March 8, 2019 11432

Melanie Conatser Skydive Perris P.O. Box 1823 Perris, California 92572

Subject: Biological Resources Letter Report for the Borrego Landing Site Assistance Project, APNs 199-060-01

and 199-060-13, PDS2019-AD-19-022 Borrego Springs, California

Dear Ms. Conatser:

This letter report provides the existing biological resources and an analysis of biological resource impacts associated with the proposed Borrego Landing Site Assistance Project (project) in an unincorporated area of San Diego County, California. This report addresses the extent of grubbing disturbance, acreages of disturbance by vegetation community, and appropriate mitigation for impacts.

In partial accordance with the County of San Diego Report Format and Content Requirements: Biological Resources (County of San Diego 2010a) and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010b), the purposes of this report are to describe the general biological character of the project in terms of vegetation resources, provide an impact analysis of the biological resources within the study area (project plus 100-foot buffer), and provide mitigation consistent with the County guidelines (County of San Diego 2010b).

1 Introduction

1.1 Project Location and Description

The study area is located within Assessor's Parcel Numbers (APNs) 199-060-01 and 199-060-13, totaling approximately 95 acres, located in northeastern San Diego County (Figure 1, Project Location; all figures can be found in Attachment A). The study area is located immediately south of Palm Springs Canyon Drive and the Borrego Springs airport (Figure 1). The approximate center of the study area is 33°15' 18.52" north latitude, 116°19' 43.75" west longitude, Section 02, Range 6 East, Township 11 South, on the U.S. Geological Survey 7.5-minute series topographic Clark Lake quadrangle map.

The soil type within the study area is Indio silt loam, saline, 0% to 2% slopes. These are highly alkaline/saline soils that tend to support a limited amount of plant species. Site elevation ranges from 505 to 510 above mean sea level.

Dudek understands that Perris Valley Aviation Services was served a notice of violation and a County Enforcement Case was opened related to unpermitted grubbing activities that occurred within the study area sometime between January 17 to 19, 2018. The original, owner-approved grubbing was intended to support a 2-acre drop zone on the 95-acre private property for parachutists for temporary paramilitary training. Training would include teams of up to six people parachuting onto an as-built Drop Zone between one to four times a day. Parachutists would be picked



up by a vehicle and driven off site to Borrego Airport. The period of training would include one to two weeks in duration, with jumps occurring approximately four to five days a week for six months a year.

2 Regional Context

2.1 Draft East County Multiple Species Conservation Program

The County of San Diego (County) is working on a draft East County Multiple Species Conservation Program (ECMSCP) for the eastern part of the unincorporated area that is bounded by Riverside County to the north, Imperial County to the east, Mexico to the south, and the Cleveland National Forest to the west. The draft ECMSCP encompasses approximately 1.6 million acres, including Oak Grove, Warner Springs, Borrego Springs, Ocotillo Wells, Julian, Agua Caliente Springs, Pine Valley, Tecate, Boulevard, Jacumba, and Campo. The draft ECMSCP is being prepared as a multiple species habitat conservation plan and a natural community conservation plan. The draft ECMSCP would provide coverage for 157 species, including 83 plant and 74 wildlife species (County of San Diego 2014).

The entire study area is located within the boundaries of the draft ECMSCP and is mapped as "Agricultural or Natural Upland outside Focused Conservation Area (FCA)" (Figure 2, Regional Context). Until the ECMSCP is approved, the Planning Agreement between the County and the Agencies (County of San Diego 2014) remains in place and applies to the project. The Planning Agreement outlines Preliminary Conservation Objectives for the ECMSCP and identifies an interim project review process, including a set of preserve design principles that interim projects would be evaluated against while the ECMSCP is in preparation.

2.2 County Resource Protection Ordinance

The County's Resource Protection Ordinance regulates biological and other natural resources within the County. These resources include wetlands, wetland buffers, floodways, floodplain fringe, steep slope lands, sensitive habitat lands, and significant prehistoric or historic sites. Generally, the ordinance stipulates that no impacts may occur to wetlands except for scientific research; removal of diseased or invasive exotic plant species; wetland creation and habitat restoration; revegetation and management projects; and crossings of wetlands for roads, driveways, or trails/pathways when certain conditions are met. The same exemptions apply to impacts to wetland buffer areas and improvements necessary to protect adjacent wetlands. Sensitive habitat lands are unique vegetation communities and support sensitive species, lands essential to the healthy functioning of a balanced natural ecosystem, or wildlife corridors. Impacts to sensitive habitat lands are permitted when impacts have been reduced as much as possible and mitigation provides at least an equal benefit to the affected species (County of San Diego 2012).

2.3 Local

The study area is located within the County's Borrego Springs Community Planning Area and has been designated as rural residential.



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3 Methods

On October 15, 2018, Dudek conducted a general biological reconnaissance survey of the project, which included the area of grubbing, totaling 17.07 acres and a 100-foot buffer per the County guidelines (County of San Diego 2010b); this area is collectively referred to as the study area and totals 27.25 acres. The purpose of the site visit was to create a baseline biological resources map with vegetation mapping, prior to habitat disturbance. The survey was conducted by Dudek biologist Britney Strittmater from 10:30 a.m. to 12:00 p.m. with temperatures ranging from 73°F to 76°F, clear skies, and wind speeds from 2 to 8 miles per hour.

3.1 Literature Review and Site History

Special-status plant and wildlife species present or potentially present within the study area were identified through an extensive literature search using the following sources: U.S. Fish and Wildlife Service (USFWS) Critical Habitat and Occurrence Data (USFWS 2019), California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CDFW 2019), and California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2019). The literature review also included review of the list of plant and wildlife species proposed for coverage under the draft ECMSCP (County of San Diego 2014) and species considered sensitive by the County of San Diego (County of San Diego 2010a). The Soil Survey, San Diego Area, California Part 1 (Bowman 1973) was also reviewed to identify potentially occurring special-status plants based on known soil associations.

The study area is located within the boundaries of the draft ECMSCP and the Borrego Springs Community Planning Area. These documents were reviewed to ensure that the project is consistent with relevant conservation goals and policies. Since the project is located within San Diego County, the County's Resource Protection Ordinance (County of San Diego 2012), Guidelines for Determining Significance and Report Format and Content Requirements (County of San Diego 2010a), and the Planning Agreement between the County and the agencies (County of San Diego 2014) are applicable to the project.

Prior to conducting the field investigation, Dudek reviewed historical photos and aerials prior to habitat disturbance, including Google Earth street views from Palm Canyon Road, in order to assess past vegetation cover (Google Earth 2018, Historic Aerials 2018). According to aerials, the eastern portion of the study area was historically used for agricultural practices as early as 1959 (Historic Aerials 2018). Furthermore, aerial imagery shows the most recent disturbance occurring sometime between August 2014 and October 2017 within the western portion of the study area, with additional disturbance occurring sometime between October 2017 and June 2017 (Google Earth 2018).

3.2 Vegetation Communities and Land Cover Mapping

Vegetation communities and land uses were mapped in the field directly onto a 200-foot-scale (1 inch = 200 feet) aerial photograph-based field map of the study area. To aid in the mapping effort, three reference sites located immediately outside of the area of disturbance were selected based on similar aerial composition to those areas that were previously disturbed/cleared (Figure 3, Vegetation Communities and Land Covers). Information such as dominant species and their associated cover classes, aspect, canopy height, and visible disturbance factors were recorded on field data forms (Attachment B). This information was collected to provide a baseline to support appropriate mitigation for impacts.



Following completion of the fieldwork, all vegetation polygons were transferred to a topographic base and digitized using ArcGIS and a geographic information system (GIS) coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present on site was determined. Vegetation communities were mapped per the *Draft Vegetation Communities of San Diego County* (Oberbauer et al. 2008), in accordance with the *County's Guidelines for Determining Significance and Report Format and Content* (County of San Diego 2010b).

3.3 Survey Limitations

The survey was conducted during the fall season, which resulted in detection and identification of most perennial plant species which may potentially occur in the area. Due to the timing of the surveys, annual and cryptic perennials may not have been detectable or were only identifiable to genus.

4 Results

4.1 Vegetation Communities and Land Covers

The western portion of the study area shows evidence of disturbance prior to the clearing activities. Specifically, the western portion of the study area shows evidence of clearing and tire tracks prior to January 2018 with lower vegetation densities than adjacent areas. The eastern portion of the study area was historically used for agricultural practices; however, aerial imagery prior to January 2018 depicts the eastern portion of the study area containing higher vegetation densities than adjacent areas and lacks disturbance (e.g., tire tracks, clearing).

Based on aerial imagery from 2017, a total of three vegetation communities/land cover types were identified within the study area, including desert saltbush scrub (including disturbed forms), disturbed habitat, and urban/developed. The vegetation communities and land cover types within the study area are described in detail below; their acreages are presented in Table 1; their spatial distributions are presented on Figure 3; and photo documentation is presented in Attachment C.

Table 1. Vegetation Communities and Land Covers within Study Area

Vegetation Community/Land Cover	Code ¹	Acreage
Desert Saltbush Scrub ²	36110	10.09
Disturbed Desert Saltbush Scrub ²	36110	16.71
Disturbed Habitat	11300	0.29
Urban/Developed	12000	0.17
	Total ³	27.25

Notes:

- Holland (1986) as modified by Oberbauer et al. (2008).
- ² Considered special-status by the County of San Diego (2010a).
- 3 Acreage may not total due to rounding.



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4.1.1 Desert Saltbush Scrub (36110)

Desert saltbush scrub is a native plant community composed of low, microphyllous shrubs that grow to about 1 to 10 feet tall, characteristically dominated by a single saltbush species (Oberbauer et al. 2008). Desert saltbush scrub is characterized by high alkaline/saline soils that are poorly drained and occurs on margins of dry lakes and surrounding playas. Within San Diego County, this association is commonly dominated by allscale (*Atriplex polycarpa*). Other representative species include other saltbush species, cheesebush (*Ambrosia salsola*), rusty molly (*Kochia californica*), Anderson's boxthorn (*Lycium andersonii*), peach thorn (*Lycium cooperi*), western honey mesquite (*Prosopis glandulosa* var. *torreyana*), and western seablite (*Suaeda occidentalis*).

Based on forensic studies of the site and species composition within nearby reference locations, desert saltbush scrub was mapped within the eastern portion of the study area and is presumed to be comprised primarily of allscale and bush seepweed (Suaeda nigra), with a lower cover of fourwing saltbush (Atriplex canescens) and alkali goldenbush (Isocoma acradenia). A few scattered emergent western honey mesquite and saltcedar (Tamarix ramosissima) were also present. The herbaceous layer was sparse and contained common Mediterranean grass (Schismus barbatus), mustard (Brassica ssp.), cryptantha (Cryptantha ssp.), and pepperweed (Lepidium ssp.). This community comprises approximately 30 percent of the area that was grubbed. Based on historical photos and aerials prior to habitat disturbance, this community was historically used for agricultural practices as early as 1959, but appears to have gone fallow sometime between 1959 and 1994 (Historic Aerials 2018) allowing native vegetation regrowth.

Based on forensic studies of the site and species composition within nearby reference locations, disturbed desert saltbush scrub was mapped within the western portion of the study area and is presumed to be comprised of a similar species composition as desert saltbush scrub described above. However, based on 2017 imagery, there is a higher cover of shrubs within the eastern portion while the western portion contained a much lower cover and a more open shrub canopy and this area exhibited soils disturbance including tire tracks based on historical photos and aerials prior to disturbance in January 2018; therefore, was mapped as disturbed desert saltbush scrub. This community comprises approximately 70 percent of the area that was grubbed.

This vegetation community requires mitigation per the County Report Format and Content Requirements for Biological Resources (County of San Diego 2010b).

4.1.2 Disturbed Habitat (11300)

Disturbed habitats are areas that have been physically disturbed and no longer recognizable as native or naturalized vegetation association (Oberbauer et al. 2008). These areas may continue to retain soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. Examples of these areas may include graded landscapes or areas, graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, areas repeatedly cleared for fuel management, or repeatedly used areas that prevent revegetation (e.g., parking lots, trails that have persisted for years). The disturbed habitat mapped within the study area consists of dirt areas adjacent to Palm Canyon Drive.

Disturbed habitat is not considered special-status by CDFW (2018a), and no mitigation is required per the County (2010b).

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4.1.3 Urban/Developed (11200)

Urban/developed are areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported (Oberbauer et al. 2008). If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals. Examples of these areas may include permanent or semi-permanent structures with associated landscaping hardscape or pavement. The urban/developed areas mapped within the study area consist of Palm Canyon Road.

Urban/developed is not considered special-status by CDFW (2018a), and no mitigation is required per the County (2010b).

4.2 Special-Status Resources

4.2.1 Special-Status Plants

Special-status plant species with a moderate potential to occur are included in Attachment D, Special-Status Plant Species with Moderate or High Potential to Occur within the Study Area. Plants that are not expected to occur or have low potential to occur are included in Attachment E, Special-Status Plant Species with Low Potential or Not Expected to Occur within the Study Area. These appendices include all County Lists A–D species (County of San Diego 2010a), as well as species recorded in the Clark Lake quadrangle and the surrounding eight quadrangles (CDFW 2019; CNPS 2019; USFWS 2019). The potential-to-occur determination is based on elevation, habitat, and soils present within the study area prior to grubbing activities, and Dudek biologists' knowledge of biological resources in the area and regional distribution of each species.

Eight special-status plant species have a moderate potential to occur within the study area: Borrego milk-vetch (Astragalus lentiginosus var. borreganus), ribbed crypantha (Cryptantha costata), Gander's cryptantha (Cryptantha ganderi), winged cryptantha (Cryptantha holoptera), Wolf's cholla (Cylindropuntia wolfii), Abrams' spurge (Euphorbia abramsiana), Parish's desert-thorn (Lycium parishii), and Palmer's jackass clover (Wislizenia refracta ssp. palmeri) (see Attachment D).

4.2.2 Special-Status Wildlife

The County divides sensitive wildlife species into County Group 1 and County Group 2 based on the species' rarity and known threats (County of San Diego 2010a). County Group 1 species include those that have a high level of sensitivity, are listed as threatened or endangered, or have a natural history requirement that increases their sensitivity. County Group 2 species include those that are becoming less common, although not so rare that extinction is imminent without immediate action. CDFW assigns Species of Special Concern status to species whose population levels are declining, have limited ranges, and/or are vulnerable to extinction due to continuing threats (CDFW 2018b). In addition, fully protected species are protected by CDFW, and Watch List species are candidates for higher sensitive status. USFWS provides the Birds of Conservation Concern status to migratory and non-migratory bird species that adhere to the 1988 amendment to the Fish and Wildlife Conservation Act that mandates USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973" (USFWS 2008). County Group 1 and/or Species of Special Concern, as well as County Group 2 species that have a moderate to high potential to occur, are discussed in this section and included in Attachment F, Special-Status Wildlife Species with Moderate to High Potential to Occur within the Study

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Area. Special-status wildlife that are not expected to occur or have low potential to occur are included in Attachment G, Special-Status Wildlife Species with Low Potential or Not Expected to Occur within the Study Area.

Special-status wildlife species with a moderate potential to occur or forage within the study area include northern reddiamond rattlesnake (*Crotalus ruber ruber*), flat-tailed horned lizard (*Phrynosoma mcallii*), golden eagle (*Aquila chrysaetos*), turkey vulture (*Cathartes aura*), prairie falcon (*Falco mexicanus*), pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western mastiff bat (*Eumops perotis californicus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), California leafed-nosed bat (*Macrotus californicus*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*) (see Attachment F).

4.2.3 Jursidictional Resources

No U.S Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board, or County RPO jurisdictional areas were detected in the project area.

5 Impacts and Mitigation

The study area includes land which was grubbed of vegetation in January 2018 in order to support a 2-acre drop zone for parachutists for temporary paramilitary training. The grubbing of vegetation resulted in impacts to desert saltbush scrub (including disturbed forms) and disturbed habitat (Table 2; Figure 4). Per the County guidelines, mitigation will be required for impacts to native vegetation (desert saltbush scrub; including disturbed forms) within the study area (County of San Diego 2010b). Per the County guidelines, mitigation ratios are standardized and not dependent upon the quality of habitat; therefore, disturbed saltbush scrub also requires a 2:1 mitigation.

Table 2. Impacts to Vegetation Communities and Land Covers within Study Area

Vegetation Community/Land Cover	Existing Acreage	Disturbance Limits ¹	Mitigation Ratio	Required Mitigation
Desert Saltbush Scrub ²	10.09	5.11	2:1	10.22
Disturbed Desert Saltbush Scrub ²	16.71	11.97	2:1	23.94
Disturbed Habitat	0.29	<0.01	n/a	n/a
Urban/Developed	0.17	_	n/a	n/a
Total ³	27.25	17.07	_	34.16

Notes:

- Disturbance limits mapped with Trimble GeoXT during October 15, 2018, site visit.
- Considered special-status by the County of San Diego (2010a).
- Acreage may not total due to rounding.

If you have any questions regarding this biological resources letter report, please call me at 760.685.1231 or

Brock Ortega at 760.479.4254.

Britney Strittmater

Biologist

Brook Ortega Senior Biologist/Project Manager

Att.: Attachment A – Figures

Attachment B - Field Data Forms

Attachment C - Photo Documentation

Attachment D - Special-Status Plant Species with Moderate or High Potential to Occur in Study Area

Attachment E - Special-Status Plant Species with Low Potential or Not Expected to Occur within the Study Area

Attachment F - Special-Status Wildlife Species with Moderate to High Potential to Occur within the Study Area

Attachment G - Special-Status Wildlife Species with Low Potential or Not Expected to Occur within the Study Area

Attachment H - Mitigation Plan for the Borrego Drop Zone - PDS2019-AD-19-022

References Cited 6

Bowman, R.H. 1973. Soil Survey, San Diego Area, California, Part 1. U.S. Department of Agriculture.

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Google Earth. 2018. Aerial photograph. 1:200 scale.

Historic Aerials. 2018. www.historicaerials.com.

Oberbauer, T.M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. http://www.sdcanyonlands.org/pdfs/veg_comm_sdcounty_2008_doc.pdf.

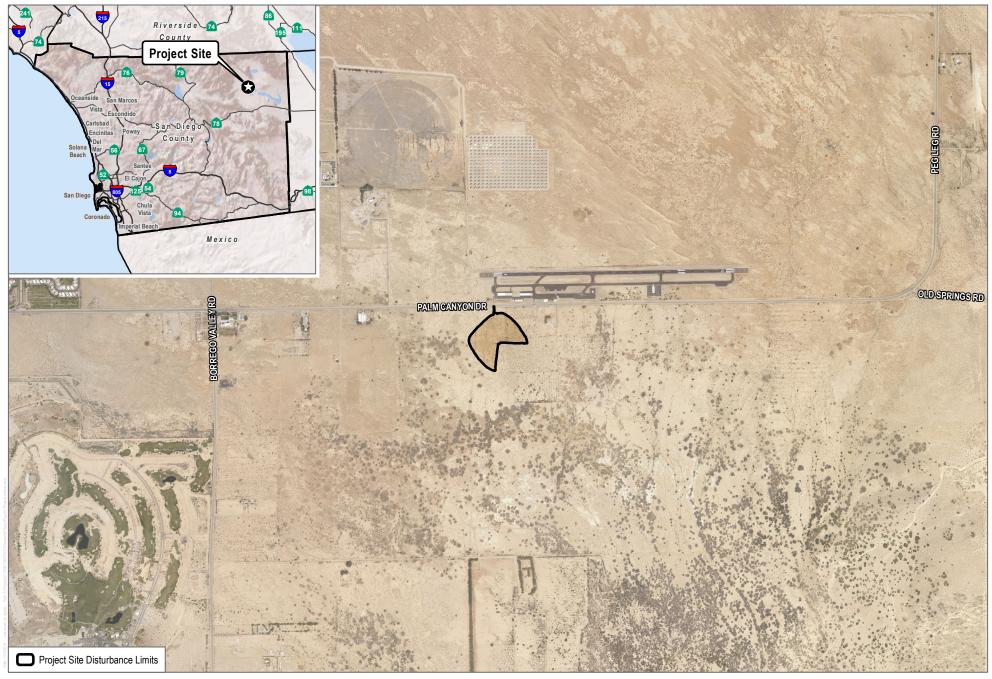
USFWS (U.S. Fish and Wildlife Service). 2008. *Birds of Conservation Concern 2008*. December 2008. Accessed February 2018. https://www.fws.gov/migratorybirds/pdf/grants/birdsofconservationconcern2008.pdf.

USFWS. 2019. "Critical Habitat and Occurrence Data" [GIS data]. Accessed February 2019. http://www.fws.gov/data.



Attachment A

Figures



DUDEK 6 0 1,000 2,000 Feet

FIGURE 1
Project Location

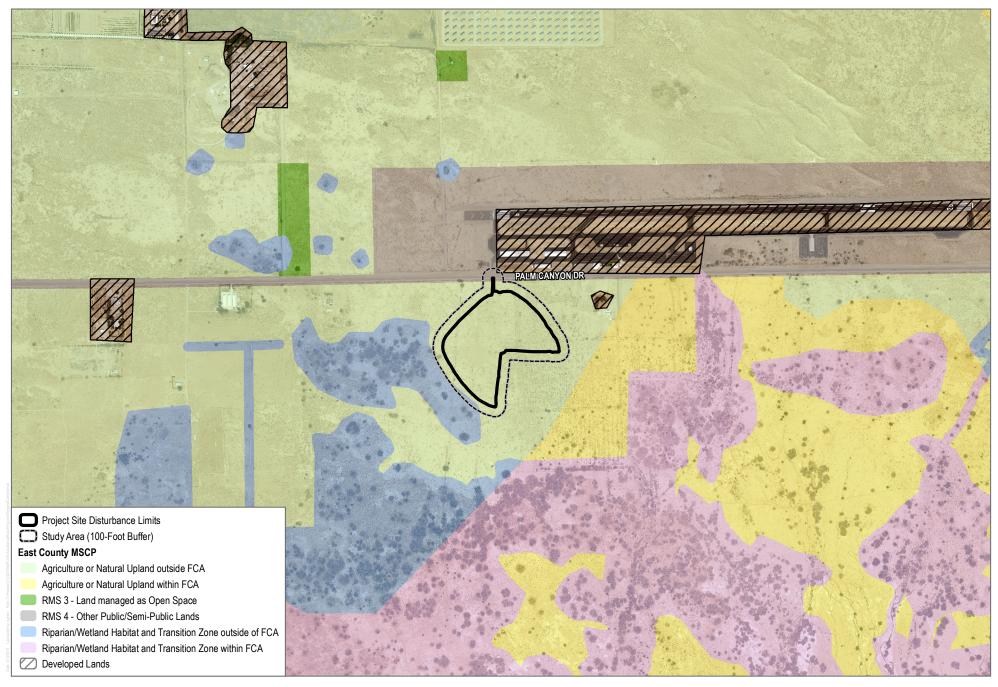


FIGURE 2
Regional Context

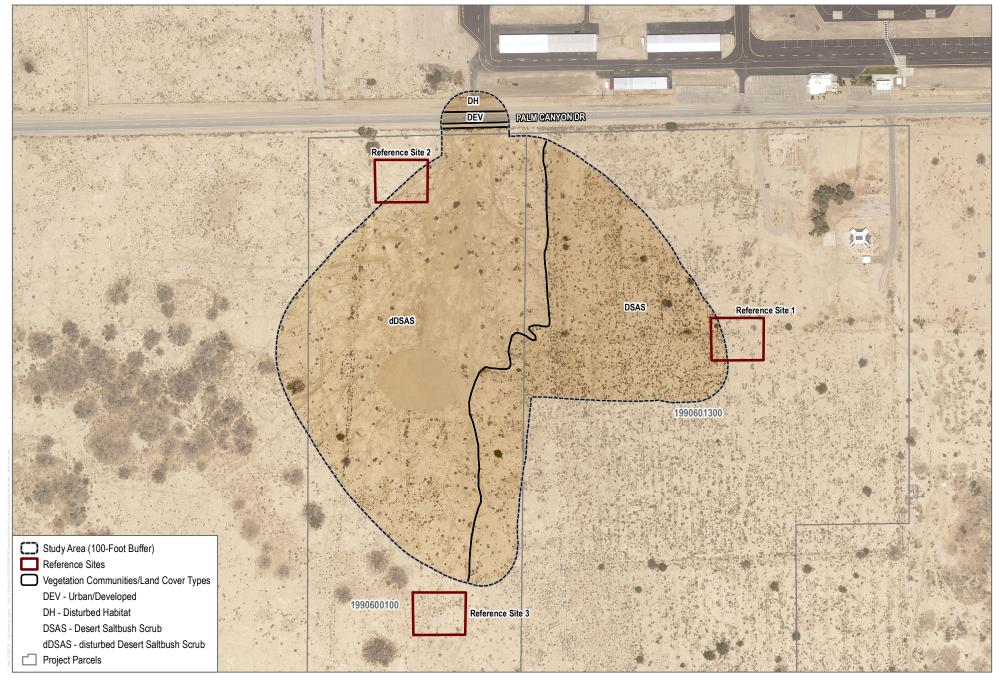


FIGURE 3
Vegetation Communities and Land Covers

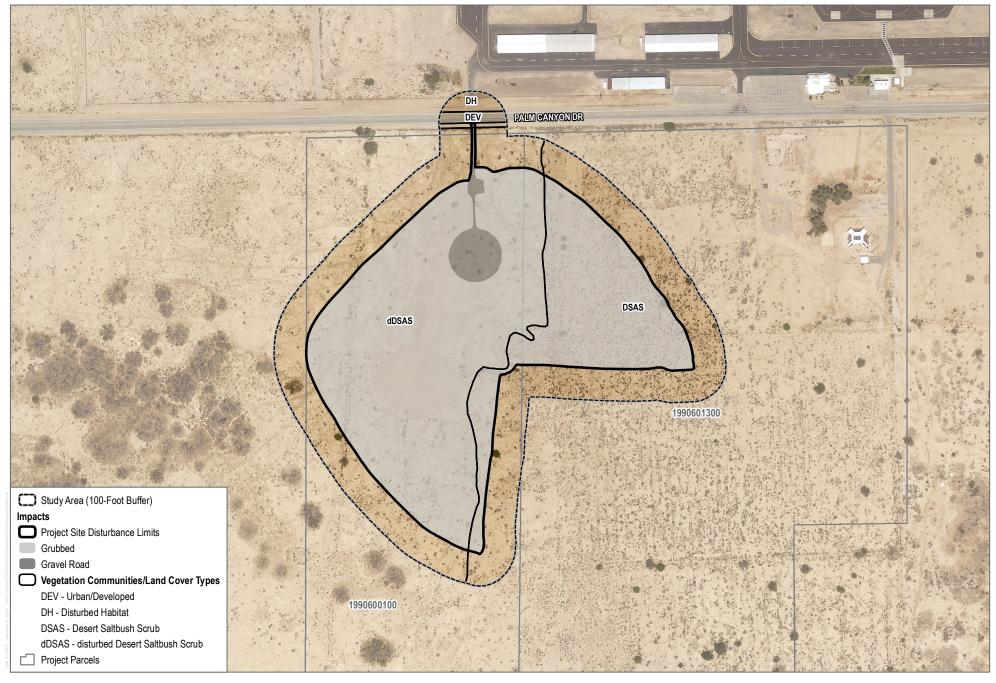


FIGURE 4
Impacts

Attachment B

Field Data Forms

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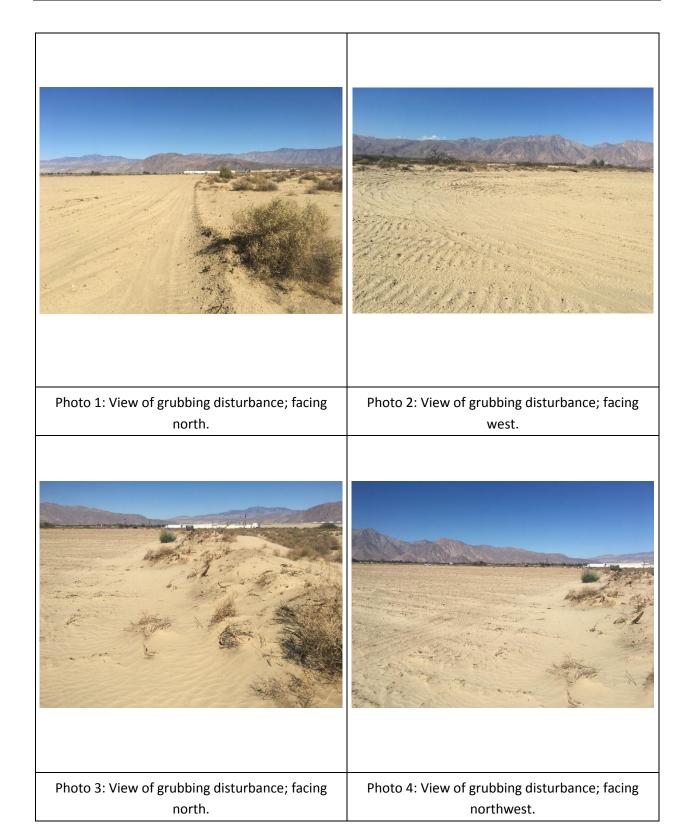
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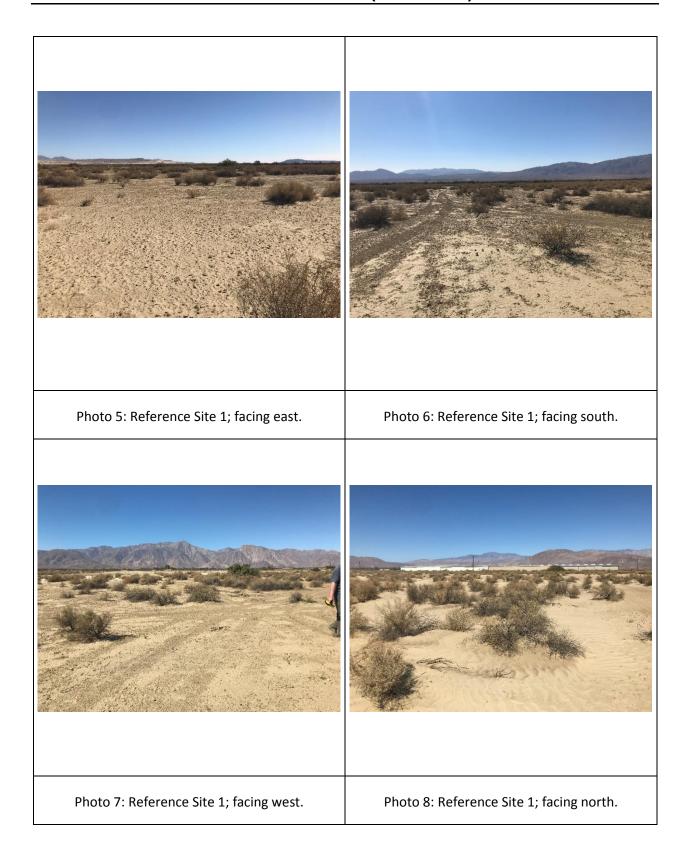
Attachment C

Photo Documentation

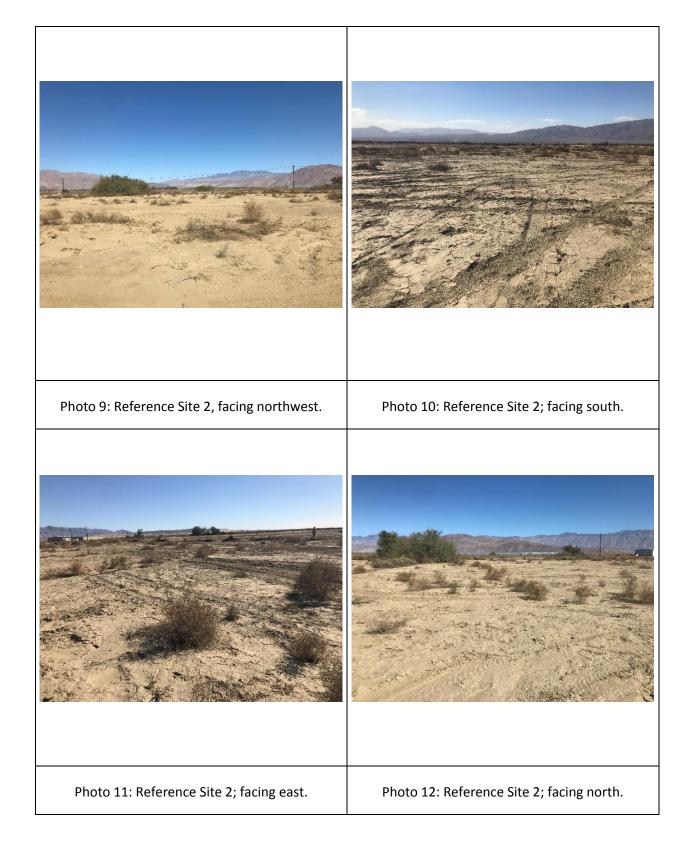
ATTACHMENT C Photo Documentation



ATTACHMENT C (Continued)



ATTACHMENT C (Continued)



ATTACHMENT C (Continued)





Photo 9: Reference Site 3, facing south.

Photo 10: Reference Site 3; facing east.



Photo 11: Reference Site 3; facing north.

Attachment D

Special-Status Plant Species with Moderate or High Potential to Occur in Study Area

ATTACHMENT D Special-Status Plant Species with Moderate or High Potential to Occur in Study Area

Scientific Name/ Common Name	Sensitivity Code and Status (Federal/State/CRPR/ County/ECMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Site (direct/indirect evidence)	Potential to Occur	Factual Basis for Determination
Astragalus lentiginosus var. borreganus Borrego milk- vetch	None/ None/ 4.3 / List D /MSCP	Mojavean desert scrub, Sonoran desert scrub/sandy/ annual herb/ Feb-May/ 98-1050	No	Moderate potential to occur.	Species is known to occur within the vicinity², the study area is located within the species known elevation range, and desert scrub is present.
Cryptantha costata ribbed cryptantha	None/ None/ 4.3 / List D /MSCP	Desert dunes, Mojavean desert scrub, Sonoran desert scrub/sandy/ annual herb/ Feb- May/ 197-1640	No	Moderate potential to occur.	Species is known to occur within the vicinity², the study area is located within the species' known elevation range and desert scrub is present.
Cryptantha ganderi Gander's cryptantha	None/ None/1B.1 / List A /MSCP	Desert dunes, Sonoran desert scrub(sandy)/ annual herb/ Feb- May/ 525-1312	No	Moderate potential to occur.	Species is known to occur within the vicinity², the study area is located within the species' known elevation range and there is suitable desert scrub present. There are numerous occurrences within 1-mile of the study area with the nearest occurrences approximately 0.3 mile east of the site and 0.5 mile west of the site (CDFW 2019).
Cryptantha holoptera winged cryptantha	None/ None/ 4.3 / List D/None	Mojavean desert scrub, Sonoran desert scrub/ annual herb/ Mar- Apr/ 328-5545	No	Moderate potential to occur.	The study area is located within the species' known elevation range, suitable vegetation is present, and species is known to occur within the vicinity ² .
Cylindropuntia wolfii Wolf's cholla	None/ None/ 4.3 /List D /MSCP	Sonoran desert scrub/ perennial stem succulent/ Mar-May/ 328- 3937	No	Moderate potential to occur.	The study area is located within the species' known elevation range, desert scrub is present, and the species is known to occur within the vicinity ² .
Euphorbia abramsiana Abrams' spurge	None/None/2B.2/ None/None	Mojavean desert scrub, Sonoran desert scrub; sandy/annual herb/(Aug)Sep-Nov/-15-4300	No	Moderate potential to occur.	The study area is located within the species' known elevation range, desert scrub is present and the species is known to occur within the vicinity ² . The nearest occurrence is just outside of the site along the south side of Palm Canyon Drive (growing in roadway) (CDFW 2019).
Lycium parishii Parish's desert- thorn	None/ None/ 2.3 / List B /MSCP	Coastal scrub, Sonoran desert scrub/ perennial shrub/ Mar-Apr/ 443-3281	No	Moderate potential to occur.	The study area is located within the species' known elevation range, desert scrub is present, and the species is known to occur in the vicinity ² with the nearest occurrence located immediately northwest of the study area, south of Palm Canyon Road (CDFW 2019).



ATTACHMENT D (Continued)

Scientific Name/ Common Name	Sensitivity Code and Status (Federal/State/CRPR/ County/ECMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Site (direct/indirect evidence)	Potential to Occur	Factual Basis for Determination
Wislizenia refracta ssp. palmeri Palmer's jackass clover	None/None/2B.2/ None/None	Chenopod scrub, Desert dunes, Sonoran desert scrub, Sonoran thorn woodland/perennial deciduous shrub/Jan–Dec/0–985	No	Moderate potential to occur.	The study area is located within the species' known elevation range, suitable vegetation is present, and species is known to occur within the vicinity ² . There is a known occurrence overlapping the study area; however, exact location was unknown and was from 1928 (CDFW 2019). There are other more recent occurrences south of the study area (CCH 2019).

1 Status:

CRPR: California Rare Plant Rank

- 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 4 (formerly List 4): Plants of Limited Distribution—A Watch List
- 0.1: Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 0.2: Fairly threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
- 0.3: Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

County Designations:

List A

List B

List D

MSCP: Draft Covered Species under the ECMSCP

² Vicinity" is based on a search of the CNDDB and CNPS databases for the Clark Lake quad and the eight surrounding quads (Collins Valley, Clark Lake NE, Rabbit Peak, Borrego Palm Canyon, Fonts Point, Tubb Canyon, Borrego Sink, and Borrego Mountain) conducted in February 2019.



ATTACHMENT D (Continued)

REFERENCES

- CCH (Consortium of California Herbaria). 2019. Accessed February 2019. http://ucjeps.berkeley.edu/consortium/
- CDFW (California Department of Fish and Wildlife). 2018. CNDDB. *Special Vascular Plants, Bryophytes, and Lichens List*. California Natural Diversity Database. November 2018. Accessed February 2019. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.
- CDFW. 2019. RareFind, Version 5.2.14. California Natural Diversity Database (CNDDB). Accessed February 2019. http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp.
- CNPS (California Native Plant Society), Rare Plant Program. 2019. Inventory of Rare and Endangered Plants (online edition v8-03 0.45). Sacramento, California. Accessed February 2019. www.rareplants.cnps.org.

ATTACHMENT D (Continued)

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Attachment E

Special-Status Plant Species with Low Potential or Not Expected to Occur within the Study Area

ATTACHMENT E Special-Status Plant Species with Low Potential or Not Expected to Occur within the Study Area

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Abronia maritima red sand-verbena	None/None/4.2/ List D	Coastal dunes/perennial herb/Feb-Nov/ 0-328	No	Not expected to occur.	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable vegetation present. Species is not known to occur within the vicinity ² .
Abronia villosa var. aurita chaparral sand- verbena	None/None/ 1B.1/List A	Chaparral, Coastal scrub, Desert dunes/sandy/annual herb/Jan-Sep/ 246-5249	No	Not expected to occur.	Not expected to occur. No suitable vegetation present. Species is known to occur within the vicinity ² .
Acanthomintha ilicifolia San Diego thorn-mint	FT/SE/1B.1/ List A/MSCP	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/clay, openings/annual herb/Apr-Jun/33-3150	No	Not expected to occur.	Although the project study area is located within the species' known elevation range, the species is not known to occur within the vicinity² and the study area lacks suitable soils and vernal pools. This species is known to occur in coastal San Diego County and south to San Telmo in northern Baja California (73 FR 50454–50496). The nearest known occurrence is approximately 32 miles southeast of the project study area (CDFW 2019). Species is not known to occur within the vicinity².
Acmispon haydonii pygmy lotus	None/None/1B.3/ List A/MSCP	Pinyon and juniper woodland, Sonoran desert scrub; rocky/perennial herb/ Jan–June/1705–3935	No	Not expected to occur.	The study area is outside of the species' known elevation range. Species is known to occur within the vicinity ² .
Acmispon prostratus Nuttall's acmispon	None/None/1B.1/ List A	Coastal dunes, Coastal scrub(sandy)/annual herb/Mar-Jun(Jul)/ 0-33	No	Not expected to occur.	The study area is outside of the species' known elevation range and there is no suitable vegetation present. Species is not known to occur within the vicinity ² .



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Adolphia californica California adolphia	None/None/2.3/ List B	Chaparral, Coastal scrub, Valley and foothill grassland/clay/perennial deciduous shrub/Dec-May/148-2428	No	Not expected to occur.	No suitable vegetation or soils present. Species is not known to occur within the vicinity ² .
Agave shawii var. shawii Shaw's agave	None/None/2.3/ List B	Coastal bluff scrub, Coastal scrub/perennial leaf succulent/ Sep-May/33-394	No	Not expected to occur.	The study area is outside of the species' known elevation range and there is no suitable vegetation present. Species is not known to occur within the vicinity ² .
Allium parishii Parish's onion	None/None/4.3/ None/None	Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; rocky/perennial bulbiferous herb/ Apr–May/2950–5690	No	Not expected to occur.	The study area is outside of the species' known elevation range and there is no suitable vegetation present. Species is known to occur within the vicinity ² .
Ambrosia chenopodiifolia San Diego bur-sage	None/None/2.3/ List B	Coastal scrub/perennial shrub/ Apr-Jun/180-509	No	Not expected to occur.	There is no suitable vegetation present. Species is not known to occur within the vicinity ² .
Ambrosia pumila San Diego ambrosia	FE/None/1B.1/ List A	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr-Oct/66-1362	No	Not expected to occur.	Although alkaline soils are present, there is no suitable vegetation present and the species is not known to occur within the vicinity ² . Nearest known occurrence is approximately 33 miles northwest of the project study area (CDFW 2019).
Androsace elongata ssp. acuta California androsace	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/annual herb/Mar-Jun/492-3937	No	Not expected to occur.	Although species not known to occur in the vicinity ² , there is no suitable vegetation present.
Aphanisma blitoides aphanisma	None/None/1B.2/ List A	Coastal bluff scrub, Coastal dunes, Coastal scrub/sandy/annual herb/ Mar-Jun/3-1001	No	Not expected to occur.	Species not known to occur in the vicinity ² . Additionally, there is no suitable vegetation present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Arctostaphylos glandulosa ssp. crassifolia Del Mar manzanita	FE/None/1B.1/ List A	Chaparral(maritime, sandy)/perennial evergreen shrub/Dec-Jun/0-1198	No	Not expected to occur.	Species not known to occur in the vicinity ² . Additionally, there is no suitable vegetation present.
Arctostaphylos otayensis Otay manzanita	None/None/1B.2/ List A/MSCP	Chaparral, Cismontane woodland/metavolcanic/perennial evergreen shrub/Jan-Apr/902-5577	No	Not expected to occur.	Species is not known to occur within the vicinity ² . The study area is outside of the species' known elevation range and there is no suitable vegetation or soils present.
Arctostaphylos rainbowensis Rainbow manzanita	None/None/1B.1/ List A	Chaparral/perennial evergreen shrub/ Dec-Mar/673-2198	No	Not expected to occur.	Species is not known to occur within the vicinity ² . The study area is outside of the species' known elevation range and there is no suitable vegetation present.
Artemisia palmeri San Diego sagewort	None/None/4.2/ List D	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland/sandy, mesic/perennial deciduous shrub/(Feb),May-Sep/49-3002	No	Not expected to occur.	Species is not known to occur within the vicinity ² and no suitable vegetation or mesic conditions present.
Asplenium vespertinum western spleenwort	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub/rocky/perennial rhizomatous herb/Feb-Jun/591-3281	No	Not expected to occur.	Species is not known to occur within the vicinity ² and no suitable vegetation is present.
Astragalus crotalariae Salton milk-vetch	None/None/4.3/ List D/MSCP	Sonoran desert scrub(sandy or gravelly)/perennial herb/Jan-Apr/-197-820	No	Low potential to occur.	The study area is located within the species' known elevation range and contains desert scrub; however, this species is known to occur in washes or open, sandy, gravelly areas (Jepson Interchange 2019) which are absent (i.e., washes and gravelly areas) from the study area. Therefore, this species has a low potential to occur.
Astragalus deanei Dean's milk-vetch	None/None/1B.1/ List A/MSCP	Chaparral, Cismontane woodland, Coastal scrub, Riparian forest/perennial herb/ Feb-May/246-2280	No	Not expected to occur.	Species is not known to occur within the vicinity ² and no suitable vegetation is present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Astragalus douglasii var. perstrictus Jacumba milk-vetch	None/None/1B.2/ List A/MSCP	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Riparian scrub, Valley and foothill grassland; rocky/perennial herb/Apr–June/2950–4495	No	Not expected to occur.	Although this species is known to occur within the vicinity ² ; the study area is outside of the species' known elevation range and there is no suitable vegetation present.
Astragalus insularis var. harwoodii Harwood's milk-vetch	None/None/2.3/ List B/MSCP	Desert dunes, Mojavean desert scrub/sandy or gravelly/annual herb/ Jan-May/0-2329	No	Not expected to occur.	Species is not known to occur within the vicniity ² and no suitable vegetation is present.
Astragalus magdalenae var. peirsonii Peirson's milk-vetch	FT/SE/1B.2/List A	Desert dunes/perennial herb/Dec-Apr/ 197-738	No	Not expected to occur.	Although this species is known to occur within the vicinity², there is no suitable vegetation present. The nearest known CNDDB occurrence is approximately 1.8 miles east of the study area (CDFW 2019).
Astragalus oocarpus San Diego milk-vetch	None/None/1B.2/ List A/MSCP	Chaparral(openings), Cismontane woodland/perennial herb/May-Aug/ 1001-5000	No	Not expected to occur.	Species is not known to occur within the vicinity ² , the study area is outside of the species' known elevation range, and there is no suitable vegetation present.
Astragalus pachypus var. jaegeri Jaeger's bush milk- vetch	None/None/1B.1/ List A	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/sandy or rocky/perennial shrub/Dec-Jun/ 1198-3002	No	Not expected to occur.	Although the species is known to occur in the vicinity ² , the study area is outside of the species' known elevation range and there is no suitable vegetation present.
Astragalus sabulonum gravel milk-vetch	None/None None/None	Desert dunes, Mojavean desert scrub, Sonoran desert scrub; Usually sandy, sometimes gravelly. Flats, washes, and roadsides/annual /perennial herb/ Feb–June/-195–3050	No	Low potential to occur.	Although the species is known to occur in the vicinity², the study area is located within the species' known elevation range, and the study area contains desert scrub; the study area lacks gravelly soils and washes to support this species. The nearest known CNDDB occurrence is approximately 1.6 miles west of the study area; however, was from 1895 and requires fieldwork (CDFW 2019).



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Astragalus tener var. titi coastal dunes milk- vetch	FE/SE/1B.1/List A	Coastal bluff scrub(sandy), Coastal dunes, Coastal prairie(mesic)/often vernally mesic areas/annual herb/Mar-May/3-164	No	Not expected to occur.	Species is not known to occur within the vicinity², the study area is outside of the species' known elevation range, and there is no suitable vegetation present. The nearest known CNDDB occurrence is approximately 56 miles southwest of the study area (CDFW 2019),
Atriplex coulteri Coulter's saltbush	None/None/1B.2/ List A	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland/alkaline or clay/perennial herb/Mar-Oct/10-1509	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Atriplex pacifica South Coast saltscale	None/None/1B.2/ List A	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/ Mar-Oct/0-459	No	Not expected to occur.	Species is not known to occur within the vicinity ² , the study area is outside of the species' known elevation range, and there is no suitable vegetation present.
Atriplex parishii Parish's brittlescale	None/None/1B.1/ List A	Chenopod scrub, Playas, Vernal pools/alkaline/annual herb/Jun-Oct/82-6234	No	Not expected to occur.	Although the study area is located within the species' known elevation range and suitable chenopod scrub and alkaline soils are present; vernal pools are absent and the species is not known to occur within the vicinity ² .
Atriplex serenana var. davidsonii Davidson's saltscale	None/None/1B.2/ List A	Coastal bluff scrub, Coastal scrub/alkaline/annual herb/Apr-Oct/33-656	No	Not expected to occur.	Although alkaline conditions are present, the species is not known to occur within the vicinity ² and suitable vegetation is absent.
Ayenia compacta California ayenia	None/None/2.3/ List B	Mojavean desert scrub, Sonoran desert scrub/rocky/perennial herb/Mar-Apr/492-3593	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, this species is known to occur in sandy washes and dry canyons (Jepson Flora Project 2019) which are absent from the study area. The nearest known CNDDB occurrence is approximately 4.2 miles southwest of the study area (CDFW 2019).



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Azolla microphylla Mexican mosquito fern	None/None/4.2/ List D	Marshes and swamps(ponds, slow water)/annual/perennial herb/Aug/98-328	No	Not expected to occur.	The study area is outside of the species' known elevation range and there is no suitable vegetation present.
Baccharis vanessae Encinitas baccharis	FT/SE/1B.1/List A	Chaparral(maritime), Cismontane woodland/sandstone/perennial deciduous shrub/Aug-Nov/197-2362	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present. The nearest known CNDDB occurrence is approximately 40 miles southwest of the study area (CDFW 2019).
Berberis fremontii Fremont barberry	None/None/2B.3/ List C/None	Joshua tree woodland, Pinyon and juniper woodland; Rocky, sometimes granitic/perennial evergreen shrub/Mar–May/3755–5645	No		Species is not known to occur within the vicinity ² , the study area is outside of the species' known elevation range, and there is no suitable vegetation present.
Berberis nevinii Nevin's barberry	FE/SE/1B.1/List A	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub/sandy or gravelly/perennial evergreen shrub/Mar-Jun/899-2707	No	Not expected to occur.	Although the species is known to occur in the vicinity ² and there is no suitable vegetation present. The nearest known CNDDB occurrence is approximately 10 miles west of the study area (CDFW 2019).
Bergerocactus emoryi golden-spined cereus	None/None/2.3/ List B	Closed-cone coniferous forest, Chaparral, Coastal scrub/sandy/perennial stem succulent/May-Jun/10-1296	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Bloomeria clevelandii San Diego goldenstar	None/None/1B.1/ List A	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/clay/perennial bulbiferous herb/ Apr-May/164-1526	No	Not expected to occur.	Species is not known to occur within the vicinity², no suitable vegetation, vernal pools or clay soils are present.
Boechera hirshbergiae Hirshberg's rockcress	None/None/1B.2/ List A/MSCP	Pebble plain/perennial herb/ Mar-May/4593-4642	No	Not expected to occur.	Species is not known to occur within the vicinity², the study area is outside of the species' known elevation range, and there is no suitable vegetation present



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Brodiaea filifolia thread-leaved brodiaea	FT/SE/1B.1/List A	Chaparral(openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools/often clay/perennial bulbiferous herb/ Mar-Jun/82-3675	No	Not expected to occur.	Species is not known to occur within the vicinity² and the study area lacks suitable vegetation, mesic conditions, and suitable vernal pools. This species commonly occurs within mesic grassland and alkali grassland communities with clay or alkaline soils ranging in elevation from 100 to 2,500 feet, depending on soil series (FR 64930-64982). The nearest occurrence is located approximately 36 miles southwest of the study area (CDFW 2019).
Brodiaea orcuttii Orcutt's brodiaea	None/None/1B.1/ List A/MSCP	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools/mesic, clay, sometimes serpentinite/perennial bulbiferous herb/May-Jul/98-5551	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area lacks vernal pools and clay soils.
Bursera microphylla little-leaf elephant tree	None/None/2.3/ List B/MSCP	Sonoran desert scrub(rocky)/perennial deciduous tree/Jun-Jul/656-2297	No	Not expected to occur.	Although the species is known to occur within the vicinity, the study area is outside of the species' known elevation range.
Calandrinia breweri Brewer's calandrinia	None/None/4.2/ List D	Chaparral, Coastal scrub/sandy or loamy, disturbed study areas and burns/annual herb/Mar-Jun/33-4003	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
California macrophylla round-leaved filaree	None/None/1B.1/ List B	Cismontane woodland, Valley and foothill grassland/clay/annual herb/Mar-May/ 49-3937	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Calliandra eriophylla pink fairy-duster	None/None/2.3/ List B/MSCP	Sonoran desert scrub(sandy or rocky)/perennial deciduous shrub/ Jan-Mar/394-4921	No	Low potential to occur.	Although the project study area is located within the species' known elevation range and suitable vegetation and soils are present; the species is not known to occur within the vicinity² and study area lacks suitable rocky soils. Therefore, this species has a low potential to occur.
Calochortus catalinae Catalina mariposa lily	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/(Feb),Mar-Jun/49-2297	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Calochortus dunnii Dunn's mariposa lily	None/SR/1B.2/ List A/MSCP	Closed-cone coniferous forest, Chaparral, Valley and foothill grassland/gabbroic or metavolcanic, rocky/perennial bulbiferous herb/(Feb),Apr-Jun/607-6004	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present.
Camissoniopsis lewisii Lewis' evening- primrose	None/None/3/ List C	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland/sandy or clay/annual herb/Mar-May(Jun),/0-984	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Carlowrightia arizonica Arizona carlowrightia	None/None/2.3/ List B/MSCP	Sonoran desert scrub(sandy, granitic alluvium)/perennial deciduous shrub/ Mar-May/935-1411	No	Not expected to occur.	Species is known to occur within the vicniity ² and suitable vegetation is present; however, the study area is located outside of the species' known elevation range.
Caulanthus simulans Payson's jewelflower	None/None/4.2/ List D/MSCP	Chaparral, Coastal scrub; sandy, granitic/annual herb/(Feb) Mar-May(June)/295-7220	No	Not expected to occur.	Species is known to occur within the vicniity²; however, there is no suitable vegetation or granitic soils present.
Ceanothus cyaneus Lakeside ceanothus	None/None/1B.2/ List A/MSCP	Closed-cone coniferous forest, Chaparral/perennial evergreen shrub/ Apr-Jun/771-2477	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Ceanothus verrucosus wart-stemmed ceanothus	None/None/2.3/ List B	Chaparral/perennial evergreen shrub/ Dec-May/3-1247	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Centromadia parryi ssp. australis southern tarplant	None/None/1B.1/ List A	Marshes and swamps(margins), Valley and foothill grassland(vernally mesic), Vernal pools/annual herb/May-Nov/0-1575	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Centromadia pungens ssp. laevis smooth tarplant	None/None/1B.1/ List A	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland/alkaline/annual herb/Apr-Sep/0-2100	No	Low potential to occur.	Although the study area is located within the species' known elevation range, suitable vegetation and alkaline soils are present, the nearest CNDDB occurrence is approximately 2.8 miles southeast of the study area and was observed in 1906, with the next CNDDB occurrence occurring over 20 miles west of the study area (CDFW 2019). Therefore, this species has a low potential to occur.
Chaenactis carphoclinia var. peirsonii Peirson's pincushion	None/None/1B.3/ List A	Sonoran desert scrub(sandy)/annual herb/Mar-Apr/10-1640	No	Low potential to occur.	Although the study area is located within the species' known elevation range and desert scrub is present, the nearest known CNDDB occurrence is from 1895, approximately 1.6 miles west of the study area (CDFW 2019). Therefore, this species has a low potential to occur.
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	None/None/1B.1/ List A	Coastal bluff scrub(sandy), Coastal dunes/annual herb/Jan-Aug/0-328	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



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Chaenactis parishii Parish's chaenactis	None/None/1B.3/ List A/MSCP	Chaparral(rocky)/perennial herb/ May-Jul/4265-8202	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Chamaebatia australis southern mountain misery	None/None/4.2/ List D/MSCP	Chaparral(gabbroic or metavolcanic)/perennial evergreen shrub/Nov-May/984-3346	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	FE/SE/1B.2/List A	Coastal dunes, Marshes and swamps(coastal salt)/annual herb hemiparasitic/May-Oct/0-98	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range. The nearest occurrence is approximately 27 miles northwest of the study area (CDFW 2019).
Chorizanthe leptotheca Peninsular spineflower	None/None/4.2/ List D	Chaparral, Coastal scrub, Lower montane coniferous forest/alluvial fan, granitic/annual herb/May-Aug/984-6234	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Chorizanthe orcuttiana Orcutt's spineflower	FE/SE/1B.1/List A	Closed-cone coniferous forest, Chaparral(maritime), Coastal scrub/sandy openings/annual herb/Mar-May/10-410	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range. The nearest occurrence is approximately 52 miles southwest of the study area (CDFW 2019).



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Chorizanthe parryi var. fernandina San Fernando Valley spineflower	FC/SE/1B.1/List A	Coastal scrub(sandy), Valley and foothill grassland/annual herb/Apr-Jul/492-4003	No	Not expected to occur.	Although the project is located within the species' known elevation range, there is no suitable vegetation present and the species not known to occur within the vicinity ² . This species is known from two localities; southeastern Ventura County and within southwestern Los Angeles County (77 FR 70103-70162).
Chorizanthe polygonoides var. longispina long-spined spineflower	None/None/1B.2/ List A/MSCP	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools/often clay/annual herb/Apr-Jul/ 98-5020	No	Not expected to occur.	Although the project study area is located within the species' known elevation range, the species is not known to occur within the vicinity ² and there are no suitable vernal pools, clay soils or suitable vegetation present.
Cistanthe maritima seaside cistanthe	None/None/4.2/ List D	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland/sandy/annual herb/(Feb),Mar-Jun(Aug),/16-984	No	Not expected to occur.	Although the project study area is located within the species' known elevation range, species is not known to occur within the vicinty ² and there is no suitable vegetation present.
Clarkia delicata delicate clarkia	None/None/1B.2/ List A/MSCP	Chaparral, Cismontane woodland/often gabbroic/annual herb/Apr-Jun/771-3281	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Clinopodium chandleri San Miguel savory	None/None/1B.2/ List A	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland/Rocky, gabbroic or metavolcanic/perennial shrub/Mar-Jul/ 394-3527	No	Not expected to occur.	Although the project study area is located within the species' known elevation range. The species is not known to occur within the vicinity ² and there are no suitable soils or vegetation present.



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Colubrina californica Las Animas colubrina	None/None/2.3/ List B	Mojavean desert scrub, Sonoran desert scrub/perennial deciduous shrub/Apr-Jun/33-3281	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present and the species is known to occur in the vicinity ² ; however, the nearest CNDDB occurrence is over 40 miles northeast of the study area (CDFW 2019). Therefore, this species' has a low potential to occur.
Comarostaphylis diversifolia ssp. diversifolia summer holly	None/None/1B.2/ List A	Chaparral, Cismontane woodland/perennial evergreen shrub/ Apr-Jun/98-2592	No	Not expected to occur.	Although the species is known to occur within the vicinity² and the study area is located within the species' known elevation range, there is no suitable vegetation present.
Convolvulus simulans small-flowered morning-glory	None/None/4.2/ List D	Chaparral(openings), Coastal scrub, Valley and foothill grassland/clay, serpentinite seeps/annual herb/Mar-Jul/98-2297	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present.
Corethrogyne filaginifolia var. incana San Diego sand aster	None/None/1B.1/ List A	Coastal bluff scrub, chaparral, coastal scrub/perennial herb/Jun-Sept/10-377	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Corethrogyne filaginifolia var. linifolia Del Mar Mesa sand aster	None/None/1B.1/ List A	Coastal bluff scrub, Chaparral(maritime, openings), Coastal scrub/sandy/perennial herb/May-Sep/49-492	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Cylindropuntia californica var. californica snake cholla	None/None/1B.1/ List A	Chaparral, Coastal scrub/perennial stem succulent/Apr-May/98-492	No	Not expected to occur.	Species is not known to occur within the vicinity² and there is no suitable vegetation present.



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Deinandra conjugens Otay tarplant	FT/SE/1B.1/List A	Coastal scrub, Valley and foothill grassland/clay/annual herb/May-Jun/ 82-984	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present. The nearest occurrence is approximately 50 miles southwest of the study area (CDFW 2019).
Deinandra floribunda Tecate tarplant	None/None/1B.2/ List A/MSCP	Chaparral, Coastal scrub/annual herb/Aug–Oct/225–4005	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Deinandra mohavensis Mojave tarplant	None/SE/1B.3/ List A/MSCP	Chaparral, Coastal scrub, Riparian scrub/mesic/annual herb/(May), Jun-Oct(Jan),/2100-5249	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Deinandra paniculata paniculate tarplant	None/None/4.2/ List D	Coastal scrub, Valley and foothill grassland, Vernal pools/usually vernally mesic, sometimes sandy/annual herb/ Apr-Nov/82-3084	No	Not expected to occur	Species is not known to occur within the vicinity² and there is no suitable vegetation or vernal pools present.
Delphinium hesperium ssp. cuyamacae Cuyamaca larkspur	None/SR/1B.2/ List A	Lower montane coniferous forest, Meadows and seeps, Vernal pools/mesic/perennial herb/May-Jul/ 4003-5351	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Delphinium parishii ssp. subglobosum Colorado Desert larkspur	None/None/4.3/ List D/None	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Sonoran desert scrub/perennial herb/Mar–June/1965–5905	No	Not expected to occur.	Although the species is known to occur within the vicinity², the study area is located outside of the species' known elevation range.
Dichondra occidentalis western dichondra	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial rhizomatous herb/(Jan),Mar-Jul/164-1640	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.



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Dicranostegia orcuttiana Orcutt's bird's-beak	None/None/2.3/ List B	Coastal scrub/annual herb hemiparasitic/(Mar),Apr-Jul(Sep),/33-1148	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Dieteria asteroides var. lagunensis Mount Laguna aster	None/SR/2.3/ List B	Cismontane woodland, Lower montane coniferous forest/perennial herb/ Jul-Aug/2625-7874	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Diplacus aridus low bush monkeyflower	None/None/4.3/ List D/None	Chaparral (rocky), Sonoran desert scrub/perennial evergreen shrub/ Apr–July/2460–3935	No	Not expected to occur.	Although there is desert scrub present, the species is not known to occur within the vicinity² and the study area is located outside of the species' known elevation range.
Diplacus clevelandii Cleveland's bush monkeyflower	None/None/4.2/ List D/MSCP	Chaparral, Cismontane woodland, Lower montane coniferous forest; Gabbroic, often in disturbed areas, openings, rocky/perennial rhizomatous herb/ Apr–July/1475–6560	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Ditaxis serrata var. californica California ditaxis	None/None/3.2/ List C	Sonoran desert scrub/perennial herb/ Mar-Dec/98-3281	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, the nearest known CNDDB occurrence is approximately 27 miles north of the study area (CDFW 2019).
Downingia concolor var. brevior Cuyamaca Lake downingia	None/SE/1B.1/ List A/MSCP	Meadows and seeps(vernally mesic), Vernal pools/annual herb/May-Jul/ 4528-4921	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or vernal pools present, and the study area is located outside of the species' known elevation range.
Dudleya alainae Banner dudleya	None/None/3.2/ List C	Chaparral, Lower montane coniferous forest, Sonoran desert scrub/rocky/perennial herb/Apr-Jul/ 2428-3937	No	Not expected to occur.	Although desert scrub is present, the species is not known to occur within the vicinity ² and the study area is located outside of the species' known elevation range.



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Dudleya attenuata ssp. attenuata Orcutt's dudleya	None/None/2.3/ List B	Coastal bluff scrub, Chaparral, Coastal scrub/rocky or gravelly/perennial herb/May-Jul/10-164	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya	None/None/1B.1/ List A	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland/rocky, often clay or serpentinite/perennial herb/Apr-Jun/16-1476	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present.
Dudleya brevifolia short-leaved dudleya	None/SE/1B.1/ List A	Chaparral(maritime, openings), Coastal scrub/Torrey sandstone/perennial herb/Apr-May/98-820	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or sandstone soils present.
Dudleya multicaulis many-stemmed dudleya	None/None/1B.2/ List A	Chaparral, Coastal scrub, Valley and foothill grassland/often clay/perennial herb/Apr-Jul/49-2592	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present.
Dudleya variegata variegated dudleya	None/None/1B.2/ List A	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools/clay/perennial herb/Apr-Jun/10-1903	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation, vernal pools, or clay soils present.
Dudleya viscida sticky dudleya	None/None/1B.2/ List A/MSCP	Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub/rocky/perennial herb/May-Jun/33-1804	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Eriastrum harwoodii Harwood's eriastrum	None/None/1B.2/ None/None	Desert dunes/annual herb/Mar–June/ 410–3000	No	Not expected to occur.	Although the study area is located within eh species' known elevation range and this species is known to occur in the vicinity², there is no suitable vegetation (i.e., desert dunes) present.
Ericameria cuneata var. macrocephala Laguna Mountains goldenbush	None/None/1B.3/ List A/MSCP	Chaparral(granitic)/perennial shrub/ Sep-Dec/3921-6070	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



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Ericameria palmeri var. palmeri Palmer's goldenbush	None/None/1B.1/ List B/MSCP	Chaparral, Coastal scrub/mesic/perennial evergreen shrub/(Jul),Sep-Nov/98-1969	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Eriogonum evanidum vanishing wild buckwheat	None/None/1B.1/ List A	Chaparral, Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland/sandy or gravelly/annual herb/Jul-Oct/3609-7300	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Eryngium aristulatum var. parishii San Diego button- celery	FE/SE/1B.1/List A	Coastal scrub, Valley and foothill grassland, Vernal pools/mesic/annual/perennial herb/Apr-Jun/66-2034	No	Not expected to occur.	Although the study area is located withint he species' known elevation range, the species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present. The nearest occurrence is approximately 26 miles southwest of the study area (CDFW 2019).
Eryngium pendletonense Pendleton button- celery	None/None/1B.1/ List A	Coastal bluff scrub, Valley and foothill grassland, Vernal pools/clay, vernally mesic/perennial herb/Apr-Jun(Jul),/49-361	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation, vernal pools or clay soils present, and the study area is located outside of the species' known elevation range.
Erythranthe diffusa Palomar monkeyflower	None/None/4.3/ List D/MSCP	Chaparral, Lower montane coniferous forest; sandy or gravelly/annual herb/ Apr–June/4000–6005	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Eucnide rupestris annual rock-nettle	None/None/2.3/ List B	Sonoran desert scrub/annual herb/ Dec-Apr/1640-1969	No	Not expected to occur.	Although desert scrub is present on the study area the species is not known to occur within the vicinity ² and the study area is located outside of the species' known elevation range.



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Euphorbia arizonica Arizona spurge	None/None/2B.3/ List B/None	Sonoran desert scrub (sandy)/perennial herb/Mar–Apr/160–985	No	Low potential to occur.	The study area is located within the species' known elevation range, desert scrub is present, and the species is known to occur within the vicinity²; however, this species is known to occur in sandy flats adjacent to creeks/washes which are absent from the study area (CDFW 2019). The nearest known CNDDB occurrence is approximately 4.3 miles northwest of the study area (CDFW 2019).
Euphorbia misera cliff spurge	None/None/2.3/ List B	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub/rocky/perennial shrub/Dec-Aug(Oct),/33-1640	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Euphorbia platysperma flat-seeded spurge	None/None/1B.2/ List A/None	Desert dunes, Sonoran desert scrub (sandy)/annual herb/Feb–Sep/210–330	No	Not expected to occur.	Although Sonoran desert scrub is present, the species is not known to occur within the vicinity ² and the study area is located outside of the species' known elevation range.
Euphorbia revoluta revolute spurge	None/None/4.3/ List D/None	Mojavean desert scrub (rocky)/annual herb/Aug-Sep/3590-10170	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present (i.e., Mojavean desert scrub), and the study area is located outside of the species' known elevation range.
Ferocactus viridescens San Diego barrel cactus	None/None/2.3/ List B	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/perennial stem succulent/May-Jun/10-1476	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Frankenia palmeri Palmer's frankenia	None/None/2.3/ List B	Coastal dunes, Marshes and swamps(coastal salt), Playas/perennial herb/May-Jul/0-33	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



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Fremontodendron mexicanum Mexican flannelbush	FE/SR/1B.1/List A	Closed-cone coniferous forest, Chaparral, Cismontane woodland/gabbroic, metavolcanic, or serpentinite/perennial evergreen shrub/Mar-Jun/33-2349	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present. The nearest occurrence is approximately 50 miles southwest of the study area (CDFW 2019).
Fritillaria biflora chocolate lily	None/None/None/ List D	Valley grassland, foothill woodland/perennial herb/Mar-Apr/0 -3937	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Funastrum utahense Utah vine milkweed	None/None/4.2/ List D	Mojavean desert scrub, Sonoran desert scrub/sandy or gravelly/perennial herb/(Mar),Apr-Jun(Sep),(Oct),/328-4708	No	Low potential to occur.	Although suitable vegetation is present, this species is not known to occur within the vicinity ² . Therefore, this species has a low potential to occur.
Galium angustifolium ssp. borregoense Borrego bedstraw	None/SR/1B.3/ List A/MSCP	Sonoran desert scrub(rocky)/perennial herb/Mar/1148-4101	No	Not expected to occur.	The species is known to occur within the vicinity ² and there is suitable vegetation present; however, the study area is located outside of the species' known elevation range.
Galium angustifolium ssp. jacinticum San Jacinto Mountains bedstraw	None/None/1B.3/ List A	Lower montane coniferous forest/perennial herb/Jun-Aug/4429-6890	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Galium johnstonii Johnston's bedstraw	None/None/4.3/ List D	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/ Jun-Jul/4003-7546	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Geraea viscida sticky geraea	None/None/2B.2/ List B/MSCP	Chaparral (often in disturbed areas)/perennial herb/ (Apr)May–June/1475–5575	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



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Githopsis diffusa ssp. filicaulis Mission Canyon bluecup	None/None/3.1/ List C	Chaparral(mesic, disturbed areas)/annual herb/Apr-Jun/1476-2297	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Grindelia hallii San Diego gumplant	None/None/1B.2/ List A/None	Chaparral, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland/perennial herb/ May–Oct/605–5725	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Harpagonella palmeri Palmer's grapplinghook	None/None/4.2/ List D/MSCP	Chaparral, Coastal scrub, Valley and foothill grassland; Clay; open grassy areas within shrubland/annual herb/ Mar–May/65–3135	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils.
Hazardia orcuttii Orcutt's hazardia	FC/ST/1B.1/List A	Chaparral(maritime), Coastal scrub/often clay/perennial evergreen shrub/ Aug-Oct/262-279	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or clay soils present, and the study area is located outside of the species' known elevation range.
Helianthus niveus ssp. tephrodes Algodones Dunes sunflower	None/SE/1B.2/ None/None	Desert dunes/perennial herb/ Sep-May/160-330	No	Not expected to occur.	The species is known to occur within the vicinity²; however, there is no suitable desert dunes present, and the study area is located outside of the species' known elevation range.
Herissantia crispa curly herissantia	None/None/2.3/ List B	Sonoran desert scrub/annual/perennial herb/(Apr),Aug-Sep/2297-2379	No	Not expected to occur.	Suitable vegetation is present; however, the species is not known to occur within the vicnity² and the study area is located outside of the species' known elevation range.
Hesperocyparis forbesii Tecate cypress	None/None/1B.1/ List A/MSCP	Closed-cone coniferous forest, Chaparral/clay, gabbroic or metavolcanic/perennial evergreen tree/NA/262-4921	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present.



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Hesperocyparis stephensonii Cuyamaca cypress	None/None/1B.1/ List A	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Riparian forest/gabbroic/perennial evergreen tree/NA/3396-5594	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Heterotheca sessiliflora ssp. sanjacintensis San Jacinto golden- aster	None/None/1B.3/ List D	Woodlands/1200-4560/unresolved in Jepson	No	Not expected to occur	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Heuchera brevistaminea Laguna Mountains alumroot	None/None/1B.3/ List A/MSCP	Broadleafed upland forest, Chaparral, Cismontane woodland, Riparian forest/rocky/perennial rhizomatous herb/Apr-Jul(Sep),/4495-6562	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Heuchera rubescens var. versicolor San Diego County alumroot	None/None/3.3/ List B	Chaparral, Lower montane coniferous forest/rocky/perennial rhizomatous herb/May-Jun/4921-13123	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Holocarpha virgata ssp. elongata graceful tarplant	None/None/4.2/ List D/MSCP	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/annual herb/May-Nov/197-3609	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Hordeum intercedens vernal barley	None/None/3.2/ List C	Coastal dunes, Coastal scrub, Valley and foothill grassland(saline flats and depressions), Vernal pools/annual herb/Mar-Jun/16-3281	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Horkelia cuneata var. puberula mesa horkelia	None/None/1B.1/ List A	Chaparral(maritime), Cismontane woodland, Coastal scrub/sandy or gravelly/perennial herb/Feb-Jul(Sep),/ 230-2657	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.



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Horkelia truncata Ramona horkelia	None/None/1B.3/ List A/MSCP	Chaparral, Cismontane woodland/clay, gabbroic/perennial herb/May-Jun/ 1312-4265	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Horsfordia newberryi Newberry's velvet- mallow	None/None/4.3/ List D	Sonoran desert scrub(rocky)/perennial shrub/Feb-Dec/10-2625	No	Low potential to occur.	Suitable vegetation is present and the study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity ² ; therefore, this species has a low potential to occur.
Hosackia crassifolia var. otayensis Otay Mountain lotus	None/None/1B.1/ List A	Chaparral(metavolcanic, often in disturbed areas)/perennial herb/May-Aug/1247-3297	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Hulsea californica San Diego sunflower	None/None/1B.3/ List A/MSCP	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest/openings and burned areas/perennial herb/Apr-Jun/3002-9564	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Hulsea mexicana Mexican hulsea	None/None/2.3/ List B/MSCP	Chaparral(volcanic, often on burns or disturbed areas)/annual/perennial herb/Apr-Jun/3937-3937	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Hulsea vestita ssp. callicarpha beautiful hulsea	None/None/4.2/ List D	Chaparral, Lower montane coniferous forest/rocky or gravelly, granitic/perennial herb/May-Oct/3002-10007	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.



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Hymenothrix wrightii Wright's hymenothrix	None/None/4.3/ List D	Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial herb/Jun-Oct/ 4593-5085	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Ipomopsis tenuifolia slender-leaved ipomopsis	None/None/2B.3/ List B/None	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub; gravelly or rocky/perennial herb/Mar–May/325–3935	No	Low potential to occur.	Suitable vegetation is present and the study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity ² ; therefore, this species has a low potential to occur.
Isocoma menziesii var. decumbens decumbent goldenbush	None/None/1B.2/ List A	Chaparral, Coastal scrub(sandy, often in disturbed areas)/perennial shrub/ Apr-Nov/33-443	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Iva hayesiana San Diego marsh- elder	None/None/2.3/ List B	Marshes and swamps, Playas/perennial herb/Apr-Oct/33-1640	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Jaffueliobryum raui Rau?s jaffueliobryum moss	None/None/2B.3/ None/None	Alpine dwarf scrub, Chaparral, Mojavean desert scrub, Sonoran desert scrub; Dry openings, rock crevices, carbonate/moss/N.A./1605–6890	No	Not expected to occur.	Although the species is known to occur within the vicinity ² and there is desert scrub present, the study area is located outside of the species' known elevation range.
Juglans californica Southern California black walnut	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub/alluvial/perennial deciduous tree/Mar-Aug/164-2953	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Juncus acutus ssp. leopoldii southwestern spiny rush	None/None/4.2/ List D	Coastal dunes(mesic), Meadows and seeps(alkaline seeps), Marshes and swamps(coastal salt)/perennial rhizomatous herb/(Mar),May-Jun/10-2953	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.



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Juncus cooperi Cooper's rush	None/None/4.3/ List D	Meadows and seeps(mesic, alkaline or saline)/perennial herb/Apr-May(Aug),/ 853-5807	No	Not expected to occur	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Kallstroemia parviflora warty caltrop	None/None/4.2/ None/None	Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; Sometimes disturbed areas/annual herb/Aug–Nov/2805–5595	No	Not expected to occur.	Although the species is known to occur in the vicinity², there is no suitable vegetation present and the study area is located outside of the species' known elevation range.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	None/None/1B.1/ List A	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/ Feb-Jun/3-4003	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Lathyrus splendens pride-of-California	None/None/4.3/ List D/MSCP	Chaparral/perennial herb/Mar–June/ 655–5005	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lepechinia cardiophylla heart-leaved pitcher sage	None/None/1B.2/ List A	Closed-cone coniferous forest, Chaparral, Cismontane woodland/perennial shrub/Apr-Jul/1706-4495	No	Not expected to occur	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lepechinia ganderi Gander's pitcher sage	None/None/1B.3/ List A	Closed-cone coniferous forest, Chaparral, Coastal scrub, Valley and foothill grassland/Gabbroic or metavolcanic/ perennial shrub/Jun-Jul/1001-3297	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Lepidium flavum var. felipense Borrego Valley pepper-grass	None/None/1B.2/ List A/MSCP	Pinyon and juniper woodland, Sonoran desert scrub/sandy/annual herb/Mar-May/1493-2756	No	Not expected to occur.	Suitable vegetation is present and the species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.



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Lepidium virginicum var. robinsonii Robinson's pepper- grass	None/None/4.3/ List A	Chaparral, Coastal scrub/annual herb/ Jan-Jul/3-2904	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Leptosiphon floribundus ssp. hallii Santa Rosa Mountains leptosiphon	None/None/1B.3/ List A	Pinyon and juniper woodland, Sonoran desert scrub/perennial herb/May-Jul/ 3281-6562	No	Not expected to occur.	Although suitable vegetation is present and the species is known to occur within the vicinity ² , the project study area is located outside of the species' known elevation range.
Leptosyne maritima sea dahlia	None/None/2.3/ List B	Coastal bluff scrub, Coastal scrub/perennial herb/Mar-May/16-492	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lessingia glandulifera var. tomentosa Warner Springs lessingia	None/None/1B.3/ List A/MSCP	Chaparral(sandy)/annual herb/ Aug-Oct/2854-4003	No	Not expected to occur.	Although the species is known to occur within the vicinity ² ; there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lewisia brachycalyx short-sepaled lewisia	None/None/2.3/ List B/MSCP	Lower montane coniferous forest, Meadows and seeps/mesic/perennial herb/Feb-Jun(Jul),/4495-7546	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lilium humboldtii ssp. ocellatum ocellated Humboldt lily	None/None/4.2/ List D/MSCP	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland/openings/perennial bulbiferous herb/Mar-Jul(Aug),/98-5906	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Lilium parryi lemon lily	None/None/1B.2/ List A/MSCP	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest/mesic/perennial bulbiferous herb/Jul-Aug/4003-9006	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



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Limnanthes alba ssp. parishii Parish's meadowfoam	None/SE/1B.2/ List A	Lower montane coniferous forest, Meadows and seeps, Vernal pools/vernally mesic/annual herb/Apr-Jun/1969-6562	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Linanthus bellus desert beauty	None/None/2B.1/ List B/MSCP	Chaparral (sandy)/annual herb/Apr– May/3280–4595	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Linanthus orcuttii Orcutt's linanthus	None/None/1B.3/ List A/MSCP	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/openings/annual herb/ May-Jun/3002-7037	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lupinus albifrons var. medius Mountain Springs bush lupine	None/None/1B.3/ List A/MSCP	Pinyon and juniper woodland, Sonoran desert scrub/perennial shrub/ Mar-May/1390-4495	No	Not expected to occur.	Suitable vegetation is present; however, species is not known to occur within the vicinity ² and the study area is located outside of the species' known elevation range.
Lycium californicum California box-thorn	None/None/4.2/ List D	Coastal bluff scrub, Coastal scrub/perennial shrub/(Dec),Mar-Aug/ 16-492	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Lycium torreyi Torrey's box-thorn	None/None/4.2/ None/None	Mojavean desert scrub, Sonoran desert scrub; Sandy, rocky, washes, streambanks, desert valleys/perennial shrub/(Jan–Feb)Mar–June(Sep–Nov)/-160–4005	No	Low potential to occur.	The study area is located within the species' known elevation range, desert scrub is present, and species is known to occur within the vicinity²; however, study area lacks suitable washes and streambanks. Therefore, this species has a low potential to occur.



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Lyrocarpa coulteri Palmer's lyrepod	None/None/4.3/ List D	Sonoran desert scrub(gravelly or rocky)/perennial herb/Dec-Apr/394-2608	No	Low potential to occur.	Suitable vegetation is present and the study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity ² . Therefore, this species has a low potential to occur.
Malacothamnus aboriginum Indian Valley bush- mallow	None/None/1B.2/ List A/MSCP	Chaparral, Cismontane woodland/Rocky, granitic, often in burned areas/perennial deciduous shrub/Apr-Oct/492-5577	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Malperia tenuis brown turbans	None/None/2.3/ List B	Sonoran desert scrub(sandy, gravelly)/annual herb/(Feb),Mar-Apr/ 49-1099	No	Not expected to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, the species is known to occur in sandy creosote bush scrub (Jepson Flora Project 2019) which is absent. The species is known to occur in the vicinity ² and the nearest known CNDDB occurrence is approximately 4.6 miles southwest of the study area (CDFW 2019).
Matelea parvifolia spearleaf	None/None/2.3/ List B	Mojavean desert scrub, Sonoran desert scrub/rocky/perennial herb/Mar-May/ 1444-3593	No	Not expected to occur.	Suitable vegetation is present and species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.
Mentzelia hirsutissima hairy stickleaf	None/None/2.3/ List B	Sonoran desert scrub(rocky)/annual herb/Mar-May/0-2297	No	Low potential to occur.	The study area is located within the species known elevation range and desert scrub is present; however, the study area lacks suitable rocky soils to support this species and the nearest known occurrence is approximately 4.6 miles west of the study area (CDFW 2019). Therefore, this species has a low potential to occur.



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Microseris douglasii ssp. platycarpha small-flowered microseris	None/None/4.2/ List D	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools/clay/annual herb/Mar-May/49-3510	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation, vernal pools or clay soils present.
Mimulus latidens Vernal pool monkeyflower	None/None/None/ List A/None	Vernal pools/annual herb/Apr–June/ 900–2953	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there are no vernal pools present, and the study area is located outside of the species' known elevation range.
Mirabilis tenuiloba slender-lobed four o'clock	None/None/4.3/ List D	Sonoran desert scrub/perennial herb/(Feb),Mar-May/984-3593	No	Not expected to occur.	Suitable vegetation is present; however, the study area is located outside the species' known elevation range and the species is not known to occur within the vicinity ² .
Monardella hypoleuca ssp. lanata felt-leaved monardella	None/None/1B.2/ List A/MSCP	Chaparral, Cismontane woodland/perennial rhizomatous herb/ Jun-Aug/984-5167	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Monardella macrantha ssp. hallii Hall's monardella	None/None/1B.3/ List A	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/ Jun-Oct/2395-7201	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Monardella nana ssp. leptosiphon San Felipe monardella	None/None/1B.2/ List A/MSCP	Chaparral, Lower montane coniferous forest/perennial rhizomatous herb/ Jun-Jul/3937-6086	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Monardella stoneana Jennifer's monardella	None/None/1B.2/ List A	Closed-cone coniferous forest, Chaparral, Coastal scrub, Riparian scrub/usually rocky intermittent streambeds/perennial herb/Jun-Sep/33-2592	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.



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Monardella viminea willowy monardella	FE/SE/1B.1/List A	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland/alluvial ephemeral washes/perennial herb/ Jun-Aug/164-738	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Mucronea californica California spineflower	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland/sandy/annual herb/ Mar-Jul(Aug),/0-4593	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Myosurus minimus ssp. apus little mousetail	None/None/3.1/ List C	Valley and foothill grassland, Vernal pools(alkaline)/annual herb/Mar-Jun/ 66-2100	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Nama stenocarpa mud nama	None/None/2.3/ List B	Marshes and swamps(lake margins, riverbanks)/annual/perennial herb/ Jan-Jul/16-1640	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Nasturtium gambelii Gambel's water cress	FE/ST/1B.1/List A	Marshes and swamps(freshwater or brackish)/perennial rhizomatous herb/ Apr-Oct/16-1083	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Navarretia fossalis spreading navarretia	FT/None/1B.1/ List A	Chenopod scrub, Marshes and swamps(assorted shallow freshwater), Playas, Vernal pools/annual herb/ Apr-Jun/98-2149	No	Not expected to occur.	The study area is located within the species' known elevation range and chenopod scrub is present; however, study area lacks suitable vernal pools to support this species and the species is not known to occur within the vicinity ² .
Navarretia peninsularis Baja navarretia	None/None/1B.2/ List A/MSCP	Chaparral(openings), Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland/mesic/annual herb/Jun-Aug/4921-7546	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Navarretia prostrata prostrate vernal pool navarretia	None/None/1B.1/ List A	Coastal scrub, Meadows and seeps, Valley and foothill grassland(alkaline), Vernal pools/Mesic/annual herb/Apr-Jul/49-3970	No	Not expected to occur	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.



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Nemacaulis denudata var. denudata coast woolly-heads	None/None/1B.2/ List A	Coastal dunes/annual herb/Apr-Sep/0-328	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present (i.e., coastal dunes), and the study area is located outside of the species' known elevation range.
Nemacaulis denudata var. gracilis slender cottonheads	None/None/2.3/ List B	Coastal dunes, Desert dunes, Sonoran desert scrub/annual herb/(Mar), Apr-May/164-1312	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, species is not known to occur within the vicinity ² ; therefore, this species has a low potential to occur.
Nemacladus twisselmannii Twisselmann's nemacladus	None/SR/1B.2/ None/None	Upper montane coniferous forest (sandy or rocky, granitic)/annual herb/July/ 7345–8040	No	Not expected to occur.	Species is known to occur within the vicinity ² ; however, there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Nolina cismontana chaparral nolina	None/None/1B.2/ List A/MSCP	Chaparral, Coastal scrub/sandstone or gabbro/perennial evergreen shrub/(Mar),May-Jul/459-4183	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present.
Nolina interrata Dehesa nolina	None/SE/1B.1/ List A	Chaparral(gabbroic, metavolcanic, or serpentinite)/perennial herb/Jun-Jul/ 607-2805	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present.
Ophioglossum californicum California adder's-tongue	None/None/4.2/ List D	Chaparral, Valley and foothill grassland, Vernal pools(margins)/mesic/perennial rhizomatous herb/(Dec),Jan-Jun/197-1722	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Opuntia wigginsii (Cylindropuntia echinocarpa) Wiggins' cholla	None/None/3.3/ List C	Sonoran desert scrub(sandy)/perennial stem succulent/Mar/98-2904	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, the species is not known to occur within the vicinity ² . Therefore, this species has a low potential to occur.



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Orcuttia californica California Orcutt grass	FE/SE/1B.1/List A	Vernal pools/annual herb/Apr-Aug/49-2165	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there are no suitable vernal pools present to support this species. Nearest occurrence is approximately 17 miles west of the study area (CDFW 2019).
Ornithostaphylos oppositifolia Baja California birdbush	None/SE/2.3/ List B	Chaparral/perennial evergreen shrub/ Jan-Apr/180-2625	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Orobanche parishii ssp. brachyloba short-lobed broomrape	None/None/4.2/ List D	Coastal bluff scrub, Coastal dunes, Coastal scrub/sandy/perennial herb parasitic/Apr-Oct/10-1001	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Packera ganderi Gander's ragwort	None/SR/1B.2/ List A/MSCP	Chaparral(burns, gabbroic outcrops)/perennial herb/Apr-Jun/ 1312-3937	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Pectocarya peninsularis Baja California bur- comb	None/None/None/ List D	Sonoran desert; washes, roadsides, clearings/annual herb/Feb-Apr/98-984	No	Low potential to occur.	The study area is located within the species' known elevation range and desert scrub is present; however, the study area lacks washes to support this species and the species is not known to occur within the vicinity². Therefore, this species has a low potential to occur.
Penstemon clevelandii var. connatus San Jacinto beardtongue	None/None/4.3/ List D	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub/rocky/perennial herb/Mar-May/1312-4921	No	Not expected to occur.	Desert scrub is present; however, the species is not known to occur within the vicinity² and the study area is located outside of the species' known elevation range.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Penstemon thurberi Thurber's beardtongue	None/None/4.2/ List D	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland, Sonoran desert scrub/perennial herb/May-Jul/1640-4003	No	Not expected to occur.	Desert scrub is present; however, the species is not known to occur within the vicinity ² and the study area is located outside of the species' known elevation range.
Pentachaeta aurea ssp. aurea golden-rayed pentachaeta	None/None/4.2/ List D	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, Valley and foothill grassland/annual herb/Mar-Jul/262-6070	No	Not expected to occur.	Species is not known to occur within the vicinity² and there is no suitable vegetation present.
Perideridia gairdneri ssp. gairdneri Gairdner's yampah	None/None/4.2/ List D	Broadleafed upland forest, Chaparral, Coastal prairie, Valley and foothill grassland, Vernal pools/vernally mesic/perennial herb/Jun-Oct/0-2001	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation or vernal pools present.
Petalonyx linearis narrow-leaf sandpaper-plant	None/None/2B.3/ None/None	Mojavean desert scrub, Sonoran desert scrub; Sandy or rocky canyons/perennial shrub/(Jan–Feb)Mar–May(June–Dec)/-80–3660	No	Low potential to occur.	The study area is located within the species' known elevation range, suitable desert scrub is present, and species is not known to occur within the vicinity²; however, the study area lacks suitable canyons. Therefore, this species has a low potential to occur. Nearest occurrence is approximately 6 miles west of the study area (CDFW 2019).
Phacelia stellaris Brand's star phacelia	FC/None/1B.1/ List A	Coastal dunes, Coastal scrub/annual herb/Mar-Jun/3-1312	No	Not expected to occur.	Species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Pilostyles thurberi Thurber's pilostyles	None/None/4.3/ List D	Sonoran desert scrub/perennial herb parasitic/Dec-Apr/0-1198	No	Low potential to occur.	The study area is located within the species' known elevation range, desert scrub is present, and species is not known to occur within the vicinity². However, the nearest occurrence is approximately 12 miles southeast of the study area (CDFW 2019); therefore, this species has a low potential to occur.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Pinus torreyana ssp. torreyana Torrey pine	None/None/1B.2/ List A	Closed-cone coniferous forest, Chaparral/Sandstone/perennial evergreen tree/NA/246-525	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity ² and there is no suitable vegetation or soils present.
Piperia cooperi chaparral rein orchid	None/None/4.2/ List D/MSCP	Chaparral, Cismontane woodland, Valley and foothill grassland/perennial herb/Mar-Jun/49-5200	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Piperia leptopetala narrow-petaled rein orchid	None/None/4.3/ List D/MSCP	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest/perennial herb/ May-Jul/1247-7300	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Poa atropurpurea San Bernardino blue grass	FE/None/1B.2/ List A/MSCP	Meadows and seeps(mesic)/perennial rhizomatous herb/(Apr),May-Jul(Aug)/4462-8054	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Pogogyne abramsii San Diego mesa mint	FE/SE/1B.1/List A	Vernal pools/annual herb/Mar-Jul/295-656	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity and there are no vernal pools present.
Pogogyne nudiuscula Otay Mesa mint	FE/SE/1B.1/List A	Vernal pools/annual herb/May-Jul/295-820	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity and there are no vernal pools present.
Polygala cornuta var. fishiae Fish's milkwort	None/None/4.3/ List D	Chaparral, Cismontane woodland, Riparian woodland/perennial deciduous shrub/ May-Aug/328-3281	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity and there is no suitable vegetation present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Proboscidea althaeifolia desert unicorn-plant	None/None/4.3/ List D	Sonoran desert scrub(sandy)/perennial herb/May-Aug(Sep),(Oct),/279-3281	No	Low potential to occur.	The study area is located within the species' known elevation range and suitable vegetation is present; however, the species is not known to occur within the vicnity².
Quercus cedrosensis Cedros Island oak	None/None/2.3/ List B	Closed-cone coniferous forest, Chaparral, Coastal scrub/perennial evergreen tree/Apr-May/837-3150	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Quercus dumosa Nuttall's scrub oak	None/None/1B.1/ List A	Closed-cone coniferous forest, Chaparral, Coastal scrub/sandy, clay loam/perennial evergreen shrub/Feb-Apr(Aug),/49-1312	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity ² and there is no suitable vegetation or clay soils present.
Quercus engelmannii Engelmann oak	None/None/4.2/ List D/MSCP	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/perennial deciduous tree/ Mar-Jun/164-4265	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity² and there is no suitable vegetation present.
Rhus aromatica var. simplicifolia single-leaved skunkbrush	None/None/2.3/ List B	Pinyon and juniper woodland/Usually granitic./perennial deciduous shrub/ Mar-Apr/4003-4495	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Ribes canthariforme Moreno currant	None/None/1B.3/ List A/MSCP	Chaparral, Riparian scrub/perennial deciduous shrub/Feb-Apr/1115-3937	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Ribes viburnifolium Santa Catalina Island currant	None/None/1B.2/ List A	Chaparral, Cismontane woodland/perennial evergreen shrub/ Feb-Apr/98-1148	No	Not expected to occur.	The study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity² and there is no suitable vegetation present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Romneya coulteri Coulter's matilija poppy	None/None/4.2/ List D	Chaparral, Coastal scrub/Often in burns/perennial rhizomatous herb/ Mar-Jul/66-3937	No	Not expected to occur.	The study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity² and there is no suitable vegetation present.
Rosa minutifolia small-leaved rose	None/SE/2.3/ List B	Chaparral, Coastal scrub/perennial deciduous shrub/Jan-Jun/492-525	No	Not expected to occur.	The study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity² and there is no suitable vegetation present.
Rubus glaucifolius var. ganderi Cuyamaca raspberry	None/None/3.1/ List A/MSCP	Lower montane coniferous forest(gabbroic)/perennial evergreen shrub/May-Jun/3937-5495	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Rupertia rigida Parish's rupertia	None/None/4.3/ List D/MSCP	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pebble plain, Valley and foothill grassland/perennial herb/Jun-Aug/ 2297-8202	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Saltugilia caruifolia caraway-leaved woodland-gilia	None/None/4.3/ List D	Chaparral, Lower montane coniferous forest/Sandy, openings/annual herb/May-Aug/2756-7546	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Salvia eremostachya desert sage	None/None/4.3/ List D	Sonoran desert scrub(rocky or gravelly)/perennial evergreen shrub/ Mar-May/2297-4593	No	Not expected to occur.	Suitable vegetation is present; however, species is not known to occur within the vicinity² and the study area is located outside of the species' known elevation range.



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Salvia munzii Munz's sage	None/None/2.3/ List B	Chaparral, Coastal scrub/perennial evergreen shrub/Feb-Apr/394-3494	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity ² and there is no suitable vegetation present.
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	None/None/1B.2/ List A	Chaparral, Cismontane woodland, Lower montane coniferous forest/mesic/perennial rhizomatous herb/Jun-Aug/1394-6562	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Selaginella asprella bluish spike-moss	None/None/4.3/ List D	Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest/granitic, rocky/perennial rhizomatous herb/Jul/5249-8858	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Selaginella cinerascens ashy spike-moss	None/None/4.1/ List D	Chaparral, Coastal scrub/perennial rhizomatous herb/NA/66-2100	No	Not expected to occur.	The study area is located within the species' known elevation range; however, species is not known to occur within the vicinity² and there is no suitable vegetation present.
Selaginella eremophila desert spike-moss	None/None/2.3/ List B	Chaparral, Sonoran desert scrub(gravelly or rocky)/perennial rhizomatous herb/ (May),Jun(Jul),/656-2953	No	Not expected to occur.	Suitable vegetation is present and species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.
Senecio aphanactis chaparral ragwort	None/None/2.3/ List B	Chaparral, Cismontane woodland, Coastal scrub/sometimes alkaline/annual herb/ Jan-Apr/49-2625	No	Not expected to occur.	The study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity² and there is no suitable vegetation present.
Senna covesii Coves' cassia	None/None/2.3/ List B	Sonoran desert scrub(sandy)/perennial herb/Mar-Jun/935-3510	No	Not expected to occur.	Desert scrub is present and the species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Sibaropsis hammittii Hammitt's clay-cress	None/None/1B.2/ List A/MSCP	Chaparral(openings), Valley and foothill grassland/clay/annual herb/Mar-Apr/2362-3494	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Sidalcea neomexicana salt spring checkerbloom	None/None/2B.2/ None/None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5020	No	Not expected to occur.	The study area is located within the species' known elevation range and species is known to occur within the vicinity²; however, there is no suitable vegetation present.
Spermolepis echinata bristly scaleseed	None/None/2.3/ List B	Sonoran desert scrub(sandy or rocky)/annual herb/Mar-Apr/197-4921	No	Low potential to occur.	Desert scrub is present and the study area is located within the species' known elevation range; however, the species is not known to occur in vicinity ² .
Spermolepis infernensis Hellhole scaleseed	None/None/1B.2/ None/None	Sonoran desert scrub; Rocky or sandy/annual herb/Mar–Apr/750–2200	No	Not expected to occur.	Desert scrub is present and species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.
Spermolepis lateriflora western bristly scaleseed	None/None/2A/ None/None	Sonoran desert scrub; Rocky or sandy/annual herb/Mar–Apr/1195–2200	No	Not expected to occur.	Desert scrub is present and species is known to occur within the vicinity ² ; however, the study area is located outside of the species' known elevation range.
Stemodia durantifolia purple stemodia	None/None/2.3/ List B	Sonoran desert scrub(often mesic, sandy)/perennial herb/Jan-Dec/591-984	No	Not expected to occur.	Desert scrub vegetation is present; however, the study area is located slightly outside of the species' known elevation range and the species is not known to occur in vicinity ² .
Stipa diegoensis San Diego County needle grass	None/None/4.2/ List D	Chaparral, Coastal scrub/rocky, often mesic/perennial herb/Feb-Jun/33-2625	No	Not expected to occur.	The study area is located within the species' known elevation range; however, the species is not known to occur within the vicinity ² and there is no suitable vegetation present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP)¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Streptanthus bernardinus Laguna Mountains jewel-flower	None/None/4.3/ List D	Chaparral, Lower montane coniferous forest/perennial herb/May-Aug/2198-8202	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation or soils present, and the study area is located outside of the species' known elevation range.
Streptanthus campestris southern jewelflower	None/None/1B.3/ List A/None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; rocky/perennial herb/(Apr)May–July/ 2950–7545	No	Not expected to occur.	Species is known to occur within the vicinity ² ; however, there is no suitable vegetation present and the study area is located outside of the species' known elevation range.
Stylocline citroleum oil neststraw	None/None/1B.1/ List A	Chenopod scrub, Coastal scrub, Valley and foothill grassland/clay/annual herb/ Mar-Apr/164-1312	No	Not expected to occur.	The study area is located within the species' known elevation range and chenopod scrub is present; however, species is not known to occur within the vicinity ² and there are no suitable clay soils to support this species.
Suaeda esteroa estuary seablite	None/None/1B.2/ List A	Marshes and swamps(coastal salt)/perennial herb/May-Oct(Jan),/0-16	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable present, and the study area is located outside of the species' known elevation range.
Suaeda taxifolia woolly seablite	None/None/4.2/ List D	Coastal bluff scrub, Coastal dunes, Marshes and swamps(margins of coastal salt)/perennial evergreen shrub/Jan-Dec/0-164	No	Not expected to occur	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Tetracoccus dioicus Parry's tetracoccus	None/None/1B.2/ List A/None	Chaparral, Coastal scrub/perennial deciduous shrub/Apr–May/540–3280	No	Not expected to occur	The project study area is located within the species known elevation range; however, species is not known to occur within the vicinity² and there is no suitable vegetation present.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Thermopsis californica var. semota velvety false lupine	None/None/1B.2/ List A/MSCP	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland/perennial rhizomatous herb/Mar-Jun/3281-6135	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Viguiera laciniata San Diego County viguiera	None/None/4.2/ List D	Chaparral, Coastal scrub/perennial shrub/Feb-Jun(Aug),/197-2461	No	Not expected to occur.	The study area is located within the species' known elevation range; however, there is no suitable vegetation and species is not known to occur within the vicinity ² .
Viguiera purisimae La Purisima viguiera	None/None/2.3/ List A	Coastal bluff scrub, Chaparral/shrub/ Apr-Sep/1198-1394	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Viola purpurea ssp. aurea golden violet	None/None/2.3/ List B	Great Basin scrub, Pinyon and juniper woodland/sandy/perennial herb/ Apr-Jun/3281-8202	No	Not expected to occur.	Species is not known to occur within the vicinity ² , there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.
Xanthisma junceum rush-like bristleweed	None/None/4.3/ List D/MSCP	Chaparral, Coastal scrub/perennial herb/Jun-Jan/787-3281	No	Not expected to occur.	Species is not known to occur within the vicinity², there is no suitable vegetation present, and the study area is located outside of the species' known elevation range.



Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ CRPR/County/E CMSCP) ¹	Habitat Requirements/ Life Form/ Blooming Period/ Elevational Range (feet)	Verified on Project Study area (direct/indirect evidence)	Potential to Occur on Study area	Factual Basis for Determination
Xylorhiza orcuttii Orcutt's woody-aster	None/None/1B.2/ List A/MSCP	Sonoran desert scrub/perennial herb/ Mar-Apr/0-1198	No	Low potential to occur.	The study area is located within the species known elevation range and desert scrub is present; however, the species is known to occur in creosote bush and arid canyon/barren slopes (Jepson Flora Project 2019), which are not present. The species is known to occur in the vicinity ² ; however, the nearest known occurrence is over 30 miles northeast of the study area (CDFW 2019). Therefore, this species has a low potential to occur.

1 Status:

- CE: Candidate for federally listed as endangered.
- FE: Federally listed as endangered.
- FT: Federally listed as threatened.
- SE: State-listed as endangered.
- ST: State-listed as threatened.
- SR: State-listed as rare.

CRPR: California Rare Plant Rank

- 1A (formerly List 1A): Plants Presumed Extinct in California
- 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elementer
- 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3 (formerly List 3): Plants About Which We Need More Information—A Review List
- 4 (formerly List 4): Plants of Limited Distribution—A Watch List

- 0.1: Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 0.2: Fairly threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
- 0.3: Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

County Designations:

List A

List B

List C

List D

MSCP: Draft Covered Species under the ECMSCP.

Vicinity" is based on a search of the CNDDB and CNPS databases for the Clark Lake quad and the eight surrounding quads (Collins Valley, Clark Lake NE, Rabbit Peak, Borrego Palm Canyon, Fonts Point, Tubb Canyon, Borrego Sink, and Borrego Mountain) conducted in February 2019.



REFERENCES

- CDFW (California Department of Fish and Wildlife). 2018. CNDDB. *Special Vascular Plants, Bryophytes, and Lichens List*. California Natural Diversity Database. November 2018. Accessed February 2019. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.
- CDFW. 2019. RareFind, Version 5.2.14. California Natural Diversity Database (CNDDB). Accessed February 2019. http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp.
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Attachment F

Special-Status Wildlife Species with Moderate to High Potential to Occur within the Study Area

ATTACHMENT F Special-Status Wildlife Species with Moderate to High Potential to Occur within the Study Area

Scientific Name/ Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
		Reptiles			
Crotalus ruber ruber Northern Red- diamond rattlesnake	None/SSC/Group 2, MSCP	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats.	No	Moderate	The study area lacks rocky outcrops; however, arid scrub is present and there are numerous occurrences within a mile of the study study area. Nearest occurrence is aprpxoiamrtely 3 miles south of the study area (CDFW 2019).
Phrynosoma mcallii Flat-tailed horned lizard	None/SSC/Group 1, MSCP	Desert washes and flats with sparse low-diversity vegetation cover and sandy soils.	No	Moderate	Low diversity vegetation and sandy soils are present within the study area. This species is known to occur in the vicinity ² . The nearest occurrence overlaps the northern portion of the study area (CDFW 2019).
		Birds			
Aquila chrysaetos (nesting & wintering) Golden eagle	BCC/FP, WL/Group 1, MSCP	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.	No	Not expected (nesting); Moderate (non- breeding)	The study area lacks large trees and cliffs for nesting. Species may forage over the study area. Species is not known to occur within the vicinity ²
Cathartes aura Turkey vulture	None/None/Group 1, MSCP	Rangeland, agriculture, grassland; uses cliffs and large trees for roosting, nesting, and resting throughout most of California during breeding season.	No	Not expected (nesting); Moderate (non- breeding)	Suitable foraging habitat present; however, there is no suitable roosting habitat within the study area. Species is not known to occur within the vicinity ²
Falco mexicanus (nesting) Prairie falcon	BCC/WL/Group 1	Grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs. Southeastern deserts northwest through Central Valley and along inner Coast Ranges and Sierra Nevada (2).	No	Not expected (nesting); Moderate (non- breeding)	No suitable nesting habitat on site. Suitable foraging habitat includes desert scrub. Species is known to occur within the vicinity ²



Scientific Name/ Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
		Mammals			
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	None/SSC (full species)/Group 2	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland. Along southern margins of Mojave Desert, along northern slopes of San Bernardino Mts., western edge of Colorado Desert south to Baja California (6).	No	Moderate	Suitable desert scrub is present. This species is known to occur in the vicinity* with the nearest occurrence approxiamtley 1.8 miles northeast of the study area (CDFW 2019).
Corynorhinus townsendii Townsend's big- eared bat	None/SC/Group 2, MSCP/ WBWG:H	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	No	Not expected (roosting); Moderate (foraging)	Not expected to roost within the study area due to no suitable caves, man-made structures, or tunnels. Moderate potential to forage, suitable xeric areas present. This species is known to occur in the vicinity*
Eumops perotis californicus Western mastiff bat	None/SSC/Group 2/ WBWG:H	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.	No	Not expected (roosting); Moderate (foraging)	This species is known to occur in the vicinity ² ; however, there is no suitable roosting habitat present (i.e., rocky canyons and cliffs). Moderate potentiail to forage, suitable desert scrub is present.
Lepus californicus bennettii San Diego black- tailed jackrabbit	None/SSC/Group 2, MSCP	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands.	No	Moderate	Suitable arid hatbiat is present. This species is known to occur in the vicinity* with the nearest occurrence approxiamtley 3.4 miles northwest of the study area (CDFW 2019).
Macrotus californicus California leafed- nosed bat	None/SSC/Group 2, None/ WBWG:H	Riparian woodlands, desert wash, desert scrub; roosts in mines and caves, occasionally buildings,	No	Moderate (foraging); Not expected (roosting)	Study area supports suitable foraging habitat and is within range of species. Species prefers caves or mines for roosting, which are not present. Species is not known to occur within the vicinity ²
Nyctinomops femorosaccus Pocketed free-tailed bat	None/SSC/Group 2, None/ WBWG:M	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.	No	Not expected (roosting); Moderate (foraging)	This species is known to occur in the vicinity ² ; however, there is no suitable roosting habitat present (i.e., cliffs, rock outcrops, caverns, buildings). Moderate potentiail to forage, suitable desert and alkali desert scrub is present.

¹ Status Designations:



APPENDIX F (Continued)

Federal Designations:

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

State Designations:

SSC California Species of Special Concern
FP California Fully Protected Species
WL California Watch List Species

County Designations:

Group 1 Group 2

MSCP East County MSCP draft covered species

Other Designations:

WBWG:H Western Bat Working Group: High Priority
WBWG:M Western Bat Working Group: Medium Priority

The 9-quad search includes species recorded in CNDDB or USFWS databases for the Clark Lake and 8 surrounding quadrangles (Collins Valley, Clark Lake NE, Rabbit Peak, Borrego Palm Canyon, Fonts Point, Tubb Canyon, Borrego Sink, and Borrego Mountain).

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Attachment G

Special-Status Wildlife Species with Low Potential or Not Expected to Occur within the Study Area

ATTACHMENT G Special-Status Wildlife Species with Low Potential or Not Expected to Occur within the Study Area

Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
		Amphibians			
Anaxyrus californicus Arroyo toad	FE/SSC/Group 1, MSCP	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.	No	Not expected	The study area is outside of the speceis' known geographic range and there is no suitable vegetation or washes, riverbanks, or stream channels present. Species is not known to occur within the vicinity ² .
Bufo punctatus Red spotted toad	None/None/MSCP	Rocky desert streams, oases, pools in rocky arroyos, cattle tanks, grassland, oak woodland, scrubland, river floodplains.	No	Not expected	The study area lacks suitable stream or similar habitat for this species. Species is not known to occur within the vicinity².
Batrachoseps major aridus Desert slender salamander	FE/SE/Group 1, MSCP	Barren, palm oasis, desert wash, and desert scrub.	No	Not expected	The study area contains desert scrub; however, lacks suitable palm oasis's or washes to support this speceis. Species is not known to occur within the vicinity ² .
Ensatina ensatina klauberi Large-blotched salamander	None/SSC/Group 1, MSCP	Moist and shaded evergreen and deciduous woodlands.	No	Not expected	The study area is outside of the species' known geographic range and lacks suitable woodlands. Species is not known to occur within the vicinity².
Rana draytonii California Red-legged frog	FT/SSC/Group 1, MSCP	Humid forests, woodlands, grasslands, coastal scrub, and stream sides with plant cover. Most common in lowland and foothills. Frequently found in woods adjacent to streams. Breeds in permanent or ephemeral water sources. Ephemeral habitats require burrows or other refuges for estivation when wetlands are dry. Occurs along coast ranges south from Mendocino Co. south and in portions of Sierra Nevada and Cascades ranges; 0-1,525m (1,2).	No	Not expected	The study area is outside of the species' known geographic range and there is no wetland or stream habitat for this highly aquatic species. Species is known to occur within the vicinity ² .
Rana muscosa Mountain yellow- legged frog	FE/SE, WL/Group 1, MSCP	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral.	No	Not expected	The study are is outside of the species' known geographic range and there is no suitable aquatic habitat, canyons, or chaparral present. Species is not known to occur within the vicinity ² .



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Spea hammondii Western spadefoot	None/SSC/Group 2, MSCP	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.	No	Not expected	The study are is outside of the species' known geographic range and there is no suitable vernal pools/wetlands or vegetation present. Species is not known to occur within the vicinity ²
Taricha torosa (Monterey Co. south only) California newt	None/SSC/Group 2, MSCP	Wet forests, oak forests, chaparral, and rolling grassland.	No	Not expected	The study are is outside of the species' known geographic range and there is no suitable vegetation present. Species is not known to occur within the vicinity ²
		Reptiles			
Actinemys marmorata Western pond turtle	None/SSC/Group 1, MSCP	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	No	Not expected	No aquatic features are present within the study area. Species is not known to occur within the vicinity ²
Anniella stebbinsi Southern California legless lizard	None/SSC/ Group 2, None	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	No	Not expected	Species is known to occur within the vicinity ² -; however, the study area is outside of the species' known geographic range and there is no suitable vegetation present.
Aspidoscelis hyperythra Orange-throated whiptail	None/WL/Group 2, MSCP	Low-elevation coastal scrub, chaparral, and valley-foothill hardwood.	No	Not expected	The study are is outside of the species' known geographic range and there is no suitable vegetation is present. Species is not known to occur within the vicinity ²
Aspidoscelis tigris stejnegeri San Diegan tiger whiptail	None/SSC/Group 2, None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	No	Not expected	No suitable chaparral, woodlands, or riparian areas present. Species is not known to occur within the vicinity ²
Coleonyx switaki Switak's banded gecko, barefoot gecko	None/ST/ Group 2, MSCP	Rocklands, especially massive rocks and rock formations at the heads of canyons.	No	Not expected	Species is known to occur within the vicinity ^{2.;} however, the site is outside of the species' known geographic range and suitablke habitat includes more boulder habitat than present on site.



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Coleonyx variegatus abbotti San Diego banded gecko	None/SSC/Group 1, None	Rocky areas within coastal scrub and chaparral.	No	Not expected	No sutiable vegetation or rocky areas are present. Species is not known to occur within the vicinity ²
Diadophis punctatus similis San Diego ringneck snake	None/None/Group 2, None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland habitats.	No	Not expected	No suitable moist habitat is present. Species is not known to occur within the vicinity ²
Gambelia copeii Cope's leopard lizard	None/SSC/None, MSCP	Coastal sage scrub, chaparral, oak woodland; prefers flat areas with open space and avoids densely vegetated areas.	No	Not expected	No suitable vegetation is present. Species is not known to occur within the vicinity ²
Lampropeltis zonata (pulchra) California mountain kingsnake (San Diego population)	None/SSC/Group 2, MSCP	Habitat generalist found in habitats including conifer forest, oak–pine woodlands, riparian woodland, chaparral, manzanita, and coastal scrub.	No	Not expected	The study area is outside of the species' known geographic range and there is no suitable habitat present. Species is not known to occur within the vicinity ²
Lichanura trivirgata rosy boa	None/None/Group 2, None	Desert and chaparral habitats with rocky soils in coastal canyons and hillsides, desert canyons, washes, and mountains.	No	Not expected	Desert habitat is present; however, study area lacks rocky soils, canyons, hillsides, washes, and mountains. Species is not known to occur within the vicinity ²
Phrynosoma blainvillii Blainville's horned lizard	None/SSC/Group 2, MSCP	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.	No	Low potential	Suitable vegetation is absent. Species is known to occur within the vicinity ² with the nearest occurrence approximately 5 miles southwest of the study area (CDFW 2019).
Plestiodon skiltonianus interparietalis Coronado skink	None/WL/Group 2, MSCP	Woodlands, grasslands, pine forests, and chaparral; rocky areas near water.	No	Not expected	No suitable vegetation is present and study area lacks rocky areas near water. Species is not known to occur within the vicinity ²
Salvadora hexalepis virgultea coast patch-nosed snake	None/SSC/Group 2, MSCP	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites.	No	Low potential	Shruby vegetation is present; however, no mammal burrows were observed and species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Sauromalus ater common chuckwalla	None/None/Group 2, None	Rock-dwelling, sheltering in rock crevices or under rocks; inhabits rocky flats and hillsides in the Mojave and Colorado Deserts; found in creosote bush habitats; sea level to 1,800 meters (5,900 feet) above mean sea level.	No	Not expected	No suitable rocky conditons or hillsides present and no suitable creosote bush is present. Species is not known to occur within the vicinity ²
Sceloporus graciosus vandenburgianus southern sagebrush lizard	None/None/Group 2, None	Montane chaparral, hardwood and conifer forest, juniper, coastal scrub.	No	Not expected	The study area is outside of the speceis' known geographic range and no suitable vegetation is present. Species is not known to occur within the vicinity ²
Thamnophis hammondii Two-striped garter snake	None/SSC/ Group 1, MSCP	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools.	No	Not expected	The study area lacks suitable wetland habitat for this species. Species is not known to occur within the vicinity ²
Uma notata Colorado Desert fringe-toed lizard	None/SSC/Group 1, MSCP	Fine, loose, wind-blown sand dunes, dry lakebeds, sandy beaches or riverbanks, desert washes, and sparse desert scrub in Colorado and Sonoran deserts south of the Salton Sea in Imperial and San Diego Co., 0-180m (2).	No	Low potential	This species is known to occur in the vicinity* with two occurrences less than a mile north of the study area (CDFW 2019); however, the study area lacks wind-blown sand dunes to support this species.
Xantusia gracilis Sandstone night lizard	None/SSC/None, None	Limited to one location in a small area of sandstone and mudstone.	No	Not expected	Suitable sandstone and mudstone is absent. This species is known to occur in the vicinity* with the nearest occurrence approximately 10 miles northeast of the study area (CDFW 2019).
		Birds			
Accipiter cooperii (nesting) Cooper's hawk	None/WL/Group 1, None	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water.	No	Not expected	No suitable nesting or foraging habitat is present. Species is not known to occur within the vicinity ²
Accipiter striatus (nesting) Sharp-shinned hawk	None/WL/Group 1, None	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats.	No	Not expected	No suitable nesting or foraging habitat is present. Species is not known to occur within the vicinity ²
Aechmophorus occidentalis Western grebe	None/None/Group 1, None	Winters in sheltered bays or estuaries on the coast and on large freshwater lakes, rarely on rivers.	No	Not expected	The study area lacks perennial water sources. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Agelaius tricolor (colony) Tricolored Blackbird	BCC/SSC, PSE/ Group1, MSCP	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture.	No	Not expected to nest	The study area lacks suitable wetland habitat. Species is not known to occur within the vicinity ²
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	None/WL/Group 1, MSCP	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches.	No	Not expected	The study area is outside of the species' known geographic range and there is no suitable vegetation present. Species is not known to occur within the vicinity ²
Ammodramus savannarum (nesting) Grasshopper sparrow	None/SSC/Group 1, MSCP	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches.	No	Not expected	The breeding and winter records for grasshopper sparrow are concentrated along the coastal ranges. Winter records are very rare in eastern The study area is outside of the species' known geographic range. Species is not known to occur within the vicinity ²
Anas strepera Gadwall	None/None/Group 2	Interior valleys, wetlands, ponds, and streams. Feeds and rests in freshwater lacustrine and emergent habitats, and to a lesser extent, estuarine and saline emergent habitats, and nests in nearby herbaceous and cropland habitats. Common in Central Valley and less common in Coast Range foothills of central and Southern California. Locally common in Imperial Valley and along Colorado River, October to March. Breeds on northeastern plateau and east of Sierra Nevada.	No	Not expected	The study area lacks perennial water sources. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Anser caerulescens snow goose	None/None/Group 2, None	Fresh emergent wetlands, adjacent lacustrine waters, and nearby wet croplands, pastures, meadows, and grasslands. Occasionally found in saline (brackish) emergent wetlands and adjacent estuarine waters. Found primarily in Central Valley; less common southward in the interior but abundant in Imperial Valley and locally common along Colorado River. Found regularly only in Southern California along Coast Ranges and immediate coast from mid-November to February.	No	Not expected	The study area lacks wetlands and suitable vegetation. Species is not known to occur within the vicinity ²
Antigone canadensis canadensis (wintering) lesser sandhill crane	None/SSC/Group 2, None	Winter foraging in cropland, grazed and mowed grassland, pasture, alfalfa fields, and shallow wetlands; roosting sites are flooded and support several inches of water.	No	Not expected	The study area lacks suitable foraging habiat (i.e., croplands, grasslands, pastures, wetlands) and lacks suitable roosting sites. Species is not known to occur within the vicinity ²
Antigone canadensis tabida (nesting & wintering) greater sandhill crane	None/FP, ST/Group 2, None	Winter foraging in cropland, grazed and mowed grassland, pasture, alfalfa fields, and shallow wetlands; roosting sites are flooded and support several inches of water.	No	Not expected	The study area lacks suitable foraging habiat (i.e., croplands, grasslands, pastures, wetlands) and lacks suitable roosting sites. Species is not known to occur within the vicinity ²
Ardea herodias (nesting colony) Great blue heron	None/None/Group 2, None	Variety of habitats, but primarily shallow estuaries and fresh and saline emergent wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, riparian habitats. Found throughout most of California. Few rookeries in southern California; more numerous in northern California.	No	Not expected	The study area lacks perennial water sources. Species is not known to occur within the vicinity ²
Artemisiospiza belli belli Bell's sage sparrow	BCC/WL/Group 1, MSCP	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter.	No	Not expected	No suitable nesting or foraging habitat (i.e., coastal scrub or chaparral). Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Asio flammeus (nesting) Short-eared owl	None/SSC/ Group 2	Grassland, prairies, dunes, meadows, irrigated lands, and saline and freshwater emergent wetlands.	No	Not expected	The study area lacks suitable habitat. Additionally, the project area is outside of the typical winter range for this species, where it occurs near the coastline (Zeiner et al. 1990). Species is not known to occur within the vicinity ²
Asio otus (nesting) Long-eared owl	None/SSC/Group 1, MSCP	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	No	Not expected	The species is known to occur within the vicinity ² ; however, the study area lacks suitable riparian, oak thickets, or other dense stands of trees.
Athene cunicularia (burrow sites & some wintering sites)	BCC/SSC/Group 1, MSCP	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	No	Low potential	The study area contains some open suitable habitat for this species, but much more atypical habitat is present (i.e., they do not prefer habitat where they are unable to view their surroundings). No burrows were observed and species is not known to occur within the vicinity ² .
Aythya americana (nesting) Redhead	None/SSC/Group 2/ None	Nests in deep (>3 ft) permanent or semi- permanent wetlands of at least 1 acre; 75% open water; emergent tules, Scirpus spp., and Typha spp. 3 feet in height; winters in coastal estuaries and large, deep ponds, lakes, and reservoirs of the interior.	No	Not expected	The study area lacks open perennial water sources. Species is not known to occur within the vicinity ²
Branta canadensis Canada goose	None/None/Group 2	Lakes, fresh emergent wetlands, moist grasslands, croplands, pastures, and meadows. Winter migrant throughout Central Valley, Salton Sea, northeastern California, also along Colorado River.	No	Not expected	The study area lacks perennial water sources. Species is not known to occur within the vicinity ²
Bucephala islandica (nesting) Barrow's golden eye	None/SSC/Group 2	Winters in lagoons, bays, and estuaries in coastal areas, and riverine waters, lakes, and reservoirs in the interior.	No	Not expected	The study area lacks perennial water sources. Species is not known to occur within the vicinity ²
Buteo lineatus Red-shouldered hawk	None/None/Group 1	Nests in dense riparian areas, especially with adjacent edges, swamps, marshes, and wet meadows for hunting.	No	Not expected	The study area lacks riparian/wetland habitats for nesting and foraging. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Buteo regalis (wintering) Ferruginous hawk	BCC/WL/Group 1, MSCP	Winters and forages in open, dry country, grasslands, open fields, agriculture.	No	Low potential	Suitable open, dry habitat is present; however, species is not known to occur within the vicinity ²
Buteo swainsoni (nesting) Swainson's hawk	BCC/ST/Group 1, MSCP	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.	No	Not expected	No suitable nesting habitat (i.e., woodlands, savaannas, riparian areas or isolated trees) are presen. No suitable foragaing habitat is present within the study area. Species is not known to occur within the vicinity ²
Butorides virescens Green heron	None/None/Group 2	Nests and roosts in valley foothill and desert riparian habitats; feeds in fresh emergent wetland, lacustrine, slow-moving riverine habitats. Resident in foothills and lowlands throughout California; common August to March in southern coastal ranges, in summer along the Colorado River, and found all year at the Salton Sea.	No	Not expected	Lack of suitable freshwater habitat. Species is not known to occur within the vicinity ²
Campylorhynchus brunneicapillus sandiegensis (San Diego & Orange Counties only) Coastal cactus wren	BCC/SSC/Group 1, MSCP	Southern cactus scrub patches.	No	Not expected	The study area lacks suitable cactus patches. Species is not known to occur within the vicinity ²
Cerorhinca monocerata (nesting colony) Rhinoceros auklet	None/WL/Group 2 (for Oceanic - Winter)	Marine pelagic waters.	No	Not expected	The study area lacks large bodies of water and suitable nesting habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Charadrius nivosus nivosus (nesting) Western snowy plover	FT (Pacific coastal population), BCC (non-listed subspecies)/SSC (coastal and interior populations)/Group 1	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.	No	Not expected	The study area lacks suitable nesting habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Charadrius montanus (wintering) Mountain plover	FPT, BCC/SSC/Group 2	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts.	No	Not expected	The study area lacks suitable grassland nesting habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Chlidonias niger (nesting colony) Black tern	None/SSC/Group 2 (Non-breeder)	Freshwater marsh with emergent vegetation; in the Central Valley primarily nests and forages in rice fields and other flooded agricultural fields with weeds and other residual aquatic vegetation.	No	Not expected	The study area lacks suitable freshwater habitats for this species. Species is not known to occur within the vicinity ²
Circus cyaneus (nesting) Northern harrier	None/SSC/Group 1, MSCP	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.	No	Not expected	The study area lacks suitable wetlands for breeding. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Coccyzus americanus occidentalis (nesting) Western yellow billed cuckoo	FC, BCC/SE/Group 1	Nests in dense, wide riparian woodlands and forest with well-developed understories.	No	Not expected	The study area lacks suitable riparian habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Contopus cooperi (nesting) Olive-sided flycatcher	BCC/SSC/Group 2	Nests in mixed-conifer, montane hardwood– conifer, Douglas-fir, redwood, red fir, and lodgepole pine habitats; usually close to water.	No	Not expected	The study area lacks suitable woodland habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Cypseloides niger (nesting) Black swift	BCC/SSC/Group 2 (non-breeder)	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats.	No	Not expected	The study area lacks suitable moist cliffs for nesting. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Dendrocygna bicolor (nesting) Fulvous whistling- duck	None/SSC/ Group 2	Nests in freshwater wetlands, especially shallow impoundments managed for rice production and temporarily flooded grasslands; also nests in pastures, haylands, and small grain fields adjacent to rice fields.	No	Not expected	The study area lacks suitable wetland habitat for this species. Species is not known to occur within the vicinity ²
Egretta rufescens Reddish egret	None/None/Group 2	Freshwater marsh with emergent vegetation; in the Central Valley primarily nests and forages in rice fields and other flooded agricultural fields with weeds and other residual aquatic vegetation.	No	Not expected	The study area lacks suitable saltmarsh habitat for this species. Species is not known to occur within the vicinity ²
Elanus leucurus (nesting) White-tailed kite	None/FP/Group 1, MSCP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	No	Not expected	No suitable nesting habitat present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Empidonax traillii extimus (nesting) Southwestern willow flycatcher	FE/SE/Group 1, MSCP	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	No	Not expected	The study area lacks suitable riparian habitat for this species Species is not known to occur within the vicinity ²
Eremophila alpestris actia California horned lark	None/WL/Group 2, MSCP	Nests and forages in grasslands, disturbed lands, agriculture, and beaches; nests in alpine fell fields of the Sierra Nevada.	No	Low potential	The study area lacks suitable grassland nesting habitat for this species. This species may occur onsite during the non-breeding season. Species is not known to occur within the vicinity ²
Falco columbarius (wintering) Merlin	None/WL/Group 2, None	Forages in semi-open areas, including coastline, grassland, agriculture, savanna, woodland, lakes, and wetlands.	No	Low potential	The study area contains semi-open areas; however, species is not known to occur within the vicinity ²
Falco peregrinus anatum (nesting) American peregrine falcon	(FD), BCC/(SD), FP/Group 1, None	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	No	Not expected	No suitable nesting habitat present and project area lacks wintering (riparian/wetland) habitats. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Fratercula cirrhata (nesting colony) Tufted puffin	None/SSC/Group 2 (Oceanic), None	Nests on offshore rocks and islands free of mammalian predators, either in earthen burrows or crevices on steep rocky slopes.	No	Not expected	No suitable coastal cliffs to support nesting. Species is not known to occur within the vicinity ²
Gavia immer (nesting) Common loon	None/SSC/Group 2 (winter), None	Extirpated as a breeder from California; winters in coastal waters such as bays, channels, coves, and inlets; also winters inland at large, deep lakes and reservoirs.	No	Not expected	The study area lacks suitable wetland habitat for this species. The study area is outside of the species' known geographic range and there is no suitable vegetation present and species is not known to occur within the vicinity ²
Haliaeetus leucocephalus (nesting and wintering) Bald eagle	(FD), BCC/SE, FP/Group 1 (winter), None	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains.	No	Not expected	Study area lacks suitable water bodies to support this species. No forested areas present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Icteria virens (nesting) Yellow-breasted chat	None/SSC/Group 1, None	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush.	No	Not expected	The study area lacks suitable wetland habitat for this species. Species is not known to occur within the vicinity ²
Ixobrychus exilis (nesting) Least bittern	BCC/SSC/Group 2, MSCP	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation.	No	Not expected	The study area lacks suitable wetland habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Junco hyemalis caniceps (nesting) Gray-headed junco	None/WL/Group 2 (winter-rare), None	Nests and forages in pine and juniper–pine forests.	No	Not expected	The stduy area lacks suitable nesting habitat for this species. Species is not known to occur within the vicinity ²
Lanius Iudovicianus (nesting) Loggerhead shrike	BCC/SSC/Group 1, MSCP	Nests and forages in open habitats with scattered shrubs, trees, or other perches.	No	Low potentail	Suitable open habitat with scattered shrubs present; however, species is not known to occur within the vicinity ²



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Larus californicus (nesting colony) California gull	None/WL/Group 2 (non breeding), None	Nests in alkali and freshwater lacustrine habitats; abundant in coastal and interior lowlands during non-nesting period.	No	Not expected	There are no bodies of water or landfills to host this species on-site. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Laterallus jamaicensis coturniculus California black rail	BC/ST, FP/Group 2, None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations.	No	Not expected	Habitat typical for supporting this species is not present on-site. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Leucophaeus atricilla (nesting colony) Laughing gull	None/WL/Group 2 (non breeding, very rare), None	Coastal saltmarsh, bays, and estuaries.	No	Not expected	No suitable habitat present. Species is not known to occur within the vicinity ²
Melanerpes lewis (winter) Lewis' woodpecker	BCC/None/Group 1, None	Winters in open oak woodland and savanna; nests in open ponderosa pine forest and logged or burned pine forest.	No	Not expected	No suitable habitats present on site. Additionally, breeding is not expected as this species is only found in San Diego County during migration and winter. Species is not known to occur within the vicinity ²
Mycteria Americana (Non-breeding, very rare) Wood stork	None/SSC/Group 2, None	Nests in freshwater and marine-estuarine forested habitats; forages in natural and artificial wetlands; roosts in trees, usually over water.	No	Not expected	Habitat typical for supporting this species is not present. Species is not known to occur within the vicinity ²
Numenius americanus (nesting) Long-billed curlew	BCC/WL/Group 2 (non-breeding), None	Nests in grazed, mixed grass, and short-grass prairies; localized nesting along the California coast; winters and forages in coastal estuaries, mudflats, open grassland, and cropland.	No	Not expected	Habitat typical for supporting this species is not present, the study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Oceanodroma furcata (nesting colony) Fork-tailed storm petrel	None/SSC/Group 2 (Ocean), None	Offshore islands with restricted access and free of mammalian predators; nesting habitat varies across islands from natural crevices in talus slopes to earthen burrows dug by themselves or other species.	No	Not expected	Habitat typical for supporting this species is not present. Species is not known to occur within the vicinity ²



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Oceanodroma homochroa (nesting colony) Ashy storm petrel	BCC/SSC/Group 2 (Ocean), None	Nests on rocky offshore islands on talus slopes, rock walls, sea caves, cliffs, and under piles of driftwood; they do not excavate their own nesting burrows.	No	Not expected	Habitat typical for supporting this species is not present. Species is not known to occur within the vicinity ²
Oceanodroma melania (nesting colony) Black storm petrel	None/SSC/Group 2 (Ocean), None	Nests on small rocky islands or talus slopes of larger islands free of mammalian predators; occurs on land only to breed.	No	Not expected	Habitat typical for supporting this species is not present, the study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Oreortyx pictus eremophilus Mountain quail	None/ None/Group 2, None	Dense montane chaparral and brushy areas within coniferous forest, pinyon–juniper–yucca associations; uses shrubs, brush stands, and trees on steep slopes for cover.	No	Not expected	Dense habitat typically used by this species is not present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Oreothylpis luciae (nesting) Lucy's warbler	BCC/SSC/Group 1, MSCP	Nests and forages in desert wash and desert riparian habitats, especially dominated by mesquite, but also in other shrubs and tamarisk.	No	Low potential	Mesquite is documented near the study area; however, species is not known to occur within the vicinity ²
Pandion haliaetus (nesting; rarely breeds in San Diego) Osprey	None/ WL/Group 1, None	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast.	No	Not expected	Habitat typical for supporting this species is not present, the study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Passerculus guttatus [sandwichensis] beldingi/ Belding's savannah sparrow	None/SE/Group 1, None	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.).	No	Not expected	The study area lacks suitable saltmarsh habitat for this species. Species is not known to occur within the vicinity ²
Passerculus rostratus [sandwichensis] rostratus (wintering) Large-billed savannah sparrow	None/SSC/Group 2, None	Nests and forages in open, low saltmarsh vegetation, including low halophytic scrub.	No	Not expected	The study area lacks suitable saltmarsh habitat for this species. Species is not known to occur within the vicinity ²



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Pelecanus erythrorhynchos (nesting colony) American white pelican	None/SSC/Group 2 (winter), None	Nests colonially on sandy, earthen, or rocky substrates on isolated islands in freshwater lakes; minimal disturbance from predators; access to foraging areas on inland marshes, lakes, or rivers; winters on shallow coastal bays, inlets, and estuaries.	No	Not expected	Habitat typical for supporting this species is not present. Species is not known to occur within the vicinity ²
Pelecanus occidentalis californicus (nesting colony and communal roosts) Brown pelican (California)	DFL/FP, SDL/Group 2, None	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands.	No	Not expected	Habitat typical for supporting this species is not present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Phalacrocorax auritus (nesting colony) Double-crested cormorant	None/WL/Group 2 (non-breeding), None	Nests in riparian trees near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries, and open coastlines; winter habitat includes lakes, rivers, and coastal areas.	No	Not expected	Habitat typical for supporting this species is not present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Piranga rubra (nesting) Summer tanager	None/SSC/Group 2, None	Nests and forages in mature desert riparian habitats dominated by cottonwoods and willows.	No	Not expected	Lack of suitable habitat within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Plegadis chihi (nesting colony) White-faced Ibis	None/WL/Group 1, None	Nests in shallow marshes with areas of emergent vegetation; winter foraging in shallow lacustrine waters, flooded agricultural fields, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries.	No	Not expected	Habitat typical for supporting this species is not present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Polioptila californica californica Coastal California gnatcatcher	FT/SSC/Group 1, MSCP	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.	No	Not expected	The study area lacks suitable habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



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Progne subis (nesting) Purple martin	None/SSC/County 1, MSCP	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	No	Not expected	No suitable habitat present on site. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Pyrocephalus rubinus (nesting) Vermillion flycatcher	None/SSC/Group 1 (for <i>P.r.flammeus</i>) , MSCP	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated fields, ditches, or pastures.	No	Not expected	No suitable riparian habitat on site. Species is not known to occur within the vicinity ²
Rallus obsoletus levipes Ridgway's rail	FE/SE, FP/Group 1, None	Coastal wetlands, brackish areas, coastal saline emergent wetlands.	No	Not expected	The study area lacks suitable habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Rallus longirostris levipes Light-footed clapper rail	FE/SE, FP/Group 1, None	Coastal saline emergent wetlands.	No	Not expected	The project area lacks suitable wetland habitat. Species is not known to occur within the vicinity ²
Riparia riparia (nesting) Bank swallow	None/ST/Group 1, None	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration.	No	Not expected	The study area lacks suitable nesting habitat. Species is not known to occur within the vicinity ²
Rynchops niger (nesting colony) Black skimmer	BCC/SSC/Group 1, None	Nests on barrier beaches, shell banks, spoil islands, and saltmarsh; forages over open water; roosts on sandy beaches and gravel bars.	No	Not expected	The study area lacks suitable nesting habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Setophaga petechia brewsteri [Aestiva group] (nesting) Yellow warbler (California)	BCC/SSC/Group 2, MSCP	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats.	No	Not expected	The study area lacks suitable nesting habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Sialia mexicana Western bluebird	None/None/Group 2, None	Nests in old-growth red fir, mixed-conifer, and lodegpole pine habitats near wet meadows used for foraging.	No	Not expected	The study area lacks suitable nesting habitat. Species is not known to occur within the vicinity ²



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Sternula antillarum browni (nesting colony) California least tern	FE/SE, FP/Group 1, None	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats.	No	Not expected	The study area lacks suitable nesting habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Strix occidentalis occidentalis California spotted owl	BCC /SSC/Group 1, MSCP	Nests and forages in dense, old-growth, multi- layered mixed-conifer, redwood, and Douglas-fir habitats.	No	Not expected	No suitable habitat present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Synthliboramphus hypoleucus (nesting colony) Xantus' murrelet, Guadalupe murrelet	FC, BCC/ST/Group 2 (oceanic) /None	Nests on steep sea slopes, canyons, and cliffs with sparse vegetation.	No	Not expected	The stduy area lacks large bodies of water for this species Species is not known to occur within the vicinity ²
Thalasseus elegans (nesting colony) Elegant Tern	None/WL/Group 1, None	Inshore coastal waters, bays, estuaries, and harbors; forages over open water.	No	Not expected	The study area lacks suitable coastal habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Toxostoma bendirei Bendire's thrasher	BCC/SSC/Group 2 (non-breeding), None	Nests and forages in desert succulent shrub and Joshua tree habitat in Mojave Desert; nests in yucca, cholla, and other thorny scrubs or small trees.	No	Not expected	The study area lacks suitable succulent scrub habitat for this species. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Toxostoma crissale Crissal thrasher	None/SSC/Group 1, MSCP	Nests and forages in desert riparian and desert wash; dense thickets of sagebrush and other shrubs such as mesquite, iron catclaw acacia, and arrowweed willow within juniper and pinyon–juniper woodlands.	No	Not expected	The study area lacks suitable dense thickets of riparian habitat for this species. Species is not known to occur within the vicinity ²



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Toxostoma lecontei lecontei Le Conte's thrasher	None/None/Group 2 (for subspecies T.I.lecontei), MSCP	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus.	No	Low(nestin g and non- breeding)	Suitable desert scrub habitat present for foragaing; however, study area lacks suitable cactus for nesting. Spiny shrubs present outside of study area that may provide potential nesting. However, species is not known to occur within the vicinity ²
Vireo bellii pusillus (nesting) Least Bell's vireo	FE/SE/Group 1, MSCP	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.	No	Not expected	This species is known to occur in the vicinity*; however, there is no suitable riparian habitat or water present.
Vireo vicinior (nesting) Gray vireo	BCC /SSC/Group 1, MSCP	Nests and forages in pinyon–juniper woodland, oak, and chamise and redshank chaparral.	No	Not expected	Suitable habitat not present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Xanthocephalus xanthocephalus (nesting) Yellow-headed blackbird	None/ SSC/ None, MSCP	Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat.	No	Not expected	No suitable wetland or similar habitats in study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
		Mammals			
Antrozous pallidus Pallid bat	None/SSC/Group 2, MSCP/ WBWG:H	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man- made structures and trees.	No	Not expected	No suitable rocky outcrops and rock crevices for roosting are present. Species is not known to occur within the vicinity ²
Bassariscus astutus Ringtail	None/None/Group 2, MSCP	Mixed forests and shrublands near rocky areas or riparian habitats; forages near water and is seldom found more than 1 kilometer (0.62 mile) from a water source.	No	Not expected	No suitable forest and riparian habitat present. Species is not known to occur within the vicinity ²
Chaetodipus californicus femoralis Dulzura pocket mouse	None/SSC/Group 2, None	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level.	No	Not expected	No suitable coastal scrub, chaparral, woodland, or confier habitats present. Species is not known to occur within the vicinity ²



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Chaetodipus fallax fallax Northwestern San Diego pocket mouse	None/SSC (full species)/Group 2, None	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland.	No	Low potential	Desert scrub is present; however, species is not known to occur within the vicinity ²
Choeronycteris mexicana Mexican long- tongued bat	None/SSC/Group 2/WBWG:M	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings.	No	Not expected	No suitable roosting habitat within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Dipodomys merriami collinus Earthquake Merriam's kangaroo rat	None/ None/ None, MSCP	Riversidean alluvial fan sage scrub, flood plains, sandy and sandy loam soils.	No	Not expected	This species is known to occur in the vicinity ² ; however, there is no suitable vegetation present.
Dipodomys merriami trinidadensis Merriam's kangaroo rat	None/ None/ None, MSCP	Occurs in the Jacumba and Mountain Springs area.	No	Not expected	Site not located within Jacumba and Mountain Springs area. Species is not known to occur within the vicinity ²
Dipodomys stephensi Stephens' kangaroo rat	FE/ST/Group 1, MSCP	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas.	No	Not expected	No suitable habitat present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Euderma maculatum Spotted bat	None/SSC/Group 2, None/WBWG:H	Foothills, mountains, desert regions of southern California, including arid deserts, grasslands, and mixed-conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes.	No	Not expected (roosting); Low (foraging)	Suitable rock crevices and cliffs for roosting are absent from study area. Study area lacks water and washes for foraging. Species is not known to occur within the vicinity ²
Lasiurus blossevillii Western red bat	None/SSC/Group 2, none/ WBWG:H	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy.	No	Not expected	No suitable roosting habitat found within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



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Lasiurus xanthinus Western yellow bat	None/SSC/None, None/ WBWG:H	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts and feeds in, and near, palm oases and riparian habitats.	No	Low	No suitable oasis or riparian habitat on site. Although documented in the Sweeney Pass quadrangle (CDFW 2014a), project area is also above the documented known range for this species (below 2000 ft).
Myotis ciliolabrum Western small-footed myotis	None/None/Group 2, None/ WBWG:M	Arid woodlands and shrublands, but near water; roosts in caves, crevices, mines, abandoned buildings .	No	Not expected (roosting); Low (foraging)	The study area does not contain water and no suitable roosting hatbiat is present. Species is not known to occur within the vicinity ²
Myotis evotis Long-eared myotis	None/None/Group 2, None/ WBWG:M	Brush, woodland, and forest habitats from sea level to 9,000 feet above MSL; prefers coniferous habitats; forages along habitat edges, in open habitats, and over water; roosts in buildings, crevices, under bark, and snags; uses caves as night roosts.	No	Not expected	The study area does not contain suitable roosting or foraging habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Myotis thysanodes Fringed myotis	None /None/Group 2, None/ WBWG:H	Drier woodlands (oak, pinyon–juniper, and ponderosa pine), desert scrub, mesic coniferous forest, grassland, and sage–grass steppe; sea level to 9,350 ft; roosts in buildings, mines, rocks, cliff faces, bridges, and large, decadent trees and snags.	No	Not expected (roosting); Low (foraging)	No suitable roosting hatbiat is present. The study supports desert scrub for foraging; however, species is not known to occur within the vicinity ²
Myotis volans Long-legged myotis	None/None/Group 2, None/ WBWG:H	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags.	No	Not expected (roosting); Low (foraging)	No suitable roosting hatbiat is present. The study supports desert scrub for foraging; however, species is not known to occur within the vicinity ²
Myotis yumanensis Yuma myotis	None /None/Group 2, None/ WBWG:LM	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees.	No	Not expected (roosting); Low (foraging)	No suitable roosting hatbiat is present. The study supports desert scrub for foraging; however, no streams or rivers are present. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



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Neotoma lepida intermedia San Diego desert woodrat	None/SSC/Group 2, None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas.	No	Low potential	No woodrat middens observed during during survey. Suitable desert scrub is present; however, species is not known to occur within the vicinity ²
Nyctinomops macrotis Big free-tailed bat	None/SSC/Group 2, None/ WBWG:MH	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water .	No	Not expected	The study area does not contain suitable roosting or foraging habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Odocoileus hemionus Mule deer	None/None/Group 2, None	Coastal sage scrub, chaparral, riparian, woodlands, and forest; often browses in open area adjacent to cover throughout California, except deserts and intensely farmed areas	No	Not expected	No suitable habitat and and species is not known to occur within the vicinity ²
Onychomys torridus ramona Southern grasshopper mouse	None/SSC/Group 2, MSCP	Grassland and sparse coastal scrub.	No	Not expected	No suitable habitat is present and species is not known to occur within the vicinity ²
Ovis canadensis nelson Nelson's bighorn sheep	None/FP, Group 1, None	Steep slopes and cliffs, rough and rocky topography, sparse vegetation; also canyons, washes, and alluvial fans.	No	Not expected	No suitable cliffs, canyons, or washes present within the study area. Species is not known to occur within the vicinity ²
Ovis canadensis nelsoni pop. 2 Peninsular bighorn sheep DPS	FE/ST, FP/Group 1, MSCP	Dry, rocky, low-elevation desert slopes, canyons, and washes; females near water during lambing season.	No	Not expected	This species is known to occur in the vicinity ² ; however, there is no suitable slopes, canyons or washes present.
Perognathus longimembris bangsi Palm Springs pocket mouse	None/ SSC/ MSCP	Creosote scrub, desert scrub, and grasslands; sparse to moderately dense vegetative cover.	No	Low potential	Suitable desert scrub is present; however, the nearest known occurrence is approximiately 11 miles southeast of the study area (CDFW 2019).
Perognathus longimembris brevinasus Los Angeles pocket mouse	None/SSC/Group 2, MSCP	Lower-elevation grassland, alluvial sage scrub, and coastal scrub.	No	Not expected	The study area does not contain suitable habitat. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



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Perognathus longimembris internationalis Jacumba pocket mouse	None/SSC/Group 2, MSCP	Desert scrub and sparse sage scrub in areas with fine sandy soils.	No	Low potential	Suitable desert scrub is present; however, species is not known to occur within the vicinity ²
Perognathus longimembris pacificus Pacific pocket mouse	FE/SSC/Group 1, None	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium.	No	Not expected	No suitable habitat present. Species is not known to occur within the vicinity ²
Puma concolor Mountain lion	None/None/Group 2, None	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats throughout California, except deserts.	No	Not expected	No suitable habitat to provide cover for this species, study area lacks cliffs, ledges, and riparian areas. Species is not known to occur within the vicinity ²
Spermophilus tereticaudus chlorus Palm Springs round- tailed ground squirrel	None/ SSC/ None, MSCP	Sandy arid regions of Lower Sonoran Life Zone including creosote bush scrub and creosote—palo verde	No	Not expected	Desert scrub habitat is present; however, creosote bush and palo verde are absent. Species is not known to occur within the vicinity ²
Taxidea taxus American badger	None/SSC/Group 2, MSCP	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	No	Not expected	No burrows or digging sign was observed. Species is not known to occur within the vicinity ²
		Invertebrates			
Apodemia mormo peninsularis Mormon metalmark	None/None/Group 1, None	Found in mountain meadows usually near the edges of woods, Great Basin sagebrush, and montane buckwheat scrub. Host plant is Eriogonum wrightii ssp. membranaceum (Faulkner and Klein 2012).	No	Not expected	No suitable habitat present. Species is not known to occur within the vicinity ²
Ariolimax columbianus stramineus Palomar banana slug	None/None/Group 2, MSCP	Moist forests; dark, damp habitats, such as under logs or other decomposing material	No	Not expected	Study area not near coast. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Branchinecta sandiegonensis San Diego fairy shrimp	FE/None/Group 1, None	Vernal pools, non-vegetated ephemeral pools.	No	Not expected	No vernal pools within the study area. Species is not known to occur within the vicinity ²
Brennania belkini Belkin's dune tanabid fly	None/None/Group 2, None	Inhabits coastal sand dunes of Southern California.	No	Not expected	No sand dunes within the study area. Species is not known to occur within the vicinity ²
Callophrys thornei Thorne's hairstreak butterfly	FC/None/Group 1, None	Interior cypress woodland dominated by host plant Hesperocyparis forbesii (Tecate cypress).	No	Not expected	No Tecate cypress habitat present. Species is not known to occur within the vicinity ²
Cicindela gabbii Western tidal flat tiger beetle	None/None/Group 2, None	Inhabits estuaries and mudflats along the coast of Southern California.	No	Not expected	No suitable estuaries within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Cicindela latesignata latesignata Western beach tiger beetle	None/None/Group 2, None	Mudflats and beaches in coastal Southern California.	No	Not expected	No suitable habitat within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Cicindela senilis frosti Senile tiger beetle	None/None/Group 2, None	Inhabits marine shoreline, from Central California coast south to saltmarshes of San Diego; also found at Lake Elsinore.	No	Not expected	No salt marshes within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Cicindela trifasciata sigmoidea Mudflat tiger beetle	None/None/Group 2, None	Marshes along coast and edges of marshes and rivers.	No	Not expected	No suitable marshes or rivers present. Species is not known to occur within the vicinity ²
Cincindela latesignata obliviosa Oblivious tiger beetle	None/None/Group 2, None	Inhabited the Southern California coastline, from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years. The oblivious tiger beetle (C. I. obliviosa) is no longer the accepted name for this species (ITIS 2016).	No	Not expected	Study area not near coast. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Coelus globosus Globose dune beetle	None/None/Group 1, None	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico.	No	Not expected	No coastal dunes on site. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Danaus plexippus Monarch butterfly	None/None/Group 2, None	Overwinters in eucalyptus groves.	No	Not expected	No eucalyptus groves within the study area and species is not known to occur within the vicinity ²
Euphydryas editha quino Quino checkerspot butterfly	FE/None/Group 1, MSCP/XERCES:CI	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex).	No	Not expected	No suitable hatbiat or host plants present. Species is not known to occur within the vicinity ²
Euphyes vestris harbisoni Harbison's dun skipper	None/None/Group 1, MSCP	Oak riparian drainages and adjacent seeps supporting host plant Carex spissa.	No	Not expected	No suitable hatbia or host plants present. Species is not known to occur within the vicinity ²
Helminthoglypta traskii coelata (Helminthoglypta coelata) Peninsular Range shoulderband snail (Mesa shoulderband snail)	None/ None/Group 2, MSCP	Wet habitats	No	Not expected	No suitable wetlands within the study area. Species is not known to occur within the vicinity ²
Linderiella occidentalis California linderiella	None/None/Group 1, None	Cool soft-water vernal pools in grasslands below 1,000 feet above mean sea level.	No	Not expected	No suitable pools within the study area. Species is not known to occur within the vicinity ²
Lycaena hermes Hermes copper	FC/None/Group 1, MSCP	Mixed woodlands, chaparral, and coastal scrub.	No	Not expected	No suitable habitat present. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Megathymus yuccae (harbisoni) Coastal giant skipper	None/None/Group 2, Nne	Coastal dunes, open yucca flats, desert canyons, open woodland, grassland, and old fields. Host plant is Yucca schidigera. Record from eastern San Diego County near Scissors Crossing, Anza-Borrego Desert State Park.	No	Not expected	No suitable habitat present and host plant (Yucca schidegera) was not observed. Species is not known to occur within the vicinity ²
Panoquina errans Wandering skipper	None/None/ Group 1, None	Saltmarsh.	No	Not expected	No suitable salt marsh habitat present. Species is not known to occur within the vicinity ²
Papilio multicaudata Two-tailed swallowtail	None/None/Group 1, None	Foothill slopes and canyons, moist valleys, streamsides, woodlands, parks, roadsides, and urban settings. Host plants include Fraxinus, Ptelea, and Prunus species (Butterflies and Moths of North America 2016).	No	Not expected	No suitable habitat within the study area. Species is not known to occur within the vicinity ²
Phobetus robinsoni Robinson's rain beetle	None/None/Group 2, None	Known from two locations in Orange County and only known from Scissors Crossing in San Diego County (43 FR 35636 35643).	No	Not expected	Species is not known to occur within the vicinity ²
Plebejus saepiolus hilda Hilda greenish blue	None/None/Group 1, None	At species level: bogs, stream edges, open fields, meadows, open forests, and roadsides. Host plants include species of Trifolium (Butterflies and Moths of North America 2016).	No	Not expected	No suitable habitat present. Species is not known to occur within the vicinity ²
Pseudocopaeodes eunus eunus Alkali skipper	None/None/Group 1, MSCP	Grassy spots on alkali flats; playa/salt flats.	No	Low potential	Alkali conditions supporting halophytes (Chenopods) occur within the study area; however, species is not known to occur within the vicinity ²
Pyrgus ruralis lagunae Laguna Mountain skipper	FE/None/Group 1, MSCP/XERCES:CI	Restricted to montane meadows of Laguna Mountains and Mount Palomar.	No	Not expected	Species restricted to Laguna Mountains and Mount Palomar. Species is not known to occur within the vicinity ²
Streptocephalus woottoni Riverside fairy shrimp	FE/None/Group 1, None	Vernal pools, non-vegetated ephemeral pools.	No	Not expected	No vernal pools within the study area. Species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other)¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Trigonoscuta blaisdelli Blaisdell trigonoscuta weevil	None/None/Group 2, None	Trigonoscuta sp.: Coastal, desert, or inland sand dunes; wide variety of plant types used; the larvae feed on the roots and the adults on the leaves.	No	Not expected	No dunes within the study area. Species is not known to occur within the vicinity ²
Tryonia imitator Mimic tryonia, California brackishwater snail	None/None/Group 2, None	Inhabits coastal lagoons, estuaries, and saltmarshes, from Sonoma County south to San Diego County.	No	Not expected	No lagoons or salt marshes wthin the study area. Species is not known to occur within the vicinity ²
		Fish			
Cyprinodon macularius Desert pupfish	FE/SE/Group 2, None	Desert springs, small streams, and marshes below 1,515 meters (5,000 feet) above mean sea level; tolerates high salinities, high water temperatures, and low dissolved-oxygen concentrations.	No	Not expected	This species is known to occur in the vicinity* (CDFW 2019); however, there is no suitable streams or wetlands within the study area. The study area is outside of the species' known geographic range.
Eucyclogobius newberryi Tidewater goby	FE/SSC/Group 1/ None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River.	No	Not expected	No suitable streams or wetlands within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Gasterosteus aculeatus williamsoni Unarmored threespine stickleback	FE/SE, FP/Group 2 / None	Slow-moving and backwater areas.	No	Not expected	No suitable streams or wetlands within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Gila orcuttii Arroyo chub	None/SSC/Group 1/ None	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.	No	Not expected	No suitable streams or wetlands within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²
Oncorhynchus mykiss irideus Southern steelhead - southern California DPS	FE/SSC/Group 1/ None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn.	No	Not expected	No suitable streams or wetlands within the study area. The study area is outside of the species' known geographic range and species is not known to occur within the vicinity ²



Scientific Name / Common Name	Status (Federal/ State/ County/Other) ¹	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential To Occur On Site	Factual Basis For Determination
Siphateles bicolor mohavensis Mohave tui chub	FE/FP,SE/None/ None	Lacustrine ponds or pools; 4 feet min water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; Ruppia maritima preferred for egg attachment and thermal refuge in summer months	No	Not expected	This species is known to occur in the vicinity*; however, there is no suitable ponds or pools within the study area.

Status Designations:

Federal Designations:

BCC U.S. Fish and Wildlife Service Bird of Conservation Concern FC Candidate for federal listing as threatened or endangered

(FD) Federally-delisted; monitored for five years

FE Federally-listed Endangered
FT Federally-listed as Threatened
FPT Federally Proposed Threatened

State Designations:

SSC California Species of Special Concern
FP California Fully Protected Species

WL California Department of Fish and Game Watch List Species

SE State-listed as Endangered
ST State-listed as Threatened
SC State Candidate for Endangered

(SD) State Delisted

County Designations:

Group 1 Group 2

MSCP East County MSCP draft covered species

Other Designations:

WBWG:H Western Bat Working Group: High Priority
WBWG:LM Western Bat Working Group: Low-Medium Priority
WBWG:M Western Bat Working Group: Medium Priority
WBWG:MH Western Bat Working Group: Medium-High Priority

XERCES:CI Xerces Society – Critically Endangered



The 9-quad search includes species recorded in CNDDB or USFWS databases for the Clark Lake and 8 surrounding quadrangles (Collins Valley, Clark Lake NE, Rabbit Peak, Borrego Palm Canyon, Fonts Point, Tubb Canyon, Borrego Sink, and Borrego Mountain).

APPENDIX G (Continued)

REFERENCES

- CDFW (California Department of Fish and Wildlife). 2018. California Natural Diversity Data Base. "Special Animals List." California Natural Diversity Database. CDFW, Biogeographic Data Branch. November 2018. https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.
- CDFW. 2019. RareFind, Version 5.2.14. California Natural Diversity Database (CNDDB). Accessed February 2019. http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp.
- Faulkner, DK and Klein, MW. 2012. Sensitive Butterflies of San Diego County, California. A Workshop Focusing on Nine Local Species. FLITE Tours, Inc. December 2012.



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Attachment H

Mitigation Plan for the Borrego Drop Zone – PDS2019-AD-19-022

September 13, 2019 11432

Mr. Nicholas Koutoufidis, Land Use & Environmental Planner County of San Diego 5510 Overland Avenue San Diego, CA 92123

Subject: Mitigation Plan for the Borrego Drop Zone - PDS2019-AD-19-022

Dear Mr. Koutoufidis:

This letter outlines actions to be implemented by Perris Valley Aviation Services, Inc. (PVAS) to mitigate for impacts associated with the proposed Borrego Landing Site Assistance Project (project) in an unincorporated area of San Diego County, California. This proposed mitigation plan is intended to officially resolve the violation at the Borrego Drop Zone (PDS2018-IC-18-031).

The Borrego Drop Zone area is located within Assessor's Parcel Numbers (APNs) 199-060-01 and 199-060-13, totaling approximately 95 acres, located in northeastern San Diego County (Figure 1, Project Location; Attachment A). The site is located immediately south of Palm Springs Canyon Drive and the Borrego Springs airport (Figure 1). The approximate center of the study area is 33°15'18.52" north latitude, 116°19'43.75" west longitude, Section 02, Range 6 East, Township 11 South, on the U.S. Geological Survey 7.5-minute series topographic Clark Lake quadrangle map.

In total, the project disturbed Desert Saltbrush Scrub (5.11 acres) and disturbed Desert Saltbrush Scrub (11.97 acres). No sensitive plants or animal species were detected onsite. A full assessment of biological resources provided in the Biological Resources Letter Report for the Borrego Landing Site Assistance Project, APNs 199-060-01 and 199-060-13, Borrego Springs, California (Dudek March 8, 2019). Table 1 provides a summary of project impacts and required mitigation acreage.

Table 1. Impacts to Vegetation Communities and Required Mitigation

Vegetation Community/Land Cover	Existing Acreage	Disturbance Limits ¹	Mitigation Ratio	Required Mitigation
Desert Saltbush Scrub ²	10.09	5.11	2:1	10.22
Disturbed Desert Saltbush Scrub ²	16.71	11.97	2:1	23.94
Disturbed Habitat	0.29	<0.01	n/a	n/a
Urban/Developed	0.17	_	n/a	n/a
Total ³	27.25	17.07	_	34.16

To mitigate for the project impacts, PVAS proposes to purchase from the Anza Borrego Foundation (ABF) 34.16 mitigation credits (acres). The proposed credits are derived from land purchased by ABF for conservation purposes. Lands purchased by ABF are eventually transferred to the Anza Borrego State Park for long term management. ABF selects conservation lands based on proximity to State of California Park lands and biological resources that are present.



The credits to be purchased by PVAS use lands that preserve relatively undisturbed desert scrub habitat. The mitigation credits are located less than three miles northeast of the mitigation site (Figure 1). Included in the credit price is the land cost and long term management funding. Once purchased, the mitigation obligation of PVAS will be complete and the violation matter resolved.

Please contact me with questions at (760) 479-4254 or via email at bortega@dudek.com or senior habitat restoration specialist Michael Sweesy at (760) 479-4253 and at msweesy@dudek.com. Inquiries to ABF should be directed to Ms. Julie Gerson, Land Program Manager at (760) 748-2169 or via email at julie@TheABF.org.

Sincerely,

Brock Ortega Senior Biologist

Att.: Figure 1, Mitigation Site Location

cc: Melanie Conatser, PVAS Scott Zachary, Haley & Aldrich Michael Sweesy, Dudek