species in the Fabaceae, Asteraceae, and Lamiaceae families. Occurrence has also been linked to habitats containing *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, *Salvia*, *Antirrhinum*, *Clarkia*, *Dendromecon*, *Eschscholzia*, *Eriogonum*, *Cirsium*, *Acmispon*, *Euthamia*, *Ehrenborferia*, and *Trichostema* genera.

Status on-site: Suitable coastal sage scrub habitat and a variety of food sources to support this species are present in both the impact and mitigation areas. The nearest known occurrence is from 2020, approximately 2.9 miles southwest of the site.

WILDLIFE CORRIDORS AND LINKAGES

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

Important corridors and linkages have been identified on a local and regional scale throughout the Multiple Habitat Conservation Program (MHCP; AMEC Earth & Environmental et al. 2003) and adopted by the City of San Marcos General Plan (City 2012). The planning objectives of most corridors and linkages in western San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

The study area is not identified as a wildlife corridor in the City of San Marcos General Plan. The study area is adjacent to MHCP preserve lands along the northwestern boundary, but a chain link fence currently restricts access to and from the preserve, and no point of access is proposed for the Project. In addition, this preserved patch of Diegan coastal sage scrub occurs between developed areas and has limited functions as a regional movement corridor due to the small size and the presence of residential and commercial development immediately adjacent to the Project site.

In summary, given that the study area is located immediately adjacent to and surrounded by existing roadways and development and the urban setting, the project site is not considered to serve as a wildlife corridor or habitat linkage for the region.

REGULATORY FRAMEWORK

Biological resources in the study area are subject to regulatory review by federal, state, and local agencies. Under CEQA, impacts associated with a proposed project are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the City) pursuant to CEQA Guidelines. Biological resources-related laws and regulations that apply include the federal Migratory Bird Treaty Act (MBTA), CEQA, California Fish and Game (CFG) Code, and the City's General Plan. The Draft San Marcos Multiple Habitat Conservation Plan (SMMHCP) has not yet been approved or adopted; however, it is considered a policy document to guide development in the City.

The City is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances. During CEQA review, the City will be responsible for reviewing project issues per the General Plan and conservation planning related to the guidelines of the Draft SMMHCP.

Federal

Federal Endangered Species Act

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

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The goal is to restore healthy populations of listed species within their native habitats, so they can be removed from the list of threatened or endangered species. Once an area is designated as critical

habitat, pursuant to the FESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat. No critical habitat for any species occurs within the study area. The nearest critical habitats are for the coastal California gnatcatcher, approximately 1.3 miles south, and San Diego fairy shrimp (*Branchinecta sandiegonensis*), approximately 1.3 miles southwest.

Migratory Bird Treaty Act

All migratory bird species native to the United States and its territories are protected under the Migratory Bird Treaty Act (MBTA), as amended. The MBTA mandates protection for eggs and chicks of all migratory bird species but does not stipulate specific protection measures. In common practice, the MBTA is used to place restrictions on the disturbance of active bird nests, including raptors, during the nesting season (generally February through September).

Clean Water Act and Rivers and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. is overseen by the USACE under Section 404 of the CWA. Most development projects are permitted using an Individual Permit or Nationwide Permit. CWA Section 404 permits require Water Quality Certification by the RWQCB pursuant to CWA Section 401.

State of California

California Environmental Quality Act

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

California Endangered Species Act

The California Endangered Species Act (CESA) established that it is State policy to conserve, protect, restore, and enhance State endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may “take” plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit 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.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates the collection, transport, and commerce of plants that are listed. The CESA follows the NPPA and covers both plants and animals determined to be endangered or threatened with extinction. Plants listed as rare under the NPPA are also designated as rare under the CESA.

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

The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by a species' listing 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. The City does not yet have an NCCP plan adopted; the SMMHCP Subarea Plan is still in draft form and has been since 2001 (City 2001). The MHCP was adopted in 2003 and included the City of San Marcos; because the Subarea Plan has not been adopted, the MHCP is advisory only for guidance.

City of San Marcos

General Plan

The Conservation and Open Space Element of the City's General Plan (City 2012) provides the following policies that are applicable to the study area as they relate to the preservation of open space that may be beneficial to encourage the protection and preservation of environmentally sensitive species and their habitats.

Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.

- Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.
- Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintains the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats policy.
- Policy COS-1.3: Continue to work with other federal, State, regional, and local agencies to implement the MHCP.

Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.

- Policy COS-2.1: Provide and protect open space areas throughout the City for recreational, agricultural, safety, and environmental value.
- Policy COS-2.2: Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.
- Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.

- Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.

- Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

Goal COS-8: Focus watershed protection and surface and groundwater quality management on sources and practices that the City has the ability to affect.

- Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, Best Management Practices (BMPs), low impact development (LID), hydromodification strategies consistent with the Current San Diego Regional Water Quality Control Board Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, and all future municipal stormwater permits.

Multiple Habitat Conservation Program

The MHCP Subregional Plan for the northwestern portion of San Diego County encompasses the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista (AMEC 2003). Each of the seven jurisdictions within the MHCP planning area is required to implement their respective portion of the MHCP via city-wide subarea plans if they are to participate and benefit from take authorization provided through the MHCP.

A draft MHCP San Marcos Subarea Plan was prepared in 2001, and, although it has not yet been approved by the USFWS and CDFW, the plan is being used as a policy document to guide development and open space design within the City. The intent of the SMMHCP Subarea Plan is to identify a City-wide preserve system that meets local and regional biological goals while minimizing fiscal and economic effects to the City and adverse effects on private property owners. The project site is not located within MHCP or SMMHCP, Hardline Preserve, or Focused Planning Area (FPA; Figure 5).

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

An analysis of project effects and proposed mitigation measures is presented below in accordance with CEQA Guidelines, the City's General Plan (City 2012), and the Draft SMMHCP (City 2001).

Issue 1 – Sensitive Species

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

Issue 1 Impact Analysis

Less than Significant - Sensitive Plant Species. Two low-sensitivity species, paniculate tarplant (*Deinandra paniculata*) and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), have the potential to occur within the study area. Paniculate tarplant and Robinson's pepper-grass are species (CNPS CRPR 4.2 and 4.3, respectively) that are not proposed for coverage by the MHCP and are relatively widespread locally and regionally. Impacts to plant species with a CNPS CRPR 2 or lower are considered potentially significant. Because paniculate tarplant and Robinson's pepper-grass have CRPR of 4.2 and

4.3, respectively, impacts to this species are not expected to jeopardize its sensitivity status or long-term survival in the region. Within the project site, impacts to the habitat that these species would potentially be present in are minimal (0.9 acre). Moreover, the project will be mitigating coastal sage scrub habitat, which would cover any potential impacts to the species. Therefore, project impacts to this species would be less than significant and would not require mitigation.

Less than Significant Impact with Mitigation - Sensitive Animal Species. The project would result in potentially significant impacts to sensitive animal species. Specifically, the project would directly impact suitable habitat for coastal California gnatcatcher and Crotch's bumble bee. In addition, potentially direct and indirect impacts to coastal California gnatcatcher nesting could also occur. Potential indirect impacts to birds nesting adjacent to the project construction could also occur. Potential direct and indirect impacts to each of these species, as well as nesting birds, are discussed below. These potential impacts would be reduced to less than significant levels through the implementation of mitigation measures **BIO-1**, **BIO-2**, and **BIO-3**.

Nesting Birds

The project site contains trees, shrubs, and other vegetation that provide suitable nesting habitat for common birds, including raptors, protected under the MBTA and CFG Code. Construction of the proposed project includes vegetation clearing, which could result in direct impacts to nesting birds. These potential impacts to nesting birds would be in violation of the MBTA and CFG Code and would be significant if the activities would impact the nesting of candidate, sensitive, or special-status species. Additionally, construction activities could result in indirect impacts through disturbance to nesting from noise, vibration, dust, and physical presence/activity.

Mitigation measure **BIO-1** below would require pre-construction surveys for coastal California gnatcatcher, nesting birds, and raptors to ensure that the appropriate avoidance measures are implemented before and during construction to avoid impacts to nesting. Mitigation measure **BIO-2** requires compensatory mitigation for impacts to occupied coastal California gnatcatcher habitat and consultation with the USFWS for take authorization for coastal California gnatcatcher. With the implementation of mitigation measures **BIO-1** and **BIO-2**, impacts to listed and sensitive species would be reduced to a level less than significant.

Crotch's Bumble Bee

Crotch's bumble bee, a State Candidate Endangered species, was identified as having moderate potential to occur in the project site due to the food sources present and potential rodent holes for nesting, although the nearest recorded occurrence is nearly three miles away and from four years ago. There would be a potential for direct impacts to individuals if project construction occurred during the Crotch's bumble bee flight season (February 1 through October 31); however, implementation of mitigation measure **BIO-3** would ensure that no direct impacts occur to Crotch's bumble bee during project construction. The project's potential impact to this species would be considered less than significant with the implementation of mitigation measure **BIO-3**.

Issue 1 Mitigation Measures

BIO-1 Nesting Bird and Raptor Avoidance. If grading and vegetation removal activities (i.e., earthwork, clearing, and grubbing) must occur during the nesting season for migratory birds and raptors (January 15 and September 15, or as otherwise defined by the California Department of Fish and Wildlife CDFW)), the project Applicant shall retain a qualified biologist to conduct pre-construction surveys to determine the presence or absence of nesting birds. The survey shall consist of searching for nesting birds within the proposed work area and surrounding 300 feet, where feasible, and the final survey shall not be completed more than three days before the beginning of impacts. If the surveys conclude there is no active nesting, the work shall resume as planned without further requirements. If the results of the survey identify nesting birds (including raptors), no-work disturbance buffers shall be implemented before construction activities may begin: 100 feet around non-listed active passerine (perching birds and songbirds) nests and 300 feet around active raptor nests (e.g., Cooper's hawk). The buffers may be reduced, if appropriate, as directed by a qualified biologist. The reduction in no-work buffers shall be approved by the City before implementation. The buffers shall be respected and maintained until the end of the bird breeding season, or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

BIO-2 Coastal California Gnatcatcher. If there is not a current negative survey for coastal California gnatcatcher (i.e., a survey conducted within the past two years) before the commencement of construction activities (i.e., earthwork, clearing, grubbing, and fuel modification [including off-site fuel modification on private property]), focused surveys for coastal California gnatcatcher shall be conducted within potentially suitable habitat in the study area before construction activities may begin. The focused surveys shall be conducted within the breeding season pursuant to the current USFWS survey protocol (1997) by a permitted biologist to conduct coastal California gnatcatcher surveys. **If focused surveys are negative, no further assessment shall be required, and construction activities shall be allowed to proceed without any further requirements.**

If coastal California gnatcatcher is detected during focused surveys, the following measures shall be implemented:

1. **Federal Endangered Species Act (FESA) Compliance:** Before the issuance of a grading permit, it shall be demonstrated to the City that any FESA-required consultation with U.S. Fish and Wildlife Service (USFWS) regarding the project's effects to gnatcatcher has occurred, and, if take of gnatcatcher is expected, that the USFWS has authorized such take through an incidental take statement or incidental take permit, as applicable. In addition, if the USFWS issues a biological opinion or incidental take permit for the project that covers coastal California gnatcatcher, that document shall supersede any inconsistent measures.
2. **Compensatory Mitigation:** Prior to the issuance of a grading permit, proof that compensatory mitigation has been secured as required in mitigation measure BIO-4 shall be provided to the City to address impacts to gnatcatcher habitat. This requirement is intended to be concurrent with, and not separate or additive to, mitigation measure BIO-4.

3. **Non-breeding Season Avoidance and Minimization Measures:** If construction activities (i.e., earthwork, clearing, grubbing, and fuel modification) occur outside of the coastal California gnatcatcher breeding season (September 1 through February 14), the following measures shall be implemented to avoid potential impacts.
 - a. **Pre-Construction Surveys:** The qualified biologist(s) shall conduct a pre-construction survey to confirm that coastal California gnatcatcher are absent, or breeding and nesting activities are not present within 500 feet of the outer limits of disturbance. The survey shall be conducted no more than three days before impacts to suitable habitat.
 - b. **Biological Monitoring:** A qualified biologist(s) shall monitor the initial clearing of suitable habitat. If coastal California gnatcatcher are found in the project footprint, the biologist(s) shall direct all work to occur within an area of the site away from coastal California gnatcatcher. The biologist(s) shall passively flush individuals away from the active work area. The qualified biologist(s) shall submit to USFWS the number and locations of coastal California gnatcatcher disturbed by vegetation removal activities.
4. **Breeding Season Avoidance and Minimization Measures:** If project construction activities (i.e., earthwork, clearing, grubbing, and fuel modification) are proposed within the coastal California gnatcatcher nesting season (February 15 through August 31), the following measures shall be implemented to avoid potential impacts:
 - a. **Pre-Construction Surveys:** Following notification to USFWS, the qualified biologist(s) shall conduct a pre-construction survey to confirm that coastal California gnatcatcher are absent or breeding and nesting activities are not present within 500 feet of the outer limits of disturbance. The survey shall be conducted within three days before impacts to suitable habitat, and USFWS shall be notified at least seven days before the initiation of the survey. The qualified biologist(s) shall submit to USFWS the number and locations of coastal California gnatcatcher observed on and within 500 feet of the project footprint.
 - b. **Biological Monitoring:** Construction activities shall not occur within 500 feet of an active coastal California gnatcatcher nest unless noise monitoring and/or noise attenuation measures are implemented (see below). Noise monitoring and noise attenuation measures shall be approved by USFWS before implementation. A qualified biologist(s) shall monitor the initial clearing of suitable habitat. After vegetation removal is complete, surveys shall be completed once per week during project construction that occurs within the breeding season. Weekly surveys may be suspended if approved by USFWS.
 - c. **Noise Monitoring:** If an active nest is observed on or within 500 feet of the project footprint, a qualified acoustician shall assess the potential for noise levels to exceed 60 A-weighted decibels (dB[A]) hourly in areas occupied by the coastal California gnatcatcher, or an hourly average increase of 3 dB(A) if existing ambient noise levels exceed 60 dB(A). The qualified acoustician shall coordinate with the qualified biologist(s) and USFWS to identify noise attenuation measures. Construction may

proceed within 500 feet of an active nest if noise levels are maintained below a 60 dB(A) hourly average, or below an hourly average increase of 3 dB(A) if existing ambient noise levels exceed 60 dB(A), near the nest site and as approved by USFWS.

- i. A qualified acoustician shall be retained to determine ambient noise levels for construction activities within 500 feet of active nests. Noise levels near the nest site shall not exceed an hourly average of 60 dB(A), or an hourly average increase of 3 dB(A) if existing ambient noise levels exceed 60 dB(A). If project-related noise levels exceed the threshold described above, construction activities shall cease until additional minimization measures are taken to reduce project-related noise levels to below an hourly average of 60 dB(A), or below an hourly average increase of 3 dB(A) if existing ambient noise levels exceed 60 dB(A). If additional measures do not decrease project-related noise levels below the thresholds described above, construction activities shall cease until USFWS is contacted to discuss alternative methods.
- d. All project personnel shall attend a training program presented by a qualified biologist before construction activities. The training program shall inform project personnel about the life history of coastal California gnatcatcher and all avoidance and minimization measures.
- e. The construction contractor shall only allow construction activities to occur during daylight hours and within the timeframes established by City Ordinance Section 10.24.020. Work prior to sunrise or after sunset is specifically prohibited.
- f. The construction contractor shall require functional mufflers on all construction equipment (stationary or mobile) used within or immediately adjacent to any 500-foot avoidance buffers to reduce construction equipment noise. Stationary equipment shall be situated so that noise generated from the equipment is not directed towards any suitable habitat for the coastal California gnatcatcher.
- g. The construction contractor shall place staging areas as far as feasible from any suitable coastal California gnatcatcher habitat.
- h. The biological monitor shall prepare written documentation of all monitoring activities at the completion of construction activities, which shall be submitted to USFWS.

Before the issuance of a grading permit, the project proponent shall demonstrate to the City that consultation with the USFWS for an evaluation of proposed project impacts to Coastal California gnatcatcher in accordance with the FESA has been completed (e.g., Section 10 consultation) or is not required.

BIO-3 Crotch's Bumble Bee Protection Requirement: The following measures shall be implemented to reduce potential impacts to Crotch's bumble bee if Crotch's bumble bee remains as a candidate state endangered species or is listed as a state endangered species at the time of project construction. If Crotch's bumble bee is delisted at the time of project construction, the measures below shall not be required.

Pre-construction Survey: To the extent feasible, construction activities (i.e., demolition, earthwork, clearing, and grubbing) shall occur outside of the Crotch's bumble bee flight season (February 1 through October 31). If construction activities must occur during the flight season, a qualified biologist shall conduct a pre-construction survey for Crotch's bumble bee queens, gynes, and colonies. The survey shall be conducted no more than 14 days before construction during optimal weather conditions (e.g., warm, sunny days between 65 and 90 degrees Fahrenheit). If the pre-construction survey is negative, no further assessment shall be required, and construction activities shall be allowed to proceed without any further requirements. If Crotch's bumble bee occupied habitat is detected during the pre-construction survey, the measures below shall be implemented.

California Endangered Species Act (CESA) Compliance: Before the issuance of a grading permit, it shall be demonstrated that CESA-required consultation with CDFW regarding the project's effects to Crotch's bumble bee occupied habitat has occurred, and, if take of Crotch's bumble bee is expected, that CDFW has authorized such take through an incidental take permit, as applicable. In addition, if an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any inconsistent measures.

Compensatory Mitigation: Permanent direct impacts to occupied Crotch's bumble bee habitat shall be offset through compensatory mitigation by preservation of Tier II habitat as described in mitigation measure **BIO-4**. However, if an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any inconsistent measures and mitigation ratios provided in mitigation measure **BIO-4**.

Issue 2 –Sensitive Natural Communities

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

Issue 2 Impact Analysis

Less than Significant Impact with Mitigation. The proposed project would have a direct impact to sensitive vegetation communities, all of which would occur outside of an adopted SMMHCP or MHCP-designated FPA. Specifically, the project would directly impact 0.9 acre of Diegan coastal sage scrub (Table 2, *Impacts to Vegetation Communities/Habitats*; Figure 7, *Vegetation Communities/Land Cover Types Impacts*). These impacts to Diegan coastal sage scrub would be considered potentially significant. No other riparian or sensitive natural community impacts are proposed or are expected to occur. Implementation of mitigation measures **BIO-4** and **BIO-5** would reduce the impacts to Diegan coastal sage scrub to less than significant. Mitigation for impacts to sensitive vegetation communities is consistent with the mitigation ratios presented in Tables 4-6 and 4-7 of the MHCP (AMEC 2003) and Section 5.2.1 of the SMMHCP (City 2001).

Table 2
IMPACTS TO VEGETATION COMMUNITIES/HABITATS

Vegetation Community or Habitat	Impact (acres)¹	Mitigation Ratio²	Required Mitigation³ (acres)
Diegan coastal sage scrub (including disturbed)	0.9	1:1	0.9
Disturbed Habitat	0.6	--	--
Developed	7.0	--	--
TOTAL	8.5	--	0.9

¹ Acreages are rounded to the nearest 0.01 acre. Impacts include both permanent and temporary impacts.

² Mitigation Ratios are consistent with those listed in Tables 4-6 and 4-7 of the MHCP (AMEC 2003) and Section 5.2.1 of the SMMHCP (City 2001) for projects located outside designated FPAs.

³ Mitigation for impacts to Diegan coastal sage scrub will be provided through purchasing of credits from either Red Mountain Conservation Bank or other location deemed acceptable by the City, USFWS, and CDFW.

Issue 2 Mitigation Measures

BIO-4 Sensitive Vegetation Mitigation. Prior to the issuance of a grading permit, proof that compensatory mitigation for 0.9 acre of Diegan coastal sage scrub habitat occupied by coastal California gnatcatcher has been secured shall be provided to the City. Mitigation shall occur at no less than a 1:1 ratio through the purchase of no less than 0.9 acre of Diegan coastal sage scrub Mitigation Bank credits, occupied by coastal California gnatcatcher at the Red Mountain Conservation Bank in Fallbrook, California, or another CDFW-approved mitigation bank with available credits, unless otherwise required by the City or Wildlife Agencies.

BIO-5 Best Management Practices (BMPs). During the project construction phase, the construction contractor shall implement BMPs, including, but not limited, to flagging/fencing the limits of construction adjacent to sensitive habitats; maintaining the project site free of trash and debris, which will not only keep the habitat clean but reduce the potential of attracting predator/scavenger species; employing appropriate standard spill prevention practices and clean-up materials; installing and maintaining sediment and erosion control measures in accordance with an approved Storm Water Pollution Prevention Plan; maintaining effective control of fugitive dust; properly storing, handling, and disposing of all toxins and pollutants including waste materials; and shielding and directing lighting (if work is to be conducted at night) away from native habitat (coastal sage scrub) in the vicinity.

Issue 3 – Wetlands

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

Issue 3 Impact Analysis

No Impact. The proposed project would not result in impacts to federally-protected wetlands or other jurisdictional resources (Figure 7).

Issue 3 Mitigation Measures

No mitigation is required.

Issue 4 – Wildlife Movement and Nursery Sites

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

Issue 4 Impact Analysis

No Impact. The study area occurs at the southern terminus of a patch of Diegan coastal sage scrub that occurs between developed areas and has limited functions as a regional movement corridor due to the small size and the presence of residential and commercial development immediately adjacent to the project site. Construction of the project would not result in substantial interference with wildlife movement because of the existing ambient noises and disturbances due to the proximity of transportation corridors and existing development. Impacts to wildlife movement are not expected, and

no mitigation is required. Mitigation measure BIO-5 will help ensure there are no indirect impacts (e.g., light spillover, construction noise, etc.) to adjacent habitat that may provide for wildlife movement or nursery sites.

Issue 4 Mitigation Measures

No mitigation is required.

Issue 5 – Local Policies And Ordinances

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

Issue 5 Impact Analysis

Less than Significant. Section 14.12.270, Protection of Trees, of the City's Municipal Code provides that where a permit is required for excavation, fill, or obstruction for installation or repair of utilities under any public street, sidewalk, trail, or public place, such construction should be located away from trees. As such, work along the project frontage would be required to occur away from trees and their root systems where possible and in accordance with tree protection measures included as conditions of permit approval. The City's General Plan requires a ratio of 1:1 tree replacement for development projects. Of the 35 trees on the project site, 28 will be removed, and 7 existing trees will be protected on-site. Implementation of the project includes a landscape component that includes more vegetation and trees incorporated into site design than what currently exists on-site; specifically, 135 standard trees (approximately 3.5 times more than currently exist onsite) will be planted. As such, the project would comply with the City's Municipal Code and General Plan policies related to tree protection, and impacts would be less than significant.

Issue 5 Mitigation Measures

No mitigation is required.

Issue 6 – Adopted Conservation Plans

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

Issue 6 Impact Analysis

Less than Significant. The SMMHCP has not been adopted, and the MHCP is advisory in nature only, as the SMMHCP would be the implementing document for the City under the MHCP. The SMMHCP is used as a policy document to guide development in the City. Implementation of the project would not preclude or prevent finalizing and adoption of the SMMHCP. The project would not conflict with existing adopted Habitat Conservation Plans or Natural Community Conservation Plans. Therefore, project impacts would be less than significant.

Issue 6 Mitigation Measures

No mitigation is required.

Sincerely,



Mandy Mathews
Biologist

Attachments:

- Figure 1: Regional Location
- Figure 2: USGS Topography
- Figure 3: Aerial Photograph
- Figure 4: Soils
- Figure 5: Regional Context
- Figure 6: Vegetation Communities/Land Cover Types
- Figure 7: Vegetation Communities/Land Cover Types Impacts

- Attachment A Plant Species Observed
- Attachment B Animal Species Observed or Detected
- Attachment C Special-Status Plant Species Observed or With Potential to Occur
- Attachment D 2024 Coastal California Gnatcatcher (*Polioptila californica californica*) Survey Report for the Mission San Marcos Industrial Park Project
- Attachment E Special-Status Animal Species Observed or With Potential to Occur

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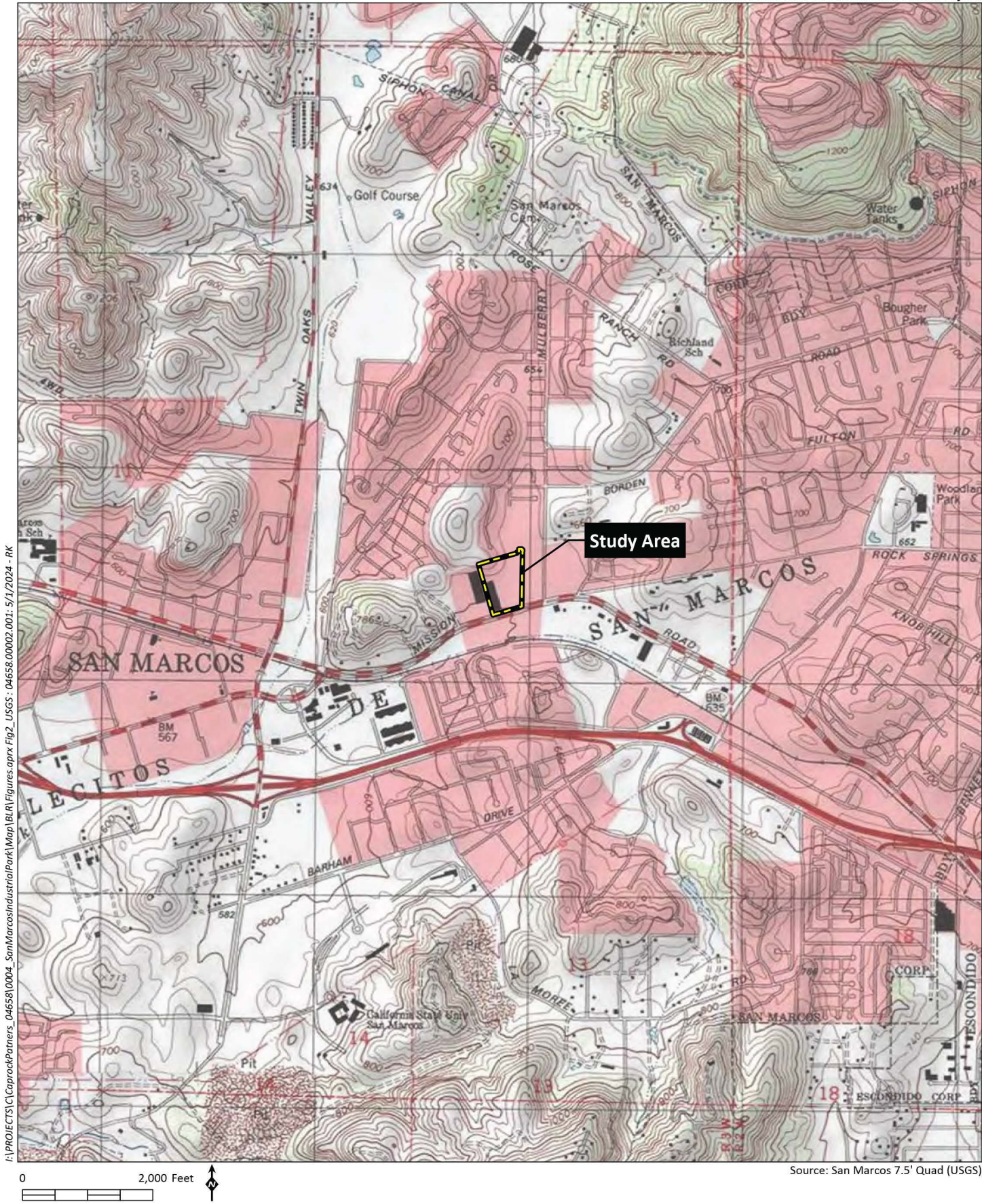
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Figures



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Source: San Marcos 7.5' Quad (USGS)



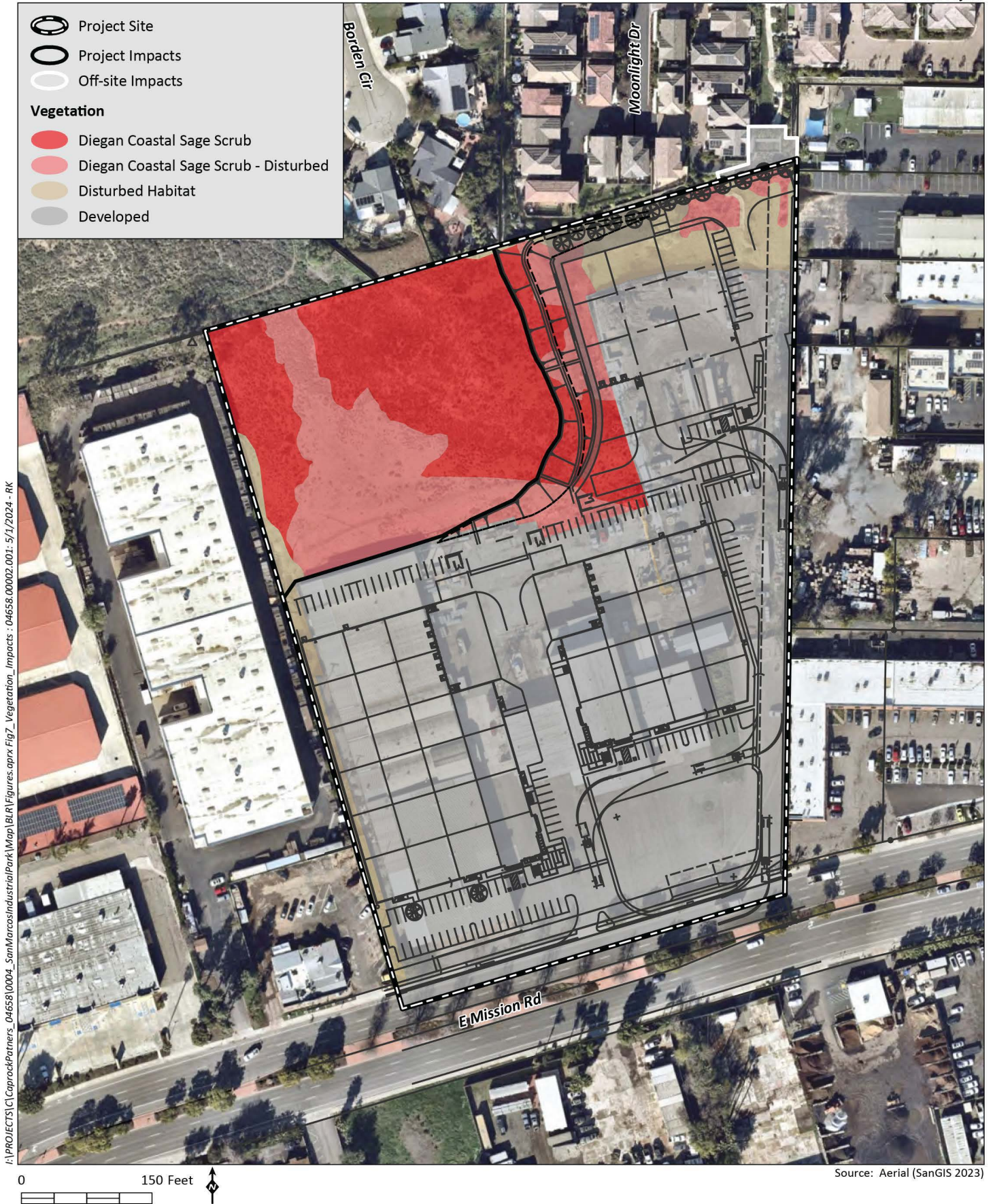


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Attachment A

Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Dicots			
Anacardiaceae	<i>Malosma laurina</i>	laurel sumac	DCSS
	<i>Schinus molle</i> *	Peruvian pepper tree	DH
	<i>Searsia lancea</i> *	African sumac	DH
Apiaceae	<i>Foeniculum vulgare</i> *	fennel	DCSS-D
Asteraceae	<i>Ambrosia psilostachya</i>	ragweed	DH
	<i>Artemisia californica</i>	California sagebrush	DCSS, DCSS-D
	<i>Baccharis pilularis</i>	coyote brush	DH, DCSS
	<i>Baccharis sarothroides</i>	broom baccharis	DCSS, DH
	<i>Centaurea melitensis</i> *	tocalote	DH, DCSS-D
	<i>Corethrogyne filaginifolia</i>	common sandaster	DCSS
	<i>Dittrichia graveolens</i> *	stinkwort	DH
	<i>Encelia californica</i>	bush sunflower	DCSS
	<i>Helminthotheca echioides</i> *	bristly ox-tongue	DH,
	<i>Heterotheca grandiflora</i>	telegraph weed	DH, DCSS-D
	<i>Isocoma menziesii</i>	white flowered goldenbush	DCSS, DCSS-D
	<i>Lactuca serriola</i> *	prickly lettuce	DH
	<i>Sonchus asper</i> *	spiny sowthistle	DH
Bignoniaceae	<i>Jacaranda mimosifolia</i>	jacaranda	Dev
Brassicaceae	<i>Hirschfeldia incana</i> *	shortpod mustard	DH
	<i>Raphanus sativus</i> *	wild radish	DH
	<i>Sisymbrium altissimum</i> *	tumble mustard	DH
Chenopodiaceae	<i>Chenopodium murale</i> *	nettle leaf goosefoot	DH
Euphorbiaceae	<i>Croton setiger</i>	turkey-mullein	DCSS-D
	<i>Ricinus communis</i> *	castor bean	DH
Fabaceae	<i>Acmispon glaber</i>	deerweed	DCSS, DCSS-D
Geraniaceae	<i>Erodium cicutarium</i> *	coastal heron's bill	DH, DCSS-D
Hamamelidaceae	<i>Liquidambar styraciflua</i>	sweetgum	Dev
Lamiaceae	<i>Marrubium vulgare</i>	white horehound	DH, DCSS-D
	<i>Rosmarinus officianalis</i> *	rosemary	DH
	<i>Salvia mellifera</i>	black sage	DCSS, DCSS-D
Malvaceae	<i>Malva parviflora</i> *	cheeseweed	DH
Myrtaceae	<i>Eucalyptus globulus</i> *	Tasmanian blue gum	DH
	<i>Melaleuca</i> sp.*	paperbark	DH
Onagraceae	<i>Oenothera speciosa</i> *	Mexican evening primrose	DH
Polygonaceae	<i>Eriogonum fasciculatum</i>	California buckwheat	DH, DCSS, DCSS-D
	<i>Rumex crispus</i> *	curly dock	DH
Salicaceae	<i>Salix lasiolepis</i>	arroyo willow	DH
Sapindaceae	<i>Koeleruteria bipinnata</i>	Chinese flame tree	Dev
Monocots			
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm	DH
Poaceae	<i>Avena</i> sp.*	wild oat	DH, DCSS-D
	<i>Bromus diandrus</i> *	ripgut brome	DH, DCSS-D
	<i>Distichlis spicata</i>	salt grass	DH
	<i>Pennisetum setaceum</i> *	fountaingrass	DH

* Non-native

† Sensitive

¹ DCSS=Diegan coastal sage scrub; DCSS-D=Diegan coastal sage scrub-disturbed; DH=Disturbed habitat; Dev=Developed land.

Attachment B

Animal Species Observed or
Detected

Taxon Order	Taxon Family	Scientific Name	Common Name
INVERTEBRATES			
Hymenoptera	Apidae	<i>Apis</i> sp.	honey bee
Lepidoptera	Hesperiidae	<i>Hylephila phyleus</i>	fiery skipper
	Pieridae	<i>Pieris rapae</i>	cabbage white
VERTEBRATES			
Amphibians and Reptiles			
Squamata	Phrynosomatidae	<i>Uta stansburiana</i>	side-blotched lizard
Birds			
Accipitriformes	Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
		<i>Selasphorus sasin</i>	Allen's hummingbird
Columbiformes	Columbidae	<i>Zenaida macroura</i>	mourning dove
Passeriformes	Aegithalidae	<i>Psaltirparus minimus</i>	bushtit
	Corvidae	<i>Corvus brachyrhynchos</i>	American crow
		<i>Corvus corax</i>	common raven
	Estrildidae	<i>Lonchura punctulata</i>	scaly-breasted munia
	Fringillidae	<i>Haemorhous mexicanus</i>	house finch
		<i>Spinus psaltria</i>	lesser goldfinch
	Parulidae	<i>Setophaga coronata</i>	yellow-rumped warbler
	Passerellidae	<i>Melospiza melodia</i>	song sparrow
		<i>Melospiza crissalis</i>	California towhee
		<i>Zonotrichia leucophrys</i>	white-crowned sparrow
	Troglodytidae	<i>Troglodytes bewickii</i>	Bewick's wren
Tyrannidae		<i>Sayornis nigricans</i>	black phoebe
		<i>Sayornis saya</i>	Say's phoebe
Piciformes	Picidae	<i>Dryobates nuttallii</i>	Nuttall's woodpecker
Mammals			
Carnivora	Canidae	<i>Canis latrans</i>	coyote
	Procyonidae	<i>Procyon lotor</i>	raccoon
Lagomorpha	Leporidae	<i>Sylvilagus audubonii</i>	desert cottontail
Rodentia	Geomyidae	<i>Thomomys bottae</i>	Botta's pocket gopher

† Sensitive

Attachment C

Special-Status Plant Species
Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FT/SE CRPR 1B.1 MHCP NE SMMHCP Covered	Annual herb. Associated with vernal pools and clay depressions on mesas. Elevation ranges between 30 to 960 meters. Blooms April to June.	Not Expected. Suitable clay soils or depressions, and vernal pools are not found in the project site.
California adolphia (<i>Adolphia californica</i>)	--/-- CRPR 2B.1	Shrub. Most often found in sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks. Usually associated with xeric locales where shrub canopy reaches 4 or 5 feet. Elevation ranges between 6 to 200 meters. Blooms December to May.	Presumed Absent. Suitable habitat occurs within the project site but there are no records of the species within the project vicinity. Perennial shrub that would have been observed during the general biological survey if present.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CRPR 1B.1 MHCP NE	Perennial herb. Found in a variety of habitats, including sage scrub, grasslands, wetlands, disturbed habitat, and sloped areas. Elevation ranges between 30 to 600 meters. Blooms April to October	Presumed Absent. Suitable habitat occurs within the project site but there are no records of the species within the project vicinity. Also, this perennial species was not detected during the general biological survey and would have been observed if present.
Del Mar manzanita (<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>)	FE/-- CRPR 1B.1 MHCP NE	Shrub. Occurs in relatively open, coastal chaparral. At occasional inland sites it occurs in denser mixed chaparral vegetation. Found along the coast regions of San Diego County and Baja California. Elevation range of less than 100 meters. Blooms December to June.	Not Expected. Suitable chaparral habitat is not present within the project site. Perennial shrub that would have been observed during the general biological survey if present.
San Diego sagewort (<i>Artemisia palmeri</i>)	--/-- CRPR 4.2	Shrub. Occurs along stream courses, often within coastal sage scrub and southern mixed chaparral. Found in the coastal regions of San Diego County and Baja California. Elevation range of less than 600 meters. Blooms May to October.	Presumed Absent. Suitable habitat occurs within the project site but this perennial shrub would have been observed during the general biological survey if present.
Encinitas baccharis (<i>Baccharis vanessae</i>)	FT/SE CRPR 1B.1 MHCP NE	Shrub. Primary habitat is mature but relatively low-growing chaparral. Also found in southern maritime and southern mixed chaparrals. This species is a San Diego County endemic; also found in Riverside County. Blooms August to November. Found between 80 to 910 meters in elevation.	Not Expected. Suitable chaparral habitat is absent from the project site. Perennial shrub that would have been observed during the general biological survey if present.

Species	Status ¹	Habitat Associations	Potential to Occur ²
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CRPR 1B.1 MHCP NE	Perennial bulbiferous herb. Typically occurs in clay soils in vernal moist grasslands and vernal pool periphery. Found in interior valley regions of San Diego, Riverside, Orange, and Los Angeles counties. Elevation ranges between 25 to 860 meters. Blooms March to June.	Not Expected. Suitable clay soils and vernal pools are not present within the project site.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/-- CRPR 1B.1	Perennial bulbiferous herb. Occurs in grasslands and vernal pool settings. Found in Los Angeles and San Diego counties. Elevation ranges between 100 and 1,700 meters. Blooms May to July.	Not Expected. Suitable grasslands and vernal pools are absent from the project site.
wart-stemmed ceanothus (<i>Ceanothus verrucosus</i>)	--/-- CRPR 2B.2 MHCP Covered SMMHCP Covered	Shrub. Found in dry, rocky slopes within chaparral. Found in western San Diego County and adjacent Baja California, Mexico. Elevation range of less than 350 meters. Blooms January to April.	Not Expected. Suitable chaparral habitat is not present within the project site. Perennial shrub that would have been observed during the general biological survey if present.
southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>)	--/-- CRPR 1B.1	Annual herb. Occurs in seasonally moist (saline) grasslands and mesic areas in valley and foothill grasslands. Found in San Diego, Los Angeles, Orange, Ventura, and Santa Barbara counties. Elevation range of less than 650 meters. Blooms May to November.	Not Expected. Suitable grassland is absent from the project site.
southern mountain misery (<i>Chamaebatia australis</i>)	--/-- CRPR 4.2	Shrub. Occurs in chaparral with gabbro and metavolcanic soils. Found in San Diego County and Baja California, Mexico. Elevation ranges between 300 and 1,230 meters. Blooms November to May.	Not Expected. Suitable chaparral habitat and soil types to support the species are not found in the project site.
summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	--/-- CRPR 1B.2 MHCP Covered SMMHCP Covered	Shrub. Found on mesic north-facing slopes in southern mixed chaparral are the preferred habitat of this large, showy shrub. Rugged steep drainages seem to be a preferred location for isolated shrubs. Found in Orange, Riverside, and San Diego counties south into Baja California, Mexico. Elevation ranges between 100 and 550 meters. Blooms April to June.	Not Expected. Suitable chaparral habitat is absent from the project site. Perennial shrub that would have been observed during the general biological survey if present.

Species	Status ¹	Habitat Associations	Potential to Occur ²
small-flowered morning-glory (<i>Convolvulus simulans</i>)	--/-- CRPR 4.2	Annual herb. Occurs on clay soils, occasionally serpentine, openings of chaparral, coastal sage scrub, and grasslands. Found in coastal regions from San Francisco south to San Diego County and further east within the Sierra Nevada foothills. Elevation ranges between 30 and 740 meters. Blooms March to July.	Not Expected. Suitable habitat and clay soils are not present within the project site.
paniculate tarplant (<i>Deinandra paniculata</i>)	--/-- CRPR 4.2	Annual herb. Occurs in vernal mesic areas and sandy soils within coastal sage scrub, open chaparral, grasslands communities in addition to vernal pools. Found in the Central Coast and south to San Diego County. Elevation ranges between 25 to 940 meters. Blooms April to November.	Low. Suitable sandy soils occur within the project site but there are few known records of the species within the project vicinity.
western dichondra (<i>Dichondra occidentalis</i>)	--/-- CRPR 4.2	Perennial herb. Occurs in dry, sandy banks in coastal sage scrub, chaparral, or southern oak woodland. Often proliferates on recently burned slopes. Found in Santa Barbara County to Baja California, Mexico and San Miguel Island. Elevation ranges between sea level and 520 meters. Blooms March to July.	Presumed Absent. Suitable habitat occurs within the project site but this perennial species would have been observed during the general biological survey if present.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/SE CRPR 1B.1 MHCP NE	Perennial herb. Found in vernal pools or mima mound areas with vernal moist conditions are preferred habitat. Found in San Diego and Riverside counties and in Baja California, Mexico. Elevation range of less than 705 meters. Blooms April to June.	Not Expected. No vernal pools, or similar vernal moist habitat, occur within the project site.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	--/-- CRPR 4.2	Annual herb. Occurs in clay soils in annual grasslands and coastal sage scrub. Found in Los Angeles, Orange, Riverside, and San Diego counties. Elevation range of less than 1000 meters. Blooms March to May.	Not Expected. Suitable clay soils are not found in the project site.
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	--/-- CRPR 4.2	Annual herb. Occurs in coastal mesas and foothills with grassland habitats. Found in San Diego, Orange, and Riverside counties. Elevation range of less than 900 meters. Blooms May to November.	Presumed Absent. Suitable habitat occurs within the project site but this perennial species would have been observed during the general biological survey if present.

Species	Status ¹	Habitat Associations	Potential to Occur ²
vernal barley (<i>Hordeum intercedens</i>)	FE/CE CRPR 3.2	Annual grass. Occurs in saline flats and depressions in grasslands or in vernal pool basins. Found in Southwestern California, with some occurrences in central coast of the state. Elevation ranges between 5 to 1,000 meters. Blooms March to June.	Not Expected. Suitable moist habitat, depressions, and vernal pools are absent from the project site.
Ramona horkelia (<i>Horkelia truncata</i>)	--/-- CRPR 1B.3	Perennial herb. Found in the chaparral communities. Occurs in the peninsular ranges in San Diego County and in northern Baja California, Mexico. Elevation ranges between 400 to 1300 meters. Blooms May to June.	Not Expected. Suitable chaparral habitat is not found within the project site.
decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	--/-- CRPR 1B.2	Perennial shrub. Occurs in coastal sage scrub habitat intermixed with grassland and is more partial to clay soils than other closely related varieties. Found in Orange and San Diego counties; Baja California, Mexico; and San Clemente and Santa Catalina islands. Elevation range of less than 200 meters. Blooms April to November.	Presumed Absent. Suitable habitat is present on the project site, but this perennial shrub would have been observed during the general biological survey if present.
southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	--/-- CRPR 4.2	Perennial grass-like herb (rhizomatous). Occurs in moist, saline, or alkaline soils in coastal salt marshes and riparian marshes. Found from the central coast to San Diego County. Elevation range of less than 300 meters. Blooms May to June.	Not Expected. Suitable freshwater marsh habitat does not occur within the project site. Perennial species that most likely would have been observed if present.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	--/-- CRPR 4.3	Annual herb. Occurs in dry, disturbed areas including riverbanks, meadows, pastures, coastal scrub, and chaparral. Wide ranging species found throughout California. Elevation ranges between 1 to 885 meters. Blooms January to July.	Low. Suitable coastal sage scrub, grassland, and disturbed habitat is present within the project site. However, this species was not observed during the rare plant survey for the project.
small-flowered microseris (<i>Microseris douglasii</i> ssp. <i>platycarpa</i>)	--/-- CRPR 4.2	Annual herb. Found on clay soils within coastal sage scrub, woodlands, and grasslands. Often near vernal pools or serpentine outcrops. Found in Los Angeles, Orange, Riverside, and San Diego counties and the Channel Islands. Flowering period: March to May. Elevation: 49 to 3,510 feet (15 to 1,070 meters).	Presumed Absent. Although coastal sage scrub and grasslands are present on site, clay soils and vernal pools are lacking.

Species	Status ¹	Habitat Associations	Potential to Occur ²
felt-leaved monardella (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	--/-- CRPR 1B.2	Perennial herb (rhizomatous). Occurs in chaparral understory, typically beneath mature stands of chamise in xeric situations. Found in San Diego and Orange Counties and in Baja California, Mexico. Elevation ranges between 300 and 1500 meters. Blooms June to August.	Not Expected. Suitable chaparral habitat is not present within the project site.
spreading navarretia (<i>Navarretia fossalis</i>)	FT/-- CRPR 1B.1 MHCP NE	Annual herb. Occurs in vernal pools, vernal swales, or roadside depressions. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. Found in western Riverside and southwestern San Diego counties as well as northwestern Baja California, Mexico. Elevation ranges between 30 to 1300 meters. Blooms April to June.	Not Expected. No depressions, vernal swales, or vernal pools found within the project site.
Delta woolly-marbles (<i>Psilocarphus brevissimus</i> var. <i>multiflorus</i>)	--/-- CRPR 4.2	Annual herb. Associated with vernal pool habitats. Found in Sacramento, San Joaquin, and San Diego Counties. Elevation ranges between 10 to 500 meters. Blooms May to June.	Not Expected. No vernal pools are located within the project site.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	--/-- CRPR 1B.1 MHCP Covered	Shrub. Occurs in chaparral with a relatively open canopy cover and is the preferred habitat in flat terrain (also found in coastal scrub). On north-facing slopes, may grow in dense monotypic stands. Found in San Diego, Orange, and Santa Barbara counties and in Baja California, Mexico. Elevation range of less than 200 meters. Blooms February to March.	Not Expected. Suitable chaparral habitat is not found within the project site. Perennial shrub that would have been observed if present.
Engelmann oak (<i>Quercus engelmannii</i>)	--/-- CRPR 4.2 MHCP Covered	Tree. Occurs on slopes and foothills of chaparral, riparian woodland, oak woodland, and grasslands. Found in the San Gabriel and San Jacinto Mountains and coastal and inland portions of Los Angeles County south to San Diego county. Elevation ranges between 50 to 1,300 meters. Blooms March to June.	Presumed Absent. Conspicuous tree species that would have been observed during the general biological survey if present.
ashy spike moss (<i>Selaginella cinerascens</i>)	--/-- CRPR 4.1	Perennial herb. Grows in sunny spots or under shrubs within coastal sage scrub and chaparral. Often associated with "red clay" soils. Found in coastal regions from southern Los Angeles County south to San Diego County. Flowering period: none. Elevation: below 1,804 feet (550 meters).	Presumed Absent. This species is visible year-round and would have been observed if present.

Species	Status ¹	Habitat Associations	Potential to Occur ²
bottle liverwort (<i>Sphaerocarpos drewiae</i>)	--/-- CRPR 1B.1	Liverwort. Occurs in the opening of coastal scrub and chaparral within Riverside and San Diego counties. Flowering period: none. Elevation: 295 to 1,970 feet (90 to 600 meters).	Not Expected. Although coastal sage scrub occurs on site this species was not observed during the general biological surveys.
Parry's tetraococcus (<i>Tetraococcus dioicus</i>)	--/-- CRPR 1B.2 MHCP Covered	Shrub. Occurs on dry slopes within chaparral communities. Found in San Diego County and in Baja California, Mexico. Elevation ranges between sea level and 1000 meters. Blooms April to May.	Not Expected. Suitable chaparral habitat is not found within the project site.

¹ CRPR = California Rare Plant Rank: 1A – presumed extinct; 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. ; MHCP = Multiple Habitat Conservation Plan; NE = Narrow Endemic; Covered = Covered Species. SMMHCP = Draft San Marcos Multiple Habitat Conservation Plan; Covered = Proposed covered species.

² Species are considered to have potential to occur when: (1) they were reported to the CNDDDB within or near the project site (locations are not always specific); and/or (2) were included in the CNPS Inventory of Rare and Endangered Plants for the San Marcos USGS Quadrangles; and/or (3) potentially suitable habitat is present on-site.

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Attachment D

2024 Coastal California Gnatcatcher
(*Polioptila californica californica*)
Survey Report for the Mission San
Marcos Industrial Park Project

July 3, 2024

04658.00002.001

Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Ave., Suite 250
Carlsbad , CA 92008

Subject: 2024 Coastal California Gnatcatcher (*Poliioptila californica californica*) Survey Report for the Mission San Marcos Industrial Park Project

Dear Stacey Love:

This letter presents the results of a U.S. Fish and Wildlife Service (USFWS) protocol presence/absence survey for the federally listed as threatened coastal California gnatcatcher (*Poliioptila californica californica*; CAGN) conducted by HELIX Environmental Planning, Inc. (HELIX) for the Mission San Marcos Industrial Park Project (Project). This report describes the methods used to perform the survey and the results. It is being submitted to the USFWS as a condition of HELIX's Threatened and Endangered Species Permit ES-778195-15.

PROJECT LOCATION

The approximately 10.8-acre Mission San Marcos Industrial Park Project is located in the northwestern portion of the City of San Marcos (City) in San Diego County, California (Figure 1, *Regional Location*). The project is depicted within unsectioned lands of the Los Vallecitos land grant, on the U.S. Geological Survey (USGS) 7.5-minute San Marcos quadrangle map (Figure 2, *USGS Topography*). The site is bordered by East Mission Road to the south, Falcon Place to the west, and Mulberry Drive to the east (Figure 3, *Aerial Photograph*).

The project site is not located within the USFWS-designated critical habitat for the species.

METHODS

The survey consisted of six visits that were performed by HELIX biologist Mandy Mathews (ES-778195-15) between April 12 and May 20, 2024 (Table 1, *Survey Results*), in accordance with the current USFWS

protocol¹. The visits were conducted at least seven days apart, between 6 a.m. and 12 p.m., pursuant to survey protocol. The project is located outside of the Natural Communities Conservation Plan program. For non-participating areas, the USFWS requires that a minimum of six surveys be conducted, at least one week apart, during the breeding season (March 15 and June 30) or a minimum of nine surveys be conducted, at least two weeks apart, during the non-breeding season (July 1 and March 14). The survey area encompassed approximately 3.1 acres of potential CAGN habitat within the proposed project site and within 300 feet from the project site (Figure 4, *2024 Coastal California Gnatcatcher Survey Results*).

The surveys were conducted by walking within and along the perimeter of suitable CAGN habitat present within the survey area. HELIX did not enter the portions of the survey area that occurred on private property and only used binoculars to look into the private property. The survey route was arranged to ensure complete survey coverage of habitat with potential for occupancy by CAGN. Surveys were conducted with binoculars to aid in bird detection. Recorded CAGN vocalizations were played sparingly and only if other means of detection had failed. If a CAGN was detected before playing recorded vocalizations, the recordings were not played. Once CAGNs were initially detected in an area, the use of playback was discontinued. The approximate survey route is depicted on Figure 4.

Table 1 details the survey dates, times, and conditions.

Table 1
SURVEY INFORMATION

Site Visit	Survey Date	Biologist(s)	Time (Start/Stop)	Approx. Acres Surveyed/ Acres per Hour	Weather Conditions (Start/Stop)
1	4/12/2024	Mandy Mathews ¹	0900/1000	3.1 ac/ 3.1 ac/hr*	56°F, wind 0-3 mph, 100% cloud cover 57°F, wind 0-3 mph, 100% cloud cover
2	4/22/2024	Mandy Mathews ¹	0900/1000	3.1 ac/ 3.1 ac/hr	56°F, wind 2-4 mph, 100% cloud cover 57°F, wind 2-4 mph, 100% cloud cover
3	4/29/2024	Mandy Mathews ¹	0830/0930	3.1 ac/ 3.1 ac/hr	60°F, wind 0-2 mph, 0% cloud cover 64°F, wind 2-4 mph, 0% cloud cover
4	5/6/2024	Mandy Mathews ¹	0800/0900	3.1 ac/ 3.1 ac/hr*	53°F, wind 0-2 mph, 0% cloud cover 58°F, wind 0-2mph, 0% cloud cover
5	5/13/2024	Mandy Mathews ¹	1100/1200	3.1 ac/ 3.1 ac/hr*	68°F, wind 0-3 mph, 20% cloud cover 70°F, wind 0-3 mph, 10% cloud cover
6	5/20/2024	Mandy Mathews ¹	0900/1000	3.1 ac/ 3.1 ac/hr*	59°F, wind 0-3 mph, 100% cloud cover 62°F, wind 0-2 mph, 95% cloud cover

¹ USFWS Permit ES-778195-15

*ac – acre; hr – hour

¹ U.S. Fish and Wildlife Service (USFWS). 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol. 5pp.

COASTAL CALIFORNIA GNATCATCHER HABITAT

Diegan coastal sage scrub (including disturbed) is the only vegetation community within the survey area determined to be suitable for CAGN (Figure 4).

Diegan Coastal Sage Scrub (including disturbed)

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). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending on soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*). Disturbed coastal sage scrub contains many of the same shrub species as undisturbed Diegan coastal sage scrub but is sparser and has a higher proportion of non-native annual species. Diegan coastal sage scrub within the survey area is dominated primarily by California sagebrush, California buckwheat, and black sage.

RESULTS

One CAGN pair (Pair No. 1) was detected during the survey effort, although not all individuals were detected during each survey (Figure 4). Pair No.1 was detected on the northern boundary of the Project. A detailed description of the CAGN observations and locations from each weekly survey is included below.

Pair No. 1 was detected on the northwestern boundary of the Project (Figure 4). Only the male was initially detected during the first survey, but the pair was detected calling and foraging throughout the study area and on two occasions (third and fourth surveys). The male approached the Project boundary and perched briefly on the chain link fence marking the Project boundary during the third survey. At least one individual of the pair was observed during four of the six surveys (neither individual was observed during the second or fifth surveys).

CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

Please contact Shelby Howard or Mandy Mathews at (619) 462-1515 if you have any questions.

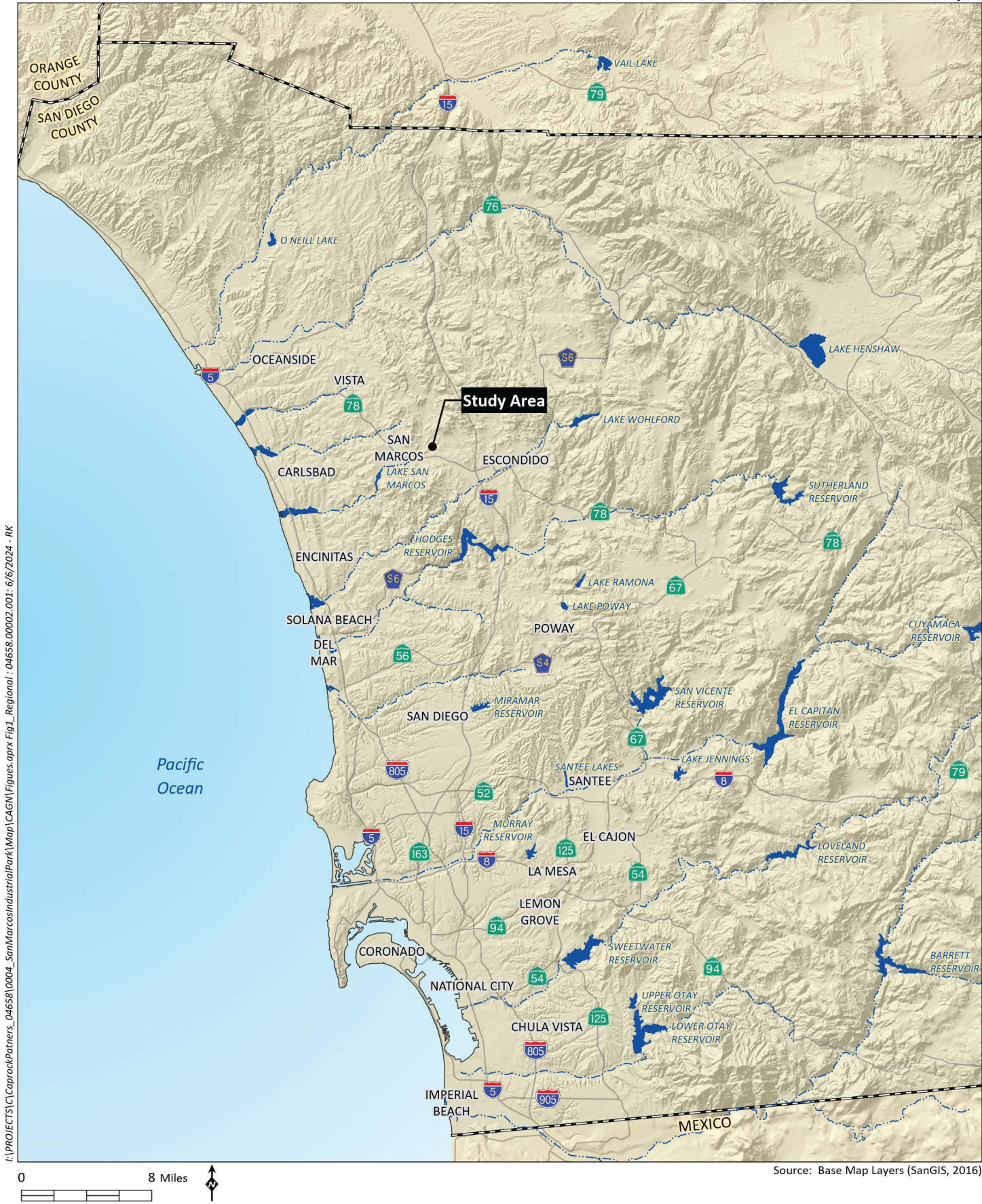
Sincerely,



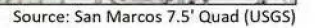
Mandy Mathews
Biologist

Attachments:

- Figure 1: Regional Location
- Figure 2: USGS Topography
- Figure 3: Aerial Photograph
- Figure 4: 2024 Coastal California Gnatcatcher Survey Results



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Attachment E

Special-Status Animal Species
Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Invertebrates			
Crotch's bumble bee (<i>Bombus crotchii</i>)	SCE	Occurs in southwestern California from the Central Valley south to the U.S./Mexico border. Inhabits open grassland and scrub habitats near the coast. Primarily nests underground, generally in abandoned rodent nests. Forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. Most commonly observed on flowering species in the Fabaceae, Asteraceae, and Lamiaceae families. Occurrence has also been linked to habitats containing <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , <i>Salvia</i> , <i>Antirrhinum</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , <i>Eriogonum</i> , <i>Cirsium</i> , <i>Acmispon</i> , <i>Euthamia</i> , <i>Ehrendorferia</i> , and <i>Trichostema</i> genera.	Moderate. The nearest known occurrence is from 2020, approximately 2.9 miles southwest of the project site. The project site contains scrub habitat and a variety of food sources to support this species, including buckwheat (<i>Eriogonum fasciculatum</i>), white sage (<i>Salvia apiana</i>), and black sage (<i>Salvia mellifera</i>). Small mammal burrows were observed on site.
Amphibians and Reptiles			
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC MSCP Covered NE	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 sandy soil is absent from the project site. No recent records of the species occur within the project vicinity.
California glossy snake (<i>Arizona elegans occidentalis</i>)	--/SSC	Most common in desert habitats but also occur in chaparral, coastal sage scrub, valley-foothill hardwood and pine-juniper woodlands, and grasslands. Prefer open sandy areas with scattered brush, but also found in rocky areas.	Low. Suitable sandy and rocky habitat absent from the project site. No recent records of the species occur within the project vicinity.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Belding's orange-throated whiptail (<i>Aspidoscelis hyperythra beldingi</i>)	--/WL MHCP Covered SMMHCP Covered	Inhabits low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.	Low. Washes and sandy areas absent from the project site. Recent records for the species are over 5 miles from the project site.
San Diegan tiger whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	--/SSC	Occurs in wide variety of habitats including grasslands, coastal sage scrub, chaparral, woodlands, and riparian areas. Often found associated with sandy areas along gravelly arroyos or washes.	Low. Washes and sandy areas absent from the project site. Recent records for the species are over 5 miles from the project site.
Red diamond rattlesnake (<i>Crotalus ruber</i>)	--/SSC	Found in chaparral, coastal sage scrub, woodlands and arid desert habitats in rocky areas and in dense vegetation.	Low. Suitable habitat rocky habitat absent from the project site. No recent records of the species occur within the project vicinity.
Coronado skink (<i>Plestiodon skiltonianus interparietalis</i>)	--WL	Found in grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.	Low. Suitable grassland, woodlands, pine forest, and chaparral absent from the project site.
Blainville's horned lizard (<i>Phrynosoma blainvillii</i>)	--/SSC SMMHCP Covered	Found in grasslands, coniferous forests, woodlands, coastal sage scrub and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills. Eats mainly ants, especially harvester ants (<i>Pogonomyrmex</i> sp.), but also consumes other small invertebrates such as spiders, beetles, termites, flies, honeybees, moth larvae, and grasshoppers. Generally excluded from areas invaded by Argentine ants (<i>Linepithema humile</i>).	Low. Suitable habitat present within the project site, but lacking open areas or patches of loose soil. Recent records of the species occur within the project vicinity.
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SSC	Inhabits chaparral, desert scrub, washes, sandy flats and rocky areas. Burrows into loose soil.	Low. Suitable sand flats and washes, and rocky areas absent from the project site. One recent record of the species occurs to the southwest.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Western spadefoot toad (<i>Spea hammondi</i>)	--/SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeding and egg laying occur in shallow, temporary pools formed by heavy winter rains. Grasslands with shallow temporary pools are optimal habitats for the western spadefoot.	Low. Suitable temporary pools absent from the project site. One recent record of the species occurs to the southeast.
Birds			
Cooper's hawk (<i>Accipiter cooperii</i>)	--/WL MHCP Covered SMMHCP Covered	Found in dense stands of oak woodlands, riparian habitat, and evergreen forests. Tolerant of human disturbance and habitat fragmentation, increasingly found breeding in suburban and urban areas.	Low. Suitable woodlands, forests, and riparian habitats absent from project site. May hunt in non-native trees along edges of the project site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	BCC/SCE, SSC SMMHCP Covered	Highly colonial species that 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 site.	Not Expected. Suitable breeding and foraging habitat is absent from the project site. One historical record of the species occurs to the southeast of the project site.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/WL MHCP Covered SMMHCP Covered	Typical habitat includes mixed chaparral and coastal scrub habitats, especially coastal sage scrub, on moderate to steep, dry, rocky slopes. Slopes vegetated by scattered shrubs interspersed with patches of grasses, forbs, and bare ground.	Low. The project site lacks suitable rocky slopes that this species is associated with.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/SE MHCP Covered SMMHCP Covered	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.	Not Expected. The project site lacks suitable riparian habitat. No recent records of the species occur within the project vicinity.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Yellow-breasted chat (<i>Icteria virens</i>)	--/SSC MHCP Covered	Occupies early successional riparian habitats with a well-developed shrub layer and an open canopy. Nests in dense shrubs along streams and watercourses.	Not Expected. The project site lacks suitable riparian habitat.
California black rail (<i>Laterallus jamaicensis coturniculus</i>)	BBC/ST, FP	Found in salt and freshwater marshes, and wet meadows dominated by pickleweed (<i>Salicornia</i> sp.), sedges (<i>Carex</i> sp.), bulrush (<i>Schoenoplectus</i> sp.), and cattails (<i>Typha</i> sp.).	Not Expected. Suitable habitat for the species is absent from the project site.
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT/SSC MHCP Covered SMMHCP Covered	Occupies open coastal scrub habitat with California sagebrush (<i>Artemisia californica</i>) as a dominant or co-dominant species. Found in arid washes, on mesas, and on slopes of coastal hills. Mostly absent from coastal areas dominated by white sage (<i>Salvia leucophylla</i>) or lemonadeberry (<i>Rhus integrifolia</i>).	Moderate. Suitable habitat present within the project site; however habitat is only a small patch. The closest record of this species in the vicinity of the project site is approximately one mile west.
Yellow warbler (<i>Setophaga petechia</i>)	BCC/SSC	Occupies riparian vegetation in close proximity to water along streams and in wet meadows. Found in willows and cottonwoods (<i>Populus</i> spp.) and numerous other species of riparian shrubs and trees.	Not Expected. The project site lacks suitable riparian habitat.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE MHCP Covered SMMHCP Covered	Found in early to mid-successional riparian habitat that supports a dense shrub cover and structurally diverse canopy. Typically breeds in willow riparian forest supporting a dense, shrubby understory of mulefat (<i>Baccharis salicifolius</i>) and other species. Oak woodland with a willow riparian understory is also used in some areas. Winters in southern Baja California, Mexico.	Not Expected. The project site lacks suitable riparian habitat.
Mammals			
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	--/SSC	Found in a variety of habitat from deserts scrubs to pine and piñon-juniper forests. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	Low. Suitable roosting habitat absent from the project site, though the species could forage on site. One historical record of the species occurs within the project vicinity, but there are no recent records of the species.

Species	Status ¹	Habitat Associations	Potential to Occur ²
American badger (<i>Taxidea taxus</i>)	--/SSC	Found in drier open areas of shrub, forest, and grassland habitats with friable soils.	Low. The site is surrounded by residential and commercial development, and provides limited suitable habitat for the species. One historical record of the species occurs to the west of the project site, but the no recent records of the species occur in the project vicinity.

¹ Listing is as follows: 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; MHCP Covered = Covered Species under the Multiple Habitat Conservation Plan; SMMHCP Covered = Species proposed for coverage under the Draft San Marcos Multiple Habitat Conservation Plan.

² Species are considered to have potential to occur when: (1) they were reported to the CNDDDB within or near the project site (locations are not always specific); and/or (2) were included in the USFWS database for the area; and/or (3) potentially suitable habitat is present.