

BIOLOGICAL TECHNICAL REPORT
FOR THE
CT HOMES FELTON RESIDENCE (APN 539-132-02)
PTS No. 557456

LOCATED IN THE CITY OF SAN DIEGO

Prepared for:

CT Homes

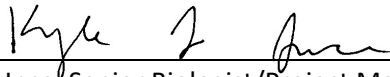
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November 2023



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BIOLOGICAL TECHNICAL REPORT FOR THE CT HOMES FELTON RESIDENCE (APN 539-132-12)

Merkel & Associates, Inc.
November 2023

MANAGEMENT SUMMARY/ABSTRACT

A biological survey of the CT Homes Felton Residence (APN 539-132-12) was conducted by Merkel & Associates, Inc. The purpose of this report is to document the existing biological conditions within the project study area; identify potential impacts to biological resources that could result from construction of a single family home residence and associated infrastructure; and recommend measures to avoid, minimize, and/or mitigate significant impacts pursuant to the California Environmental Quality Act (CEQA) and applicable federal, state, and local regulations and guidelines, including the City's Multiple Species Conservation Program (MSCP) Subarea Plan (1997), Biology Guidelines (2018b), Environmentally Sensitive Land Regulations (2018c), and Significance Determination Thresholds (2016).

The survey revealed the presence of native Southern Maritime Chaparral habitat, and non-native habitats including Non-native Vegetation and Disturbed Habitat. Two sensitive plant species, Nuttall's scrub oak (*Quercus dumosa*) and wart-stemmed ceanothus (*Ceanothus verrucosus*), and two sensitive wildlife species, Cooper's hawk (*Accipiter cooperii*) and Nuttall's woodpecker (*Picoides nuttallii*) were detected and/or observed. Impacts to 0.202 acre of Southern Maritime Chaparral, 0.036 acre of Non-native Vegetation, and 0.146 acre of Disturbed Habitat are expected to occur with the proposed project. In addition, the project will result in the loss of 29 Nuttall's scrub oak and 5 wart-stemmed ceanothus. Mitigation for Southern Maritime Chaparral is proposed as payment into the City's Habitat Acquisition Fund (HAF) for acquisition of Southern Maritime Chaparral or Tier I habitat inside the MHPA. Impacts to Nuttall's scrub oak and wart-stemmed ceanothus are not considered significant; however, the wart-stemmed ceanothus has been included in the project's Revegetation/Restoration Plan and will be mitigated at a 2:1 ratio in order to meet its condition for coverage, per the MSCP Subarea Plan (City of San Diego 1997).

A total of 0.164 acre of the project area occurs within the MHPA of the City's MSCP which will necessitate a MHPA Boundary Line Adjustment (BLA). Payment into the HAF for preservation of 0.858 acre of native habitat (e.g., Southern Maritime Chaparral, Tier I) will occur as a condition of the BLA. This 4:1 preservation and additional 1:1 preservation (0.202 acre) for impacts to Tier I habitat will also serve as mitigation for impacts to Southern Maritime Chaparral. A MHPA BLA was previously approved by the City and Wildlife Agencies for this project in November 2019 and only minor changes to the project scope are necessary to accommodate infrastructure features.

INTRODUCTION

Merkel & Associates, Inc. (M&A) has prepared this biological technical report, written in accordance with the current City of San Diego (City) Biology Guidelines for Conducting Biological Surveys (2018a), for the proposed CT Homes Felton Residence Project (Project). The purpose of this report is to document the existing biological conditions within the project study area; identify potential impacts to biological resources that could result from implementation of the proposed project; and recommend measures to avoid, minimize, and/or mitigate significant impacts pursuant to the California Environmental Quality Act (CEQA) and applicable federal, state, and local regulations and guidelines, including the City's Multiple Species Conservation Program (MSCP) Subarea Plan (1997), Biology Guidelines (2018b), Environmentally Sensitive Land Regulations (2018c), and Significance Determination Thresholds (2016).

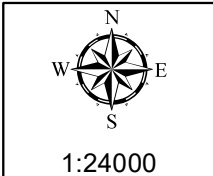
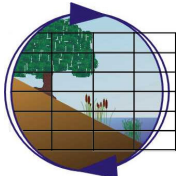
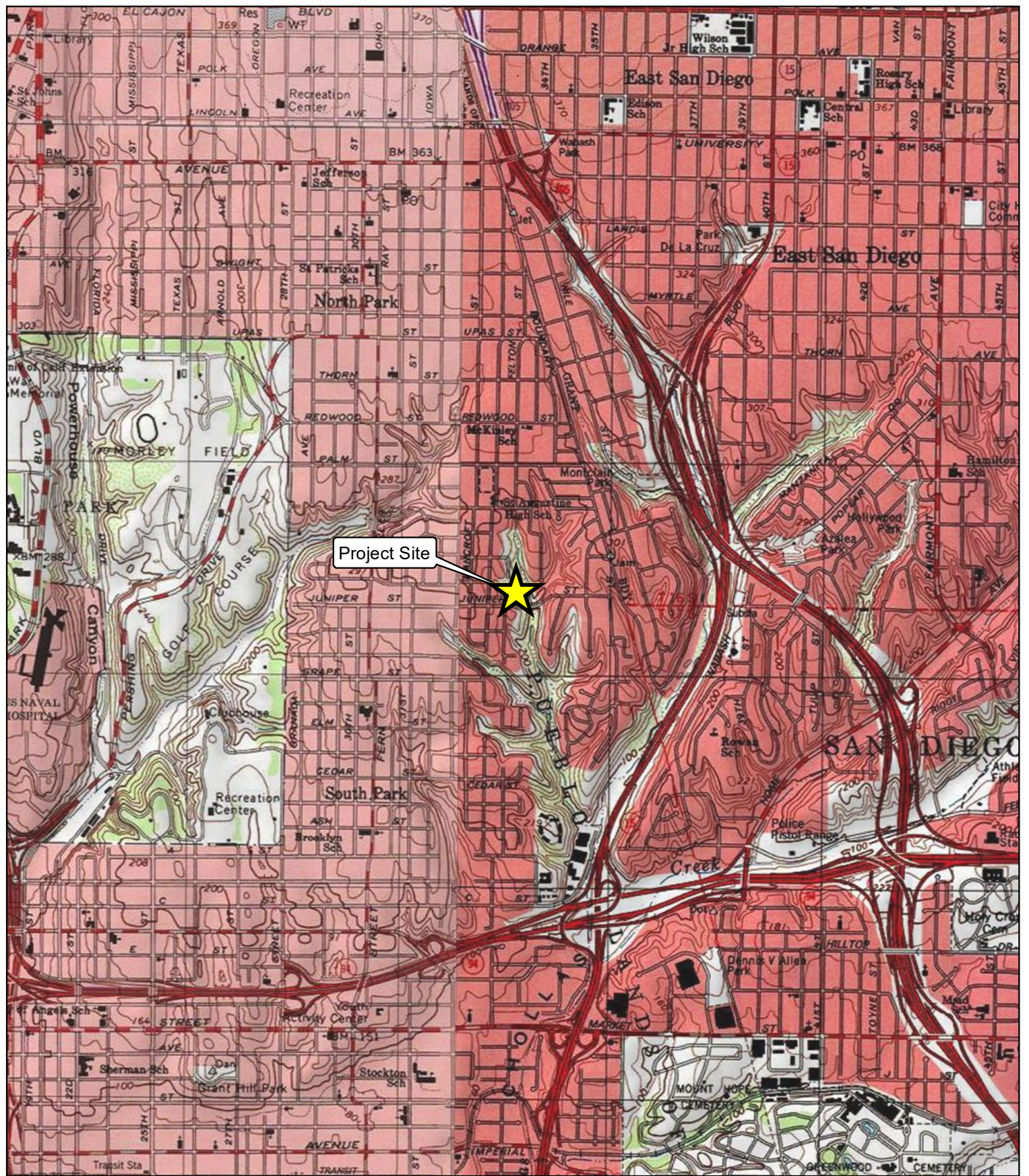
The project site is located at the planned paper street terminus of Felton Street in the City of San Diego on private land (Assessor's Parcel Number [APN]: 539-132-02) (Figure 1). A portion of the parcel is located within a City Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) (Figure 2).

PROJECT DESCRIPTION

The project includes the development of a 2,677-square foot 2-story single family residence on a 5,000 square foot (0.12 acre) lot located in the greater North Park community. The dwelling includes an attached garage and deck. Grading will include the import of 200 cubic yards of soil material to construct the building pad. A total of 205 linear feet of CMU retain wall will be constructed along the north and south sides of the property. The project also includes the off-site construction of a 30-foot wide private driveway, 465 linear feet of 6" A.C. public watermain and 321 linear feet of a 4" private sewer lateral totaling an additional 0.315 acres of off-site development. Altogether the project totals 0.435 acres. The project site is located within and adjacent to a City of San Diego owned open space canyon.

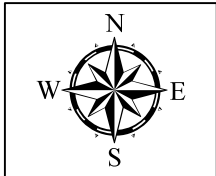
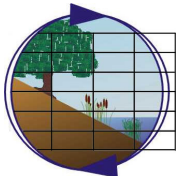
Access to the project is from the proposed driveway location that extends south from the terminus of Felton Street. This report assumes that all staging activities would occur within the limits of the proposed work and that the required brush management requirements would be limited to the area within the boundary of the subject parcel/residence.

All brush management is constrained to the limits of the property boundary. Brush Management Zone 1 has been reduced from 35 feet to 30 feet and Brush Management Zone 2 has been eliminated based on the inclusion of alternative brush management compliance measures and structural upgrade, as provided below. No native vegetation is expected to be retained within the limits of the property boundary. Zone 1 will consist of hardscape and irrigated ornamental vegetation. Brush management outside the property boundary, where native Southern Maritime Chaparral occurs will not be impacted by the development. Brush management in these offsite areas will be the responsibility of the adjacent property owners. A previously proposed project which excluded an access driveway and sewer alignment received MHPA BLA concurrence in November of 2019. The additional encroachment (0.136 acre) into the MHPA is relative to the access driveway and the proposed sewer alignment.



Project Vicinity Map
Felton Residence
Source: USGS 7.5' National City, CA Quadrangle

Figure 1



Local Setting Map
Felton Residence

Aerial Source: Bing 2022

Modified on June 2, 2023

Figure 2

The following alternative compliance measures and structural upgrades have been incorporated into the project design (see architectural and landscape plans):

- 6-foot tall CMU fire wall at the east property line
- Fire retardant deck and concrete flat work
- Fire rated eaves and perimeter wall construction
- Non-combustible perimeter fencing (vinyl/metal)

METHODS AND SURVEY LIMITATIONS

LITERATURE AND DATA REVIEW

Historical and currently available biological literature and data pertaining to the study area were reviewed prior to initiation of the field investigation. This review included examination of: 1) aerial photography for the project site (Bing Maps 2012, Microsoft Corporation); 2) regional vegetation data for the project vicinity (SanGIS 2010); 3) geological substrates and soil types mapped on the project site (SanGIS 2003 and 2002, respectively); and 4) California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and U.S. Fish and Wildlife Service (USFWS) special status species records for the project vicinity (CDFW 2020a and USFWS 2019a, respectively).

SURVEY DATES, TIMES, AND CONDITIONS

An M&A biologist conducted a general biological survey within the project study area on May 22, 2017 (Table 1). An updated study to include a proposed driveway and sewer alignment was conducted on October 22, 2020. A survey was conducted on October 20, 2022 to assess a slight modification to the sewer alignment and to re-verify site conditions.

Table 1. Summary of Survey Dates, Times, Conditions, and Staff

Date	Time	Weather Conditions ¹	Biologist	Survey
May 22, 2017	1030 - 1200 1330 - 1500	Weather: 0% cc Wind: 0-5 mph Temperature: 71°F-73°F	Kyle Ince	General Biological Survey
October 22, 2020	1000 - 1230	Weather: 0% cc Wind: 0-3 mph Temperature: 72°F-75°F	Kyle Ince	General Biological Survey
October 20, 2022	1200 - 1300	Weather: 15- 10% cc Wind: 0-5 mph Temperature: 82°F-81°F	Kyle Ince	General Biological Survey/Resources Verification
October 20, 2023	1215 - 1330	Weather: 0% cc Wind: 0-5 mph Temperature: 80°F-79°F	Kyle Ince	Crotch Bumble Bee Habitat Assessment

¹ cc = cloud cover; mph = miles per hour; F = Fahrenheit

GENERAL BIOLOGICAL SURVEY

Existing vegetation types were delineated onto a 1" = 65' scale (approx.) color aerial photograph (Air Photo USA 2007). A Trimble GPS unit with sub meter accuracy was used to further define vegetation boundaries and map sensitive species. The vegetation types were classified according to the Holland (1986) code classification system as modified by Oberbauer et al. (2008) and were mapped in

accordance with the City's current biological resource mapping requirements (2018a). A list of detectable flora and fauna species were recorded in a field notebook. Plant identifications were either resolved in the field or later determined through verification of voucher specimens, and wildlife species were determined through direct observation (aided by binoculars), identification of songs, call notes and alarm calls, or by detection of sign (e.g., burrows, tracks, scat, etc.). In addition, directed searches for sensitive species with a potential to occur onsite were conducted within the study area, and any other potential occurrences were assessed in the field based on the existing biological conditions. Photographs of the project study area were taken to record the biological resources present, and data collected from the survey were digitized into current Geographical Information System (GIS) Environmental Systems Research Institute (ESRI) software platforms.

The scientific and common names utilized for the floral and faunal resources were noted according to the following scientific nomenclature: flora, Rebman and Simpson (2014); butterflies, Klein/San Diego Natural History Museum (2002); amphibians and reptiles, Crother (2017); birds, Chesser et al. (2019); and mammals, San Diego Natural History Museum (undated), which uses Wilson and Reeder (2005) for species names and Hall (1981) for subspecies.

APPLICABLE REGULATIONS

FEDERAL, STATE, CITY, LOCAL REGULATIONS

The project will be required to comply with federal, state, and local regulations. Federal, State and local regulatory requirements that pertain to the project include U.S. Fish and Wildlife Service Endangered Species Act, the California Department of Fish and Game Code, the City of San Diego Land Development Code, and Environmentally Sensitive Lands (ESL) regulations. ESL Regulations (Chapter 14, Division 1, Section 143.0141) and biological guidelines address wetlands, listed species, development inside and outside MHPA as well as grading restrictions; of these, development inside and outside MHPA apply to this project, specifically. In addition, OR-1-2 Zone (Chapter 13, Division 2, Section 131.0230) and biology guidelines specifies development area (overlap in discussion regarding 25% development in MHPA addressed in the ESL regulations).

The project will comply with the regulatory requirements from these agencies. This biological technical report provides analysis throughout that demonstrates project compliance with ESL guidelines.

MIGRATORY BIRD TREATY ACT (MBTA)/CDFG CODE

The study area has the potential to be utilized by regionally common migratory birds and raptors that are not designated as special status species under CEQA but are protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503 and 3513.

Under the MBTA, it is unlawful, except as permitted by the USFWS, to "take, possess, transport, sell, purchase, barter, import, or export all species of birds protected by the MBTA, as well as their feathers, parts, nests, or eggs. Take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12)." It is important to note that "take" as defined under the federal MBTA is not synonymous with "take" as defined under the federal ESA. The MBTA definition of "take" lacks a "harm and harassment" clause comparable to "take" under the ESA; thus, the MBTA authority does not extend to activities beyond

the nests, eggs, feathers, or specific bird parts (i.e., activities or habitat modification in the vicinity of nesting birds that do not result in “take” as defined under the MBTA are not prohibited).

Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit the “take, possession, or destruction of bird nests or eggs.” Section 3503 states: “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.” Section 3513 states: “It is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.”

It is recommended that all clearing of vegetation occur outside the general avian and raptor breeding season (January 15 through September 15) and thus avoid impacts to active bird and/or raptor nests protected under the federal MBTA and/or California Fish and Game Code Sections 3503 and 3513. If clearing during the breeding season cannot be avoided, then all construction activities undertaken for the project shall comply with the regulatory requirements of the federal MTBA and CDFG Codes Sections 3503 and 3513:

- If an active bird nest were found, then all construction activities undertaken for the project shall comply with the regulatory requirements of the federal MTBA and CDFG Codes Sections 3503 and 3513.

SURVEY RESULTS

PHYSICAL CHARACTERISTICS/SETTING

The project site is located in a residential area of the North Park community occurring west of Interstate 805, west of Interstate 15, and north of State Route 94. It is situated on a relatively flat mesa abutting a portion of an unnamed open space canyon that extends from Nutmeg Street (located approximately 0.22 miles to the north) to Juniper Street located approximately 0.08 miles south of the site. South of Juniper Street, this canyon becomes Juniper Canyon which continues approximately 0.3 miles south from Juniper Street to Whaley Street (Figure 1). The project site is situated between a finger canyon that extends to 33rd Street to the west and the main aforementioned canyon to the east which extends to Nutmeg Street to the north. These canyons consist of relatively flat canyon floor with steep slopes of native Southern Maritime Chaparral vegetation that lead to the surrounding urban development.

The project parcel lies on a relatively flat disturbed mesa at the terminus of Felton Street. The elevation ranges within the project study area from approximately 211 feet above mean sea level (MSL) near the eastern terminus of the proposed sewer alignment to 262 feet above MSL located along the northern boundary of the parcel. The soils within the project study area are mapped as terrace escarpments (SanGIS 2002). Underlying geology is mapped as Miocene to Pleistocene rock type sandstone, mudstone (SanGIS 2003). The regional climate is characterized as temperate, semi-arid Mediterranean, with hot, dry temperatures in the late summer/early autumn and cooler, wet winters. Most of the annual precipitation falls between December and March, with annual rainfall levels totaling approximately 9-13 inches (USDA-NRCS 2006).

A total of 7,144 square feet (0.164 acre) of the proposed project development occurs within a City MSCP MHPA (Figure 2). The project site is not located within federally designated critical habitat for any listed species (USFWS 2019b).

VEGETATION COMMUNITIES

Three vegetation types were identified within the project study area during biological surveys conducted by M&A on May 22, 2017 and October 22, 2020 (Figure 3; Table 2). These identified vegetation types are considered upland habitats (i.e., City MSCP Tier's I and IV). Only the vegetation types within the project construction boundary (Figure 3) are calculated in Table 2. The vegetation types outside the project construction boundary (i.e., Urban/Developed) are not quantified but are mapped and described for context (Figure 3).

Table 2. Habitats/Vegetation Communities within Project Construction Boundary

Vegetation Type	Holland/ Oberbauer Code	Upland Tier Habitat Type	Total Area (acres)	Inside MHPA (acres)	Outside MHPA (acres)
Southern Maritime Chaparral	37120	Upland, Tier I	0.202	0.124	0.078
Non-native Vegetation	11000	Upland, Tier IV	0.036	0.014	0.022
Disturbed Habitat	11300	Upland, Tier IV	0.197	0.026	0.171
Total:			0.435	0.164	0.271

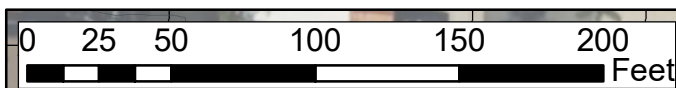
A description of each habitat type is summarized on the following pages, and a complete list of the floral species observed on the project site during the biological survey has been included with this report in Appendix 1.

Southern Maritime Chaparral

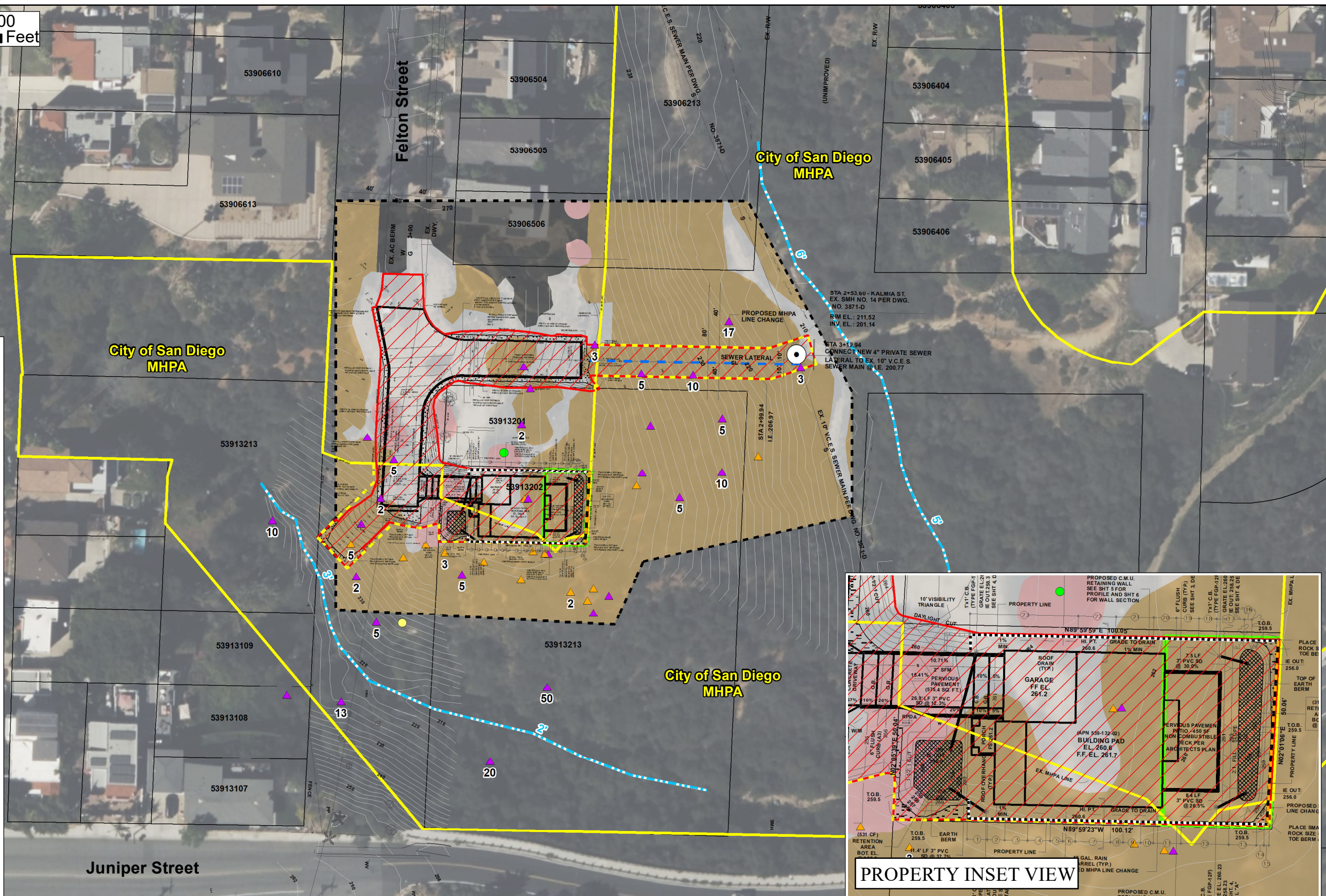
Southern Maritime Chaparral vegetation occupies much of the eastern and southern portions of the site. The Vegetation Classification Manual for Western San Diego County (SANDAG 2011) and current biological guidelines (2018a) allow for mapping of this vegetation away from the coast. Relatively tall woody shrubs including common chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), lemonadeberry (*Rhus integrifolia*), and toyon (*Heteromeles arbutifolia*) characterize this habitat. Two sensitive shrub species, Nuttall's scrub oak (*Quercus dumosa*) and wart-stemmed ceanothus (*Ceanothus verrucosus*) were also relatively common throughout the area.

Lower growing shrubs such as black sage (*Salvia mellifera*), flat-top buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), and California encelia (*Encelia californica*) were found interspersed between the taller shrubs. Other native plant species included perennial vines such as manroot (*Marah macrocarpus*), sub shrubs such as peak rush rose (*Helianthemum scoparium*), and annual forbs such as intermediate sun cup (*Camissoniopsis intermedia*) and hooked skunkweed (*Navarretia hamata*).

It should be noted that both Nuttall's scrub oak and wart-stemmed ceanothus which are now considered indicator species of Southern Maritime Chaparral have distributional ranges that extend well inland from the coast including Boulder Ranch and Miramar for Nuttall's scrub oak and Escondido and Rancho Bernardo for wart-stemmed ceanothus.



- Vegetation Communities (Holland/Oberbauer Code)**
- Southern Maritime Chaparral (37C30)
 - Non-native Vegetation (11000)
 - Disturbed Habitat (11300)
 - Urban/Developed (12000)
- Special Status Species (label = count >1)**
- Flora**
- Nuttall's Scrub Oak (*Quercus dumosa*)
 - Wart-stemmed Ceanothus (*Ceanothus verrucosus*)
- Fauna**
- California Thrasher (*Toxostoma redivivum*)
 - Cooper's Hawk (*Accipiter cooperii*)
- Site Plans (February 2022)**
- Proposed Structures and Curbs
 - Proposed 2ft Contours
 - 5' HT Vinyl Fencing on Retaining Wall
 - 6' HT CMU Fire Wall
 - Retention Area
 - Rip Rap
 - Proposed 4" Sewer Lateral Line
 - Point of Connection for Proposed 4" Sewer Lateral Line
 - Brush Management Zone 1
 - Limit of Work
- Other**
- City of San Diego MHPA (SanGIS August 2021)
 - Proposed Adjusted MHPA Boundary
 - Existing 2ft Contours
 - APN Boundary (SANGIS December 2021)
 - Focused Survey Area



Biological Resources Map
2385 Felton Street

Modified on Feb. 27, 2023

Figure 3

Aerial Source: Bing 2020

Non-native Vegetation

This habitat is mapped for areas that are dominated by non-native plant species. This includes small groupings of acacia (*Acacia cyclops*), a few eucalyptus (*Eucalyptus* spp.) trees, and patches of Indian-fig (*Opuntia ficus-indica*) which was primarily found beneath eucalyptus trees. The eucalyptus trees found onsite appeared to be mostly dead. This habitat has low wildlife value due to the lack of native species.

Disturbed Habitat

Disturbed habitat has been primarily mapped for areas that have been physically altered and now consist of mostly unvegetated, compacted soils. The flat portion of the site is mostly devoid of vegetation except for occasional sapling tree tobacco (*Nicotiana glauca*). A disturbed slope located west of the parcel boundary is dominated by opportunistic, non-native forbs such as tocalote (*Centaurea melitensis*), London rocket (*Sisymbrium irio*) and horehound (*Marrubium vulgare*).

Urban/Developed

Urban/Developed has been mapped for existing development areas including the terminus of Felton Street.

WILDLIFE

A total of 19 faunal species were observed and/or detected within or adjacent to the project study area during the biological survey. The majority of these species are common and widespread species that typically occur within upland and urban habitats; however, two sensitive species, Cooper's hawk (*Accipiter cooperii*) and Nuttall's woodpecker (*Picoides nuttallii*) were also detected and/or observed and are further discussed below. A complete list of fauna species observed by M&A during the surveys is provided in Appendix 2.

California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), western scrub-jay (*Aphelocoma californica*), Bewick's wren (*Thryomanes bewickii*) and wrentit (*Chamaea fasciata*) were observed and are common bird species typical of chaparral habitat. Other detected common bird species included bushtit (*Psaltriparus minimus*), mourning dove (*Zenaidura macroura*), lesser goldfinch (*Spinus psaltria*), Nuttall's woodpecker, and house finch (*Haemorhous mexicanus*). Two raptors, red-tailed hawk (*Buteo jamaicensis*) and Cooper's hawk were observed in urban development near the site. The red-tailed hawk was observed soaring over residential development to the south of the site and the Cooper's hawk was observed perched on a telephone pole northwest of the site. An offsite raptor nest was observed in a mature Eucalyptus (*Eucalyptus* sp.) tree located approximately 150 feet northwest of the site. This offsite tree occurs in the front yard of the most southern house that is situated on the west side of Felton Street. The nest did not appear to be occupied during the survey. Only one mammal species, desert cottontail (*Sylvilagus audubonii sanctidiegi*), was detected during the surveys. Mammals that may potentially occur in this habitat and the adjacent canyon include common and urban tolerant species such as striped skunk (*Mephitis mephitis holzneri*) and coyote (*Canis latrans leptiscus*). Potential common reptiles and amphibians present in this habitat include the western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), San Diego alligator lizard (*Elgaria multicarinata webii*), and garden slender salamander (*Batrachoseps major major*). The sensitive orange-throated whiptail (*Aspidoscelis hyperythra*) has been reported from Juniper Canyon to the south and may occur onsite (CDFW 2019).

SENSITIVE RESOURCES

Sensitive species are those considered sensitive by the City or any state or federal agency. For the purposes of this report, species listed as endangered or threatened under the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA); species designated as California Special Concern species or Fully Protected species by the CDFW; and species listed as MSCP narrow endemics by the City (1997) are considered “sensitive”. Species considered rare by the California Native Plant Society (CNPS) (2020) or as Special Plants or Animals in the CNDDDB (CDFW 2020b and 2019), may be considered “sensitive” if they meet the CEQA Guidelines §15380 (Title 14, Chapter 3, Article 20) definition for “endangered, rare or threatened species”.

Plants

Two sensitive floral species were identified within the project study area during the biological surveys: Nuttall’s scrub oak (CNDDDB Special Plant, CRPR 1B.1 Species, MHCP Covered Species), and wart-stemmed ceanothus (CNDDDB Special Plant, CRPR 2.2, MSCP Covered Species) (Figure 3). Most of the sensitive plants that were found within the study area occurred outside the parcel boundary except for one Nuttall’s scrub oak and one wart-stemmed ceanothus which occurred together within the Southern Maritime Chaparral habitat in the eastern third of the parcel. An additional 28 Nuttall’s scrub oak and 5 wart-stemmed ceanothus are expected to be impacted by the driveway and sewer alignment. No City MSCP narrow endemics were identified onsite.

Appendix 3 provides a complete listing of the sensitive plant species detected or an evaluation of the potential for sensitive floral species to occur within the study area based on suitable habitat, soils, topography, and/or elevation.

Narrow Endemics

Table 3 lists each of the City’s Narrow Endemic species and their potential to occur onsite.

Table 3. Narrow Endemics

Scientific Name Common Name	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
<i>Acanthomintha ilicifolia</i> San Diego thornmint	Not Expected	No suitable soils (i.e., friable clay) occur onsite.
<i>Agave shawii</i> Shaw's agave	Not Expected	The project site is not located along the coast or within the known range for this species.
<i>Ambrosia pumila</i> San Diego ambrosia	Not Expected	No suitable conditions (i.e., seasonal drainages, alluvial soil) for this species occur onsite.
<i>Aphanisma blitoides</i> Aphanisma	Not Expected	No suitable habitat or soils occur within the project study area. The site occurs east of this species' known range.
<i>Astragalus tener</i> var. <i>titi</i> Coastal dunes milk vetch	Not Expected	No suitable habitat (sand dunes) for this species occurs onsite.
<i>Baccharis vanessae</i> Encinitas baccharis	Not Expected	The project site is south of this species' known range.
<i>Dudleya blochmaniae</i> var. <i>brevifolia</i> Short-leaved live- forever	Not Expected	No suitable soils with iron bearing concretions typically associated with this species occur within the project study area. In addition, the project site is south of its known range.
<i>Dudleya variegata</i> Variegated dudleya	Not Expected	No suitable soils and/or substrate occur within the project study area. In addition, no known records of this species occur in the project region.
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button celery	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Hemizonia conjugens</i> Otay tarplant	Not Expected	No suitable soils occur within the project study area. The site is well north of this species' known range.
<i>Navarretia fossalis</i> Spreading navarretia	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Opuntia parryi</i> var. <i>serpentina</i> Snake cholla	Not Expected	Although suitable habitat occurs in the project study area, this conspicuous cacti species was sought but not observed in the project area. A population has been recorded approximately 1,000 feet south of the site in Juniper Canyon.
<i>Orcuttia californica</i> Orcutt's grass	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Pogogyne abramsii</i> San Diego mesa mint	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Pogogyne nudiuscula</i> Otay Mesa mint	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.

Wildlife

Two sensitive fauna species were observed or detected during the M&A biological survey: Cooper's hawk (CDFW Watchlist List Species, CNDDDB Special Animal, MSCP Covered Species) and Nuttall's woodpecker (CNDDDB Special Animal) (Figure 3). The Cooper's hawk was observed offsite northwest of the site on a telephone pole located near the intersection of Kalmia Street and 33rd Street. No nesting habitat for this species occurs onsite. The Nuttall's woodpecker was observed foraging within the project study area during the biological survey. No tree cavities for nesting were observed in the dead eucalyptus tree trunks/branches.

Although not observed during the field surveys, the following sensitive wildlife have at least a moderate potential to occur onsite predominately based upon the presence of suitable habitat: Crotch bumble bee (*Bombus crotchii*) (foraging only), orange-throated whiptail, Coronado Island skink (*Plestiodon skiltonianus interparietalis*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), and northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). The Crotch bumble bee became a candidate species for listing under the California Endangered Species Act in June of 2019. It is not a covered species under the City of San Diego's MSCP. No other potential sensitive faunal species are expected to have at least a moderate potential to occur within the project site. The coastal California gnatcatcher (*Poliioptila californica californica*) is a year around resident bird species that occurs in the coastal areas of San Diego County. This bird's typical habitat (Coastal Sage Scrub) does not occur onsite or adjacent to the site and the site's Southern Maritime Chaparral appears too dense to support this species. Gnatcatcher has been reported from Juniper Canyon approximately 0.5 miles south of the site (USFWS 2019a).

Appendix 3 provides a complete listing of the sensitive wildlife species identified during the biological surveys or evaluated for the potential to occur onsite primarily based on suitable habitat.

Jurisdictional Resources

No jurisdictional resources occur on the site.

Wetland Buffers

No wetlands occur on the site.

Wildlife Corridors

The site is associated with an isolated urban canyon that offers no direct connectivity to other large contiguous open habitats. The drainage system along the bottom of the canyon is directed downstream through culverts under Juniper Street and then proceeds down Juniper Canyon where it is eventually conveyed into a storm drainpipe that presumably drains into San Diego Bay. Due to the lack of connectivity to large core open space/natural areas, this canyon is not expected to provide a regional linkage for maintaining population viability and preserving biological diversity for a wide range of wildlife including large mammals with large home ranges (e.g., mountain lion, mule deer); thus, it is not expected to function as a regional wildlife corridor.

The subject canyon likely acts as a local wildlife corridor due to its connectivity (albeit constrained by surrounding urban development) to a limited amount of small finger canyons in the vicinity. The

topography and wildlife habitat within these canyons provide coverage, foraging and breeding opportunities to a variety of common species and to a lesser extent sensitive bird species. The subject canyon and the unnamed creek along the bottom of the canyon likely facilitate wildlife movement for native and migratory wildlife species within the canyon, provide potential native wildlife nursery sites, and may act as a steppingstone corridor for avian species.

MHPA BOUNDARY LINE ADJUSTMENT / COMPLIANCE WITH MSCP/VPHCP

Approximately 0.028 acre (1,219 square feet) of the parcel occurs within the City's MHPA and 100 percent of the MHPA within the parcel is proposed to be developed by the project. Because the project proposes to impact more than the allowable development area of 25 percent of the MHPA for the project parcel, a MHPA boundary line adjustment (BLA) is required per the Biological Guidelines (City of San Diego 2018b).

Given the small size of the project property (0.11 acre) and proposed development which is limited to the construction of a single-family dwelling, there is no opportunity for redesign that would preclude or reduce encroachment into the MHPA; therefore, the proposed project includes a MHPA BLA. A MHPA BLA is subject to approval by the City and wildlife agencies in accordance with meeting the six MHPA BLA functional equivalency criteria, as provided in the Regional MSCP Plan (August 1998). These criteria include: 1) effects on significantly and sufficiently conserved habitats; 2) effects to covered species; 3) effects on habitat linkages and function of preserve areas; 4) effects on preserve configuration and management; 5) effects on ecotones of other conditions affecting species diversity; and 6) effects to species of concern not on the covered species list.

It should be noted that a previously proposed project which excluded an access driveway and sewer alignment received MHPA BLA concurrence in November 2019. The additional minor encroachment (0.136 acre) into the MHPA is relative to the access driveway and the proposed sewer alignment. The total amount of area to be removed from the MHPA is now 0.164 acre (0.028 acre located on the parcel and 0.136 acre located off the parcel).

Purchase of a suitable exchange property (i.e., a property that is currently outside but directly adjacent to the MHPA) that meets the six MHPA BLA criteria for the purpose of a boundary adjustment would not be cost feasible nor prudent given the small area (i.e., 0.164 acre) required for the adjustment. In addition, the Developer (CT Homes) does not own any properties where the MHPA can be adjusted in exchange for the 0.164-acre MHPA boundary adjustment onsite. All the properties within the City of San Diego that are owned by the Developer are landlocked within urban development that is not contiguous with the MHPA. The nearest property to the MHPA is situated at 3533 Nile Street (APN: 453-755-10-00) which is separated from the MHPA by one house and a frontage road located to the east of this property. No opportunities to restore Tier I habitat occur on-site since the entire parcel will be developed and the remaining infrastructure development (e.g., sewer line) on City paper streets would not be prudent for establishing chaparral habitat. Although the revegetation/restoration plan exclusively uses native species, its purpose is for long-term erosion control over the sewer which cannot be planted with deep-rooted species and on a minor fill slope required for construction of the driveway.

For these reasons, it is recommended that the Developer pay into the City's Habitat Acquisition Fund (HAF) per requirements of purchase involving a BLA. A payment to preserve 0.858 acre of native habitat (Tier I inside the MHPA) within lands purchased by the HAF and managed by the City for

conservation of sensitive biological resources in perpetuity within the MHPA would be required to compensate for the removal of 0.164 acre of habitat from the onsite MHPA. It should be noted that the City has consistently maintained that impacts to Tier I habitat cannot be mitigated by HAF purchase because it cannot guarantee that land purchased in the future with HAF monies would include Tier I habitat. However, all mitigation options pursuant to the City's Bio Guidelines have been explored and exhausted and ultimately deemed infeasible as discussed above and summarized here: (1) purchase of suitable exchange property would not be cost feasible/prudent given the small amount of impact acreage associated with the project; (2) the developer does not own property where the MHPA can be adjusted, and (3) there is no feasible way for on-site revegetation, since the entire parcel will be developed and the remaining infrastructure development on City paper streets would not be prudent for establishing chaparral habitat. A 4:1 HAF purchase mitigation plus an additional 1:1 for Tier I impacts (0.202 acre) was agreed upon by the resource agencies for approval of the BLA. The following discussion assesses how this transaction would meet each of the City's six functional equivalency criteria outlined below.

EFFECTS ON SIGNIFICANTLY AND SUFFICIENTLY CONSERVED HABITATS

The proposed BLA through purchase into the HAF will ensure conservation of four times the amount of native habitat than the amount required for a BLA on a property outside but contiguous to the MHPA, thus having a greater than equivalent positive effect on conserved habitats.

EFFECTS ON COVERED SPECIES

Adjustment of the MHPA boundary at the proposed project site will not have a significant effect on covered species. A total of 21 Nuttall's scrub oak (CNDDDB Special Plant, CRPR 1B.1 Species, MHCP Covered Species) and 5 wart-stemmed ceanothus (CNDDDB Special Plant, CRPR 2.2, MSCP Covered Species) are expected to be removed from the MHPA. This is not considered significant as the specified quantity of plants is not expected to affect the long term viability for both species nor adversely affect their local long-term survival.

EFFECTS ON HABITAT LINKAGES AND FUNCTION OF PRESERVE AREAS

Adjustment of the MHPA boundary at the proposed project site is not expected to significantly impact a habitat linkage or significantly affect the function of the MHPA. Preservation of habitat through payment into the habitat acquisition fund will ensure acquisition of high quality habitat located in the identified core biological habitat acquisition areas such as portions of East Elliott/Mission Trails Regional Park (MTRP). The City of San Diego consistently utilizes HAF funds to acquire lands of high quality habitat to contribute to conservation of preserve areas including habitat linkages whereas the MHPA on-site does not serve equivalent function of preserve when compared to MTRP and lacks sufficient habitat linkage.

EFFECTS ON PRESERVE CONFIGURATION AND MANAGEMENT

Adjustment of the MHPA boundary onsite is not expected to have a significant effect on the configuration of the Preserve. The boundary will be adjusted approximately 2 to 75 feet to the south of the property for a distance of approximately 150 feet to accommodate the house and the driveway. In addition, the boundary will be adjusted to exclude the proposed sewer alignment for a distance of approximately 321 feet. A total of 0.164 acre (7,144 square feet) of area will be removed from the City's management responsibilities. No change in the configuration of the Preserve

boundary or management responsibility will occur with the proposed payment into the City's Habitat Acquisition Fund.

EFFECTS ON ECOTONES OR OTHER CONDITIONS AFFECTING SPECIES DIVERSITY

No Ecotones will be affected from the MHPA boundary adjustment. Species diversity is also not expected to be affected from the proposed boundary adjustment. The 0.164 acre of area that will be removed from the MHPA includes 0.124 acre of Southern Maritime Chaparral, 0.014 acre of Non-native Vegetation (i.e., Acacia, Eucalyptus) and 0.026 acre of Disturbed Habitat (i.e., unvegetated, compacted soils). Much of the Southern Maritime Chaparral is relatively disturbed given its abutment with the adjacent disturbed habitats. Payment within the City's Acquisition Fund is expected to provide preservation of higher quality Tier I habitat.

EFFECTS TO SPECIES OF CONCERNS NOT ON THE COVERED SPECIES LIST

No plant or animal Species of Concern that are not on the City's Covered Species List will be affected by the boundary adjustment. Payment within the City's Acquisition Fund is expected to preserve habitat with non-covered species.

MSCP CONSISTENCY

MHPA Land Use Adjacency

The project is located partially within and immediately adjacent to the MHPA which includes a City owned open space canyon. The following MHPA Land Use Adjacency Guidelines (City of San Diego 1997) must be adhered to in order for the project to be consistent with the City's MSCP Subarea Plan.

1. Drainage – No direct drainage or release of toxins, chemicals, petroleum products exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes is allowed within the MHPA. **As shown on the plans, to contain all onsite storm-water runoff from flowing onto the MHPA City Park Lands, two retention areas have been created with 1.5' height earthen berms. The west retention area has a surface area of approximately 153 sq. ft., and the easterly retention area is approximately 160 sq. ft. of surface area. In addition, all runoff associated with off-site areas (i.e., Kalmia and Felton Street driveways) will be accommodated with the use of permeable pavers that allow for surface water capture and infiltration. In addition, in order to prevent any "potential" stormwater erosion, the project proposes the placement of small rock riprap (rock size of 0.5') throughout the perimeter of the project, and disturbed areas. All proposed drainage treatment areas that are currently located within the MHPA, will be adjusted outside the MHPA as part of the project's proposed Boundary Line Adjustment that is required for final project acceptance.**
2. Toxics – The use of chemicals or products that generate by-products that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. This can be accomplished using natural detention basins, grass swales or mechanical trapping devices. **As described above, all runoff will be treated via retention basins or with the use of permeable pavers which are expected to allow for infiltration and treatment of potential toxins associated with storm water runoff.**

3. Lighting – Lighting adjacent to the MHPA should be shielded and directed away from the MHPA. **Outdoor lighting along the southern and eastern property boundary will be shielded as specified on the architectural plans so as to avoid impacts to the MHPA.**
4. Noise – Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Excessively noisy activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. **Excessively noisy outdoor construction activities (e.g., framing, roofing) are expected to occur outside the breeding season for birds including the sensitive coastal California gnatcatcher which breeds from March 1 to August 15, although it should be noted that no suitable habitat (i.e., Coastal Sage Scrub) for the coastal California Gnatcatcher occurs onsite, as previously mentioned. All excessive high noise generating activities will be limited to the period of August 15 to March 1 (i.e., outside the bird breeding season).**
5. Barriers – New development adjacent to the MHPA may be required to provide barriers (e.g. non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation. **A five-foot tall vinyl fence on a retaining wall proposed for the southern boundary of the parcel and a six-foot tall CMU fire wall along the eastern boundary of the parcel will serve as barriers to the adjacent MHPA.**
6. Invasives – No invasive non-native plant species shall be introduced into areas within and adjacent to the MHPA. **No invasive plant species are proposed in the project’s landscape plans. Any installed irrigation (i.e., low flow rotator heads, drip) will not result in runoff that will promote the presence of invasive species within the MHPA.**
7. Brush Management – New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone brush management areas on the development pad and outside of the MHPA. **Brush management including alternative compliance measures are discussed in the Brush Management Section of this report and are shown in the Landscape Architect’s proposed Brush Management Plan.**
8. Any manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA. **All proposed manufactured slopes for the project have been included within the development footprint for the project.**

Area Specific Management Directives/Conditions of Coverage for MSCP Covered Species

One MSCP covered species, wart-stemmed ceanothus, occurs onsite. The species is covered by the MSCP because 67% of the major populations will be conserved. The project site does not occur in an identified protected population and therefore area specific management directives to increase populations of this species are not pertinent. In addition, implementation of the project’s brush management plan will reduce the risk of catastrophic fire to adjacent populations of this species and therefore assist with meeting the area specific directive of reducing catastrophic fire. Orange-throated whiptail is a MSCP covered species that has a moderate chance of occurring on the site. This reptile is covered by the MSCP because 59% of its potential habitat and 62% of known point occurrences will be preserved. The project is not expected to have a significant edge effect on this species. Cooper’s hawk is a bird species that may forage onsite. This species is covered by the MSCP

because 59% of potential foraging and 52% of potential nesting habitat, and 92% of known occurrences will be conserved. No potential nest trees for this species occur onsite.

IMPACTS

State CEQA Guidelines §15065 (a) (Title 14, Chapter 3, Article 5) states, “A project may have a significant effect on the environment” if:

- “The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.”
- “The project has possible environmental effects which are individually limited but cumulatively considerable.”

The following impact analysis identifies potential impacts to biological resources that could result from implementation of the proposed project based on project plans dated November 19, 2020. In addition, the City has developed Significance Determination Thresholds (2016) and Biology Guidelines (2018b) under CEQA; therefore, applicable mitigation measures for significant project impacts are recommended in accordance with these City guidelines. The following Significance Determination Thresholds are relevant to the proposed project and have been taken verbatim from the Significance Determination Thresholds:

- a. The site has been identified as part of the MHPA by the City’s MSCP Subarea Plan.
- b. The site supports or could support (e.g., in different seasons/rainfall conditions, etc.) Tier I, II, or IIIA & B vegetation communities (such as grassland, chaparral, coastal sage scrub, etc.). The CEQA determination of significant impacts may be based on what was on the site (e.g., if illegal grading or vegetation removal occurred, etc.), as appropriate.

DIRECT IMPACTS

CEQA guidelines §15358 define a “direct impact or primary effect” as “effects which are caused by the project and occur at the same time and place” that can produce a temporary or permanent biologically significant “physical change” in the environment.

Vegetation Communities

Development of the entire parcel to include construction of the single-family dwelling, associated brush management features, a driveway, and a sewer pipeline will result in vegetation impacts identified in Table 4. Given the site’s constraints, Brush Management Zone 1 has been reduced from 35 feet to 30 feet and Brush Management Zone 2 has been reduced from 65 feet to 0 feet in accordance with 142.0412(C).(2).

Offsite

Table 4. Quantitative Summary of Proposed Project Habitat Impacts and Mitigation

Vegetation Community	Upland Tier Habitat Type	Total Onsite within Project Boundary (acres)	Total Proposed Impacts (acres) Outside ³ MHPA Inside Property Boundary	Total Proposed Impacts (acres) Outside ³ MHPA Outside Property Boundary	Total Proposed Impacts (acres)	Applicable Mitigation Ratios	Applicable Required Mitigation Acreage
Southern Maritime Chaparral	Tier I	0.202	0.069 ²	0.133	0.202	1:1	0.202 ¹
Non-native Vegetation	IV	0.036	0.013	0.023	0.036	0:1	0.000
Disturbed Habitat	IV	0.197	0.026	0.171	0.197	0:1	0.000
Total:		0.435	0.108	0.327	0.435	n/a	0.202

¹Assumes mitigation occurs within the MHPA. Impact acreages include brush management which has been contained within the limits of the property parcel boundary. An additional 1:1 has been added to allow for use of the HAF to satisfy the MHPA BLA with associated Tier I impacts (see Table 5). There is not a Brush Management Zone 2 with this project.

²Includes 0.032 acre of impact associated with Brush Management Zone 1.

³Impacts are considered outside the MHPA as concurrence on the BLA is required and once approved areas currently within would be removed from the MHPA Preserve.

Table 5. Quantitative Summary of BLA Requirements

Vegetation Community	Upland Tier Habitat Type	Total Onsite within Project Boundary (acres)	Total (acres) of Area to be Removed from the MHPA	Applicable Mitigation Ratios	Total (acres) of Area to be Purchased for MHPA Preservation
Southern Maritime Chaparral	Tier I	0.202	0.124	4:1 ¹ 1:1	0.496 0.202
Non-native Vegetation	IV	0.036	0.014	4:1	0.056
Disturbed Habitat	IV	0.197	0.026	4:1	0.104
Total:		0.435	0.164	n/a	0.858

1 –An additional 1:1 has been added to allow for use of the HAF to satisfy the MHPA BLA with associated Tier I impacts.

All impacts from brush management are constrained to the limits of the property parcel boundary. No native vegetation is expected to be retained within the limits of the parcel boundary. Offsite impacts are associated with construction of the proposed driveway and sewer line. Zone 1 will consist of hardscape and ornamental vegetation. Per the project’s brush management plan (see Landscape Architect plan), the City’s Fire Chief may allow implementation of alternative compliance measures to achieve an equivalency of a full defensible space per Lands Development Code Section 142.0412(I). Approval of such measures are based on documentation which addresses the topography, existing or potential fuel loads, and other characteristics related to fire protection and the context of the proposed development. Alternative compliance measures must minimize impacts to undisturbed native or naturalized vegetation and shall not be detrimental to the public health, safety, and public welfare of persons residing or working in the area. The following alternative compliance measures and structural upgrades have been incorporated into the project design:

- 6-foot tall CMU fire wall at the east property line
- Fire retardant deck and concrete flat work
- Fire rated eaves and perimeter wall construction
- Non-combustible perimeter fencing (vinyl)

Based on the City’s Significance Determination Guidelines under CEQA, revised version (2016), project impacts to Tier IV habitats in general are not considered significant under CEQA and therefore do not require mitigation. The only significant impact to biological resources associated with the project is from the loss of 0.202 acre of Southern Maritime Chaparral habitat.

Sensitive Plants and Wildlife

The project will result in the loss of 29 Nuttall’s scrub oak (CNDDDB Special Plant, CRPR 1B.1 Species, MHCP Covered Species) and 5 wart-stemmed ceanothus (CNDDDB Special Plant, CRPR 2.2, MSCP Covered Species). This is 16 percent and 22 percent, respectively, of the number of plants detected within the nearby area. The loss of these 34 shrubs would not be considered significant given the

natural distribution, rarity, and the level of coverage that has been afforded to these species by the MSCP. It should be noted that these species are relatively abundant within the Southern Maritime Chaparral habitat that is protected within the MHPA in the local area.

The only suitable habitat for Nuttall's woodpecker onsite consists of 4-5 dead medium sized Eucalyptus trees. Although Nuttall's woodpecker was observed foraging in these Eucalyptus trees onsite, no nesting cavities were observed on these trees during the recent biological survey.

The site may provide foraging habitat for the Crotch bumble bee, a candidate species for listing as endangered under CESA by CDFW. Bumble bees including this species are generalist foragers and have been reported visiting a wide variety of flowering plants to feed on pollen and nectar resources (Xerces Society 2018, Koch et al.). Crotch bumble bee has a short tongue and thus may be best suited to forage at open flowers with short corollas. The plant families most commonly associated with Crotch bumble bee sightings in California include but are not limited to Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae, and Boraginaceae (Thorp et al. 1983). Two families (i.e., Asteraceae, Fabaceae) are represented on-site which include, broom baccharis (*Baccharis sarothroides*), California encelia, golden yarrow (*Eriophyllum confertiflorum*), fascicled tarplant (*Deinandra fasciculatum*), coastal deerweed (*Acmispon glaber* var. *glaber*) and black sage which all occur on-site. Example plant genera that the Crotch bumble bee have been reported to feed on include but are not limited to milkweed (*Asclepias* spp.), phacelia (*Phacelia* spp.), and sage (*Salvia* spp.) (Williams et al. 2014 as well as snapdragon (*Antirrhinum* spp.), phacelia (*Phacelia* spp.), clarkia (*Clarkia* spp.), bush poppy (*Dendromecon* spp.), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* spp.) (Koch et al. 2012). Of these plants, buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*) and black sage are represented on the site. Based on the above information, the bumble bee has a moderate potential to forage on-site, primarily within the southern maritime chaparral habitat based on the presence of suitable foraging plant species present on-site. Nesting occurs primarily underground, often in abandoned holes made by rodents or occasionally abandoned bird nests or other cavities (e.g., brush piles rock piles, fallen logs, holes in building foundations, rubble or abandoned furniture, etc.) typical of most bumble bee species (Xerces Society 2018; Osborne et al. 2008; Koch et al. 2012; CDFW 2023). A habitat assessment conducted in October 2023 did not reveal any potential nesting habitat (i.e., abandoned burrows, abandoned bird nests, dense thatch). Site soils are not conducive to burrowing as they are highly compacted and include a relatively high proportion of 3 to 5-inch sized cobble. Dense, relatively tall, closed canopy chaparral vegetation covers the east-facing slope proposed for the location of the sewer. The remaining mostly disturbed flat area of the site includes bare ground but with the same, highly compacted soil conditions. Urban development occurs to the north and similar soil/chaparral conditions occur south, east, and west of the site. As such, the site is also considered to lack adjacency to high-quality foraging or nesting habitat.

A search of CNDDDB records shows that this species has been recorded from three locations within five miles of the site. One location was recorded in 1966 near Balboa Park in an area that has likely since been developed. A second location was recorded in 1995 within Florida Canyon just east of Balboa Park. A third and more recent location was recorded in 2019 on the north side of the San Diego River, approximately five miles northwest of the site. No iNaturalist sightings occur within the vicinity of the site or anywhere in the North Park Community.

Jurisdictional Habitats and Buffers

No jurisdictional habitats or buffers will be impacted with the proposed project.

Wildlife Corridors

Due to the relatively small scale, location along the canyon rim in closer proximity to existing residences, and timing (i.e., daylight hours) of the proposed project construction impacts, the project is not expected to significantly impact a wildlife corridor or alter the local movement of wildlife, and thus would not be considered significant under CEQA.

INDIRECT IMPACTS

CEQA guidelines §15358 define an “indirect impact or secondary effect” as “effects which are caused by the project and are later in time or farther removed in distance but are still reasonably foreseeable” that can produce a temporary or permanent biologically significant “physical change” in the environment. Indirect impacts such as edge effects (e.g., artificial lighting spill, elevated noise, introduction of invasive species, pet access) from residential development to sensitive biological resources in the adjacent open space canyon, would be addressed by complying with MHPA Land Use Adjacency Guidelines discussed below.

The project may have significant indirect impacts if construction crews are not made aware of the limits of work and the sensitive nature of the MHPA preserve. The project may also have a significant indirect impact if standard Best Management Practices (BMPs) are not utilized to avoid inadvertent impacts to sensitive habitats and/or resources during project construction. It should be noted that §142.0411 of the City’s Municipal Code (Chapter 14, Article 2, Division 4), requires all disturbed, graded, and/or cleared areas that will not be permanently paved or covered by structures will be revegetated within 90 days of the completion of disturbance, with native or naturalized plant species to provide erosion control and ensure that additional non-native plant species are not introduced into the MHPA.

No potential significant indirect impacts under the City’s Significance Determination Thresholds are anticipated if proper construction crew training occurs and the project is in compliance with standard BMP practices and the City Municipal Code.

CUMULATIVE IMPACTS

CEQA guidelines §15355 define cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts”. The MSCP was designed to compensate for the loss of biological resources throughout the program’s region; therefore, projects that conform to the MSCP would not result in a cumulatively considerable impact for those biological resources adequately covered by the program. The aforementioned direct and indirect impacts resulting from the proposed project would therefore not be cumulatively considerable if the project mitigation measures are implemented to ensure conformance to the MSCP Subarea Plan and Biology Guidelines.

MITIGATION

MITIGATION ELEMENT

Vegetation

The only significant impact to biological resources associated with the project is from the loss of 0.202 acre of Southern Maritime Chaparral, a Tier I habitat

As per Table 3 of the City's Biological Guidelines (2018a), mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in kind). The following table (Table 6) provides a quantitative summary of BLA requirements showing a 4:1 ratio for vegetation community impacts plus an additional 1:1 for impacts to Tier I. The required payment into the HAF for preservation of 0.858 acre of native habitat (e.g., Southern Maritime Chaparral, Tier I) will mitigate MHPA BLA and habitat impacts.

Species

The condition for coverage of wart-stemmed ceanothus requires that revegetation efforts within appropriate habitats must include restoration of this species. This species has been included in the project's Revegetation/Restoration Plan. A total of 15 container plants of this species will be planted with a requirement for survival of 10 individuals (2:1 mitigation) at the end of a 5-year maintenance and monitoring period. As a condition of project approval, the site development permit will include a requirement that the identified property owner ensure the wart-stemmed ceanothus remain intact and undisturbed in perpetuity to maintain the biological integrity of the revegetation effort. The City would be afforded enforcement action of this requirement should compliance issues arise in the future.

The purchase of MHPA preservation as identified in Table 5 would be sufficient to compensate for the loss of potential foraging habitat for Crotch bumble bee habitat.

PROTECTION AND NOTICE ELEMENT

All project limits shall be fenced with orange construction fencing prior to clearing and grubbing. A project biologist will be required to monitor the installation of this fence as well as the subsequent clearing and grubbing of the vegetation to ensure that impacts do not extend beyond the limits of work and determined habitat impact acreages.

MANAGEMENT ELEMENT

No on-site mitigation is proposed. As a condition of project approval, the site development permit will include a permit condition that the identified property owner ensure the wart-stemmed ceanothus remain intact and undisturbed in perpetuity to maintain the biological integrity of the revegetation effort located on the driveway slope within the remaining paper street of Fenton. The City would be afforded enforcement action should compliance issues arise in the future.

CONCLUSIONS

The only significant impact to biological resources associated with the project is from the loss of 0.202 acre of Southern Maritime Chaparral habitat. Mitigation will be accomplished through payment into

the HAF for preservation of 0.858 acre of native habitat (e.g., Southern Maritime Chaparral, Tier I) associated with the MHPA BLA. As stated previously, payment into the HAF is the only viable option for the project to satisfy conservation of Tier I habitat inside the MHPA. Payment into the HAF was previously approved and subsequent to that approval, the site's habitat was reclassified from Southern Mixed Chaparral (Tier IIIA) to Southern Maritime Chaparral (Tier I). The conclusions of this report presume that the project complies with the MSCP Consistency measures provided in this document. The project will be required to comply with federal, state, and local regulations. In addition, the proposed MHPA boundary adjustment requires approval by the City and concurrence by the wildlife agencies (i.e., USFWS, CDFW). The project will also be required to comply with the MHPA Land Use Adjacency requirements (previously specified) as a condition of approval. All project limits shall be fenced with orange construction fencing prior to clearing and grubbing. A project biologist will be required to monitor the installation of this fence as well as the subsequent clearing and grubbing of the vegetation to ensure that impacts do not extend beyond the limits of work and determined habitat impact acreages.

REFERENCES

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APPENDIX 1. FLORA SPECIES OBSERVED ON-SITE

Habitat Types:

- C = Southern Maritime Chaparral
- D = Disturbed Habitat
- N = Non-native Vegetation

* = Denotes non-native flora species.

Scientific Name	Common Name	Habitat
DICOTYLEDONS		
Aizoaceae – Fig-Marigold Family		
* <i>Malephora crocea</i>	Crocea ice plant	N
Anacardiaceae – Sumac Family		
<i>Malosma laurina</i> (Nutt.) Abrams	laurel sumac	C
<i>Rhus integrifolia</i> (Nutt.) Brewer & S. Watson	lemonadeberry	C
Asteraceae – Sunflower Family		
<i>Baccharis sarothroides</i> A. Gray	broom baccharis	C
* <i>Centaurea melitensis</i> L.	totalote	D
<i>Deinandra fasciculata</i> (DC.) Greene	fascicled tarplant	C
<i>Encelia californica</i> Nutt.	California encelia	C
* <i>Erigeron bonariensis</i> L.	flax-leaf fleabane	D
<i>Eriophyllum confertiflorum</i> (DC.) A. Gray var. <i>confertiflorum</i>	long-stem golden-yarrow	C
<i>Isocoma menziesii</i> (Hook. & Arn.) G. L. Nesom var. <i>sedoides</i> (Greene) G. L. Nesom	San Diego goldenbush	C
<i>Pseudognaphalium biolettii</i> Anderb.	bicolor cudweed	C
* <i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & B.L. Burt	everlasting cudweed	D
* <i>Sonchus oleraceus</i> L.	common sow thistle	D
Brassicaceae – Mustard Family		
* <i>Hirschfeldia incana</i> (L.) Lagr.-Fossat	short-pod mustard	D
* <i>Sisymbrium irio</i> L.	London rocket	D
Cactaceae – Cactus Family		
* <i>Opuntia ficus-indica</i> (L.) Miller	mission prickly pear, Indian-fig	N
<i>Opuntia littoralis</i> (Engelm.) Cockerell	coast prickly-pear	C
Chenopodiaceae – Goosefoot Family		
* <i>Atriplex semibaccata</i> R. Br.	Australian saltbush	D
* <i>Salsola tragus</i> L.	Russian thistle, tumbleweed	D
Cistaceae – Rock-Rose Family		
<i>Helianthemum scoparium</i> Nutt.	peak rush-rose	C
Crassulaceae – Stonecrop Family		
* <i>Crassula ovata</i> (Mill.) Druce	jade plant	N
Cucurbitaceae – Gourd Family		
<i>Marah macrocarpus</i> (E. Greene) E. Greene var. <i>macrocarpus</i>	manroot, wild-cucumber	C

Scientific Name	Common Name	Habitat
Ericaceae – Heath Family <i>Xylococcus bicolor</i> Nutt.	mission manzanita	C
Euphorbiaceae – Spurge Family * <i>Euphorbia peplus</i> L.	petty spurge	D
Fabaceae – Pea Family * <i>Acacia cyclops</i> G. Don <i>Acmispon glaber</i> (Vogel) Brouillet var. <i>glaber</i> * <i>Melilotus albus</i> Medikus	cyclops acacia coastal deerweed white sweetclover	N C D
Fagaceae – Oak Family <i>Quercus dumosa</i> Nutt.	Nuttall's scrub oak	C
Geraniaceae – Geranium Family * <i>Pelargonium x hortorum</i> L. Bailey	zonal geranium	N
Lamiaceae – Mint Family * <i>Marrubium vulgare</i> L. <i>Salvia mellifera</i> Greene	horehound black sage	D C
Myrtaceae – Myrtle Family * <i>Eucalyptus citriodora</i> Hook. * <i>Eucalyptus</i> sp.	lemon-scented gum eucalyptus	N N
Myrsinaceae – Myrsine Family * <i>Anagallis arvensis</i> L.	scarlet pimpernel	D
Nyctaginaceae – Four-O'Clock Family <i>Mirabilis laevis</i> (Benth.) Curran var. <i>crassifolia</i> (Choisy) Spellenb.	coastal wishbone plant	C
Onagraceae – Evening-Primrose Family <i>Camissoniopsis intermedia</i> (P.H. Raven) W.L. Wagner & Hoch	intermediate sun cup	C
Phrymaceae – Hopseed Family <i>Mimulus aurantiacus</i> Curtis var. <i>puniceus</i> (Nutt.) D.M. Thomps.	coast monkey flower	C
Plantaginaceae – Plantain Family <i>Antirrhinum nuttallianum</i> Benth. ssp. <i>nuttallianum</i>	Nuttall's snapdragon	C
Polemoniaceae – Phlox Family <i>Navarretia hamata</i> E. Greene ssp. <i>hamata</i>	hooked skunkweed	C

Scientific Name	Common Name	Habitat
Polygonaceae – Buckwheat Family		
* <i>Emex spinosa</i> (L.) Campdera	devil's thorn	N
<i>Eriogonum fasciculatum</i> Benth. var. <i>fasciculatum</i>	coastal California buckwheat	C
Rhamnaceae – Buckthorn Family		
<i>Ceanothus verrucosus</i> Nutt.	wart-stemmed lilac/ceanothus	C
Rosaceae – Rose Family		
<i>Adenostoma fasciculatum</i> Hook. & Arn.	Chamise, greasewood	C
<i>Heteromeles arbutifolia</i> (Lindley) M. Roemer	toyon, Christmas berry	C
Solanaceae – Nightshade Family		
* <i>Nicotiana glauca</i> Graham	tree tobacco	D
* <i>Solanum nigrum</i> L.	black nightshade	C
<i>Solanum parishii</i> A.A. Heller	Parish's nightshade	C
MONOCOTYLEDONS		
Agavaceae – Century Plant Family		
<i>Yucca</i> sp.	Ornamental yucca	N
Poaceae – Grass Family		
* <i>Avena barbata</i> Link	slender wild oat	D
* <i>Pennisetum setaceum</i> Forsskal	crimson fountain grass	D
* <i>Schismus barbatus</i> (L.) Thell.	Mediterranean schismus	D

APPENDIX 2. FAUNA SPECIES OBSERVED OR DETECTED ON-SITE

Habitat Types:

C = Southern Maritime Chaparral

D = Disturbed Habitat

N = Non-native Vegetation

FO = fly over

* = denotes introduced species

Abundance Codes (birds only):

A = Abundant: Almost always encountered in moderate to large numbers in suitable habitat and the indicated season.

C = Common: Usually encountered in proper habitat at the given season.

U = Uncommon: Infrequently detected in suitable habitat. May occur in small numbers or only locally in the given season.

R = Rare: Applies to species that are found in very low numbers.

“Numbers” indicate the number of individuals observed during the field survey work.

Status Codes (birds only):

M = Migrant: Uses the site for brief periods of time, primarily during the spring and fall months.

R = Year-round resident: Probable breeder on-site or in the vicinity.

S = Spring/summer resident: Probable breeder on-site or in the vicinity unless combined with transient status.

T = Transient: Uses site irregularly in summer but unlikely to breed. Not a true migrant and actual status often poorly known.

W = Winter visitor: Does not breed locally.

V = Casual vagrant: Not expected; out of normal geographic or seasonal range and by definition rare.

Common Name	Scientific Name	Habitat	Abundance	Status
BIRDS				
Accipitridae (Hawks and Harriers)				
Cooper's hawk	<i>Accipiter cooperii</i>	N (off-site)	C	M, R
red-tailed hawk	<i>Buteo jamaicensis</i>	FO	C	R, M, W
Columbidae (Pigeons and Doves)				
mourning dove	<i>Zenaida macroura</i>	N	C	R
Trochilidae (Hummingbirds)				
Anna's hummingbird	<i>Calypte anna</i>	C	C	R
Costa's hummingbird	<i>Calypte costae</i>	C	C	R
Picidae (Woodpeckers and Wrynecks)				
Nuttall's woodpecker	<i>Picooides nuttallii</i>	C	C	R
Tyrannidae (Tyrant Flycatchers)				
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	C	C	M, S
Corvidae (Jays, Magpies, and Crows)				
western scrub-jay	<i>Aphelocoma californica</i>	C	C	R
American crow	<i>Corvus brachyrhynchos</i>	FO	A	R
Aegithalidae (Bushtit)				
bushtit	<i>Psaltriparus minimus</i>	C	C	R
Troglodytidae (Wrens)				
Bewick's wren	<i>Thryomanes bewickii</i>	C	C	R
Sylviidae (Sylviid Warblers and Gnatcatchers)				
wrentit	<i>Chamaea fasciata</i>	C	C	R
Mimidae (Mockingbirds and Thrashers)				
northern mockingbird	<i>Mimus polyglottos</i>	N	C	R
Parulidae (Warblers)				
orange-crowned warbler	<i>Oreothlypis celata</i>	C	C	M, W, S
Emberizidae (Sparrows, Blackbirds and Relatives)				
spotted towhee	<i>Pipilo maculatus</i>	C	C	R
California towhee	<i>Melospiza crissalis</i>	C	C	R
Fringillidae (Finches)				
house finch	<i>Haemorhous mexicanus</i>	N	A	R
lesser goldfinch	<i>Spinus psaltria</i>	C	C	M, R

Common Name	Scientific Name	Habitat	Abundance	Status
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MAMMALS**Leporidae (Hares and Rabbits)**

desert cottontail *Sylvilagus audubonii sanctidiegi* C

¹Nomenclature from:

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APPENDIX 3. OCCURRENCE OR POTENTIAL OF SPECIAL STATUS SPECIES ON THE PROJECT SITE

Key to abbreviations:

Federal Endangered Species Act (ESA)

FE = Federally-listed as Endangered

FT = Federally-listed as Threatened

FPE = Federally proposed for listing as Endangered

FPT = Federally proposed for listing as Threatened

FPD = Federally proposed for delisting

FC = Federal candidate species

SC = Species of concern

Delisted species are monitored for 5 years

BCC = Birds of Conservation Concern

California Endangered Species Act (CESA)

SE = State-listed as Endangered

ST = State-listed as Threatened

SCE = State candidate for listing as Endangered

SCT = State candidate for listing as Threatened

SCD = State candidate for de-listing

SR = California Rare Species

California Natural Diversity Database (CNDDDB)

SP = Special Plant

SA = Special Animal

California Department of Fish and Wildlife (DFW)

SSC = Species of Special Concern

FP = California fully protected species

WL = Watch List

U.S. Forest Service (USFS)

S = Sensitive

California Rare Plant Rank (CRPR)

List 1A = Plants presumed extinct in California

List 1B = Plants rare, threatened, or endangered in California and elsewhere

List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 = Plants about which more information is needed (a review list)

List 4 = Plants of limited distribution (a watch list); Threat level:

0.1-Seriously threatened in California (high degree/immediacy of threat)

0.2-Fairly threatened in California (moderate degree/immediacy of threat)

0.3-Not very threatened in California (low degree/immediacy of threats/ no current threats known)

Multiple Species/Habitat Conservation Program (MSCP)/(MHCP)

NE = Narrow Endemic Species

CS = Covered Species

Vernal Pool Habitat Conservation Plan (VPHCP)

VP = Vernal Pool Species

County of San Diego

Plant List A = Plants rare, threatened or endangered in California and elsewhere

Plant List B = Plants rare, threatened or endangered in California but more common elsewhere

Plant List C = Plants which may be quite rare, but need more information to determine their true rarity status

Plant List D = Plants of limited distribution and are uncommon, but not presently rare or endangered

Animal Group 1 = Animals rare, threatened or endangered in California and elsewhere

Animal Group 2 = Animals rare, threatened or endangered in California but more common elsewhere elsewhere

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
PLANTS					
<i>Acanthomintha ilicifolia</i> San Diego thornmint	ESA: FT CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A MHCP: NE, CS	Native, annual herb that has a distinctive microhabitat, preferring grassy openings in chaparral or sage scrub on gabbroic substrate with friable or broken clay soils, including vernal pools; ranges in elevation from 10-960 meters (33-3,150 ft); blooming period April-June.	No	Not Expected	No suitable soils (i.e., friable clay) occur onsite.
<i>Agave shawii ssp. shawii</i> Shaw's agave	CNDDDB: SP CRPR 2B.1 MSCP: NE, CS Cnty of SD List: B MSCP: NE, CS	Perennial succulent found in coastal Diegan sage scrub and maritime succulent scrub; elevation 10-75 meters (33-250ft.); blooming period September-May	No	Not Expected	The project site is not located along the coast or within the known range for this species.
<i>Ambrosia chenopodiifolia</i> San Diego bursage	CNDDDB: SP CRPR 2B.1 Cnty of SD List: B	Perennial shrub found in coastal sage scrub in southern San Diego County and Baja; elevation 55-155 meters (180-510 ft.); blooming period April-June	No	Not Expected	No suitable habitat occurs on-site for this species. The site occurs north of its known range.
<i>Ambrosia pumila</i> San Diego ambrosia	ESA: FE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A MHCP: NE, CS	Native, perennial, rhizomatous herb that prefers creeks beds, seasonally dry drainages, and floodplains; usually a protective tree canopy is absent and it grows on the periphery of willow woodland; ranges in elevation from 20-450 m (66-1,476 ft.); blooming period April-October.	No	Not Expected	No suitable habitat for this species occurs on-site.
<i>Aphanisma blitoides</i> aphanisma	CNDDDB: SP CRPR 1B.2 MSCP: NE (City of SD only), CS Cnty of SD List: A	Annual herb found in sandy soils of coastal bluff scrub, coastal dunes, and coastal scrub; elevation 1-305 meters (3-1,000 ft.); blooming period March-June.	No	Not Expected	No suitable habitat or soils occur within the project study area. The site occurs east of this species known range.

Scientific Name Common Name	Sensitivity Codes and Status^{1, 2}	Habitat Preferences/Requirements³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	ESA: FE CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE (City of SD only), CS Cnty of SD List: A	Annual herb found in sandy coastal bluff scrub, coastal dunes, and mesic coastal prairie; elevation 1-50 meters (3-164 ft.); blooming period March-May.	No	Not Expected	No suitable habitat (sand dunes) for this species occurs onsite.
<i>Baccharis vanessae</i> Encinitas baccharis	ESA: FT CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS MHCP: NE, CS Cnty of SD List: A	Native, deciduous shrub that prefers mature but relatively low-growing chaparral; at inland locales may be associated with large granitic boulders; blooming period August-November.	No	Not Expected	The project site is south of this species' known range.
<i>Bloomeria (=Muilla) clevelandii</i> San Diego goldenstar	CRPR 1B.1 CNDDDB: SP MSCP: CS MHCP: NE Cnty of SD List: A BLM : S	Native, perennial, corm/bulbiferous herb that prefers valley grasslands, particularly near mima mound topography or in the vicinity of vernal pools, in clay soils with good shrink/swell potential; does not typically grow in the shade of woody perennials, but rather in somewhat open locales; blooming period April-May.	No	Not Expected	No suitable habitat or soils occur within the project study area.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	ESA: FT CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A	Perennial bulbiferous herb that prefers vernal moist grasslands and the periphery of vernal pools are the typical locales where this species has been found. Species such as <i>Sisyrinchium bellum</i> and <i>Nassella pulchra</i> may grow nearby; elevation 25-1,220 meters (82-4,000 ft.); blooming period March-June.	No	Not Expected	The project occurs well south of this species' known range. No suitable habitat or soils occur within the project study area.

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	CNDDDB: SP CRPR 1B.1 MSCP: NE (City of CV only), CS Cnty of SD List: A USFS: S BLM: S	Native, perennial, bulbiferous/corm sprouting herb that prefers vernal moist grasslands, mima mound topography, and the periphery of vernal pools, but will occasionally grow on streamside embankments, and has also been found in mesic grasslands and openings within chaparral, at elevations ranging from 30-1,692 meters (98-5,551 ft.); blooming period May-July.	No	Not Expected	No suitable habitat or soils occur within the project study area. No known records of this species occur in the project region.
<i>Ceanothus verrucosus</i> wart-stemmed ceanothus	CNDDDB: SP CRPR 2B.2 MSCP: CS MHCP: CS Cnty of SD List: B	Native, evergreen, sizable shrub that prefers coastal chaparral intermixed with chamise and mission manzanita; typically, is a dominant shrub within the vegetation community where it occurs; it may be particularly vigorous on north-facing slopes but can accommodate more xeric aspects; blooming period December-May.	Yes	Occurs On-site	Five shrubs were observed within the proposed limits of work. This species is relatively common within chaparral habitat in the surrounding area.
<i>Convolvulus simulans</i> small-flowered bindweed/ small-flowered morning glory	CNDDDB: SP CRPR 4.2 Cnty of SD List: D	Native, small annual grows on friable clay soils which are typically devoid of shrubs, in openings in chaparral, sage scrub, and grasslands; blooming period March-July.	No	Not Expected	No suitable soils occur within the project study area. In addition, no known records of this species occur in the project region.
<i>Corethrogyne filaginifolia</i> var. <i>filaginifolia</i> (=var. <i>incana</i> ; var. <i>linifolia</i>) California sand aster	CNDDDB: SP CRPR: 1B.1 MSCP: CS MHCP: NE, CS Cnty of SD List: A	Perennial herb found in chaparral, coastal bluff scrub, coastal mixed chaparral and coastal scrub habitat; elevation 3-115 meters (10-344 ft.); blooming period May-September.	No	Low	Although suitable habitat occurs in the project study area, this perennial was not observed. In addition, no known records of this species occur in the project region. Most recorded populations are within a few miles of the coast (i.e., Point Loma, Carmel Valley).

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
<i>Deinandra (=Hemizonia) conjugens</i> Otay tarplant	ESA: FT CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A	Annual herb found in fractured clay soils of lightly vegetated coastal scrub, valley and foothill grassland; elevation 25-300 meters (82-985 ft.); blooming period May-June.	No	Not Expected	No suitable soils occur within the project study area. The site is north of this species' known range.
<i>Deinandra (=Hemizonia) floribunda</i> Tecate tarplant	CNDDDB: SP CRPR 1B.2 Cnty of SD List: A USFS: S BLS: S	Annual herb that is found in chaparral and coastal sage scrub; also found in sandy washes in the high desert; elevation 70-1,220 meters (230-4,000 ft.); blooming period August-October.	No	Not Expected	No suitable soils occur within the project study area. The site is well north and west of this species' known range.
<i>Dichondra occidentalis</i> western dichondra	CNDDDB: SP CRPR 4.2 CNDDDB: SP Cnty of SD List: D	Native, small, cryptic perennial, rhizomatous herb that occurs in southern mixed chaparral, chamise chaparral, sage scrub, rocky outcrops in grasslands, and especially in recently exposed areas of post-burn habitat; often grows almost completely hidden at the base of leafy shrubs; ranges in elevation from 50-500 meters (164-1,641 ft.); blooming period (January) March-July.	No	Low	Although suitable habitat occurs in the project study area, this perennial was sought but not observed in the project area. This species has been recorded from Switzer Canyon, near 30 th Street approximately 0.5 miles northwest of the site.
<i>Dicranostegia orcuttiana</i> (= <i>Cordylanthus orcuttianus</i>) Orcutt's bird's-beak	CNDDDB: SP CRPR 2B.1 MSCP: CS Cnty of SD List: B	Annual herb (hemiparasitic) found in coastal scrub often in seasonally dry drainages and upland adjacent to riparian habitat; elevation 10-350 meters (33-1,150 ft.); blooming period March-September	No	Not Expected	No suitable habitat occurs within the project study area. No known records of this species occur in the project region. Nearly all recorded populations of this species are found in the Otay River Valley, approximately 11 miles south of the site.
<i>Dudleya brevifolia</i> (= <i>blochmaniae</i> ssp <i>brevifolia</i>) short-leaf dudleya	CESA: SE CNDDDB: SP CRPR 1B.1	Native, cryptic, perennial herb that prefers open areas of chamise chaparral or Torrey Pine forest on	No	Not Expected	No suitable soils with iron bearing concretions typically associated with this species

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	MSCP: NE, CS MHCP: NE Cnty of SD List: A	Torrey sandstone with soils mapped as Carlsbad gravelly sandy loam; blooming period in April.			occur within the project study area. In addition, the project site is south of its known range.
<i>Dudleya variegata</i> variegated dudleya	CNDDDB: SP CRPR 1B.2 MSCP: NE, CS MHCP: NE	Native, small, corm-like sprouting, succulent, perennial herb that occurs in openings in sage scrub and chaparral, isolated rocky substrates in open grasslands, as well as in vernal pools and mima mound topography; usually grows in small areas devoid of shrub cover, even though chamise, scrub oak, or sage scrub elements may occur nearby; blooming period May-June.	No	Not Expected	No suitable soils and/or substrate occur within the project study area. In addition, no known records of this species occur in the project region.
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button celery	ESA: FE CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE (City of SD only), CS MHCP: NE VPHCP: VP Cnty of SD List: A	Annual/perennial herb found in vernal pools or vernal moist coastal scrub, valley and foothill grassland adjacent to vernal pools; elevation 20-620 meters (65-2,035 ft.); blooming period April-June.	No	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Ferocactus viridescens</i> coast barrel cactus	CNDDDB: SP CRPR: 2B.1 MSCP: CS MHCP: CS Cnty of SD List: B	Native succulent; optimal habitat for this cactus appears to be sage scrub hillsides; often at the crest of slopes and growing among cobbles; occasionally is found on the periphery of vernal pools and mima mound topography; blooming period May-June.	No	Low	This conspicuous cacti was sought but not found.

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<i>Harpagonella palmeri</i> Palmer's grappling hook	CNDDDB: SP CRPR 4.2 Cnty of SD List: D	Native, inconspicuous annual, herb that typically occurs on clay vertisols with open grassy slopes in open sage scrub or chaparral, at elevations ranging from 20-955 meters (65-3,133 ft.); blooming period March-May.	No	Low	Although suitable habitat occurs in the project study area, the soils are not suitable.
<i>Isocoma menziesii</i> var. <i>decumbens</i> clay-field goldenbush/ decumbent goldenbush	CNDDDB: SP CRPR 1B.2 Cnty of SD List: A BLM: S	Perennial shrub found in sandy, often disturbed areas of chaparral and coastal sage scrub; elevation 10-135 meters (33-443 ft.); blooming period April-November.	No	Not Expected	Although suitable habitat occurs in the project study area, this species was not observed.
<i>Juglans californica</i> southern California black walnut	CNDDDB: SP CRPR 4.2 Cnty of SD List: D	Perennial deciduous tree that grows in open savannahs often in grazed areas; often surrounded by chaparral, cismontane woodland, and coastal scrub; elevation 50-900 meters (164-2,950 ft.); blooming period March-August.	No	Not Expected	No suitable habitat occurs in the project study area. In addition, no known records of this tree species occur in the project region.
<i>Lepidium virginicum</i> var. <i>menziesii</i> (=var. <i>robinsonii</i>) Robinson's peppergrass	CNDDDB: SP CRPR: 4.3 Cnty of SD List: A	Native, annual herb that grows in openings in chaparral and sage scrub at the foothill elevations, generally well away from the southern California coast; typically, sites are relatively dry, exposed locales, rather than beneath a shrub canopy or along a creek; blooming period January-July.	No	Low	Although suitable habitat occurs in the project study area, this annual species was not observed.
<i>Lycium californicum</i> California desert-thorn/ California box thorn	CNDDDB: SP CRPR 4.2 Cnty of SD List: D	Perennial shrub found in coastal bluff scrub and coastal sage scrub; elevation 5-150 meters (16-492 ft.); blooming period December-August.	No	Not Expected	No suitable habitat for this conspicuous shrub occurs in the project study area,
<i>Microseris douglasii</i> ssp. <i>platycarpha</i> small-flower microseris	CNDDDB: SP CRPR 4.2 Cnty of SD List: D	Native, non-descript, annual herb that is typically found on clay lenses in perennial grasslands, on the periphery	No	Not Expected	No suitable soils and/or substrate occur within the project study area.

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		of vernal pools, or in broad openings in sage scrub; blooming period March-May.			
<i>Navarretia fossalis</i> spreading prostrate navarretia/ Moran's navarretia/ spreading navarretia	ESA: FT CNDDDB: SP CRPR 1B.1 MSCP: NE (City of SD Only), CS MHCP: NE, CS VPHCP: VP Cnty of SD List: A	Native, small, annual herb that prefers vernal pools and swales, and occurs in chenopod scrub, marshes, swamps, and playas; blooming period April-June.	No	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Opuntia californica</i> var. <i>californica</i> (=O. <i>parryi</i> var. <i>Serpentina</i> ; and = <i>Cylindropuntia californica</i>) snake cholla	CNDDDB: SP CRPR: 1B.1 MSCP: NE, CS Cnty of SD List: A BLM: S	Perennial stem succulent that grows in openings on dry slopes of chaparral and coastal sage scrub; elevation 30-150 meters (100-492 ft.); blooming period April-May.	No	Low	Although suitable habitat occurs in the project study area, this conspicuous cacti species was sought but not observed in the project area. A population has been recorded approximately 1,000 feet south of the site in Juniper Canyon.
<i>Orcuttia californica</i> California Orcutt grass	ESA: FE CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS MHCP: NE, CS VPHCP: VP Cnty of SD List: A	Annual herb found in vernal pools; elevation 15-660 meters (49-2,165 ft.); blooming period April-August.	No	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Pogogyne abramsii</i> San Diego mesa mint	ESA: FE CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS VPHCP: VP Cnty of SD List: A	Annual herb found in vernal pools; elevation 90-200 meters (295-656 ft.); blooming period March-July.	No	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.

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<i>Pogogyne nudiuscula</i> Otay Mesa mint	ESA: FE CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS VPHCP: VP Cnty of SD List: A	Annual herb found in vernal pools; elevation 90-250 meters (295-820 ft.); blooming period May-July.	No	Not Expected	No suitable habitat (i.e., vernal pools) occurs onsite.
<i>Quercus dumosa</i> Nuttall's scrub oak	CNDDDB: SP CRPR 1B.1 MHCP: CS Cnty of SD List: A USFS: S BLM: S	Native, evergreen shrub that prefers coastal chaparral with a relatively open canopy cover in flat terrain; on north- facing slopes this shrub may grow in dense monotypic stands; blooming period February-April.	Yes	Occurs On- site	Twenty-nine shrubs were were recorded within the limits of construction. This species is relatively common in chaparral habitat in the surrounding area.
<i>Selaginella cinerascens</i> ashy spike-moss	CNDDDB: SP CRPR 4.1 Cnty of SD List: D	Native, perennial, prostrate, ground- cover herb that occurs in undisturbed chaparral and sage scrub; ranges in elevation from 20-640 meters (66- 2,100 ft.).	No	Low	Although suitable habitat occurs in the project study area, this species was not observed.
<i>Stemodia durantifolia</i> blue streamwort/purple stemodia	CNDDDB: SP CRPR: 2B.1 Cnty of SD List: B	Perennial herb often found in mesic; elevation 180-300 meters (590-984 ft.); blooming period January-December.	No	Not Expected	Typical mesic conditions not found on-site.
<i>Bahiopsis (=Viguiera) laciniata</i> San Diego County viguiera	CNDDDB: SP CRPR: 4.3 Cnty of SD List: D	Native, perennial shrub that typically prefers arid sage scrub; generally the shrub cover is more open than at mesic, coastal locales supporting sage scrub; blooming period February-June.	No	Low	One plant was observed just south of the study area. It was sought on-site but was not observed.
INVERTEBRATES					
<i>Bombus crotchii</i> Crotch bumble bee	CESA: SCE CNDDDB: SA	The Crotch's bumble bee is nearly endemic to California, and historically occupied grasslands and shrublands in southern to central California, with occasional records in the northern portion of the state. Like all bumble bees, the species requires floral	No	Moderate (foraging)	The site supports plant families including Asteracea and Lamiaceae visited by this species. Nesting potential is considered low. No rodent burrows were observed during the October 20, 2023 habitat

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
		<p>resources, and undisturbed nest sites and overwintering sites; primarily nests underground and may rely on sufficient availability of rodent and other animal burrows to provide potential nesting sites. Crotch's bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants. The Crotch's bumble bee has a short tongue, and thus is best suited to forage at open flowers with short corollas. The plant families most commonly visited in California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae and Boraginaceae.</p> <p>The flight period for Crotch's bumble bee queens in California is from late February to late October. Their flight period peaks in early April and there is a second pulse in July. The flight period for workers and males in California is from late March through September; worker and male abundance peak in early July.</p>			assessment. Suitability for burrowing is considered low as soils are highly compacted and include a relatively high proportion of 3 to 5-inch sized cobbles.
<i>Euphydryas editha quino</i> quino checkerspot butterfly	ESA: FE CNDDDB: SA Cnty of SD Group: 1 MSCP: NE (Cnty of SD only)	Coastal habitats of sage scrub and chaparral; more inland, can be found in open meadows adjacent to sage scrub, chaparral and oak woodland, as well as juniper woodland and semi-desert scrub; habitats must have open areas with low growing and sparse vegetation; other suitable habitat	No	Not Expected	No suitable habitat or host plants observed on the project site. In addition, the project site is not located within a USFWS quino recommended survey area and no known historical or current records of this species occur in the project region.

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		conditions include dirt trails/roads, especially along hilltops, and clay soils and cryptogamic crusts, which favor host plant growth; primary caterpillar host plants include <i>Plantago erecta</i> at lower elevations and <i>P. patagonica</i> and <i>Antirrhinum coulterianum</i> at higher elevations; additional host plants may include <i>Cordylanthus rigidus</i> and <i>Castilleja exserta</i> ; adults nectar on low growing annuals; adult flight period typically Mar-Apr, depending on winter rainfall and temperatures.			
AMPHIBIANS					
<i>Spea hammondi</i> western spadefoot toad	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2 North Cnty MSCP: CS MHCP: CS BLM: S	Breeding and egg laying occur almost exclusively in shallow, temporary pools formed by heavy winter rains, typically within grassland habitat.	No	Not Expected	No suitable habitat occurs in the project study area. In addition, no known records occur in the project study area.
REPTILES					
<i>Anniella pulchra pulchra</i> silvery legless lizard	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Shows a preference for areas of leaf litter and loose soil along washes, beach sand dunes, open scrub and woodland, and sandy benches along alluvial fans.	No	Not Expected	No suitable habitat/conditions occur onsite and no known records occur within the project region.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	CNDDDB: SA CDFW: WL Cnty of SD Group: 2 MSCP: CS MHCP: CS USFS: S	This species is a diurnal reptile from early spring to late summer that prefers washes and other sandy areas with patches of brush and rocks in coastal scrub and chaparral.	No	Moderate	Suitable habitat (i.e., chaparral) occurs within the study area. This species is known from Juniper Canyon and may occur on-site.
<i>Charina (=Lichanura) trivirgata roseofusca</i>	Cnty of SD Group: 2 USFS: S	This species ranges from the foothills of the San Gabriel and San Bernardino	No	Low	Suitable habitat (i.e., chaparral) occurs within the study area,

Scientific Name Common Name	Sensitivity Codes and Status^{1, 2}	Habitat Preferences/Requirements³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
coastal rosy boa		Mountains south through San Diego County into Sierra San Pedro Martir, Baja California, at elevations ranging from sea level to 2,070 meters (6,790 feet) (USFS 2006b). This primarily nocturnal snake occurs in coastal sage scrub and chaparral-dominated communities that contain large rocks and boulders for cover and refuge, often near permanent or intermittent streams.			although there were no outcrops which are used by the species for refuge. Unlikely to occur given the canyon's urban surroundings and susceptibility to predators including domestic cats.
<i>Plestiodon (=Eumeces) skiltonianus interparietalis</i> Coronado Island skink	CNDDDB: SA CDFW: WL Cnty of SD Group: 2 BLM: S	Diurnal species that actively forages through leaf litter and dense vegetation in a variety of habitats including grasslands, sage scrub, and various woodlands including oak, pine, juniper, and riparian.	No	Moderate	Suitable habitat (e.g., chaparral) occurs within the study area. Although this species was not observed during the general biological survey, this species is known from the region in suitable habitat.
<i>Phrynosoma coronatum (blainvillii)</i> coast (San Diego) horned lizard	CNDDDB: SA BLM: S CDFW: SSC Cnty of SD Group: 2 MHCP: CS	This species is endemic to southern California and northern Baja California, Mexico (USFS 2006b). This diurnal lizard occurs in a variety of habitats, including coastal sage scrub, chaparral, grassland, coniferous forest, oak woodland, riparian, and the margins of higher elevation desert, with an abundance of open areas for basking and obtaining prey (i.e., native ants and insects), and loose, fine soils that provide camouflage and allow burrowing for protection from predators.	No	Low	Suitable habitat occurs throughout the study area, although it is unlikely to occur given the canyon's urban surroundings and susceptibility to predators including domestic cats. No known records occur in the project region/canyon.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	This species ranges from Creston in San Luis Obispo County southward, primarily on the coastal side of the	No	Moderate	Suitable habitat (i.e., chaparral) is present onsite. There is a potential for orange-throated

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
		mountains, into Baja California, at elevations ranging from sea level to 2,130 meters (7,000 feet), but is typically found below 1,524 meters (5,000 feet) (USFS 2006b). This diurnal snake prefers coastal sage and chaparral habitats with low shrub structure of medium density. Habitat selection is closely related to the presence of the species' primary prey, whiptail lizards (<i>Cnemidophorus</i> spp.), and the presence of refuge and burrow sites for overwintering, which generally occurs between Oct to Mar.			whiptails, the primary prey item for this species, to occur in the chaparral.
BIRDS					
<i>Accipiter cooperii</i> Cooper's hawk	CNDDDB ⁴ : SA CDFW : WL Cnty of SD Group: 1 MSCP: CS MHCP: CS	Year-round resident of San Diego County that frequently nests in dense stands of live oak, riparian deciduous or other forest habitats located near water and along broken woodland habitat and edges, where it can perch under cover and hunt prey, including amphibians, reptiles, and small birds and mammals.	No	Low	Observed perched on a power pole in residential development northwest of the site. This species may forage within the study area but no potential nests or nest trees were observed onsite.
<i>Accipiter striatus</i> sharp-shinned hawk	CNDDDB ⁴ : SA CDFW: WL Cnty of SD Group: 1	Winter visitor only of southern California and is found in a wide variety of habitats. Prefers areas with trees or large shrub and feeds primarily on small birds.	No	Low	A limited amount of suitable foraging habitat occurs within the study area and no potential nests or nest trees were observed during the biological survey.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	CNDDDB: SA CDFW: WL Cnty of SD Group: 1 MSCP: CS	Sedentary year-round resident that occurs in sparse, mixed chaparral and sage scrub habitats, often on rolling, herbage-covered hillsides with	No	Low	A limited amount of suitable habitat due to the lack of rocky outcrops within the project

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	MHCP: CS	scattered shrubs and rocky outcrops; breeds from Mar-Jun, with nests built on the ground concealed at the base of grass or a shrub.			study area. No known locations within project area.
<i>Athene cunicularia</i> burrowing owl	CNDDDB ^{4, 5} : SA CDFW: SSC MSCP: CS North Cnty MSCP: NE South Cnty MSCP: NE Cnty of SD Group: 1 MHCP: CS USFWS: BCC	Occurs in open dry grasslands, agricultural, rangelands and desert habitats as well as airports, golf courses, and vacant urban lots.	No	Low	No sign or potential burrows were identified within the study area. There are no records of this species occurring in the general area of the project site.
<i>Elanus leucurus</i> white-tailed kite	CDFW: FP CNDDDB ⁴ : SA Cnty of SD Group: 1 BLM: S	Year-round resident; prefers riparian woodland, oak groves or sycamore groves adjacent to grasslands for foraging. Diet consists of the California vole or meadow mouse. Nests mid- February through June.	No	Low	No suitable nesting trees or foraging habitat was located within or adjacent to the study area.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ESA: FE CESA: SE CNDDDB: SA MSCP: NE (Cnty of SD), CS MHCP: CS Cnty of SD Group: 1	Summer resident, arriving by mid-May and remain through mid-July. This bird is a riparian obligate and primarily occurs in densely vegetated riparian habitats, preferring streamside in areas that have water throughout the spring and summer.	No	Not Expected	No suitable habitat is located within the project study area.
<i>Icteria virens</i> yellow-breasted chat	CDFW: SSC CNDDDB ⁴ : SA MHCP: CS Cnty of SD Group: 1	Summer resident to riparian woodland/scrub with dense undergrowth below 1500 feet elevation. Arrives in early April and departs by mid-September.	No	Not Expected	No suitable habitat is located within the project study area.
<i>Picoides nuttallii</i> Nuttall's woodpecker	CNDDDB ⁴ : SA	Year-round resident; typically uses a mix of deciduous riparian and adjacent oak habitats, but is also using urban	Yes	Observed	This species was observed foraging onsite. No suitable nesting habitat occurs in the project study area.

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		landscaping. Nests in tree cavities; breeds from late Mar to early July.			
<i>Polioptila californica californica</i> coastal California gnatcatcher	ESA: FT CDFW: SSC CNDDDB: SA MSCP: NE (Cnty of SD only); CS MHCP: CS Cnty of SD Group: 1	Year-round resident in coastal areas below 500 m (1,500 ft); prefers coastal sage scrub habitat that is dominated by <i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> and <i>Artemisia californica</i> as well as open chaparral.	No	Low	This bird's typical habitat (coastal sage scrub) does not occur on-site and the site's chaparral appears too dense to support this species. It has been reported from Juniper Canyon approximately 0.5 miles south of the site.
<i>Vireo bellii pusillus</i> least Bell's vireo	CDFW: SSC CNDDDB ⁴ : SA Cnty of SD Group: 1 East Cnty SD MSCP: CS USFWS: BCC USFS: S BLM: S	Summer visitor to southern willow scrub habitat and mesquite thickets. Arrives in San Diego County by late March or early April and leaves by the end of September.	No	Not Expected	No suitable habitat onsite. In addition, there are no records of this species occurring in the project area.
MAMMALS					
<i>Antrozous pallidus</i> pallid bat	CNDDDB: SA USFS: S CDFW: SSC North Cnty MSCP: CS East Cnty MSCP draft: CS Cnty of SD Group: 2	Nocturnal bat species that is a yearlong resident throughout California and occurs in a wide variety of habitats, including grasslands, shrublands, woodlands, and forests, but prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging, may forage up to 2.5 km (3 mi) from day roost.	No	Low for Foraging; Low for Roosting	Limited amount of suitable foraging habitat occurs within the study area but no preferable roosting habitat rocky outcrops, cliffs, and crevices were identified during the biological survey.
<i>Chaetodipus californicus femoralis</i> Dulzura (California) pocket mouse	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Nocturnal species that occurs in a variety of habitats, including coastal scrub, chaparral and grasslands, typically in brushy areas along grass- chaparral edge.	No	Moderate	Suitable habitat occurs within study area but mostly outside the proposed project impact area. No known records in project region/canyon.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	CNDDDB: SA CDFW: SSC	Nocturnal species that occurs in a variety of habitats, including coastal	No	Moderate	Suitable habitat occurs within study area but mostly outside

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	Cnty of SD Group: 2 MHCP: CS	scrub, chaparral and grasslands, typically in brushy areas along grass- chaparral edge.			the proposed project impact area. No known records in project region/canyon.
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	CDFW: SSC CNDDDB: SA MHCP: CS Cnty of SD Group: 2	Nocturnal species found in rocky, gravelly areas in both coastal and desert areas. Habitat includes coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper and annual grassland.	No	Low	Chaparral vegetation present but gravelly soil substrate absent. No known records in project region/canyon.
<i>Eumops perotis californicus</i> western mastiff bat	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2 BLM: S	Nocturnal bat species that occurs in many open, semi-arid to arid habitats, including woodlands, coastal scrub, grasslands, chaparral, desert scrub, and urban areas; roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels.	No	Low for Foraging; Low for Roosting	Limited amount of suitable foraging habitat occurs within the study area but no preferable roosting habitat rocky outcrops, cliffs, and crevices were identified during the biological survey.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat		Mainly nocturnal, but also crepuscular and occasionally diurnal small mammal that is active year-long and prefers coastal scrub or juniper/sagebrush habitat, with moderate to dense canopies, particularly in areas of rock outcrops and rocky cliffs and slopes; nests are constructed of twigs, sticks, cactus parts, and rocks, dependent on the availability of surrounding building materials, and are usually built against a rock crevice or in the lower branches of trees; prefers to eat the buds, fruits, seeds, bark, leaves, and young shoots of live oak, chamise, and buckwheat,	No	Low	No woodrat nests observed on- site but this species may occur in adjacent chaparral habitat. No known records in project region/canyon.

<i>Scientific Name</i> Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified On-Site	Potential To Occur On-Site	Factual Basis for Determination of Occurrence Potential
		and is dependent on prickly pear for water balance in desert habitats.			
<i>Onychomys torridus ramona</i> southern grasshopper mouse	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2 East Cnty MSCP draft: CS	Variety of habitats, including grasslands, sage scrub and chaparral, where friable soils occur.	No	Low	Suitable habitat but lacks suitable soils. No known records of this patchily distributed species occur in the project region/canyon.
<i>Taxidea taxus</i> American badger	CNDDDB: SA CDFW: SSC MSCP: CS Cnty of SD Group: 2	Nocturnal and diurnal carnivore that is most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils for digging burrows for cover.	No	Low	Suitable habitat but lacks suitable soils for digging burrows. No known records of this patchily distributed species occur in the project region/canyon.

¹References for Sensitivity Codes and Status: County 1997, Ogden et al. 1998, AMEC 2003a, County 2009b and d, CDFG 2011b-d

²California Natural Diversity Database Special Plants/Animals = A general term that refers to all taxa inventoried by the CDFG CNDDDB, regardless of their legal or protection status; these taxa include species, subspecies, or varieties that fall into one of the above categories and/or one or more of the following categories: 1) Taxa officially listed or proposed for listing under the federal and/or state ESA; 2) Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the CEQA Guidelines, which may include California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) Lists 1 and 2, and some List 3 plants; 3) Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), or U.S. Forest Service (USFS) Sensitive (S) Species; 4) Taxa considered SSC by the CDFG; 5) Taxa listed by the CNPS; 6) Taxa that are biologically rare, very restricted in distribution, declining throughout their range but are not currently threatened with extirpation, or have a critical, vulnerable stage in their life cycle that warrants monitoring; 7) Populations in California that may be peripheral to the major portion of a taxon's range, but are threatened with extirpation in California; 8) Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, valley shrubland habitats, vernal pools, etc.); and 8) In addition to the above taxa, those taxa designated as a special status, sensitive, or declining species by other state or federal agencies, or non-governmental organization (NGO) [e.g., The World Conservation Union (IUCN) Conservation Dependent (CD), Critically Endangered (CR), Data Deficient (DD), Endangered (EN), Least Concern (LC), Near Threatened (NT), Vulnerable (V) species; California Department of Forestry and Fire Protection (CDF) Sensitive (S) species; National Marine Fisheries Service (NMFS) Species of Concern (SC); American Fisheries Society (AFS) Endangered (EN), Threatened (TH), Vulnerable (VU) species; Xerces Society (XERCES) Critically Imperiled (CI), Data Deficient (DD), Imperiled (IM), Vulnerable (VU) invertebrate species; USFWS Birds of Conservation Concern (BCC); American Bird Conservancy (ABC) U.S. Watch List of Birds of Conservation Concern (WLBC); Marine Mammal Commission (MMC) Marine Mammal Species of Special Concern (SSC); and The Western Bat Working Group (WBWG) High (H), Low-Medium (LP), Medium (M), Medium-High (MH) Priority species].

³References for Habitat Preferences/Requirements: (plants) Reiser 2001, County 2009d, CNPS 2010; (butterflies) Faulkner and Klein 2004, Opler 2006; (amphibians and reptiles) Stebbins 2003, CDFG 2010a; (birds) AOU Birds of North America On-line 2010 and CDFG 2010a; (mammals) CDFG 2010a.

⁴CNDDDB only tracks the nesting locations of these bird species; the location of the nest or any indication of breeding (i.e., territorial males, adults carrying nest material, adults carrying food, the presence of newly fledged young, etc.) is acceptable evidence of nesting. County of San Diego listing is for breeding populations only.

⁵CNDDDB only tracks the wintering range of these bird species. County of San Diego listing is for wintering populations only