Appendix B

Biological Resources Technical Letter Report

November 25, 2019 11538

Mr. Greg Keppler Vista Irrigation District 1391 Engineer Street Vista, California 92081

Subject: Biological Resources Technical Letter Report for the E Reservoir Replacement and

Pump Station Project

Dear Mr. Greg Keppler:

Dudek was retained by Vista Irrigation District (VID) to complete a biological resources technical letter report for the E Reservoir Replacement and Pump Station Project (proposed project) located at 2330 Edgehill Road in the County of San Diego, California, just east of the City of Vista. The proposed project includes the replacement of the existing oval shaped, partially buried, 1.5-million-gallon E Reservoir with a new reservoir and construction a new pump station on the 1.88-acre property comprised of one parcel (APN: 174-240-33) (Figure 1; Attachment A). The new reservoir would increase storage capacity and provide the VID with a facility that meets applicable current codes and standards, and the new pump station would provide a redundant water supply to higher-pressure zones within the VID's service area when disruptions occur to primary water supplies.

The purpose of this report is to describe the biological character of the proposed project site in terms of vegetation, flora, wildlife, and wildlife habitats; analyze the potential for biological impacts of the proposed project; and proposed avoidance, minimization, and/or mitigation measures to offset potential biological resources impacts in accordance with California Environmental Quality Act (CEQA) guidelines.

1 Methods

On January 10, 2019, Dudek biologist Mike Howard conducted a general biological resources survey and mapping of vegetation communities. The survey was conducted from 8:45 am to 10:45 am under sunny skies, calm winds, and temperature ranging from 56-58°F. Vegetation communities and other land cover were mapped in the field directly onto 100-scale (1 inch = 100 feet) digital orthographic field map using the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) classification system. Prior to the survey, Dudek reviewed regional biological databases and references, including regional vegetation data, California Natural Diversity Database (CNDDB) species occurrences, US Fish and Wildlife Service (USFWS) data, regional Multiple Habitat Conservation Program (MHCP) and Multiple Species Conservation Program (MSCP) information, and other regional sources on vegetation, wetlands, special-status species, and wildlife movement. During the field reconnaissance, an inventory of plant and animal species detected by sight, calls, tracks, scat, or other signs was developed, as well as an assessment of potential special-status species that could occur on property based on habitats present.



2 Environmental Setting

The proposed project would be located on a 1.88-acre parcel of land located within Section 16 of Township 11 South, Range 3 West of the San Marcos, CA 7.5' United States Geological Survey (USGS) Topographic Quadrangle Map. The project site is located in unincorporated land in the County of San Diego (County) just to the east of the City of Vista (City) in the northern portion of San Diego County.

The site is approximately 1.88 acres and a portion of Edgehill Road is constructed on the southerly edge of the parcel. Existing elevations on the site range from 765 to 730 feet above mean sea level (amsl) sloping generally from northeast to southwest. The existing oval-shaped reservoir on site was constructed in 1929. It is partially buried with sloped walls and constructed of reinforced gunite concrete walls and floor. The roof is comprised of two layers of corrugated metal roofing with wood timber framing. Other facilities on the site include a slump block building, fencing, access roads, and associated landscaping. Surrounding land uses include rural residential development and agriculture.

3 Results

3.1 Vegetation Communities and General Biological Diversity

Nearly the entire proposed project site is characterized by developed and ornamental planting land cover. Developed land cover on the site is comprised of the existing E Reservoir facility, associated facilities, and access roads, which cover approximately 1.42 acres. Ornamental planting areas cover approximately 0.39 acres of the site and consist of eucalyptus trees (*Eucalyptus* sp.), ornamental pine trees (*Pinus* sp.), Peruvian peppertree (*Schinus molle*), onionweed (*Asphodelus fistulosus*), hottentot fig (*Carpobrotus edulis*), and bare ground.

The proposed project site is largely developed and provides limited habitat for wildlife. The ornamental tree species and limited native vegetation provide habitat for species common to urban areas, particularly bird species such as black phoebe (Sayornis nigricans), American crow (Corvus brachyrhynchos), and song sparrow (Melospiza melodia).

The narrow, steep slope on the east side of the reservoir is characterized by plant species associated with disturbed coastal sage scrub, including predominantly California sagebrush (*Artemisia californica*) and black sage (*Salvia mellifera*). This small vegetation patch is open and sparse with evidence of ground disturbance and patches dominated by non-native exotic plant species, including black mustard (*Brassica nigra*) and tree tobacco (*Nicotiana glauca*). This area of the site was mapped as disturbed coastal sage scrub based on the characteristic dominant species; however, this isolated vegetation patch is very small (less than 0.07 acres) and well below the state-defined minimum mapping unit¹ for vegetation community mapping (CDFW-CNPS 2019; CDFW 2018). Coastal sage scrub vegetation is identified as a special-status vegetation type; however, the remnant patch on the project site would not be considered substantial or suitable to support special-status wildlife associated with coastal sage scrub due its size, disturbed nature, and isolation from other native vegetation.

Minimum mapping unit (MMU) can vary depending on the area of the mapping effort and the sensitivity of the vegetation community being mapped; however, minimum mapping unit size is not greater than 10 acres and is usually 1 or 2 acres in size. Special vegetation types are mapped at a 0.25-acre MMU. Minimum width of a mapped polygon is generally no less than 30 feet.

Table 1 provides a summary of the vegetation communities and other land cover on the proposed project site, and Figure 2 shows the vegetation mapping of the site. A total of 18 plant species were recorded on the project site, as provided in Attachment B. Seven wildlife species were recorded on the project site, as provided in Attachment C.

Table 1. Vegetation Communities and Other Land Cover

Vegetation Community / Land Cover	Acreage
Developed	1.42
Ornamental Plantings	0.39
disturbed Coastal Sage Scrub	0.07
Total	1.88

3.2 Wetland and Water Resources

No jurisdictional wetlands or waters features potentially subject to the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife occur on the proposed project site.

3.3 Special-Status Species

Special-status species include plant and wildlife species that are federally- or state-listed as endangered, threatened, or candidates under the federal and state endangered species list, species listed as state rare or fully protected, wildlife designated as state species of special concern, and plant species with a California Rare Plant Rank (CRPR) 1A, 1B, 2A, or 2B (CDFW 2019a; CNPS 2019). Special-status species occurrence information in the region is based on the federal, state, and local occurrence database records (CDFW 2019b, USFWS 2019, and CCH 2019).

No special-status plant species were identified on the proposed project site. Based on a review of the special-status plant species known from the region, each special-status plant species would either not be expected to occur or would have a low potential to occur on the proposed project site. A full review of the 68 potential special-status plant species is provided in Attachment D.

No special-status wildlife species were identified on the proposed project site. Based on a review of the special-status wildlife species known from the region, each special-status wildlife species would either not be expected to occur or would have a low potential to occur on the proposed project site. A full review of the 52 potential special-status wildlife species is provided in Attachment E.

3.4 Wildlife Movement and Other Regional Consideration

The proposed project site is largely developed and is situated within surrounding land uses characterized by rural residential development and agriculture. No wildlife corridors have been identified on the site or in the vicinity of the site. The site is not a part of and does not contain a riparian corridor or other contiguous habitat linkage that could be used by wildlife for movement. Therefore, the proposed project site provides little value or function for wildlife movement.

In terms of other regional considerations, the proposed project site is located on VID property within unincorporated San Diego County. The County of San Diego is in the process of developing the North County Multiple Species Conservation Program (MSCP), which would provide a regional strategy for conserving the County's biological resources and a process for permitting development activities. The North County MSCP has not been finalized or approved and would not apply to VID projects; however, the document provides relevant conservation planning information for the region. The preliminary draft of the North County MSCP (County of San Diego 2009) excludes the proposed project site and the surround rural residential / agricultural areas from the pre-approved mitigation area (PAMA; future habitat reserve areas); therefore, the site and surroundings are not considered important for biological conservation in the draft North County MSCP.

4 Anticipated Project Impacts and Analysis of Significance

The proposed project includes the replacement of the existing E Reservoir with a new reservoir and construction a new pump station on the property. The new reservoir would increase storage capacity and provide the VID with a facility that meets applicable current codes and standards, and the new pump station would provide a redundant water supply to higher-pressure zones within the VID's service area when disruptions occur to primary water supplies. For the purposes of analyzing impacts to biological resources, it was assumed that the entire proposed project site would be directly impacted by activities associated with demolition and construction of the new reservoir, pump station, and associated facilities.

4.1 Explanation of Findings of Significance

Impacts to biological resources must be quantified and analyzed to determine whether such impacts are significant under the California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines specify that a proposed project may have a significant effect on the environment if the project would:

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

The following provides an evaluation of the direct, indirect, and cumulative impacts of the proposed project and an analysis of significance of these impacts pursuant to CEQA.

4.2 Direct Impacts

The proposed project would result ground disturbance and in the direct, permanent impact to the biological resources on the entire site from demolition of the existing facilities and construction of the proposed project.

4.2.1 Vegetation Communities

Implementation of the proposed project would result in ground disturbance and direct, permanent impact to the entire 1.88-acre proposed project site. Under CEQA significance criteria b) listed above in Section 4.1, the impact to vegetation communities and other land cover from the proposed project would be less than significant would not require mitigation.

Developed and ornamental planting land cover characterize the majority of the site (1.81 acres), which would not be considered sensitive under CEQA and impacts to these area would be less than significant. Coastal sage scrub is considered a sensitive natural community by CDFW; however, impacts to 0.07 acres of this isolated, remnant patch of vegetation would not be considered a substantial impact on a sensitive natural community under CEQA significance criteria b). The disturbed coastal sage scrub vegetation on the site is on a steep slope and surrounded by rural residential and agricultural land uses. The vegetation patch is open with evidence of past ground disturbance and non-native exotic plant species occur throughout. This vegetation patch was not considered suitable to support special-status plant or wildlife species and is considerably smaller than the state minimum mapping unit size for vegetation mapping. Therefore, the negligible loss of this vegetation would not be considered a substantial impact on a sensitive natural community and the impact would be less than significant.

4.2.2 Wetland and Water Resources

No wetland or water resources occur on the proposed project site; therefore, the proposed project would have no impact on state or federally protected wetlands addressed under CEQA significance criteria c) listed above in Section 4.1.

4.2.3 Special-Status Species

No special-status plant species were detected on the proposed project site, and no special-status plant species are likely to occur. The majority of the site (over 96%) is characterized by developed and ornamental planting land cover that does not provide suitable habitat to support special-status plant species, and the remainder of the site (0.07 acres) is not likely to or has a low potential to support these species. As a result, the proposed project would not have a substantial adverse effect on special-status plant species under CEQA significance criteria a), and the impacts of the proposed project would be less than significant and would not require mitigation.

No special-status wildlife species were detected on the proposed project site, and no special-status wildlife species are likely to occur. The majority of the site (over 96%) is characterized by developed and ornamental planting land cover that does not provide suitable habitat to support special-status wildlife species, and the remainder of the site (0.07 acres) is not likely to or has a low potential to support these species. As a result, the proposed project would not have a substantial adverse effect on special-status plant species under CEQA significance criteria a), and the impacts of the proposed project would be less than significant and would not require mitigation.

Trees, shrubs, and structures on the proposed project site have the potential to support nesting birds protected by the Migratory Bird Treaty Act (MBTA) and/or the California Fish and Game Code. Direct impacts to nesting birds would be a significant impact under CEQA significance criteria a), absent mitigation. In order to avoid nesting birds during construction of the proposed project, pre-construction nesting bird surveys and avoidance measures shall be implemented pursuant to MM BIO-1 (Pre-Construction Nesting Bird Surveys and Reporting) provided in Section 5. With implementation of the proposed mitigation measure to avoid impacts to nesting birds, this impact would be reduced to a level that is less than significant.

4.2.4 Wildlife Movement and Other Regional Considerations

As described above in Section 3.4, the proposed project site provides little value or function for wildlife movement; therefore, the proposed project would not interfere substantially with the movement of wildlife and impacts would be less than significant under CEQA significance criteria d) and would not require mitigation.

No local policies or ordinances protecting biological resources or provisions of any approved habitat conservation plans would apply to the proposed project; therefore, the no impacts under CEQA significance criteria e) or f) would result.

4.3 Indirect Impacts

Indirect impacts to biological resources could result to adjacent areas during construction of the proposed project from dust generation, soil erosion and runoff, and water quality degradation. These impacts have the potential to be significant. However, the project would be required to comply with San Diego Air Pollution Control District Rule 55 (fugitive dust control), which regulates dust emissions from construction/demolition activity. The project would comply with the Construction General Permit Order 2009-009-DWQ and prepare a Stormwater Pollution Prevention Plan, which must identify best management practices to reduce construction impacts on water quality. Additionally, all construction activities would be limited to the project site and developed/disturbed areas. Further, during operation, stormwater runoff would be treated through a water quality basin prior to discharge from the site. Therefore, indirect impacts would be less than significant.

4.4 Cumulative Impacts

The proposed project would involve demolition of an existing reservoir and construction of a new reservoir and pump station in an area of existing rural residential and agricultural land uses. The proposed project site supports negligible biological resources and the impacts of the proposed project would not contribute appreciably to the cumulative loss of biological resources in the region. The proposed project would mitigate potential impacts to nesting birds and potential indirect effects from construction. With implementation of these measures, the proposed project's contribution to cumulative biological resources impacts would be less than significant.

5 Avoidance, Minimization, and Mitigation Measures

The following mitigation measure would be required to reduce potentially significant impacts of the proposed project on biological resources below a level of significance.

MM BIO-1. Pre-Construction Nesting Birds Surveys and Reporting. To avoid impacts to breeding and nesting birds in accordance to the MBTA and California Fish and Game Code, construction activities shall take place outside of

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the nesting season; nesting season is March 1 (January 1 for raptors) through September 15. If construction cannot take place outside the nesting season, a breeding/nesting bird survey shall be conducted by a qualified biologist within 72 hours prior to ground disturbing activities to determine if active nests of bird species protected by the MBTA and/or the California Fish and Game Code are present in the impact area or within 300 feet of the impact area. If active nests are found, an avoidance buffer shall be established (typically 50 to 300 feet, depending on the species) until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. A survey and monitoring report documenting the pre-construction survey results and implemented avoidance measures shall be submitted.

Sincerely,

Mike Howard

Senior Project Manager / Biologist

Att.: A. Figures

- B. Plant Species List
- C. Wildlife Species List
- D. Special-Status Plant Species Potential to Occur
- E. Special-Status Wildlife Species Potential to Occur

cc: Andrew Talbert, Dudek

References

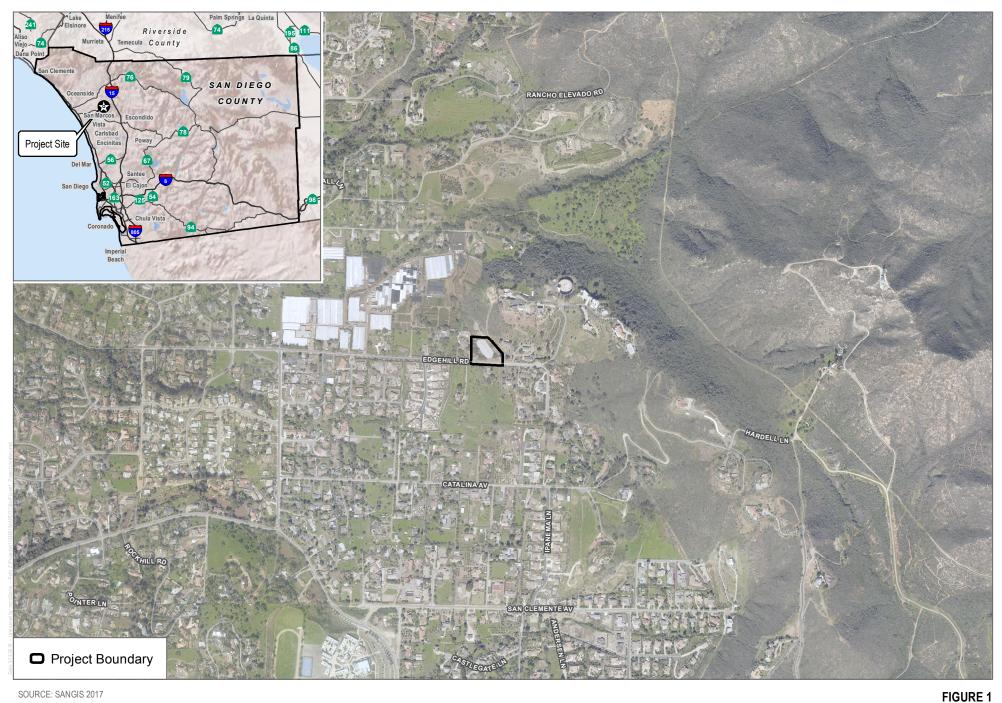
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Attachment A

Figures



SOURCE: SANGIS 2017

Project Location



SOURCE: SANGIS 2017

Vegetation Communities

Attachment B

Plant Species List

EUDICOTS

ADOXACEAE-MUSKROOT FAMILY

Sambucus nigra ssp. caerulea—blue elderberry

AIZOACEAE-FIG-MARIGOLD FAMILY

* Carpobrotus edulis—hottentot fig

ANACARDIACEAE-SUMAC OR CASHEW FAMILY

Malosma laurina—laurel sumac

* Schinus molle—Peruvian peppertree

APIACEAE—CARROT FAMILY

* Foeniculum vulgare—fennel

ASTERACEAE—SUNFLOWER FAMILY

Artemisia californica—California sagebrush Encelia californica—California brittle bush

BRASSICACEAE—MUSTARD FAMILY

* Brassica nigra—black mustard

CHENOPODIACEAE—GOOSEFOOT FAMILY

* Salsola tragus—prickly Russian thistle

CUCURBITACEAE—GOURD FAMILY

Cucurbita foetidissima-Missouri gourd

FAGACEAE—OAK FAMILY

Quercus agrifolia—coast live oak

MYRTACEAE—MYRTLE FAMILY

* Eucalyptus sp. —eucalyptus

LAMIACEAE—MINT FAMILY

Salvia mellifera—black sage

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat

SOLANACEAE—NIGHTSHADE FAMILY

Nicotiana glauca—tree tobacco



GYMNOSPERMS AND GNETOPHYTES

PINACEAE—PINE FAMILY

Pinus sp. —ornamental pine

MONOCOTS

ASPHODELACEAE—ASPHODEL FAMILY

* Asphodelus fistulosus—onionweed

POACEAE-GRASS FAMILY

- * Pennisetum setaceum—fountain grass
- * signifies introduced (non-native) species



Attachment C

Wildlife Species List

BIRD

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans-black phoebe

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

JAYS, MAGPIES AND CROWS

CORVIDAE—CROWS AND JAYS

Corvus brachyrhynchos—American crow

WOOD WARBLERS AND ALLIES

PARULIDAE-WOOD-WARBLERS

Setophaga coronata—yellow-rumped warbler

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS

Melospiza melodia—song sparrow Melozone crissalis—California towhee

MAMMAL

RATS, MICE, AND VOLES

CRICETIDAE-RATS, MICE, AND VOLES

Neotoma sp. — woodrat



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Attachment D

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. aurita	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; sandy/annual herb/(Jan)Mar-Sep/245-5250	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, openings/annual herb/Apr-June/30-3150	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed with negligible suitable habitat. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1	Coastal dunes, Coastal scrub (sandy)/annual herb/Mar-June(July)/0-35	Not expected to occur. The site is outside of the species' known elevation range and there are no known occurrences within 5 miles of the project site (CDFW 2019).
Adolphia californica	California adolphia	None/None/2B.1	Chaparral, Coastal scrub, Valley and foothill grassland; Clay/perennial deciduous shrub/Dec-May/30-2430	Not expected to occur. There is no suitable clay soil present and the site is primarily developed and with negligible suitable habitat. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Agave shawii var. shawii	Shaw's agave	None/None/2B.1	Coastal bluff scrub, Coastal scrub; Maritime succulent scrub/perennial leaf succulent/Sep-May/5-395	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr-Oct/65-1360	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Arctostaphylos glandulosa ssp. crassifolia	Del Mar manzanita	FE/None/1B.1	Chaparral (maritime, sandy)/perennial evergreen shrub/Dec-June/0-1200	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Arctostaphylos rainbowensis	Rainbow manzanita	None/None/1B.1	Chaparral/perennial evergreen shrub/Dec- Mar/670-2200	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Atriplex coulteri	Coulter's saltbush	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar-Oct/5-1510	Not expected to occur. There is no suitable alkaline or clay soil on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Atriplex pacifica	South Coast saltscale	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar-Oct/0-460	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Atriplex parishii	Parish's brittlescale	None/None/1B.1	Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June-Oct/80-6235	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Baccharis vanessae	Encinitas baccharis	FT/SE/1B.1	Chaparral (maritime), Cismontane woodland; sandstone/perennial deciduous shrub/Aug,Oct,Nov/195-2360	Not expected to occur. There is no suitable habitat and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/perennial bulbiferous herb/Apr-May/160-1525	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay/perennial bulbiferous herb/Mar-June/80-3675	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic, clay/perennial bulbiferous herb/May-July/95- 5550	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Calochortus dunnii	Dunn's mariposa lily	None/SR/1B.2	Closed-cone coniferous forest, Chaparral, Valley and foothill grassland; gabbroic or metavolcanic, rocky/perennial bulbiferous herb/(Feb)Apr–June/605–6005	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Camissoniopsis lewisii	Lewis' evening- primrose	None/None/3	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; sandy or clay/annual herb/Mar– May(June)/0–985	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019, CCH 2019).
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2	Closed-cone coniferous forest, Chaparral/perennial evergreen shrub/Apr- June/770-2475	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Ceanothus verrucosus	wart- stemmed ceanothus	None/None/2B.2	Chaparral/perennial evergreen shrub/Dec- May/0-1245	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 1 mile from the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Centromadia parryi ssp. australis	southern tarplant	None/None/1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May-Nov/0-1575	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Centromadia pungens ssp. laevis	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr-Sep/0-2100	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	None/None/1B.1	Coastal bluff scrub (sandy), Coastal dunes/annual herb/Jan-Aug/0-330	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Chamaebatia australis	southern mountain misery	None/None/4.2	Chaparral (gabbroic or metavolcanic)/perennial evergreen shrub/Nov-May/980-3345	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. The closest known occurrence is less than 5 miles from the project site (CCH 2019).
Chorizanthe orcuttiana	Orcutt's spineflower	FE/SE/1B.1	Closed-cone coniferous forest, Chaparral (maritime), Coastal scrub; sandy openings/annual herb/Mar-May/5-410	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/1B.2	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; often clay/annual herb/Apr-July/95-5020	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Clarkia delicata	delicate clarkia	None/None/1B.2	Chaparral, Cismontane woodland; often gabbroic/annual herb/Apr-June/770-3280	Not expected to occur. There is no suitable habitat on site, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Comarostaphylis diversifolia ssp. diversifolia	summer holly	None/None/1B.2	Chaparral, Cismontane woodland/perennial evergreen shrub/Apr–June/95–2590	Not expected to occur. There is no suitable habitat on site, and the site is primarily developed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Corethrogyne filaginifolia var. incana	San Diego sand aster	None/None/1B.1	Coastal bluff scrub, Chaparral, Coastal scrub/perennial herb/June-Sep/5-375	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Corethrogyne filaginifolia var. linifolia	Del Mar Mesa sand aster	None/None/1B.1	Coastal bluff scrub, Chaparral (maritime, openings), Coastal scrub; sandy/perennial herb/May,July,Aug,Sep/45-490	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Cryptantha wigginsii	Wiggins' cryptantha	None/None/1B.2	Coastal scrub; often clay/annual herb/Feb- June/65-900	Not expected to occur. There is no suitable clay soil on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Dichondra occidentalis	western dichondra	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial rhizomatous herb/(Jan)Mar-July/160-1640	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019, CCH 2019).
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None/None/1B.1	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland; rocky, often clay or serpentinite/perennial herb/Apr–June/15–1475	Not expected to occur. There is no suitable clay soil on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Dudleya multicaulis	many- stemmed dudleya	None/None/1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr- July/45-2590	Not expected to occur. There is no suitable clay soil on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Dudleya variegata	variegated dudleya	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/perennial herb/Apr-June/5-1905	Not expected to occur. There is no suitable clay soil or vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Dudleya viscida	sticky dudleya	None/None/1B.2	Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub; rocky/perennial herb/May-June/30-1805	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Ericameria palmeri var. palmeri	Palmer's goldenbush	None/None/1B.1	Chaparral, Coastal scrub; mesic/perennial evergreen shrub/(July)Sep-Nov/95-1970	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Eryngium aristulatum var. parishii	San Diego button-celery	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/annual / perennial herb/Apr-June/65-2035	Not expected to occur. There are no vernal pools on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eryngium pendletonense	Pendleton button-celery	None/None/1B.1	Coastal bluff scrub, Valley and foothill grassland, Vernal pools; clay, vernally mesic/perennial herb/Apr-June(July)/45-360	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Erysimum ammophilum	sand-loving wallflower	None/None/1B.2	Chaparral (maritime), Coastal dunes, Coastal scrub; sandy, openings/perennial herb/Feb–June/0–195	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Euphorbia misera	cliff spurge	None/None/2B.2	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub; rocky/perennial shrub/Dec-Aug(Oct)/30-1640	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/perennial stem succulent/May–June/5–1475	Not expected to occur. There are no vernal pools on site. Additionally, the site is primarily developed and the neglible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Hazardia orcuttii	Orcutt's hazardia	None/ST/1B.1	Chaparral (maritime), Coastal scrub; often clay/perennial evergreen shrub/Aug-Oct/260-280	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Heterotheca sessiliflora ssp. sessiliflora	beach goldenaster	None/None/1B.1	Chaparral (coastal), Coastal dunes, Coastal scrub/perennial herb/Mar-Dec/0-4020	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Holocarpha virgata ssp. elongata	graceful tarplant	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/annual herb/May– Nov/195-3610	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known occurrence is approximately 5 miles from the project site (CCH 2019).
Horkelia cuneata var. puberula	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb-July(Sep)/225-2655	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Horkelia truncata	Ramona horkelia	None/None/1B.3	Chaparral, Cismontane woodland; clay, gabbroic/perennial herb/May-June/1310-4265	Not expected to occur. The site is outside of the species' known elevation range. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Isocoma menziesii var. decumbens	decumbent goldenbush	None/None/1B.2	Chaparral, Coastal scrub (sandy, often in disturbed areas)/perennial shrub/Apr-Nov/30-445	Not expected to occur. The site is outside of the species' known elevation range. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Iva hayesiana	San Diego marsh-elder	None/None/2B.2	Marshes and swamps, Playas/perennial herb/Apr-Oct/30-1640	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is approximately 5 miles from the project site (CDFW 2019).
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb-June/0-4005	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2	Closed-cone coniferous forest, Chaparral, Cismontane woodland/perennial shrub/Apr- July/1705-4495	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Leptosyne maritima	sea dahlia	None/None/2B.2	Coastal bluff scrub, Coastal scrub/perennial herb/Mar-May/15-490	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Monardella hypoleuca ssp. intermedia	intermediate monardella	None/None/1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest (sometimes); Usually understory/perennial rhizomatous herb/Apr–Sep/1310-4100	Not expected to occur. The site is outside of the species' known elevation range. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Monardella hypoleuca ssp. lanata	felt-leaved monardella	None/None/1B.2	Chaparral, Cismontane woodland/perennial rhizomatous herb/June-Aug/980-5165	Not expected to occur. The site is outside of the species' known elevation range. The closest known CNDDB occurrence is less than 1 mile from the project site from 1986 (CDFW 2019).
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/annual / perennial herb/Jan–July/15–1640	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr-June/95-2150	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Nemacaulis denudata var. denudata	coast woolly- heads	None/None/1B.2	Coastal dunes/annual herb/Apr-Sep/0-330	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Nemacaulis denudata var. gracilis	slender cottonheads	None/None/2B.2	Coastal dunes, Desert dunes, Sonoran desert scrub/annual herb/(Mar)Apr-May/-160-1310	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Nolina cismontana	chaparral nolina	None/None/1B.2	Chaparral, Coastal scrub; sandstone or gabbro/perennial evergreen shrub/(Mar)May–July/455–4185	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr-Aug/45-2165	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Pinus torreyana ssp. torreyana	Torrey pine	None/None/1B.2	Closed-cone coniferous forest, Chaparral; Sandstone/perennial evergreen tree/N.A./95- 525	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1	Vernal pools/annual herb/Mar-July/295-655	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Pseudognaphalium leucocephalum	white rabbit- tobacco	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug-Nov(Dec)/0-6890	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb-Apr(May-Aug)/45-1310	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Salvia munzii	Munz's sage	None/None/2B.2	Chaparral, Coastal scrub/perennial evergreen shrub/Feb-Apr/375-3495	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar-June/45-5020	Not expected to occur. There are no playas or alkaline soils on site. Additionally, the site is primarily developed and the negligible coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Stemodia durantifolia	purple stemodia	None/None/2B.1	Sonoran desert scrub (often mesic, sandy)/perennial herb/(Jan)Apr,June,Aug,Sep,Oct,Dec/590-985	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Suaeda esteroa	estuary seablite	None/None/1B.2	Marshes and swamps (coastal salt)/perennial herb/(May)July-Oct(Jan)/0-15	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Tetracoccus dioicus	Parry's tetracoccus	None/None/1B.2	Chaparral, Coastal scrub/perennial deciduous shrub/Apr-May/540-3280	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed. The closest known CNDDB occurrence is less than 1 mile from the project site (CDFW 2019).

Status Legend:

FE: Federally listed as endangered

FT: Federally listed as threatened

SE: State listed as endangered

ST: State listed as threatened

SR: State Rare

CRPR 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

CRPR 2A: Plants Presumed Extirpated in California, But More Common Elsewhere

CRPR 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

- .1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)



References

CDFW (California Department of Fish and Wildlife). 2019. California Natural Diversity Database (CNDDB). RareFind Version 4.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CCH (Consortium of California Herbaria). 2019. Data provided by the Consortium of California Herbaria. Regents of the University of California. Updated August 16, 2019. Accessed November 2019. ucjeps.berkeley.edu/consortium/



Attachment E

Special-Status Wildlife Species Potential to Occur

		Status		
		(Federal/		
Scientific Name	Common Name	State)	Habitat	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Spea hammondii	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	Not expected to occur. There are no vernal pools on site. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Reptiles				
Actinemys marmorata	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Arizona elegans occidentalis	California glossy snake	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

Ociontific Name	Common Name	Status (Federal/	Habitat	Determinate Occur
Scientific Name Crotalus ruber	red diamondback rattlesnake	State) None/SSC	Habitat Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Potential to Occur Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. The closest known CNDDB occurrence is less than 1 mile from the project site (CDFW 2019).
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Thamnophis sirtalis ssp. (Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 850 m)	south coast garter snake	None/SSC	Marsh and upland habitats near permanent water and riparian vegetation	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to nest. There are no emergent wetlands or grasslands on site, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Aquila chrysaetos (nesting & wintering)	golden eagle	BCC/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest; low potential to winter. There are no open areas of scrubland on site. Additionally, the site is primarily developed and the suitable coastal sage scrub is fragmented and isolated. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Campylorhynchus brunneicapillus sandiegensis (San Diego & Orange Counties only)	coastal cactus wren	BCC/SSC	Southern cactus scrub patches	Not expected to occur. There are no suitable cactus scrub patches on site. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Charadrius alexandrinus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Circus hudsonius (nesting)	northern harrier	None/SSC	Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Coccyzus americanus occidentalis (nesting)	western yellow- billed cuckoo	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to nest. There is no riparian habitat on site. Additionally, the site is primarily developed and the suitable coastal sage scrub is fragmented and isolated. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to nest. There are no dense, wide riparian woodlands on site. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Ixobrychus exilis (nesting)	least bittern	BCC/SSC	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Laterallus jamaicensis coturniculus	California black rail	BCC/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site; however, the occurrence is from 1938 and is possible extirpated (CDFW 2019).
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.)	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Low potential to occur. Negligible coastal scrub present with sandstone, however the habitat is fragmented and disturbed and the site is mostly developed. The remnant patch of vegetation would not support nesting coastal California gnatcatchers and protocol surveys for this species were not considered necessary and were not conducted. The closest known CNDDB occurrence approximately 3 miles south of the project site in the Santa Fe Hills opens space area in San Marcos (CDFW 2019).
Rallus obsoletus levipes	Ridgway's rail	FE/SE, FP	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

		Status (Federal/		
Scientific Name	Common Name	State)	Habitat	Potential to Occur
Fishes				
Eucyclogobius newberryi	tidewater goby	FE/SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Gila orcuttii	arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Low potential to occur. There is negligible scrub on site, however the habitat is fragmented, there are no rocky outcrops for roosting, there are no open habitats on site, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented and isolated, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented and isolated, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Choeronycteris mexicana	Mexican long- tongued bat	None/SSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Corynorhinus townsendii	Townsend's big- eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented and isolated, and the site is primarily developed. The closest known CNDDB occurrence is approximately 4 miles from the project site within Guajome Regional Park in 1988 (CDFW 2019).
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented, there is no suitable woodland or rocky crevices for roosting, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Lasiurus xanthinus	western yellow bat	None/SSC	Valley-foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur. No suitable vegetation present. The closest known CNDDB occurrence is less than 1 mile from the project site (CDFW 2019).
Leptonycteris yerbabuenae	lesser long-nosed bat	FDL/SSC	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Lepus californicus bennettii	San Diego black- tailed jackrabbit	None/SSC	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented and isolated, and the site is

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Low potential to occur. There is suitable coastal scrub, however the habitat is fragmented and isolated, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Nyctinomops femorosaccus	pocketed free- tailed bat	None/SSC	Pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Nyctinomops macrotis	big free-tailed bat	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	Not expected to occur. There are no coastal strands, coastal dunes, and river alluvium on site, and the site is primarily developed. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Low potential to occur. There is negligible coastal scrub, however the habitat is fragmented and isolated, and the site is primarily developed. The closest known CNDDB occurrence is less than 5 miles from the project site (CDFW 2019).

		Status (Federal/		
Scientific Name	Common Name	State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch bumble bee	None/PSE	Open grassland and scrub communities supporting suitable floral resources.	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. No suitable vegetation present. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. There are no vernal pools on site. There are no known occurrences within 5 miles of the project site (CDFW 2019).
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. There are no vernal pools on site. There are no known occurrences within 5 miles of the project site (CDFW 2019).

Status Notes:

FE: Federally Endangered FT: Federally Threatened

FDL: Federally Delisted

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

SSC: California Species of Special Concern FP: California Fully Protected Species

WL: California Watch List Species

SE: State Endangered ST: State Threatened

PSE: Proposed State Endangered

References

CDFW (California Department of Fish and Wildlife). 2019. California Natural Diversity Database (CNDDB). RareFind Version 4.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.



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