PRE-ACTIVITY SURVEY REPORT

TL 649 WOOD TO STEEL POLE REPLACEMENT
OTAY MESA

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EXECUTIVE SUMMARY

San Diego Gas & Electric (SDG&E) Company proposes the TL 649 Wood-to-Steel Pole Replacement Project (Proposed Project; Project) in an effort to fire-harden existing facilities in its service territory. The company proposes to replace 117 existing wood poles with steel poles along an approximately seven-mile expanse of Tie Line (TL) 649 between the existing Otay Mesa Substation to the existing Border Substation. The Project will include a total of 136 distinct work areas associated with poles, including replacement poles, new poles, pole removal from service (RFS), underground to overhead conversion, and poles for overhead work only. TL 649 traverses a large expanse of densely vegetated and fire-prone areas on public and private lands, including lands owned by the City of San Diego and City of Chula Vista. Installation of steel poles will reduce damages to utilities in the event of a fire, thereby increasing system reliability, as well as decreasing routine maintenance needs and increasing the lifespan of both the poles themselves and the entire transmission line.

As required by SDG&E's Subregional Natural Communities Conservation Plan (NCCP), SDG&E contracted Chambers Group, Inc. (Chambers Group) to complete a Pre-activity Survey Report (PSR). The PSR survey area (Project Survey Area) included a review of all Proposed Project impact areas and the habitats immediately surrounding those impact areas (30 ft. for Project structures and 10 ft. for access roads) in order to determine Project-related impacts to sensitive habitat types and potential impacts to NCCP-covered plant and wildlife species.

Impacts were categorized into two groups: permanent impacts and temporary impacts. Anticipated permanent impacts were calculated by combining the anticipated permanent impacts from pole replacements and proposed road modifications. Anticipated permanent impacts for the Project totaled 2,691 square feet (sq. ft.) (0.062 acres). Anticipated temporary impacts were calculated by combining the anticipated temporary impacts from: stringing sites, footpaths, staging yards, and pole replacement work areas. Anticipated temporary impacts for pole replacement activities totaled 725,134 sq. ft. (16.65 acres), where 154,209 sq. ft. (3.54 acres) of which are pole replacement work areas.

Because TL 649 is an existing facility, the Proposed Project is considered to be maintenance of an existing SDG&E facility under the SDG&E NCCP. Per Table 7.4 of the SDG&E NCCP, permanent impacts to sensitive habitat types located within a Preserve area resulting from the maintenance of existing facilities (totaling 681 sq. ft.) would require mitigation at a 2:1 ratio; therefore, SDG&E proposes to withdraw 1,262 sq. ft. of mitigation credit from the SDG&E mitigation bank to mitigate for permanent impacts within a Preserve. Temporary impacts to 52,877 sq. ft. (1.21 acres) of sensitive habitat types located within a Preserve area, where impacts to sensitive habitats totaled over 1,000 sq. ft. per site, will be mitigated through the SDG&E Enhancement and Monitoring Program. If some or all sites do not meet success criteria in the appropriate time period, SDG&E proposes to withdraw the appropriate amount of credit at a 1:1 ratio from the SDG&E mitigation bank.

SDG&E's Low-effect Habitat Conservation Plan (HCP) for Quino checkerspot butterfly (QCB) includes the majority of the Project Survey Area, from Z188727 (Location 18) east and south to the Border Substation, including Otay Staging Yard. Suitable habitat for QCB was evaluated for all locations within the HCP area and impact areas with suitable habitat were determined to be unoccupied based on 2018 Protocol Surveys. SDG&E proposes to mitigate for 529 sq. ft. of permanent impacts to QCB Suitable unoccupied habitat and 37,578 sq. ft. of temporary impacts to QCB Suitable unoccupied habitat located within the HCP area at a ratio of 1:1. No mitigation is required for impacts to QCB unsuitable habitat within the HCP area.

SECTION 1.0 – INTRODUCTION

1.1. PROJECT DESCRIPTION

SDG&E proposes the TL 649 Wood-to-Steel Pole Replacement Project in an effort to fire-harden existing facilities in SDG&E's service territory. SDG&E proposes to replace wood poles with steel poles along approximately seven miles of the existing 69 kilovolt (kV) single-circuit power line. Installation of steel poles will minimize damages to utilities in the event of a fire, thereby increasing system reliability; decreasing routine maintenance needs; and increasing the life span of both the poles and the entire line.

Specifically, SDG&E proposes to conduct the following activities as part of the Proposed Project:

- Replace approximately 117 existing wood power line and interset distribution line poles with dull galvanized steel structures. Of the 117 replacement structures, 21 poles will require a pier foundation, seven will require a micropile foundation, and the remaining 89 will be directly buried.
- Reroute approximately 130 feet (ft.) of existing underground distribution lines.
- Remove approximately 18 existing wood poles from service.
- Install approximately two new steel poles of which one is a direct bury and one requires a pier foundation.
- Conduct overhead work on four existing poles, of which two are transmission poles and two are distribution poles.
- Transfer existing transmission conductors to the new steel poles.
- Replace the existing distribution conductors with new Aluminum Conductor Steel Reinforced (ACSR) distribution conductors.

SDG&E will utilize approximately 28 stringing sites, two temporary guard structures, and approximately two staging yards during construction of the Proposed Project.

The Proposed Project is consistent with SDG&E's efforts to improve reliability in fire-prone areas through fire-hardening projects and other enhancements. SDG&E prioritizes the maintenance of poles in each power line according to the existing vegetation and fuel conditions, the history of high-speed winds in the area, and the age and condition of the existing facilities as part of an overall strategy to strengthen power lines for improved system reliability.

SECTION 2.0 – PROJECT LOCATION

SDG&E proposes to replace wood poles with steel poles along approximately seven miles of the existing 69-kilovolt (kV) single-circuit power line. This segment of the Proposed Project is located in the cities of San Diego and Chula Vista, California (State), as well as unincorporated San Diego County (County) and is detailed in Figure 1: Project Location and Vicinity Map. The Proposed Project extends east from Black Coral Way and Sea Lavender Way in the City of San Diego for approximately five miles; then travels south for approximately two miles to just north of Otay Mesa Road in unincorporated San Diego County. Over this distance, the Project traverses private and public lands, including lands owned by the County of San Diego, the City of San Diego, the City of Chula Vista, the State of California, and SDG&E . TL 649 traverses a large expanse of densely vegetated and fire-prone areas, within the United States Geological Survey (USGS) 7.5-minute quadrangles *Imperial Beach* and *Otay Mesa*.

SECTION 3.0 – PROPOSED WORK DESCRIPTION

The existing wooden poles will be replaced with new dulled galvanized steel-wood equivalent (SW), directly-embedded, tubular light-duty and heavy-duty steel poles and engineered steel poles with micropile or pier foundations. Construction-related activities associated with the Project include replacing approximately 117 wood poles; removing 18 wooden poles from service; conducting overhead work at approximately four poles; installing two new steel poles; installing two temporary wooden guard structures; re-establishing existing access roads; and accessing 28 stringing sites and two staging yards. Once the new poles have been installed, a mechanical pulling machine (powered dolly) will be used to facilitate the installation of new conductors, if required. Wherever possible, activities will occur within existing paved or unpaved access roads or other previously disturbed areas. Proposed work sites are identified with site specific construction notes in Table 1: Proposed Actions by Work Sites. Appendix A: Photographic Document, includes photographs of current conditions at all proposed Project work sites.

Table 1: Proposed Actions by Work Sites

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
1	Z188714	Within Preserve	Overhead work only.	Vehicle access from Black Coral Way
2	Z188715	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road
3	Z188716	Within Preserve	Direct Bury Heavy Duty Pole.	Vehicle access from existing dirt access road
4	Z188717	Within Preserve	Direct Bury Heavy Duty Pole.	Vehicle access from existing dirt access road
5	Z188718	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road
6	Z188719	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road
7	Z188720	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
8	Z188721	Within Preserve	Pier Foundation Pole.	Vehicle access from existing dirt access road
9	Z188722	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road
10	Z183072	Within Preserve	Pier Foundation Pole.	Vehicle access from existing paved access road
11	Z186082	Within Preserve	Direct Bury Heavy Duty Pole.	Vehicle access from existing paved access road
12	Z188723	Outside Preserve	Direct Bury Heavy Duty Pole.	Vehicle access from existing dirt access road
13	Z188724	Outside Preserve	Pier Foundation Pole, remove anchor	Vehicle access from existing dirt access road
13A	P204009S	Outside Preserve	Remove stub pole	Vehicle access from existing dirt access road
14	Z188725	Within Preserve	Direct Bury Pole.	Vehicle access from existing dirt access road
15	Z183266	Outside Preserve	Pier Foundation Pole.	Vehicle access from existing dirt access road
16	Z183265	Within Preserve	Direct Bury Heavy Duty Pole.	Vehicle access from existing dirt access road
17	Z188726	Within Preserve	Pier Foundation Pole.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
18	Z188727	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing paved access road
18.1	P188917	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing paved access road
18.2	P181964	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing paved access road
18.3	P81123	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing paved access road
18.3B	PXXXS	Within Preserve	Direct Bury; QCB HCP Area.	Vehicle access from existing dirt access road
18.31	P89878	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
18.4	P81124	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
18.5	P100309	Within Preserve	Direct Bury Pole; QCB HCP Area. Two UG work spaces proposed; One 2x20 foot trench and one 4x4 foot trench.	Vehicle access from existing dirt access road
19	P81121	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
19.1	P81122	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
20	Z188728	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
21	Z81118	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
22	P81117	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
22C	P209711S	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
23, 23D	Z81116, P204010S	Outside Preserve	Pier Foundation Pole; P204010S Remove From Service; Within 75x75 Foot Work Area, No Additional Impacts Anticipated for RFS of Stub; QCB HCP Area.	Vehicle access from existing dirt access road
23.2	P259680	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
24	Z81114	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
25	P81113	Outside Preserve	Direct Bury Pole; QCB HCP Area. Pole relocated 45 feet east. UG intercept from new pole location to pedestal; 1x100 foot trench for UG.	Vehicle access from existing dirt access road
25.1	P182005	Outside Preserve	Overhead work; QCB HCP Area	Vehicle access from existing dirt access road
26	Z81112	Outside Preserve	Pier Foundation Pole; QCB HCP Area. UG intercept conduit; 3x3 foot trench within	Vehicle access from existing dirt access road
27	Z81110	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
28	Z81109	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
29, 29E	Z81107, P86238S	Outside Preserve	Pier Foundation Pole; P86238S Remove From Service Within 75x75 Foot Work Area; No Additional Impacts to Remove Stub; QCB HCP Area.	Vehicle access from existing dirt access road
30	Z81105	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
31	Z81104	Outside Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
32	Z81102	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
33	Z81101	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
34	Z81100	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
35	Z81098	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
36	Z81097	Outside Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
37	Z81982	Outside Preserve	Direct Bury Pole; install stub pole, Reg Station; QCB HCP Area.	Vehicle access from existing dirt access road
37.1	Unnamed Stub	Outside Preserve	Direct Bury Pole, Reg Station; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
38	Z81980	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
39	Z82224	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
40	Z81978	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
41	Z81976	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
42	Z81975	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
43	Z81973	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
43F	P229278S	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
44	Z81972	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
45	Z81971	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
46	Z81969	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
47	Z81081	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
48	Z81079	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
49	Z81078	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
50	Z118863	Within Preserve	Direct Bury Heavy Duty Pole; String new 430' to Z118864; QCB HCP Area.	Vehicle access from existing dirt access road
50.2	[NO TAG]	Within Preserve	Remove wood pole from service; QCB HCP Area	Overland travel
51	Z118864	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
52	P204534	Within Preserve	Wood Pole – Remove From Service; QCB HCP Area.	Vehicle access from existing dirt access road
53	Z81074	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
54	Z81072	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
55	Z81069	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
56	Z81067	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
57	Z81066	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
58	Z81064	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
59	Z81063	Within Preserve	Direct Bury Pole; QCB HCP Area.	Overland travel
60	Z81061	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
61	Z81060	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
62	Z81058	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
63	Z81057	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
63.1	P81056	Within Preserve	Remove wood pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
64	Z81055	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
65	Z81053	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
66	Z81052	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
67	Z81051	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
68	Z81049	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
69	Z731392	Within Preserve	Direct Bury Heavy Duty Pole; Vernal Pools in Access Road Adjacent to Pole; QCB HCP Area.	Vehicle access from existing dirt access road
70	Z731604	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
71, 71G	Z81044, P203016S	Within Preserve	Pier Foundation Pole; P203016S Remove From Service wood is within 75x75 Foot Pier Foundation Work Area; No Additional Impacts for Stub; QCB HCP Area.	Vehicle access from existing dirt access road
72	Z81968	Within Preserve	Direct Bury Pole (Pole Tagged P81409 in Field); QCB HCP Area.	Vehicle access from existing dirt access road
73	Z731591	Within Preserve	Remove from service; QCB HCP Area.	Vehicle access from existing dirt access road
73.1	Z253700	Within Preserve	Pier Foundation Pole; SWI 649-4; QCB HCP Area.	Vehicle access from existing dirt access road
74	Z731391	Within Preserve	Remove wooden pole from service; QCB HCP Area.	Vehicle access from existing dirt access road
75, 75H	Z31723, P203106S	Within Preserve	Pier Foundation Pole; P203016S Remove From Service is within 75x75 Foot Pier Foundation Work Area; No Additional Impacts for Stub; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
76	Z188730	Within Preserve	Direct Bury Heavy Duty Pole; SWI 649-5; QCB HCP Area.	Vehicle access from existing dirt access road
77	Z31724	Within Preserve	Overhead work only; QCB HCP Area.	Vehicle access from existing dirt access road
78	Z31725	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
79	Z31726	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
80	Z31727	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
81	Z31728	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
82	Z31729	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
83	Z31730	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
84	Z31731	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
85	Z31732	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
86	Z31733	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
87	Z31734	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
88	Z31735	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
89	Z31736	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
90	Z31737	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
91	Z31738	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
92	Z31739	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
93	Z729583	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
94	Z31741	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
95	Z31742	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
96	Z31743	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
97	Z31744	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
98	Z31767	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
99	Z31768	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
100	P34258	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
101	P34257	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
102	Z34102	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
103	Z31745	Within Preserve	Micropile Pole; QCB HCP Area.	Vehicle access from existing dirt access road
104	Z31746	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
105	Z31747	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
106	Z31748	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
107	Z31749	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road
108	Z31750	Within Preserve	Pier Foundation Pole; QCB HCP Area.	Vehicle access from existing dirt access road

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
108.1	P89151	Within Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
109	Z31751	Within Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
110	Z31752	Outside Preserve	Direct Bury Pole; QCB HCP Area.	Vehicle access from existing dirt access road
111	Z31753	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
112	Z31754	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
113	Z31755	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
114	Z31756	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
115	Z31757	Outside Preserve	Direct Bury Heavy Duty Pole; QCB HCP Area.	Vehicle access from existing dirt access road
116	Z31758	Outside Preserve	Pier Foundation Pole.	Vehicle access from existing dirt access road
117	Z31759	Outside Preserve	Overhead work only	Vehicle access from existing dirt access road
	Otay Staging Yard	Outside Preserve	QCB HCP Area.	Vehicle access from existing road.

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
	Main Street Staging Yard	Outside Preserve	QCB HCP Area.	Vehicle access from existing road.
SS1	Stringing Site 1	Outside Preserve	Conduct Wire Stringing.	Black Coral Way
SS2	Stringing Site 2	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing paved road.
SS3	Stringing Site 3	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing paved road.
SS4	Stringing Site 4	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing dirt access road.
SS5	Stringing Site 5	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing paved road.
SS6	Stringing Site 6	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing dirt access road.
SS7	Stringing Site 7	Outside Preserve	Conduct Wire Stringing.	Vehicle access from existing dirt access road.
SS8	Stringing Site 8	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS9	Stringing Site 9	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS10	Stringing Site 10	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
SS11	Stringing Site 11	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS12	Stringing Site 12	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS13	Stringing Site 13	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS14	Stringing Site 14	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS15	Stringing Site 15	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS16	Stringing Site 16	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS17	Stringing Site 17	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS18	Stringing Site 18	Within Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS19	Stringing Site 19	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS20	Stringing Site 20	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS21	Stringing Site 21	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
SS22	Stringing Site 22	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS23	Stringing Site 23	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS24	Stringing Site 24	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS25	Stringing Site 25	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS26	Stringing Site 26	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS27	Stringing Site 27	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
SS28	Stringing Site 28	Outside Preserve	Conduct Wire Stringing; QCB HCP Area.	Vehicle access from existing dirt access road.
TA1	Turnaround 1	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA2	Turnaround 2	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA3	Turnaround 3	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA4	Turnaround 4	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
TA5	Turnaround 5	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA6	Turnaround 6	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA7	Turnaround 7	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA8	Turnaround 8	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA9	Turnaround 9	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA10	Turnaround 10	Outside Preserve	Proposed Turnaround Area.	Vehicle access from existing dirt access road.
TA11	Guard Structure 1	Outside Preserve	West Side of Heritage Road.	Vehicle access from Heritage Road
TA12	Guard Structure 2	Outside Preserve	East Side of Heritage Road.	Vehicle access from Heritage Road
	Road Modification 1	Outside Preserve	5 Foot Wide by 30 Foot Long Impact Area for Modification for Existing Access Road at Z81100.	Vehicle access from existing road.
	Road Modification 2	Outside Preserve	5 Foot Wide by 30 Foot Long Impact Area for Modification for Existing Access Road at Z81098.	Vehicle access from existing road.
	Road Modification 3	Outside Preserve	5 Foot Wide by 30 Foot Long Impact Area for Modification for Existing Access Road at Z81097.	Vehicle access from existing road.

Location #	Structure ID	Preserve Designation	Proposed Action (s)	Access
	Road Modification 4	Outside Preserve	5 Foot Wide by 30 Foot Long Impact Area for Modification for Existing Access Road at	Vehicle access from existing road.

3.1.1 Staging Yards

The inclusion of staging yards in the Project design are necessary for storing and preparing materials and equipment for Project activities. The Project will include approximately two proposed staging yards: Main Street Staging Yard and Otay Staging Yard.

The site is located south of Main Street near the intersections of Main Street and Auto Park Avenue and Main Street and Maxwell Road. The site is located within a previously disturbed lot in the city of Chula Vista. The yard can be accessed directly from Main Street to the north.

The proposed work area for the Otay Staging Yard is approximately 174,240 sq. ft. (4 acres). The site is located within an automobile and industrial storage facility, within the incorporated community of Chula Vista. The yard can be accessed directly from Otay Mesa Road to the south. Size and shape of staging areas may be irregular and modified depending on specific material storage needs, safe and adequate work spaces, vehicle access, and avoidance of natural resources. Actual impacts associated with the staging areas will be evaluated in the Project Post-Construction Report (PCR).

All staging yards may also be used as Incidental Landing Areas (ILAs) for helicopter work, if necessary.

3.1.2 Stringing Sites

To facilitate the reconductoring of TL 649, approximately 28 stringing sites of various dimensions will be utilized. Stringing sites, where feasible, will be confined to previously disturbed areas within the ROW and along or adjacent to Project access roads. Vehicles, equipment, and personnel will remain within the SDG&E ROW, existing paved or unpaved access roads, or previously disturbed areas to the greatest extent possible.

3.1.3 Guard Structures

Temporary guard structure installation will occur in locations within the seven-mile Project alignment where stringing work will cross existing facilities such as other utilities and roadways to assure safety while conductors are being pulled. Different types of guard structures may be used, depending on the site conditions. Often, bucket trucks are utilized as guard structures during stringing activities. Where wooden poles are used as guard structures, a single-pole guard structure or an H-frame guard structure will be temporarily installed. The temporary work area is located in the immediate vicinity of the guard structure location. No permanent impacts would result from the utilization of guard structures. It is anticipated that 2 guard structures will be utilized on the Project at locations where the TL crosses public roads. The guard structures are necessary to provide for safety while conductor is pulled through the line.

3.2. ACCESS

TL 649 Project-related activities will remain within the existing SDG&E ROW easements wherever feasible. All sites/pole locations are expected to be accessible by vehicle on paved or unpaved access roads or by overland travel. Road re-establishment and/or vegetation clearing may be necessary to improve some existing access roads and to re-establish unmaintained access roads. No new access roads are anticipated to be established. The Project design includes the permanent modification of existing access roads at four pole locations estimated to each include an approximately 30-foot long by five-foot wide impact area at each pole.

3.3. CONSTRUCTION METHODS

Three distinct types of poles will be used for the Project: direct-embedded steel-wood equivalent (SW) light-duty and direct-embedded SW heavy-duty dull galvanized steel poles, engineered dull galvanized steel poles used with micropile foundations, and engineered dull galvanized steel poles used with pier foundations. Work areas for each type of pole will vary but will be confined to the previously disturbed areas around the base of the existing poles to the extent possible in order to provide a safe and adequate workspace.

3.3.1 Directly-Embedded Steel Poles

Directly-embedded steel poles are light-duty and heavy-duty steel poles that are secured using a concrete backfill. The poles will range in heights above grade from approximately 43 to 79 ft. The diameter of the pole at ground level is approximately 30 inches for light-duty steel poles and approximately 42 inches for heavy-duty steel poles. The poles will be directly-embedded at a depth of approximately 7 to 16 ft. as necessary for installation. Light-duty steel poles will be used at 57 locations, and heavy-duty steel poles will be used at 33 locations.

3.3.2 Micropile Foundation Poles

Micropile foundation poles are heavy-duty engineered steel poles installed using a micropile foundation, which uses a series of level work platforms from which small micropiles (or small, individual foundations) are installed. The poles will have a height above grade of approximately 55 to 110 ft. A steel cap and micropile anchor bolt ring are installed above the micropile foundation to act as the base foundation for an engineered steel pole. The combined dimensions of the micropile foundation and pole are expected to average 7 ft. in diameter at ground level (and not have a diameter greater than 8 ft.).

3.3.3 Pier Foundation Poles

Concrete pier foundation poles will utilize 6 to 8 ft. diameter hole dug approximately 30 to 40 ft. deep using a large truck mounted auger. A rebar cage is then lowered into the hole and an anchor bolt cage is inserted within the rebar cage. The hole is then filled with concrete, with the exposed final foundation remaining approximately 2 ft. above ground level. The new engineered steel pole is then bolted to the foundation. New steel single-pole concrete pier foundation structures will range in height from 45 to 110 ft. above ground, will be approximately 72 to 96 inches in diameter at the base, and will be made of dull galvanized steel.

3.3.4 Steel Replacement Poles

Replacement poles will be located as close as possible to the existing poles, usually within 10 ft.; and installation of the new steel poles will require excavating the pole holes using either a truck-mounted auger or drill rig, or by hand with the aid of a hand jack powered by an air compressor. Excavated soil will be placed in a spoil pile adjacent to each hole. In locations where poles are moved further than 8 ft., two temporary work areas will be required, one for the removal of the existing pole and one for the installation of the new pole. Spoil boxes may be used to store spoils at sites that are located on steep or uneven terrain. Plywood boards or visqueen covers will be used to cover the excavated holes until pole installation activities begin. New poles will be installed by boom truck or crane. Excess spoils generated from Project activities will be dispersed around the bases of the poles within the allotted temporary work areas and/or evenly distributed on the existing access roads and properly compacted. In the event that the soil cannot be spread and adequately contoured or compacted onto the existing access roads, crews will remove the excess soil from the Project site. The appropriate Best Management Practices (BMPs) will be used before, during, and after Project-related construction activities where necessary to prevent offsite sedimentation. Bucket trucks will be utilized to remove conductor and cross-arms from old poles. Wood poles will be removed by cutting the poles into sections or removed completely by use of a hydraulic jack and line truck. The existing pole butts will be completely removed unless required to remain per the Reviewer Recommendations, and the holes will be backfilled with spoils.

3.3.5 Wood Pole Removal

Wood pole removal activities will utilize boom and bucket trucks to remove cross arms, conductors, and poles. Associated hardware, including anchors and old wood poles will be recycled and/or disposed of at an approved offsite location.

SECTION 4.0 – HABITAT EVALUATION

Chambers Group, Inc. (Chambers Group) biologists conducted pre-construction biological surveys in order to document existing environmental conditions and to document the presence of any sensitive wildlife or plant species covered by SDG&E's Subregional NCCP. Table 2 below outlines survey dates and staff.

Table 2: Survey Dates and Staff

Survey Period	Survey Type	Surveyor Names						
04/10/2014 – 04/23/2014	Focused Plant Survey	Rebecca Alvidrez †	Maya Mazon †	John Dicus	Melanie Dicus *	Margie Mulligan *	Ryan Meszaros	Christina Congedo
06/02/2014 – 06/12/2014	Focused Plant Survey	Rebecca Alvidrez †	Maya Mazon †	John Dicus	Melanie Dicus *	Christina Congedo		
4/18/2014	Wildlife Habitat Assessment	Ian Maunsell*	Phillip Howard					
7/17/2014	Vernal Pool and FS Habitat Assessment	Paul Morrissey*†	Ian Maunsell*					
11/3/2014	Vernal Pool Habitat Assessment	Paul Morrissey†	Ian Maunsell	Mike Nieto* (RECON)				
11/14/2014 – 11/16/2014	PSR Impacts Survey	Christina* Congedo	Clark Austin	Ian†* Maunsell				

Note: *** Denotes technical lead.**
† Denotes team lead.

4.1. VEGETATION COMMUNITIES

The Proposed Project area supports a variety of vegetation communities. Each vegetation community description corresponds to the habitats described in SDG&E's NCCP. The following 12 vegetation communities were observed to occur within the Project Survey Area during the pre-activity survey: Bare Ground, Chaparral, Coastal Sage Scrub, Coastal Sage/Chaparral Mix, Disturbed, Disturbed Wetland, Grassland, Landscape/Ornamental, Maritime Succulent Scrub, Meadow/Seep, Riparian Forest, Riparian Scrub, Tecate Cypress Forest, and Vernal Pool. Vegetation communities observed within the Survey Area and the plants that typically occur within those communities are described below.

4.1.1 Bare Ground

Areas characterized as Bare Ground habitats include areas with exposed soils, rocky substrate, access roads, and disturbed areas devoid of plant cover. Areas within the Project Survey Area that are considered Bare Ground are existing access roads or previously graded areas. The majority of vernal pools and potential fairy shrimp habitat formed from seasonally ponded areas within the Project Survey Area occur within Bare Ground (access roads) on the eastern portion of the Project, east of CA-125.

4.1.2 Chaparral

Chaparral habitat consists of woody, evergreen, leathery-leaved, medium to tall shrubs that are adapted to occasional fires (Gray and Bramlet 1992). Chaparral habitat consists of north-facing slopes dominated by woody perennial shrubs with leathery evergreen leaves. Dominant plant species observed within the Project included chamise (*Adenostoma fasciculatum*), Ramona lilac (*Ceanothus tomentosus*), toyon (*Heteromeles arbutifolia*), holly-leaf cherry (*Prunus ilicifolia*), and spiny redberry (*Rhamnus crocea*).

4.1.3 Coastal Sage Scrub

Coastal sage scrub habitat consists of drought-deciduous, low, soft-leaved shrubs and herbs which are often gray-green in color (e.g., sagebrush, buckwheat, sage). Plant species in this community are typically facultative drought tolerant and are most active during winter and spring months. Diegan coastal sage scrub is usually found on xeric slopes or clay dominant soils. This habitat regularly occupies gentle to steep slopes with shallow or heavy soils mostly at elevations below 3,000 ft. above mean sea level (amsl). Within the Project Survey Area both natural and coastal sage scrub restoration areas occur, characterized by dominant plant species including California sagebrush (*Artemisia californica*), coastal California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), toyon, laurel sumac (*Malosma laurina*), black sage (*Salvia mellifera*), Munz's sage (*Salvia munzii*) and San Diego County viguiera (*Bahiopsis laciniata*). Additional areas within the Project Survey Area show alluvial characteristics occurring within the terraces of the dry wash and are similar in structure and composition to Riversidian Alluvial Fan Sage Scrub (RAFSS) which is a type of coastal sage scrub that occurs in large alluvial flood plains.

4.1.4 Coastal Sage/Chaparral Mix

In this NCCP-vegetation community, chaparral and coastal sage scrub dominant plant species are co-dominant. This mix generally occurs where the habitat is transitioning from one to the other. This habitat typically occurs on coastal foothills under 3,000 meters amsl. Dominant shrub species within this community observed within the Project Survey Area include interspersed co-dominant chamise, California sagebrush, buckwheat, toyon, and spiny redberry.

4.1.5 Disturbed

Disturbed areas, a NCCP-vegetation community, may be nearly devoid of vegetation because of clearing or grading and are dominated by pioneering herbaceous species that readily colonize disturbed soils, such as tocalote (*Centaurea melitensis*), wild oat (*Avena* sp.), black mustard (*Brassica nigra*), prickly sow-thistle (*Sonchus asper*), and wild lettuce (*Lactuca serriola*) (Gray and Bramlet 1992). Areas characterized by disturbed habitat have no or negligible ecological value and, within the Project Survey Area, are primarily dominated by various combinations of ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), prickly Russian thistle (*Salsola tragus*), slender wild oat (*Avena fatua*), tocalote, redstem stork's bill (*Erodium cicutarium*), lambsquarters (*Chenopodium album*), and hairy crabgrass (*Digitaria sanguinalis*). Scattered individuals or remnants of native coastal sage scrub species may occur including California buckwheat, California sagebrush, and deerweed (*Acmispon glaber*).

4.1.6 Landscape/Ornamental

This NCCP-vegetation community consists of areas dominated by non-native species planted for landscaping and generally occur in residential neighborhoods, commercial properties, or along roadsides.

This habitat can be found within the Project Survey Area within the water park and residential areas towards the west end of the TL. Landscape/ornamental associated species observed during the survey include jacaranda (*Jacaranda mimosifolia),* fountain tree (*Spathodea campanulata*), and cape honeysuckle (*Tecomaria capensis*).

4.1.7 Grasslands

Grassland is a NCCP-vegetation community consisting of moderate to dense cover of low, herbaceous vegetation dominated by native and/or non-native grasses. These habitats grow in deep, well-developed soils on gentle slopes and flats (Gray and Bramlet 1992). These habitats can be dominated by either native or non-native species. Native grassland communities within the Project Survey Area are characterized by scattered native bunchgrasses (*Stipa* sp.), usually dominating, with other herbaceous native and non-native species. In San Diego County, grasslands are considered native if at least 20 percent of the ground cover consists of native species. Dominant plant species observed within the Project Survey Area included sand aster (*Corethrogyne filaginifolia*), long-stemmed buckwheat (*Eriogonum elongatum* var. *elongatum*), California buckwheat, decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), nodding needlegrass (*Stipa cernua*), small-flowered needlegrass (*Stipa lepida*) and purple needlegrass (*Stipa pulchra*). Non-native annual grasslands within the Project Survey Area are comprised predominately of non-native grass species including several different non-native brome grass species (*Bromus* spp.), wild oat (*Avena* sp.), black mustard, fennel (*Foeniculum vulgare*), and shortpod mustard (*Hirschfeldia incana*).

4.1.8 Maritime Succulent Scrub

Maritime succulent scrub, a NCCP-vegetation classification, consists of coastal sage scrub dominants with cacti and other succulent species. This habitat is most commonly associated with rocky or sandy soils on steep south facing slopes. This low-growing plant community is open (25 to 75 percent cover) and generally does not support an understory. Naturally-occurring and restored forms of maritime succulent scrub occur within the Project Survey Area. Dominant plant species observed within this habitat included California sagebrush, coastal California buckwheat, coast cholla (*Cylindropuntia prolifera*), jojoba (*Simmondsia chinensis*), golden-spined cereus (*Bergerocactus emoryi*), San Diego barrel cactus (*Ferocactus viridescens)*, shiny-leaf yerba santa (*Eriodictyon trichocalyx* var. *trichocalyx*), laurel sumac, and coast prickly pear (*Opuntia littoralis*).

4.1.9 Riparian Scrub

Riparian scrub is a NCCP-vegetation community consisting of dense woody shrubs such as mule fat, and can have an herbaceous understory. This community is associated with streams, rivers, or ephemeral drainages. This community often lacks the occurrence of mature tree species, stratified canopy, and can form along the periphery of riparian woodland or forest habitats. When trees do occur within this habitat they are typically young and/or do not provide prevalent canopy cover such as blue elderberry (*Sambucus mexicana*), Tamarix, or sandbar willow. Within the Project Survey Area, both natural and disturbed riparian scrub habitats occur. Natural riparian scrub communities within the Project Survey Area were observed most commonly associated with drainages in the Otay River flood plain and associated tributaries. These riparian communities were dominated by shrub species such as mule fat and interspersed broom baccharis or sandbar willow, and an herbaceous understory of San Diego marsh elder, mugwort, and ragweed (*Ambrosia psilostachya*). Occasional willow species occur within this community infrequently, such as black willow or arroyo willow, providing limited canopy cover. Disturbed riparian

scrub communities describe habitats dominated by non-native or invasive species associated with drainages and providing a dense thicket of vegetation functioning as a scrub community. This habitat was often found in drainages with evidence of trash and debris and dominated by non-native plants, such as salt cedar (*Tamarix ramosissima*), castor bean, and tree tobacco, and occasionally showed evidence of remnant native communities as evidenced by sparse mulefat, broom baccharis, or San Diego marsh elder.

4.1.10 Vernal Pools

Vernal pools are a NCCP-vegetation classification. This habitat is characterized by low depressions typically flooded and saturated above a hardpan or claypan for several weeks to a few months in the winter and spring (Gray and Bramlet 1992). Vernal pools can be differentiated from other seasonal wetland communities by containing at least one vernal pool indicator species (species known to only or predominantly occur within these isolated seasonal wetlands) such as woolly marbles (*Psilocarphus brevissimus*) or San Diego button celery (*Eryngium aristulatum* var. *parishii*). Wetland obligate perennial species such as spike rush (*Eleocharis* sp.) frequently occur. Vernal pool plants are not persistent and generally not evident during summer or fall. Vernal pools are often barren during the summer or may be invaded by upland annuals after the soils have dried out (Gray and Bramlet 1992). Within the Project Survey Area the NCCP classification of vernal pools habitats is further described by two distinct types of vernal pool habitat; San Diego Mesa Claypan Vernal Pools and Disturbed Vernal Pools.

San Diego Mesa Claypan Vernal Pools

According to NCCP-vegetation classifications, soils within San Diego Mesa Claypan Vernal Pools are typically finer textured and grayer than the hardpan vernal pool and are typically surrounded by hummocks called mima mounds that are typically grassland habitat. Within the Project Survey Area vernal pool obligate indicator species included woolly marbles and San Diego button celery. These plants were primarily observed occurring within a larger mima mound complex located west of Z31730 (Location 83) south to pole Z31743 (Location 96). Additional wetland associated species observed within the Project Survey Area and commonly found in vernal pools include adobe popcorn flower (*Plagiobothrys acanthocarpus*) and toad rush (*Juncus bufonius*). However, this habitat has been invaded by upland annuals and many of the typical vernal pool annual species were found in low numbers or not at all. Based on topography, this habitat type is expected to occur within many of the claypan depressions interspersed between mima mounds in this area of the Project. As expected, given the survey timing (summer), this habitat was largely dominated by upland species and grasses. Additional species observed in this community included, non-native brome grasses, native needlegrass, and minor shrubs such as the decumbent goldenbush (*Isocoma menziesii var. decumbens*). This habitat was observed immediately adjacent to the following work areas and will be avoided: pole Z731392 (Location 69), Z31731 (Location 84), Z31732 (Location 85), Z31733 (Location 86), Z31736 (Location 89), Z31737 (Location 90), Z31738 (Location 91), Z729583 (Location 93), Z31742 (Location 95).

Disturbed Vernal Pools

The NCCP-habitat classification of vernal pools typically describes natural areas where mima mounds or other depressions collect water and support vernal pool indicator species. Previous human disturbances within the Project Survey Area include construction of roads, off-highway vehicle (OHV) use, fill, daily Border Patrol use, utility infrastructure inspections (sewer and water line), and recreation, which have resulted in disturbed or atypical vegetation being present within vernal pool habitats. Disturbed vernal

pools are characterized by at least one vernal pool indicator species occurring within disturbed or developed areas. Within the Project Survey Area, disturbed vernal pool habitat occurs on previously developed and bladed dirt roads where senesced wooly marbles were prevalent in apparently claypan soils, and signs of hydrology such as soil cracks were present. This habitat can be differentiated from the San Diego Mesa Claypan Vernal Pool habitat described above by areas largely devoid of upland vegetation during the summer due to regular disturbances and soil compaction. This habitat was observed to occur adjacent to pole Z81063 (Location 59).Work areas occurring near seasonally ponded features are not considered to be suitable under SDG&E's Low Effect QCB HCP, due to their location within compacted roads.

Permanent impacts to vernal pool habitats have been avoided through the final Project design, and temporary impacts to vernal pool habitats will be avoided and minimized to the extent that temporary impacts would be less than significant.

SECTION 5.0 – SENSITIVE BIOLOGICAL RESOURCES

The Project is located within the designated boundaries of SDG&E's Subregional NCCP. The SDG&E's Subregional NCCP outlines avoidance and minimization measures as well as standard operational procedures which have been incorporated as part of the Project. Prior to the survey effort, Chambers Group conducted a review of current databases within one mile of the Proposed Project (literature review). According to the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Electonic Inventory, 20 NCCP-covered plant species and 14 NCCP-covered wildlife species have been documented within one mile of the Project. These species are further discussed below.

5.1. SDG&E NCCP-COVERED PLANT SPECIES

5.1.1 Literature Review Results

The CNDDB and CNPS literature review resulted in the following list of 20 NCCP-covered plant species documented within one mile of the Project:

- San Diego thorn-mint (*Acanthomintha ilicifolia*)
- San Diego ambrosia (*Ambrosia pumila*)
- San Diego goldenstar (*Bloomeria clevelandii*)
- Orcutt's brodiaea (*Brodiaea orcuttii*)
- Lakeside ceanothus (*Ceanothus cyaneus*)
- Snake cholla (*Cylindropuntia californica*)
- Otay tarplant (*Deinandra conjugens*)
- Variegated dudleya (*Dudleya variegata*)
- Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*)
- San Diego barrel cactus (*Ferocactus viridescens*)
- Palmer's grapplinghook (*Harpagonella palmeri*)
- Tecate cypress (*Hesperocyparis forbesii*)
- Gander's pitcher sage (*Lepechinia ganderi*)
- Little mousetail (*Myosurus minimus* subsp. *apus*)
- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Otay mesa mint (*Pogogyne nudiuscula*)
- Small-leaved rose (*Rosa minutifolia*)
- Parry's Tetracoccus (*Tetracoccus dioicus*)

5.1.2 Focused Survey and PFO Evaluation

Following the literature review, Chambers Group conducted focused surveys for sensitive NCCP-covered plant species with the potential to occur within the Project Survey Area. The focused surveys are part of the CEQA analysis in support of a Proponent's Environmental Assessment (PEA) and Permit to Construct (PTC) application to the California Public Utilities Commission (CPUC) for this project. Two focused plant

survey efforts were conducted, the first in 2014 and a subsequent survey in 2018 with more focused survey areas due to project and engineering updates. The Potential for Occurrence (PFO) for each of the 20 species were updated based on results of the survey efforts. Precipitation in 2014 and 2018 was below the average for San Diego County. The below average precipitation and above average temperatures recorded both years may have reduced the occurrences of sensitive plants (particularly annual herbaceous species) during the surveys in areas where historic records show the species to have occurred. Many large perennial species or deciduous woody shrub species were still detectable during the survey effort.

Botanists checked populations of perennial species observed in 2014 to verify presence of those populations in 2018. If additional individuals were observed, these were counted and recorded. No retractions were made to the 2014 dataset except within an identified work area of perennial species that were no longer present at the time of the 2018 surveys. Absence of a previously observed herbaceous individual in 2014 does not preclude its presence in 2018 even if it was not observed again. It is presumed that herbaceous species, if observed in 2018, may still be present in the seedbank or below ground (e.g. *Bloomeria clevelandii*) in 2018 and they have the potential to flower in future years under sufficient rainfall conditions.

Based on the results of the 2014 and 2018 survey efforts the following six NCCP-covered plant species identified during the literature review were not observed and are presumed to be absent within the Project Survey Area: Lakeside ceanothus, snake cholla, variegated dudleya, Palmer's goldenbush, Gander's pitcher sage, and Parry's tetracoccus.

The following seven NCCP-covered annual plant species known to occur within, or obligately associated with, vernal pool habitats were identified during the literature review: San Diego thorn-mint, San Diego ambrosia, Orcutt's brodiaea, little mousetail, spreading navarretia, California Orcutt grass, and Otay mesa mint. Although not observed during the focused survey effort, marginal quality habitat for these species occurs within a vernal pool mima mound complex west of pole Z31729 (Location 82), and south through pole Z31744 (Location 97). At the time of the survey effort, vernal pool habitat within this area was observed to be invaded by upland species and non-native grasses, and lacked sufficient hydrology to support these species. However, during periods of typical or above average rainfall, these areas may provide marginal quality habitat for vernal pool species and these species have a moderate potential to occur. Thus, Project-related work activities have the potential to impact these species. San Diego thorn-mint, San Diego ambrosia, and Otay mesa mint are NCCP-Narrow Endemic (NE) species. Impacts to these species are to be avoided through Operational Protocols, avoidance of vernal pools habitats incorporated into the final Project design, and Reviewer Recommendations.

The following seven NCCP-covered plant species identified during the literature review were observed to occur within the Project Survey Area during the 2014 and 2018 survey efforts: San Diego goldenstar, Otay tarplant, San Diego button-celery, San Diego barrel cactus, Palmer's grapplinghook, Tecate cypress, and small-leaved rose.

In addition to the 20 species identified during the literature review, the following NCCP-covered plant species, Otay manzanita (*Arctostaphylos otayensis*), was observed to occur within the Project Survey Area during the survey effort in both 2014 and 2018.

The 21 sensitive plant species discussed above, their current status, habitat requirements, and a complete PFO table are included in Appendix C.

5.2. SDG&E NCCP-COVERED WILDLIFE SPECIES

5.2.1 Literature Review Results

The CNDDB literature review resulted in the following list of 14 NCCP-covered wildlife species documented within one mile of the Project:

- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- Western burrowing owl (*Athene cunicularia*)
- Coastal cactus wren (*Campylorhynchus brunneicapillus*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- San Diego horned lizard (*Phrynosoma coronatum*)
- Orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)
- Red diamond rattlesnake (*Crotalus ruber*)
- Thorne's hairstreak (*Mitoura thornei*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- San Diego fairy shrimp (*Branchinecta sandiegonensis*)

5.2.2 Survey Results and PFO Evaluation

Based on the results of the 2014 survey effort, suitable habitat of variable quality for all wildlife species identified in the literature review was observed to occur within the Project Survey Area.

Marginal quality habitat[1] was observed within the Project Survey Area for northwestern San Diego pocket mouse, San Diego desert woodrat, coastal cactus wren, and red diamond rattlesnake. These four species are considered to have a moderate potential for occurrence within the Project Survey Area based on proximity of historical records. Thus, Project-related activities have the potential to impact these species.

[1] Either a historical record exists of the species within the immediate vicinity of the project site (within approximately one mile) and marginal habitat exists on the Project site, or the habitat requirements or environmental conditions associated with the species occur within the Project site, but no historical records exist within one mile of the Project site.

Coastal cactus wren, an NCCP-NE species, is expected to have a moderate potential to forage within the Project Survey Area, but a low potential for nesting due to low quality maritime succulent scrub habitat and lack of mature cactus patches in the immediate vicinity of Project work areas.

High quality habitat[2] was observed within the Project Survey Area for San Diego horned lizard, Riverside fairy shrimp, San Diego fairy shrimp, and western burrowing owl. San Diego horned lizard and Riverside fairy shrimp were not observed during the survey effort; however, due to the presence of high quality habitat they are considered to have a high potential to occur.

San Diego Fairy shrimp were observed during wet sampling efforts in 2016 and 2017 and are presumed to be present between Location 84 (Z31731) through Location 96 (Z31743), observed within two non jurisdictional road ruts on the dirt access road between Stringing Site 21 and Location 78 (Z31725), and within a vernal pool north of Location 75 (Z31723). Impacts to fairy shrimp species are expected to be minimized through Operational Protocols, avoidance of vernal pools habitats incorporated into the final Project design, and Reviewer Recommendations.

Western Burrowing Owl was observed within the project survey area during wintering surveys conducted in January and February 2019; however, through the implementation of the *2019 Tie Line 649 Wood-to-Steel Replacement Project Burrowing Owl Monitoring and Mitigation Plan*, impacts to these species will be minimized to the greatest extent possible. Western burrowing owl is an NCCP-NE species. Although not observed during a focused survey effort in 2014 and 2018, two active burrow locations were observed in 2019 near the Otay Staging Yard and the second located approximately 1,770 feet south of Location 117 (Z31759).

The following six NCCP-covered wildlife species identified during the literature review were observed to occur within the Project Survey Area during the survey effort: San Diego black-tailed jackrabbit, coastal California gnatcatcher, least Bell's vireo, southern California rufous-crowned sparrow, orange-throated whiptail, and Thorne's hairstreak. Thus, Project-related activities have the potential to impact these species.

In addition to the 14 species identified during the literature review, the following two NCCP-covered wildlife species were observed within the Project Survey Area during the survey effort: Cooper's hawk (*Accipiter cooperii*) and Grasshopper sparrow (*Ammodramus savannarum perpallidus*).

The 16 sensitive wildlife species discussed above, their current status, habitat requirements, and a complete PFO table are included in Appendix D.

[2] Both a historical record exists of the species within the Project site or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Project site.

5.3. QUINO CHECKERSPOT BUTTERFLY

Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) received federal protection under the Federal ESA in 1997 (USFWS 2002). Although not covered under SDG&E's NCCP, a Habitat Conservation Plan (HCP) was created by SDG&E and United States Fish and Wildlife Service (USFWS), and Quino checkerspot butterfly is covered under the SDG&E Low-Effect QCB HCP. The QCB HCP includes the majority of the Project Survey Area, from Z188727 (Location 18) east and south to the Border Substation. Due to severe drought during the 2014 blooming period and QCB flight season, focused surveys were only conducted during the 2018 survey effort. Suitable habitat for QCB does occur throughout the Project Survey Area where coastal sage and chaparral scrub communities, vernal pool habitats, and native grasslands occur and host plants are present. Suitable QCB Habitat is defined in SDG&E's Low-Effect HCP for QCB as:

> *"Shrub communities, such as coastal sage scrub, chaparral, and desert scrub, with 50 percent shrub cover or less, and the potential to support dot-seed plantain* [Plantago erecta] *and other larval host plants. Areas that meet the shrub cover standard are excluded if the ground cover vegetation is disturbed and/or covered by understory vegetation to the extent that larval host plants do not grow. Areas of solid rock substrate and the surfaces of solidly compacted access roads which are not likely to support vegetation are also excluded. All areas of vernal pool complexes are included as Suitable QCB Habitat regardless of upland vegetation surrounding the vernal pools. Areas meeting the 50 percent shrub cover with QCB Host Plants, native herbaceous species, cryptobiotic crusts, or the potential to support any of these elements are included as Suitable QCB Habitat. Also included in Suitable QCB Habitat for this Plan are all native grasslands and non-native grasslands that show evidence of potential to support larval host plants. Evidence for a potential to support larval host plants included presence of native grasses, native wildflowers, and cryptobiotic crusts."*

Although vernal pools are to be included in suitable habitat for QCB, the Project Survey Area contains vernal pool habitat and seasonally ponded road rut features along compacted existing access roads. These compacted surfaces are unlikely to support QCB host plants and are not considered suitable habitat for QCB. Pursuant to SDG&E's Low-effect HCP for QCB (3.2.1 Section 3b), "*if the timing of the Project does not allow for adult flight season surveys to determine the presence of QCB within the impact areas then it will be assumed that the identified suitable habitat for QCB is occupied.*" As a result, the QCB habitat assessment was conducted during the Pre-activity Survey for determinations of impacts to specific habitat communities per SDG&E's NCCP. Due to poor survey conditions Chambers Group was unable to conduct focused surveys for this species in 2014 and timing did not allow for surveys to determine occupation of potential QCB habitat. A focused survey for QCB was conducted in 2015 (Blackhawk Environmental) and in 2018 (Chambers Group), with both surveys finding no QCB. Further details regarding this survey and its results can be found within Appendix I of the IS/MND.

This species was not recorded during the 2018 QCB survey to occur within the TL 649 Project area. The CNDDB lists 5 records of occurrence within 1 mile, the closest being approximately 1,137 ft. from the Project area and suitable habitat exists throughout the alignment.

5.4. VERNAL POOLS

The CNDDB lists seven occurrences of San Diego Mesa Claypan Vernal Pool habitat within one mile of the Project. Jurisdictional vernal pools are located throughout the TL 649 alignment from CA-125 eastward (adjacent to and along the Otay River), but are most densely concentrated along the north/south alignment adjacent to Donovan State Prison from pole Z31729 south through pole Z31744. Jurisdictional vernal pools located within access roads are subject to continuous vehicular disturbance and can, in the absence of vegetation, constitute an "atypical situation." Therefore, alternative methods described in the Arid Supplement were used to delineate vernal pools within seasonally ponded features. When endemic flora was not observed within a basin due to presumed disturbance, presence of endemic flora was assumed if the basin was within proximity to known/mapped vernal pool complexes.

Seasonally ponded road rut features occur throughout the alignment, starting east of Heritage Road and continuing down to Location 114. These road ruts were not considered jurisdictional due to lack of endemic vegetation and not being near or adjacent to jurisdictional vernal pools. In 2004, SDG&E amended its NCCP/HCP to incorporate clarifications regarding vernal pools; this document is titled the *SDG&E Vernal Pool Clarification Document*. Per this document, permanent and temporary impacts to vernal pools associated with the operations and maintenance of existing facilities outside of existing roads are considered a covered activity under SDG&E's NCCP. Refer to the Reviewer Recommendations below for specific measures to further limit impacts to vernal pools in addition to the standard NCCP/HCP measures.

Permanent and temporary impacts to vernal pools as a result of the Project will be avoided, and impacts to vernal pools are anticipated.

5.5. GENERAL WILDLIFE

The following 123 wildlife species were observed during the pre-activity surveys and can be found in Appendix E: Wildlife Species Observed.

SECTION 6.0 – REVIEWER RECOMMENDATIONS

SDG&E proposes implementation of the SDG&E NCCP Section 7.1 Operational Protocols. Temporary impacts will be minimized, as crews will only impact the vegetation absolutely necessary to conduct Project-related activities.

In addition to SDG&E NCCP Operational Protocols, SDG&E proposes the implementation of the Reviewer Recommendations listed below to avoid and minimize impacts resulting from Project related activities. Due to the sensitive nature of vernal pools, specific operational protocols are detailed in chapter 7.1.11 Vernal Pool Complexes, and should be followed. Recommendations specific to vernal pools that should be emphasized for this Project are listed below and preceed overall Project-related recommendations.

6.1. VERNAL POOL SPECIFIC REVIEWER RECOMMENDATIONS:

1. For all construction activities occurring adjacent to jurisdictional vernal pools, SDG&E will work with a qualified biologist having local experience with vernal pool resources, to site roads or facilities in a manner that avoids potential impacts to vernal pools. All jurisdictional vernal pools adjacent to the Project footprint, plus a five-foot buffer (where feasible), will be fenced with orange safety fencing to ensure no people or equipment impact the jurisdictional vernal pools during construction activities. A silt fence will be installed along the base of the roadway to prevent increased erosion or sedimentation during construction in jurisdictional vernal pool areas. Gravel bags will be placed along the bottom of the fence to minimize erosion or sedimentation into vernal pools, and removed upon completion of construction.
2. To the extent feasible, all construction equipment shall be fueled and maintained at least 100 feet from the nearest jurisdictional vernal pools. No parking within mapped jurisdictional vernal pools will occur.
3. During modifications and maintenance of existing access roads adjacent to jurisdictional vernal pools, a qualified environmental surveyor, having local experience with vernal pool resources, shall oversee and monitor all such activities occurring adjacent to jurisdictional vernal pools. The environmental surveyor shall:
    a. Hold a pre-construction meeting to brief the crew on the location of sensitive resources and construction boundaries.
    b. Direct installation of protective fencing to prevent encroachment of people or equipment into vernal pools during construction activities and to ensure that no fence posts are placed within vernal pools.
    c. If it is not feasible to place protective fencing without impacting jurisdictional vernal pools, during the dry season sandbags will be placed along the perimeter of the jurisdictional vernal pool and removed post-construction (or prior to the on-set of the wet season).
4. An environmental surveyor will ensure that fencing to protect jurisdictional vernal pools is appropriately placed and is maintained in good condition for the duration of the Project.
5. Steel plates and/or geotextile mats, or equivalent, may be placed over jurisdictional vernal pools in order to minimize temporary impacts to vernal pools from Project activites.

6. Any Project-related work where jurisdictional vernal pools are located within the existing SDG&E access road are completely dry, as determined by the environmental surveyor.
7. Vehicle trips to the area along the existing SDG&E access road and the existing adjacent prison access road between poles Z31729 and Z31744 shall be limited. Crews shall carpool and/or walk in to limit trips. Guidance shall be provided by the environmental surveyor. The existing Donovan Prison access road adjacent to the existing SDG&E access road shall be utilized in order to avoid and avoid any temporary impacts to jurisdictional vernal pools located within the existing SDG&E access road.

6.2. GENERAL PROJECT-WIDE REVIEWER RECOMMENDATIONS:

1. A environmental surveyor shall be present during all Project-related activities in order to avoid and minimize any impacts to sensitive resources, as needed.
2. Locations of special-status plants have been identified and inventoried following the 2014 and 2018 focused plant survey results. Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, and marking areas to be avoided in construction areas.
3. If construction activities including but not limited to tree trimming, road maintenance (i.e., re-establishing of existing access roads), grading, pole replacement, or site disturbance are to occur between February 15 and August 31, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds.
4. Periodic wintering Burrowing Owl surveys will be conducted in January and February during construction in suitable habitat. The *2019 Tie Line 649 Wood-to-Steel Replacement Project Burrowing Owl Monitoring and Mitigation Plan* will be implemented during construction in order to minimize impacts to Burrowing Owl located near the Project activities.

SECTION 7.0 – SUMMARY OF IMPACTS

7.1. PROJECT SPECIFIC IMPACTS

Construction of the Proposed Project would result in temporary disturbance and/or permanent loss of sensitive vegetation communities; however, SDG&E would avoid and minimize impacts according to the *SDG&E NCCP Operational Protocols*. In addition, temporary disturbance and/or permanent loss could occur to sensitive plant species, sensitive wildlife, and sensitive habitat areas. Permanent loss involves long-term impacts associated with permanent features such as new poles. Temporary disturbance includes short-term impacts during removal of old wood poles, installation for new poles, and work at string sites, and staging/laydown areas.

7.1.1 Permanent Impacts

New and Replacement Poles

Permanent impacts include the placement of either a light-duty steel pole, heavy-duty steel pole, micropile foundation steel pole, or pier foundation steel pole.

Permanent impacts resulting from the installation of light-duty and heavy-duty direct bury steel poles were calculated with an assumption that each pole location will be backfilled with concrete. Therefore, in addition to the pole, there will be a permanent impact surrounding the pole resulting from the concrete backfill (concrete annulus). The permanent impacts for light-duty and heavy-duty steel poles are calculated to be either 7 sq. ft. (H2 light duty pole), 13 sq. ft. (H3-H6 light-duty), or 14 sq. ft. (H7-H9 heavy duty) of impacts.

The anticipated permanent impact for micropile steel poles is based on a micropile steel cap plate with an average diameter of 7 ft., for a 39 sq. ft. permanent impact area.

The anticipated permanent impacts for the installation of concrete pier foundation poles were calculated with an assumption that each concrete pier foundation would be no larger than 6 ft. in diameter, for a permanent impact area of 29 sq. ft. for each of the new pier foundation poles.

Road Modifications

The Project design includes the permanent modification of existing access roads at four pole locations (Z81100, Z81098, Z81097, and P204016S) estimated to each include an approximately 30-foot long by five-foot wide impact area at each pole. Therefore, up to 600 sq. ft. of permanent impacts will occur as a result of minor modifications to existing access roads based on approximately 150 sq. ft. of permanent impacts at each location.

7.1.2 Temporary Impacts

Temporary impacts for each of the proposed replacement steel pole types are described below. In general, temporary impact areas were evaluated based on anticipated geometric anticipated work spaces around each proposed work location. Construction work spaces are dynamic in nature and may require minor modifications during the construction phase of the Project in order to facilitate worker safety and avoid impacts to natural resources, including sensitive habitats such as vernal pools. Therefore, the

proposed temporary impact areas below are estimated based on "best information available," and may shift or be modified in accordance with *SDG&E NCCP Operational Protocols,* within the existing Project scope of work. Final Project-related impacts will be calculated during the PCR and mitigation for impacts will be applied according to ratios described in Table 7.4 of SDG&E's NCCP and the SDG&E Low-effect HCP for QCB.

Light-Duty and Heavy-Duty Direct Embedded Steel Poles

The anticipated temporary impact area for installation of directly-embedded steel poles was calculated with an assumption that each location would require a 10-foot radius around the pole for a designated temporary work area, resulting in an approximately 314 sq. ft. work area. The temporary work space does not include the permanent impacts, therefore resulting in the calculated 301 sq. ft. (light duty), 307 sq.ft. (H2 light duty) and 300 sq. ft. (heavy duty) of temporary impacts for directly embedded steel poles.

Micropile Foundations Steel Pole

The anticipated temporary impact area for installation of micropile foundation steel poles was calculated with an assumption that each location would require a 20-foot radius around the pole for a designated temporary work area, resulting in an approximately 1,285 sq. ft. work area, and an average permanent impact area of 29 sq. ft. for the steel cap plate, resulting in 1,256 sq. ft. of total temporary impacts for the new micropile foundation steel pole locations.

Pier Foundation Steel Poles

The anticipated temporary impact area for installation of pier foundation poles was calculated with the assumption that crews will use a temporary work area of approximately 75 ft. by 75 ft. for a temporary work area of approximately 5,660 sq. ft. A 35 sq. ft. permanent impact area was subtracted from the 5,660 sq. ft. of temporary work area, resulting in 5,625 sq. ft. of total temporary impacts for each new concrete pier foundation pole site. An enlarged work area is required for concrete pier foundation poles due to the wider base associated with the pole structure, as well as the drilling platform and associated equipment required to complete construction. These temporary work areas will be designed on a site-by-site basis in order to minimize impacts to sensitive vegetation types.

Staging Yards, Turnaround Areas, Stringing Site Impacts

The Project will require use of approximately 28 stringing sites that will temporarily impact approximately 112,260 sq. ft. (2.58 acres) of habitat. Vehicles, equipment, and personnel will remain within the SDG&E ROW, existing paved or unpaved access roads, or previously disturbed areas to the extent possible.

The use of two staging yards will result in up to 435,600 sq. ft. (10 acres) of temporary impacts, where Main Street Staging Yard will result in approximately 261, 360 sq. ft. (6 acres) and Otay Staging Yard will result in approximately 174,240 sq. ft. (4 acres) of temporary impacts.

The use of 10 designated turnaround areas for large vehicles and equipment to safely turnaround for operations within access roads and work areas will result in approximately 21,046 sq. ft. of temporary impacts.

Temporary Work Areas for Existing Wood Pole Removed from Service and Overhead Work

Approximately 18 poles will be completely removed from service. Approximately four poles will be accessed for overhead work only. The temporary work area for the removal of the wood pole locations and poles required to have overhead work only is expected to be no greater than 34 and 314 sq. ft. per location.

Guard Structures

Approximately two guard structures will be utilized during construction at where the TL crosses the public road, Heritage Road. Two wooden poles will be erected at the junction of where Heritage Road intersects thea alignment. Total temporary impacts as a result of the use of these temporary guard structures will result in approximately 144 sq. ft. of temporary impacts.

Underground Distribution Line

Approximately four locations will have impacts associated with the installation of existing distribution lines underground. Impacts associated with trenching and placement of distribution lines underground will result in approximately 165 sq. ft. of temporary impacts.

Table 3: Anticipated Impact Summary Table

Type of Impact		Area Impacted (sq. ft.)
Temporary	Total LE-HCP Temporary Impacts to Sensitive Vegetation Communities.[3]	100,443
	Total Temporary Impacts to Non-Sensitive Vegetation Communities.[4]	624,721
	Total Anticipated Temporary impacts	**725,164**
Permanent	Total LE-HCP Permanent Impacts to Sensitive Vegetation Communities	1,192
	Total Anticipated Permanent Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bareground, and Landscape/Ornamental communities)	1,482
	Total Anticipated Permanent Impacts	**2,674**

[3] Habitats include: Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, Grassland, Maritime Succulent Scrub, Riparian Scrub.
[4] Habitats include: Disturbed habitat and Bare Ground.

SECTION 8.0 – MITIGATION

8.1. NON-SENSITIVE HABITATS

Per Table 7.4 of SDG&E's Subregional NCCP, no mitigation is required for permanent or temporary impacts to non-sensitive habitat communities, which include Agriculture, Bare Ground, Landscape/Ornamental, and Disturbed areas. Therefore, no mitigation is required for 1,482 of permanent impacts and 624,721 sq. ft. of temporary impacts to these habitat types.

8.2. SENSITIVE HABITATS

The following sensitive habitat types are anticipated to have project-related impacts: Chaparral, Coastal Sage Scrub, Grassland, Riparian Scrub, and Maritime Succulent Scrub. Mitigation requirements per Table 7.4 of SDG&E's Subregional NCCP differ based on if the impacts are within or outside of a defined Preserve area.

8.2.1 Preserve Areas

The following mitigation determinations are based on Table 7.4 of SDG&E's Subregional NCCP for Project sites located within the San Diego County MSCP; where Preserve boundaries (mapped areas) have been established.

The following 86 pole locations on the TL 649 Project occur within a designated Preserve. Z188714 (Location 1) east to Z183072 (Location 10), Z188725 (Location 14), Z183625 (Location 16), Z188727 (Location 18) east to Z81118 (Location 21), Z82224 (Location 39) east to Z81969 (Location 46), Z81074 (Location 53), Z81067 (Location 56), and Z81063 (Location 59) east and south to Z31751 (Location 109). In addition, the following Project support sites are located within a designated Preserve: Main Street Staging Yard, Stringing Site 2, Stringing Site 3, Stringing Site 7, Stringing Site 14, Stringing Site 15, Stringing Site 18 east to Stringing Site 27, Turnaround 1, Turnaround 2, Turnaround 8 east to 10, Road Modification 4, and Pulling Site 1.

Permanent and temporary impacts to sensitive habitat types associated with replacement of these pole locations will be mitigated for according to ratios described in Table 7.4 of SDG&E's Subregional NCCP for impacts occurring within a Preserve for the maintenance of existing facilities. Permanent and temporary impacts to sensitive habitat located outside of a defined Preserve are not mitigated for per Table 7.4 of SDG&E's Subregional NCCP. Actual Project related impacts will be assessed in a post-construction analysis and will be adjusted once the Project is completed. See Table 4 below for a breakdown of impact type and associated mitigation.

A total of 83,485 sq. ft. of Project impacts (681 sq. ft. permanent and 82,804 sq. ft. temporary) to sensitive habitats will occur within Preserve areas. SDG&E proposes to withdraw credit from the SDG&E mitigation bank for permanent impacts to sensitive vegetation communities located within Preserve areas at a ratio of 2:1 for a total of 1,362 sq. ft. of mitigation credit drawdown.

Per Table 7.4 of SDG&E's Subregional NCCP, temporary impacts of less than 500 sq. ft. per site to sensitive habitats types within a Preserve do not require credit drawdown. Per Table 7.4 (a) of the NCCP, temporary impacts are mitigated through basic site remediation, which may include native hydroseed for erosion control. No additional mitigation is proposed for 1,433 sq. ft. of temporary impacts to sensitive habitat

types located within Preserve areas in which each site is anticipated to have less than 500 sq. ft. of temporary impacts.

Temporary impacts to sensitive vegetation communities located within Preserve areas with impacts ranging from 500 to 1,000 sq. ft. per site will be addressed through credit withdrawal at a ratio of 1:1, resulting in a total of 632 sq. ft. of credit drawdown.

In addition to the above credit drawdown, SDG&E proposes to include 80,739 sq. ft. of anticipated temporary impacts to sensitive habitats located within Preserve areas in the SDG&E Enhancement and Monitoring Program. It is anticipated that 52,877 sq. ft. of the above mentioned temporary impacts will be mitigated through active site enhancement, and the remainder (27,862 sq. ft.) of the temporary impacts is expected to recover on its own and will be mitigated through monitoring of the impacted habitat.

The Enhancement and Monitoring Program consists of two components: the active enhancement of areas containing sensitive vegetation located within Preserve areas that are temporarily impacted by Project-related activities, and the monitoring of areas containing sensitive vegetation located within Preserve areas that are temporarily impacted by Project-related activities which are expected to recover on their own. Habitat that is expected to recover on its own usually consists of grassland, in which the majority of species are non-native in origin, but may also include sparse or immature scrub communities. SDG&E does not actively enhance non-native vegetation because non-native vegetation is generally considered resilient enough to completely regenerate to pre-activity levels without active enhancement measures. As a result, SDG&E will monitor these areas to determine whether or not they meet success criteria, as defined by guidelines set forth by the NCCP. If success criteria for both enhancement and monitoring areas are not met after 3 years, SDG&E proposes to withdraw the appropriate amount of credit for these areas from the SDG&E mitigation bank at a 1:1 ratio.

8.2.2 Outside of Preserve Areas

In accordance with Table 7.4 of SDG&E's Subregional NCCP, no mitigation is required for impacts outside of SDG&E's defined Preserve area. No additional mitigation is required for 511 sq. ft. of permanent impacts and 17,639 sq. ft. of temporary impacts to sensitive habitat types outside of the Preserve.

8.3. SDG&E LOW-EFFECT HCP FOR QCB

A QCB focused survey was conducted in 2018 and found no QCB within the Project area. A total of 2,349 sq. ft. of permanent impacts and 417,958 sq. ft. of temporary impacts are anticipated to occur within the SDG&E QCB HCP Mapped area. Pursuant to SDG&E's Low-effect HCP for QCB, suitable habitat within the Project Survey Area was assumed unoccupied after the 2018 surveys. Of the total permanent impacts within the QCB HCP Mapped area, 529 sq. ft. was assumed unoccupied based on the presence of suitable habitat and no observed QCB larva or adults in 2018. Therefore, SDG&E proposes to mitigate for 529 sq. ft. of permanent impacts to QCB Suitable Unoccupied habitat located within the QCB HCP area at a ratio of 1:1 for a total of 529 sq. ft.

Of the total temporary impacts within the QCB HCP Mapped Area, 380,140 sq. ft. lacked suitable habitat. Approximately 37,818 sq. ft. was assumed unoccupied based on habitat suitability and the outcome of the 2018 QCB survey. SDG&E proposes to mitigate for 37,578 sq. ft. of temporary impacts to QCB Suitable unoccupied habitat located within the HCP area at a ratio of 1:1 for a total of 37,578 sq. ft.

No mitigation is required for QCB unsuitable habitat within the QCB HCP Mapped area; therefore, no mitigation is required for 1,820 sq. ft. of permanent and 380,140 sq. ft. of temporary impacts to QCB unsuitable habitat.

8.4. MITIGATION SUMMARY

In summary, SDG&E proposes to drawdown 1,994 sq. ft. of credit from the SDG&E mitigation bank to mitigate for temporary and permanent impacts to sensitive habitat types located within a Preserve area due to Project-related activities. In addition, temporary impacts to 80,739 sq. ft. of sensitive habitat types located within a Preserve area will be mitigated through the SDG&E Enhancement and Monitoring Program. Mitigation for temporary and permanent impacts occurring within SDG&E's QCB HCP will include a total of 38,107 sq. ft. of credit withdraw. Table 4 includes a summary of all mitigation proposed for the Project.

Table 4. Mitigation Summary Table

Type of Impact	Habitat Category	Mitigation Type	Area Impacted (Square Feet)	Mitigation Ratio	Total Mitigation (Square Feet)
Permanent	Sensitive[5]	None	511	N/A	N/A
		Credit Drawdown	681	2:1	1,362
	Non-Sensitive[6]	N/A[7]	1,482	N/A	N/A
	QCB	Unsuitable	1,820	N/A	N/A
		Suitable-Unoccupied	529	1:1	529
Temporary	Sensitive	None Required	19,072	N/A	N/A
		Credit Drawdown	632	1:1	632
		Enhancement	52,877	1:1	52,877
		Monitoring	27,862	1:1	27,862
	Non-Sensitive	N/A	624,721	N/A	N/A
	QCB	Unsuitable	380,140	N/A	N/A
		Suitable-Unoccupied	37,818	1:1	37,818

[5] Habitat communities within this category include: Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, Grassland, and Maritime Succulent Scrub.
[6] Habitat communities within this category include: Disturbed, Bare Ground, and Landscape/ornamental vegetation.
[7] Per Table 7.4 within the SDG&E NCCP, non-sensitive habitat does not require mitigation.

SECTION 9.0 – REFERENCES

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APPENDIX A – LOCATION PHOTOGRAPHS

Photograph 1.

Location 1: pole **Z188714** in **bare ground**.

Photo taken facing east.

Photograph 2.

Location 2: pole **Z188715** in **bare ground.**

Photo taken facing west**.**

Photograph 3.

Location 3: pole **Z188716** in **disturbed** habitat.

Photo taken facing east.

Photograph 4.

Location 4: pole **Z188717** in **disturbed** habitat.

Photo taken facing south.

Photograph 5.

Location 5: pole **Z188718** in **disturbed** habitat**.**

Photo taken facing southeast.

Photograph 6.

Location 6: pole **Z188719** in **disturbed** habitat.

Photo taken facing east.

Photograph 7.

Location 7: pole **Z188720** in **Grassland** habitat.

Photo taken facing east.

Photograph 8.

Location 8: pole **Z188721** in **grassland** habitat.

Photo taken facing northwest.

Photograph 9.

Location 9: pole **Z188722** in **disturbed** habitat.

Photo taken facing northwest.

Photograph 10.

Location 10: pole **Z183072** in **coastal sage scrub** habitat.

Photo taken facing southeast**.**

Photograph 11.

Location 11: pole **Z186082** in **disturbed** habitat.

Photo taken facing southeast.

Photograph 12. Location 12: pole **Z188723** in **grassland** habitat.

Photo taken facing southeast.

Photograph 13. Location 13: pole **Z188724** in **grassland** habitat.

Photo taken facing east.

Photograph 14.

Location 13A pole **P204009S** in **grassland** habitat.

Photo taken facing northeast.

Photograph 15.

Location 14: pole **Z188725** in **grassland** habitat.

Photo taken facing south.

Photograph 16.

Location 15: pole **Z183266** in **disturbed** habitat.

Photo taken facing east.

Photograph 17.

Location 16: pole **Z183265** in **grassland** habitat.

Photo taken facing east.

Photograph 18.

Location 17: pole **Z188726** in **disturbed** habitat.

Photo taken facing southeast.

Photograph 19.

Location 18: pole **Z188727** in **bare ground**.

Photo taken facing southeast.

Photograph 20.

Location 18.1: pole **P188917** in **bare ground**.

Photo taken facing south.

Photograph 21.

Location 18.2: pole **P181964** in **disturbed** habitat.

Photo taken facing northeast.

Photograph 22.

Location 18.3: **P81123** in **bare ground** and P89878 in background.

Photo taken facing north.

Photograph 23.

Location 18.3B: new stub pole **PXXXS** in **bare ground**.

Photo taken facing northeast.

Photograph 24.

Location 18.31: removal of P89878 in **disturbed habitat**.

Photo taken facing north.

Photograph 25.

Location 18.4: pole **P81124** in **bare ground**.

Photo taken facing northwest.

Photograph 26.

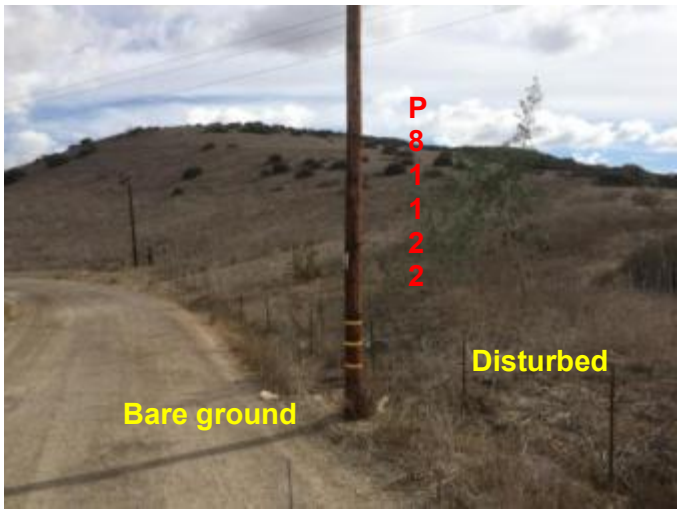
Location 18.5: pole **P100309** in **bare ground**.

Photo taken facing northwest.

Photograph 27.

Location 19: pole **P81121** in **grassland habitat and bare ground**.

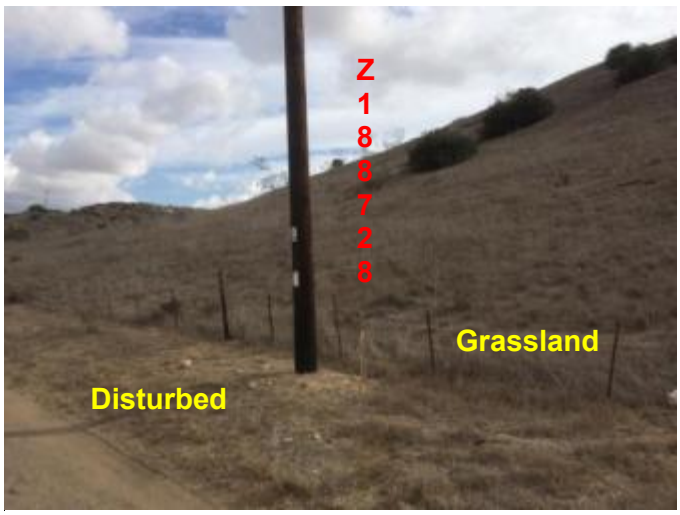
Photo taken facing southeast.



Photograph 28.

Location 19.1: pole **P81122** in **bare ground** and **disturbed** habitat.

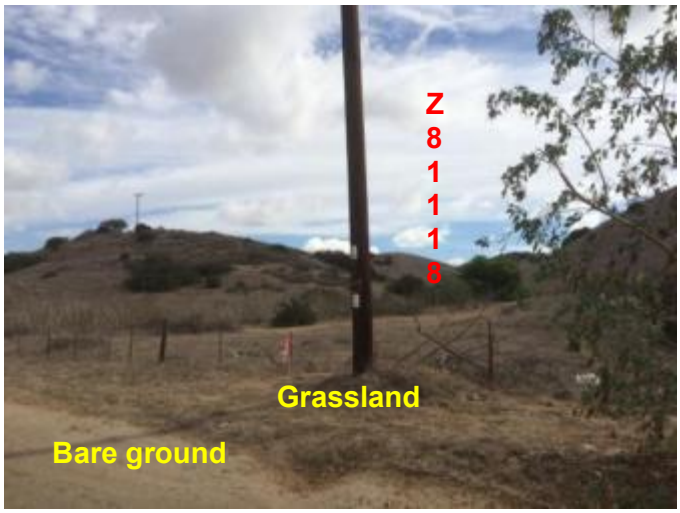
Photo taken facing southeast.



Photograph 29.

Location 20: pole **Z188728** in **grassland**.

Photo taken facing southeast.



Photograph 30.

Location 21: pole **Z81118** in **grassland habitat and bare ground**.

Photo taken facing southeast.

Photograph 31.

Location 22: pole **Z81117** in **bare ground**.

Photo taken facing east.

Photograph 32.

Location 22C: pole **P209711S** in **disturbed** habitat.

Photo taken facing east.

Photograph 33.

Location 23: pole **Z81116** in **bare ground** habitat.

Photo taken facing east.

Photograph 34.

Location 23 D: pole **P204010S** in **disturbed** habitat.

Photo taken facing east.

Photograph 35.

Location 23.2: location of new pole (red arrow) **P259680** in **disturbed** habitat.

Photo taken facing northwest.

Photograph 36.

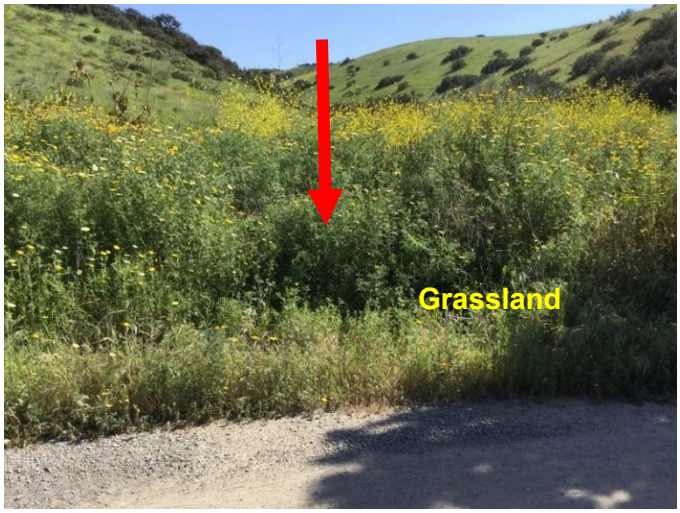
Location 24: pole **Z81114** in **grassland** habitat and bare ground.

Photo taken facing southeast.

Photograph 37.

Location 25 RFS Site: pole **P81113** in **grassland** habitat.

Photo taken facing southeast.



Photograph 38.

Location 25 New Site: pole **P81113** in **grassland** habitat.

Photo taken facing south.

Photograph 39.

Location 25.1: pole **P182005** in **disturbed** habitat.

Photo taken facing north**.**

Photograph 40.

Location 26: pole **Z81112** in **landscape** habitat.

Photo taken facing southeast.

Photograph 41.

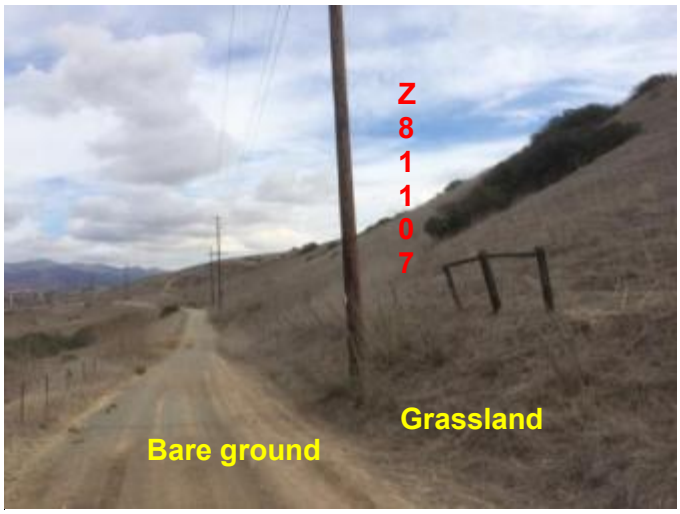
Location 27: pole **Z81110** in **disturbed** habitat.

Photo taken facing east.

Photograph 42.

Location 28: pole **Z81109** in **grassland** habitat and bare ground.

Photo taken facing southeast.



Photograph 43.

Location 29: pole **Z81107** in **grassland** habitat and bare ground.

Photo taken facing east.

Photograph 44.

Location 29 E: pole **P86238S** in **grassland** habitat.

Photo taken facing east.

Photograph 45.

Location 30: pole **Z81105** in **grassland** habitat and bare ground.

Photo taken facing southeast.

Photograph 46.

Location 31: pole **Z81104** in **grassland** habitat and bare ground.

Photo taken facing southeast.

Photograph 47.

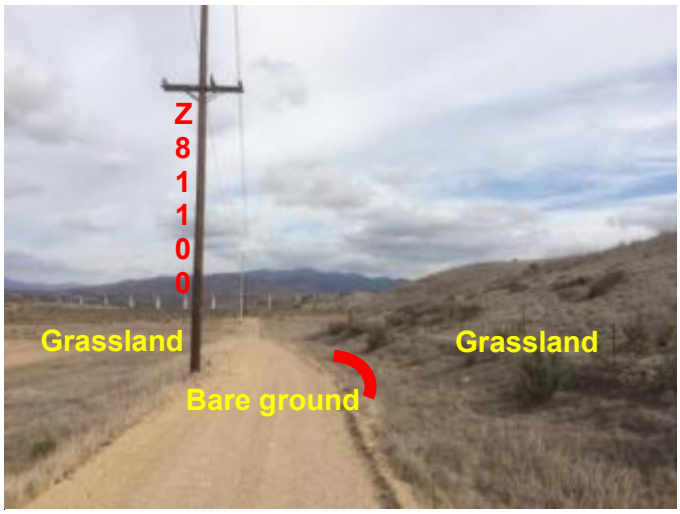
Location 32: pole **Z81102** in **grassland** habitat and **disturbed** habitat.

Photo taken facing east.

Photograph 48.

Location 33: pole **Z81101** in **grassland** habitat and bare ground.

Photo taken facing southwest.



Photograph 49.

Location 34: pole **Z81100** in **bare ground and grassland** with **Access Road Modification #1**.

Photo taken facing east.

Photograph 50.

Location 35: pole **Z81098** in **bare ground** with **Access Road Modification #2.**

Photo taken facing east.

Photograph 51.

Location 36: pole **Z81097** in **bare ground** with **Access Road Modification #3.**

Photo taken facing east.

Photograph 52.

Location 37 and 37.1: pole **Z81982** in **disturbed** habitat and **bare ground** and **unnamed stub** (red arrow) pole installation within grassland.

Photo taken facing east.

Photograph 53.

Location 38: pole **Z81980** in **disturbed habitat** and **bare ground**.

Photo taken facing northwest.

Photograph 54.

Location 39: pole **Z82224** in **coastal sage scrub** habitat.

Photo taken facing southeast.

Photograph 55.

Location 40: pole **Z81978** in **coastal sage scrub** habitat and bare ground.

Photo taken facing east.

Photograph 56.

Location 41: pole **Z81976** in **coastal sage scrub** habitat and bare ground.

Photo taken facing east.

Photograph 57.

Location 42: pole **Z81975** in **coastal sage scrub** habitat.

Photo taken facing southwest.

Photograph 58.

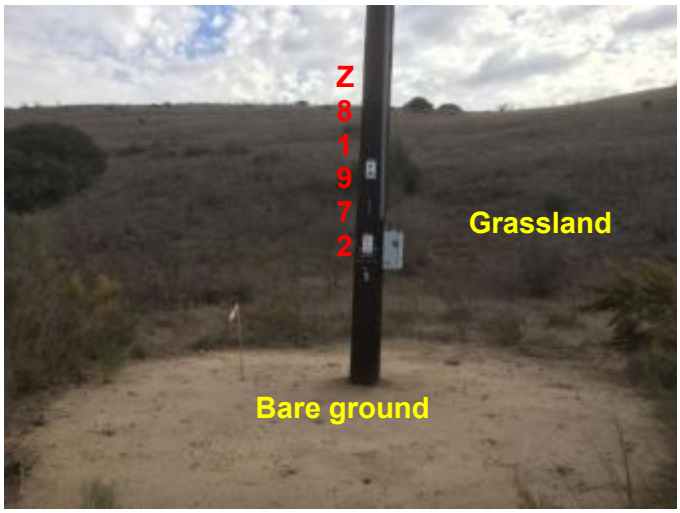
Location 43: pole **Z81973** in **bare ground**.

Photo taken facing south.

Photograph 59.

Location 43 F: stub pole **P229278S** in **grassland** habitat.

Photo taken facing east.



Photograph 60.

Location 44: pole **Z81972** in **bare ground** and **grassland**.

Photo taken facing south.

Photograph 61.

Location 45: pole **Z81971** in **bare ground and grassland**.

Photo taken facing south.

Photograph 62.

Location 46: pole **Z81969** in **bare ground and grassland**.

Photo taken facing southwest.

Photograph 63.

Location 47: pole **Z81081** in **bare ground** and **grassland**.

Photo taken facing east.

Photograph 64.

Location 48: pole **Z81079** in **bare ground and grassland**.

Photo taken facing northeast.

Photograph 65.

Location 49: pole **Z81078** in **bare ground and grassland**.

Photo taken facing east.

Photograph 66.

Location 50: pole **Z118863** in **bare ground and grassland**.

Photo taken facing north.

Photograph 67.

Location 51: pole **Z118864** in **disturbed, bare ground, and grassland habitat**.

Photo taken facing east.

Photograph 68.

Location 50: pole **Z118863** in **bare ground and grassland**.

Photo taken facing north.

Photograph 69.

Location 52: pole **P204534** in **bare ground**.

Photo taken facing north.

Photograph 70.

Location 53: pole **Z81074** in **grassland habitat and bare ground**.

Photo taken facing east.

Photograph 71.

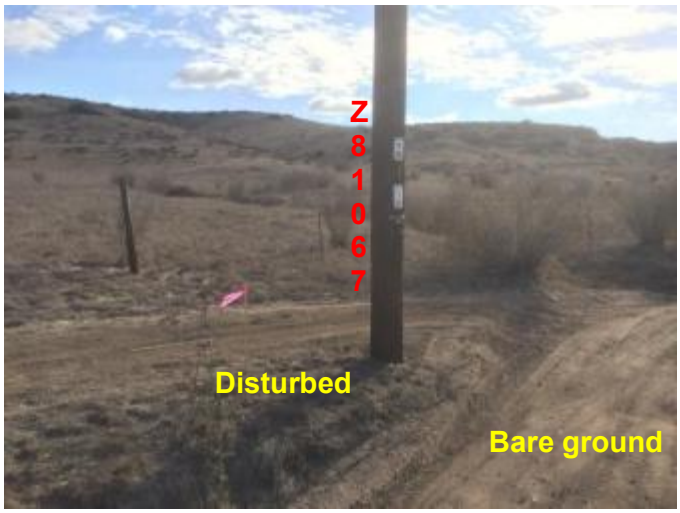
Location 54: pole **Z81072** in **bare ground and grassland habitat**.

Photo taken facing northeast.

Photograph 72.

Location 55: pole **Z81069** in **bare ground** and **grassland habitat**.

Photo taken facing east.



Photograph 73.

Location 56: pole **Z81067** in **disturbed** habitat and bare ground.

Photo taken facing south.

Photograph 74.

Location 57: pole **Z81066** in **grassland habitat**.

Photo taken facing southeast.

Photograph 75.

Location 58: pole **Z81064** in **maritime succulent scrub habitat and bare ground**.

Photo taken facing east.

Photograph 76.

Location 59: pole **Z81063** in **grassland habitat**.

Photo taken facing north.

Photograph 77.

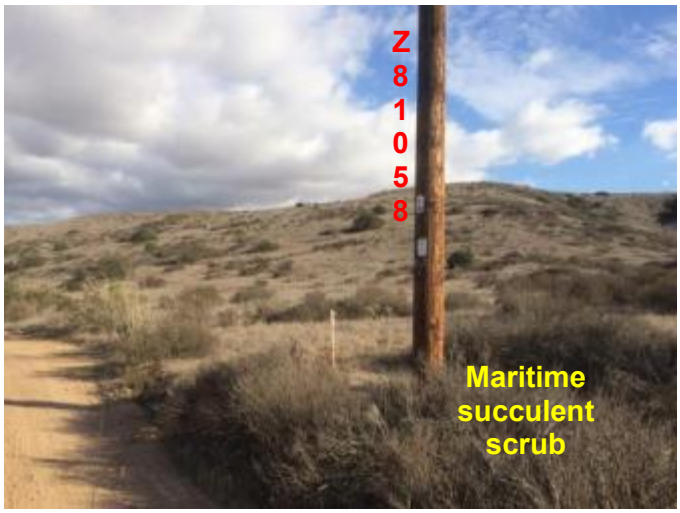
Location 60: pole **Z81061** in **grassland** and **bare ground**.

Photo taken facing south.

Photograph 78.

Location 61: pole **Z81060** in **grassland habitat and bare ground.**

Photo taken facing southeast.



Photograph 79.

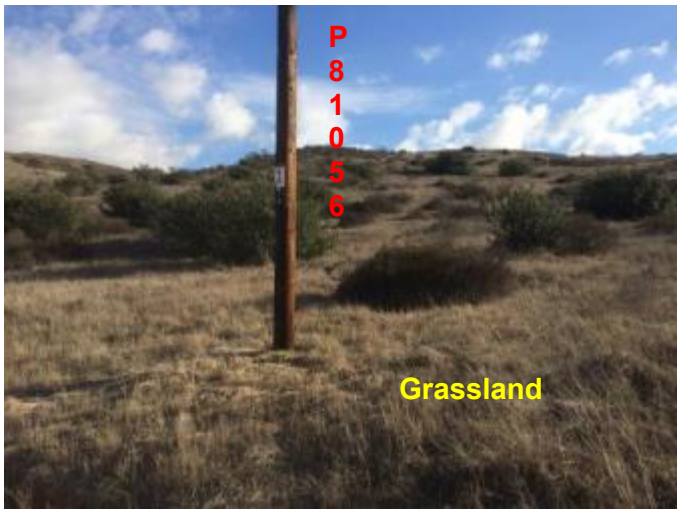
Location 62: pole **Z81058** in **maritime succulent scrub and bare ground**.

Photo taken facing east.

Photograph 80.

Location 63: pole **Z81057** in **maritime succulent scrub habitat and bare ground.**

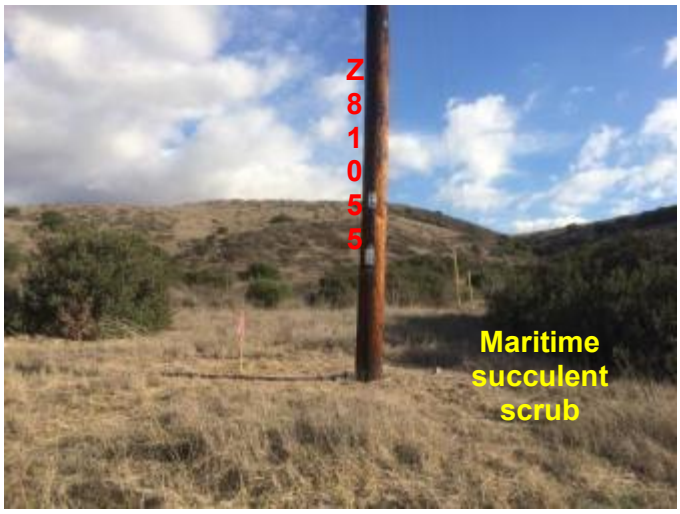
Photo taken facing east.



Photograph 81.

Location 63.1: pole **P81056** in **grassland habitat**.

Photo taken facing south.



Photograph 82.

Location 64: pole **Z81055** in **maritime succulent scrub habitat**.

Photo taken facing south.

Photograph 83.

Location 65: pole **Z81053** in **maritime succulent scrub habitat and bare ground**.

Photo taken facing east.

Photograph 84.

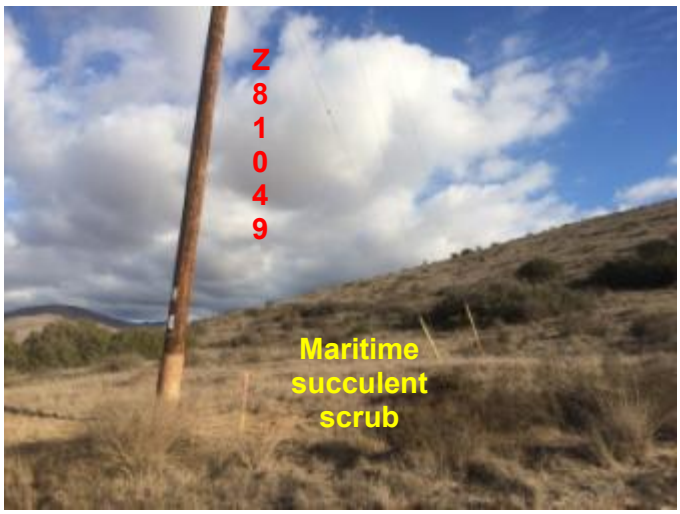
Location 66: pole **Z81052** in **coastal sage scrub/chaparral habitat**.

Photo taken facing south.

Photograph 85.

Location 67: pole **Z81051** in **grassland habitat.**

Photo taken facing east.



Photograph 86.

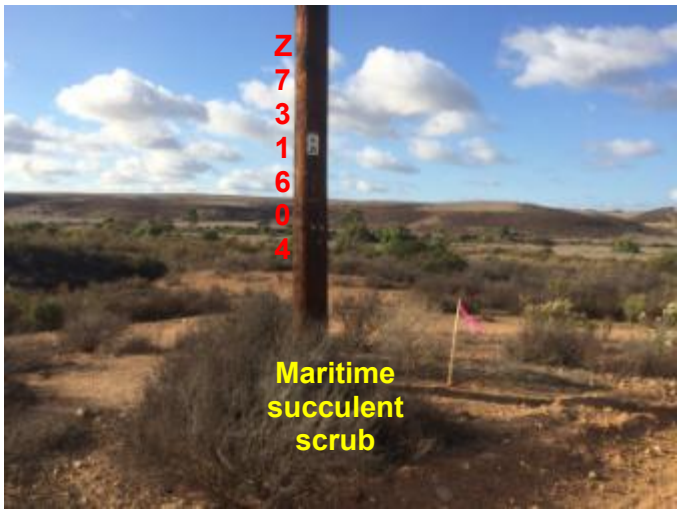
Location 68: pole **Z81049** in **maritime succulent scrub habitat**.

Photo taken facing east.

Photograph 87.

Location 69: pole **Z731392** in **grassland habitat**.

Photo taken facing east.



Photograph 88.

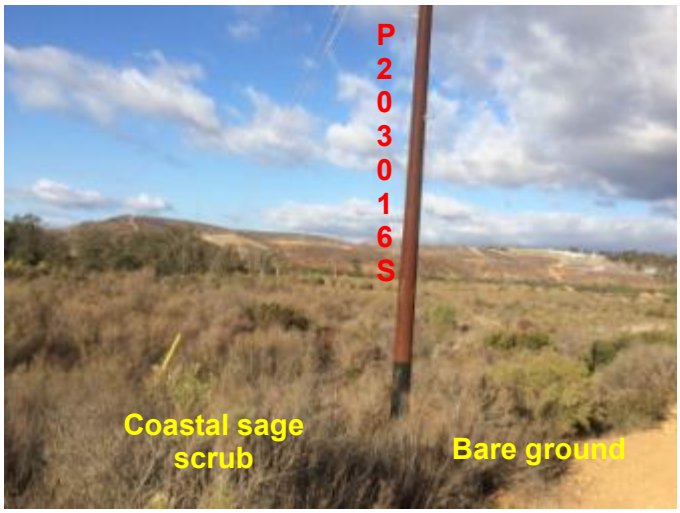
Location 70: pole **Z731604** in **maritime succulent scrub habitat and bare ground**.

Photo taken facing north.

Photograph 89.

Location 71: pole **Z81044** in **coastal sage scrub**.

Photo taken facing east.



Photograph 90.

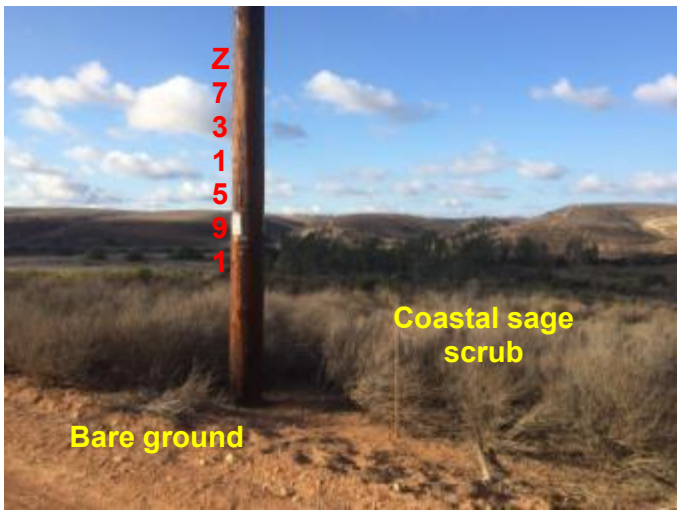
Location 71G: pole **P203016S** in **coastal sage scrub** and **bare ground**.

Photo taken facing north.

Photograph 91.

Location 72: pole **Z81968** in **coastal sage scrub**.

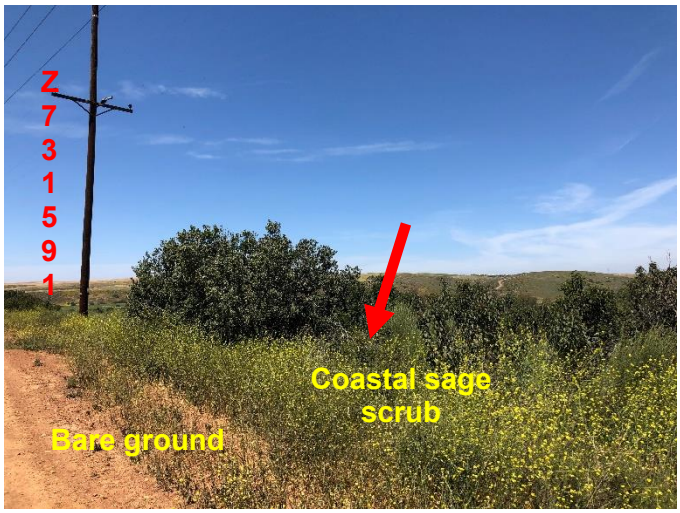
Photo taken facing north.



Photograph 92.

Location 73: pole **Z731591** in **coastal sage scrub** and **bare ground**.

Photo taken facing north.



Photograph 93.

Location 73.1: Install pole **Z253200** (red arrow) in **coastal sage scrub** and **bare ground**.

Photo taken facing north.

Photograph 94.

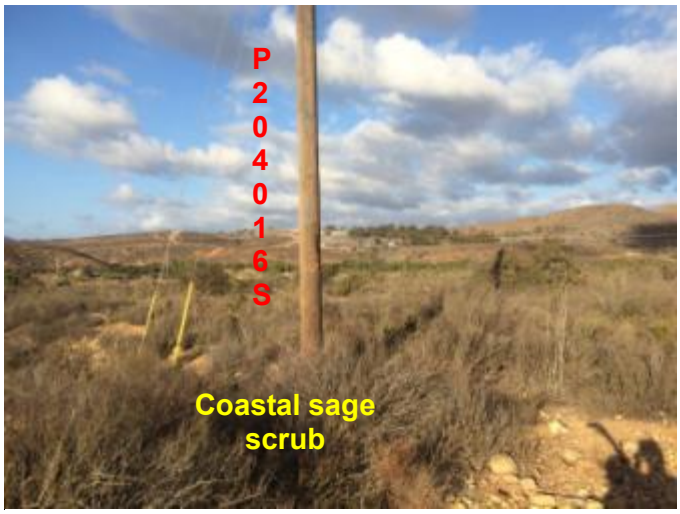
Location 74: pole **Z731391** in **bare ground.**

Photo taken facing northwest.

Photograph 95.

Location 75: pole **Z31723** in **coastal sage scrub** and **bare ground**.

Photo taken facing west.



Photograph 96.

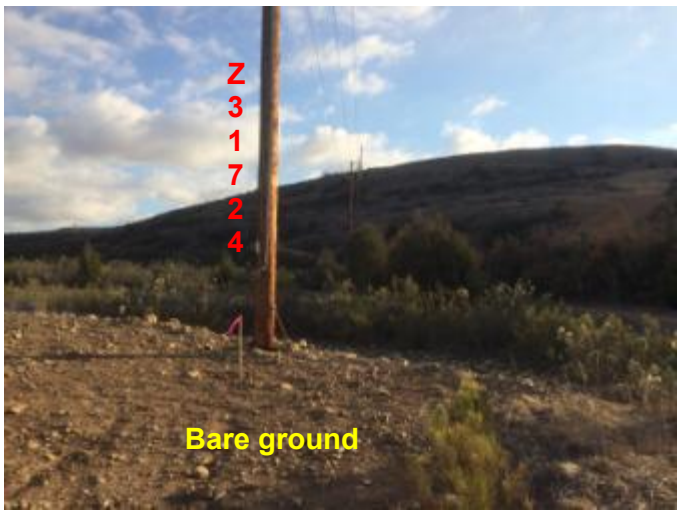
Location 75H: stub pole **P204016S** in **coastal sage scrub**.

Photo taken facing northeast.

Photograph 97.

Location 76: pole **Z188730** in **bare ground.**

Photo taken facing southeast.



Photograph 98.

Location 77: pole **Z31724** in **bare ground.**

Photo taken facing south.

Photograph 99.

Location 78: pole **Z31725** in 70% **coastal sage scrub** and 30% **bare ground**.

Photo taken facing southeast.

Photograph 100.

Location 79: pole **Z31726** in **disturbed** habitat.

Photo taken facing southeast.

Photograph 101.

Location 80: pole **Z31727** in **bare ground** and **disturbed habitat**.

Photo taken facing southeast.

Photograph 102.

Location 81: pole **Z31728** in **disturbed** and **coastal sage scrub habitat**.

Photo taken facing southeast.

Photograph 103.

Location 82: pole **Z31729** in **disturbed habitat**.

Photo taken facing east.

Photograph 104.

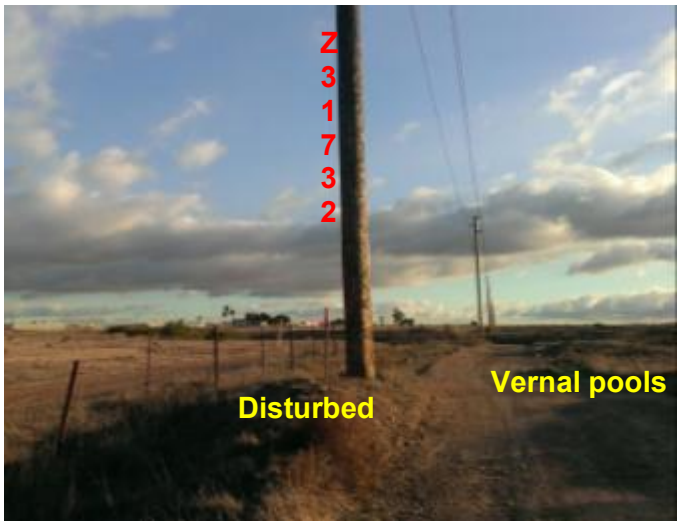
Location 83: pole **Z31730** in **disturbed** habitat.

Photo taken facing southeast.

Photograph 105.

Location 84: pole **Z31731** in **disturbed** habitat.

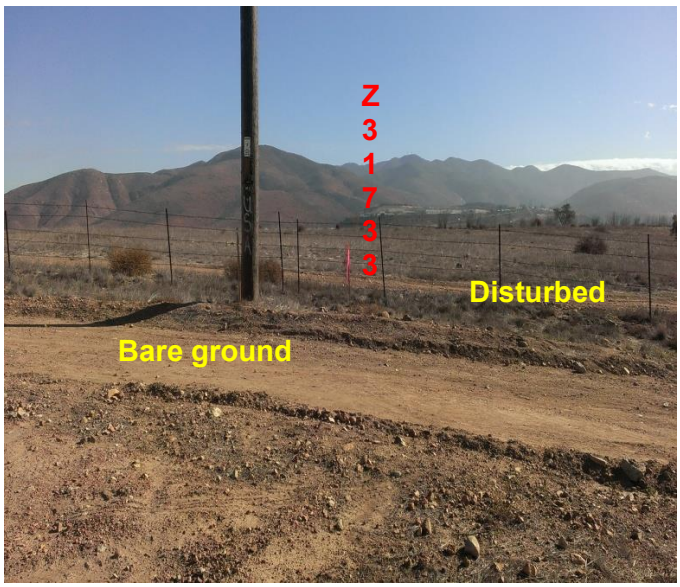
Photo taken facing south.



Photograph 106.

Location 85: pole **Z31732** in **disturbed** habitat near vernal pools.

Photo taken facing east.



Photograph 107.

Location 86: pole **Z31733** in **disturbed** habitat.

Photo taken facing northwest.

Photograph 108.

Location 87: pole **Z31734** in **disturbed** habitat and bare ground.

Photo taken facing north.

Photograph 109.

Location 88: pole **Z31735** in **disturbed** habitat and bare ground.

Photo taken facing north.

Photograph 110.

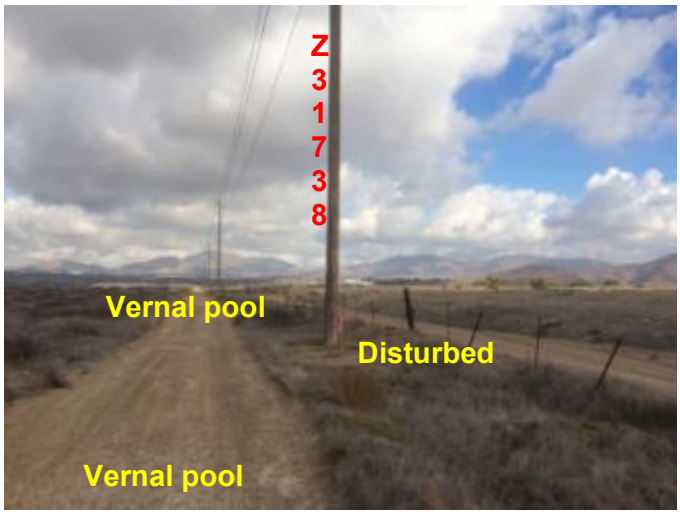
Location 89: pole **Z31736** in **disturbed** habitat near vernal pool.

Photo taken facing north.

Photograph 111.

Location 90: pole **Z31737** in **disturbed** habitat near vernal pools.

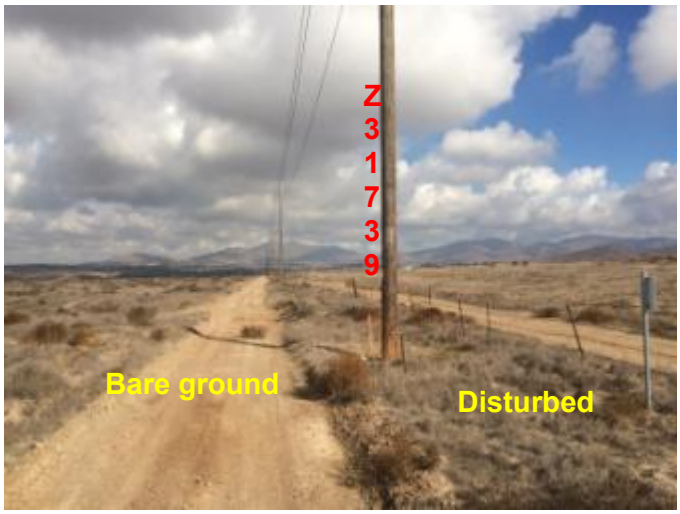
Photo taken facing north.



Photograph 112.

Location 91: pole **Z31738** in **disturbed** habitat near vernal pools.

Photo taken facing north.



Photograph 113.

Location 92: pole **Z31739** in **disturbed** habitat.

Photo taken facing north.

Photograph 114.

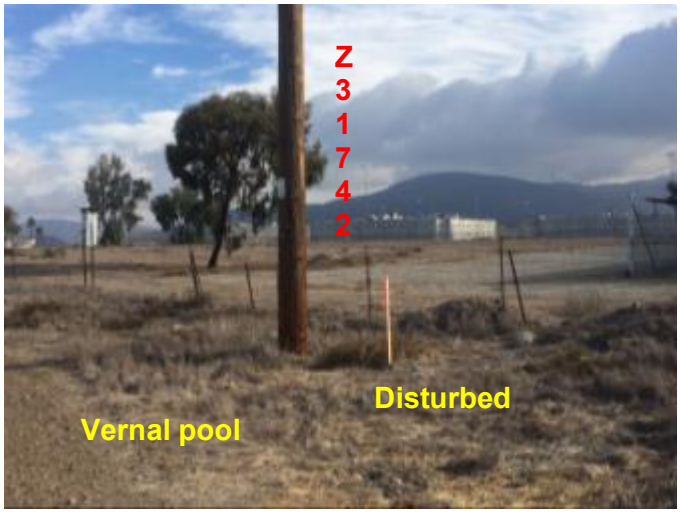
Location 93: pole **Z729583** in **disturbed** habitat adjacent to vernal pool.

Photo taken facing north.

Photograph 115.

Location 94: pole **Z31741** in **disturbed** habitat.

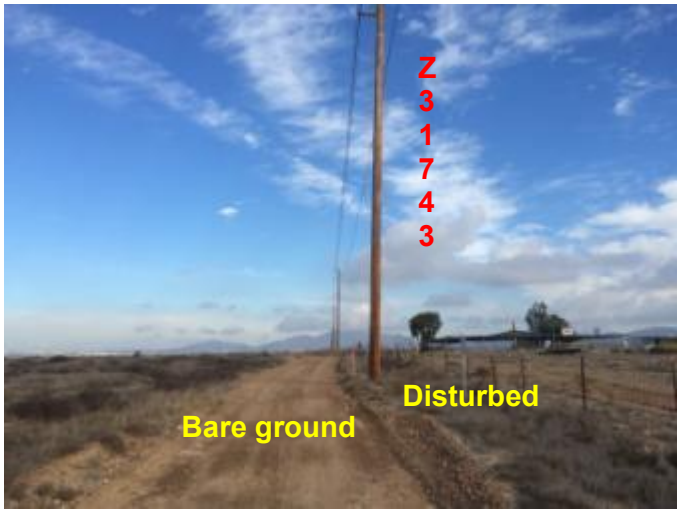
Photo taken facing north.



Photograph 116.

Location 95: pole **Z31742** in **disturbed** habitat and near vernal pool.

Photo taken facing northeast.



Photograph 117.

Location 96: pole **Z31743** in **disturbed** habitat and vernal pools.

Photo taken facing north.

Photograph 118.

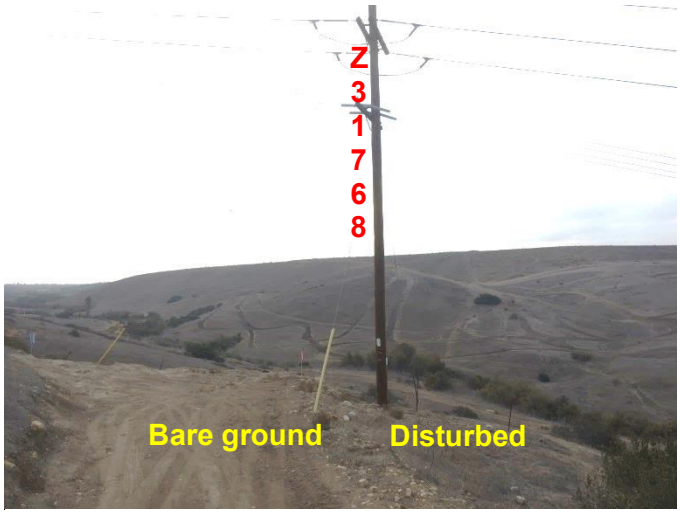
Location 97: pole **Z31744** in **bare ground, disturbed habitat, and coastal sage scrub habitat**.

Photo taken facing east.

Photograph 119.

Location 98: pole **Z31767** in **disturbed** and **coastal sage scrub habitat**.

Photo taken facing west.



Photograph 120.

Location 99: pole **Z31768** in **disturbed** habitat and **bare ground**.

Photo taken facing southeast.

Photograph 121.

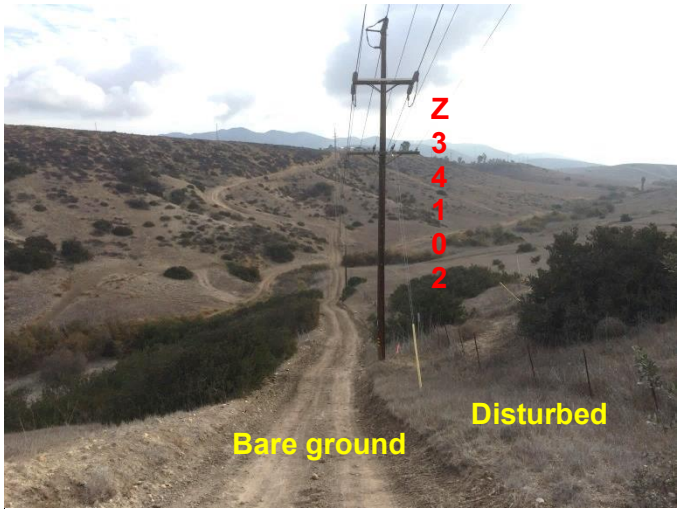
Location 100: pole **P34258** in **disturbed** habitat and bare ground.

Photo taken facing west.

Photograph 122.

Location 101: pole **P34257** in **disturbed** habitat.

Photo taken facing east.



Photograph 123.

Location 102: pole **Z34102** in **disturbed** habitat and bare ground.

Photo taken facing east.

Photograph 124.

Location 103: pole **Z31745** in **bare ground and disturbed habitat**.

Photo taken facing west.

Photograph 125.

Location 104: pole **Z31746** in **bare ground**.

Photo taken facing north.

Photograph 126.

Location 105: pole **Z31747** in **bare ground**.

Photo taken facing north.

Photograph 127.

Location 106: pole **Z31748** in **disturbed** habitat and bare ground.

Photo taken facing north.

Photograph 128.

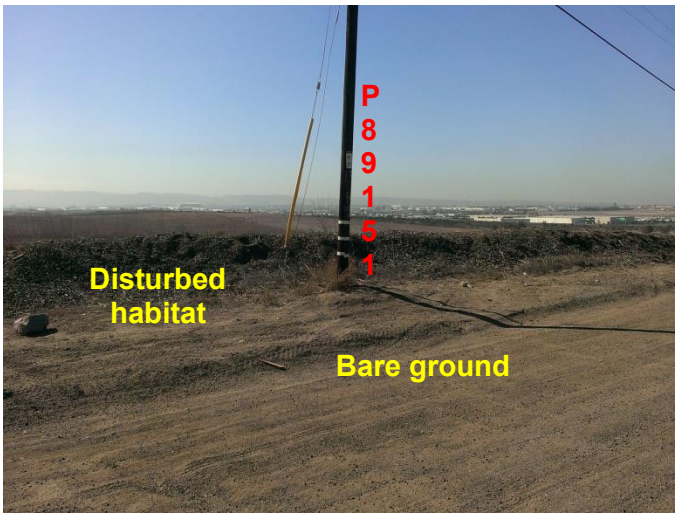
Location 107: pole **Z31749** in **disturbed** habitat and bare ground.

Photo taken facing north.

Photograph 129.

Location 108: pole **Z31750** in 80% **disturbed** habitat and 20% **bare ground**.

Photo taken facing east.



Photograph 130.

Location 108.1: pole **P89151** in **disturbed** habitat and bare ground.

Photo taken facing southwest.

Photograph 131.

Location 109: pole **Z31751** in **disturbed** habitat and bare ground.

Photo taken facing northeast.

Photograph 132.

Location 110: pole **Z31752** in **disturbed** habitat.

Photo taken facing northeast.

Photograph 133.

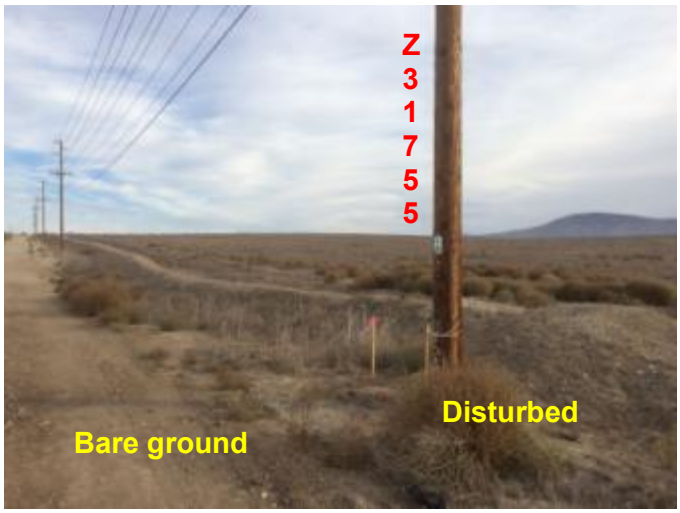
Location 111: pole **Z31753** in **disturbed** habitat and bare ground.

Photo taken facing northeast.

Photograph 134.

Location 112: pole **Z31754** in **disturbed** habitat.

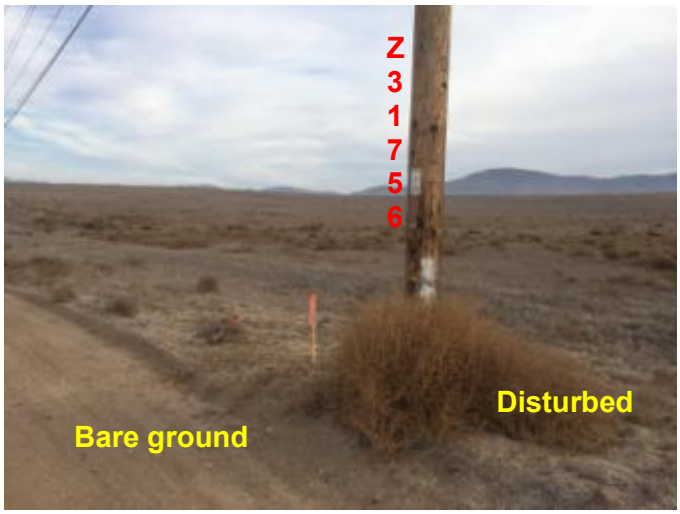
Photo taken facing northeast.



Photograph 135.

Location 113: pole **Z31755** in **disturbed** habitat and bare ground.

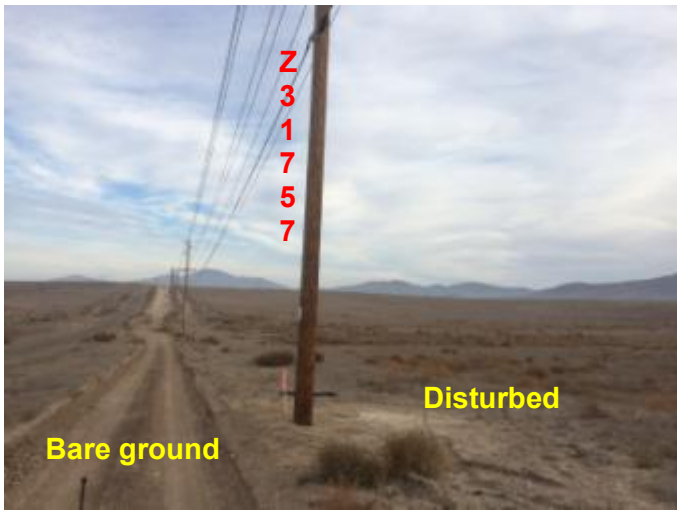
Photo taken facing northeast.



Photograph 136.

Location 114: pole **Z31756** in **disturbed** habitat and bare ground.

Photo taken facing northeast.



Photograph 137.

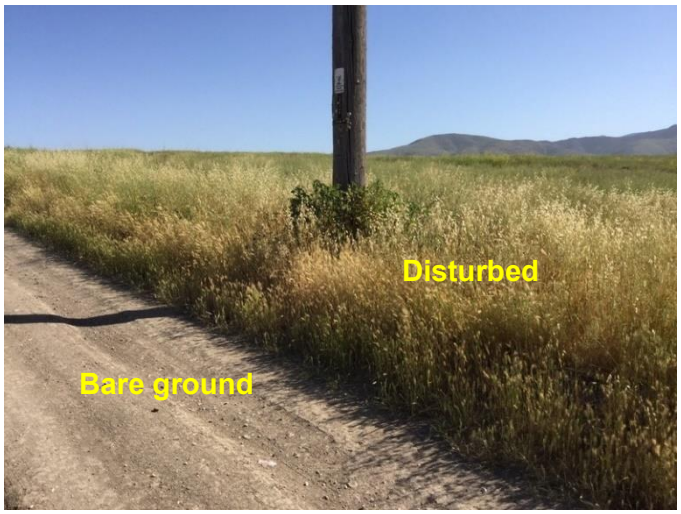
Location 115: pole **Z31757** in **bare ground and disturbed habitat**.

Photo taken facing north.

Photograph 138.

Location 116: pole **Z31758** in **disturbed** habitat and bare ground.

Photo taken facing northeast.



Photograph 139.

Location 116: pole **Z31759** in **disturbed** habitat and bare ground.

Photo taken facing northeast.

Photograph 140.

Main Street Staging Yard: proposed location of Main Street Staging Yard with **bare ground** visible.

Photo taken facing southwest.

Photograph 141.

Main Street Staging Yard: proposed location of Main Street Staging Yard with **disturbed** habitat visible in the background and low-quality **coastal sage scrub** visible in the foreground.

Photo taken facing south.

Photograph 142.

Main Street Staging Yard: proposed location of Main Street Staging Yard with low-quality **coastal sage scrub** habitat visible.

Photo taken facing southwest.

Photograph 143.

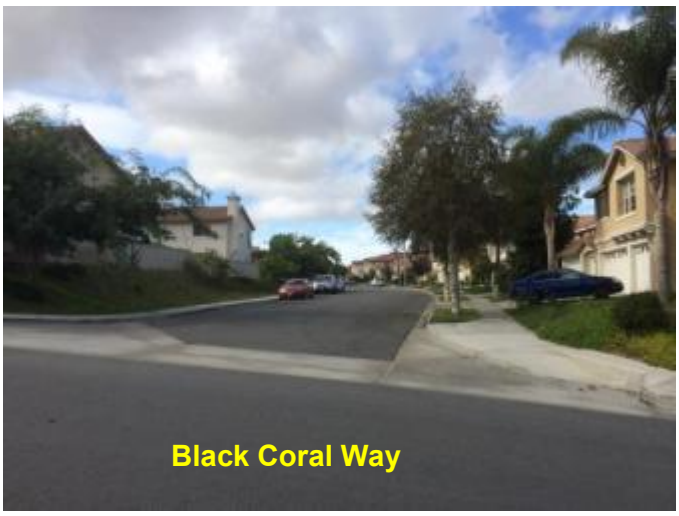
Otay Staging Yard: proposed location of Otay Staging Yard with **bare ground** visible.

Photo taken facing west.

Photograph 144.

Otay Staging Yard: proposed location Otay Staging Yard with **bare ground** visible.

Photo taken facing east.



Photograph 145.

Stringing Site 1 within **developed** land. Black Coral Way in the foreground.

Photo taken facing west.

Photograph 146.

Stringing Site 2 within **developed** land.

Photo taken facing southeast.

Photograph 147.

Stringing Site 3 within **developed** land.

Photo taken facing east.

Photograph 148.

Stringing Site 4 with **bare ground**.

Photo taken facing northwest.

Photograph 149.

Stringing Site 5 within **developed** land.

Photo taken facing north.

Photograph 150.

Stringing Site 6 with **bare ground**.

Photo taken facing southeast.

Photograph 151.

Stringing Site 7 with **bare ground.**

Photo taken facing south.

Photograph 152.

Stringing Site 8 with **bare ground**.

Photo taken facing east.

Photograph 153.

Stringing Site 9 with **bare ground**.

Photo taken facing east.

Photograph 154.

Stringing Site 10 within **bare ground**.

Photo taken facing east.

Photograph 155.

Stringing Site 11 with **bare ground**.

Photo taken facing east.

Photograph 156.

Stringing Site 12 with **bare ground**.

Photo taken facing east.

Photograph 157.

Pulling Site near Location 49 within **bare ground** and **grassland habitat**.

Photo taken facing east.

Photograph 158.

Stringing Site 13 with **bare ground**.

Photo taken facing east.

Photograph 159.

Stringing Site 14 with **bare ground**.

Photo taken facing east.

Photograph 160.

Stringing Site 15 with **bare ground**.

Photo taken facing northeast.

Photograph 161.

Stringing Site 16 with **disturbed** habitat and **bare ground**.

Photo taken facing northeast.

Photograph 162.

Stringing Site 17 with **grassland** habitat.

Photo taken facing northeast.

Photograph 163.

Stringing Site 18 with **bare ground**.

Photo taken facing northeast.

Photograph 164.

Stringing Site 19 with **bare ground**.

Photo taken facing northeast.

Photograph 165.

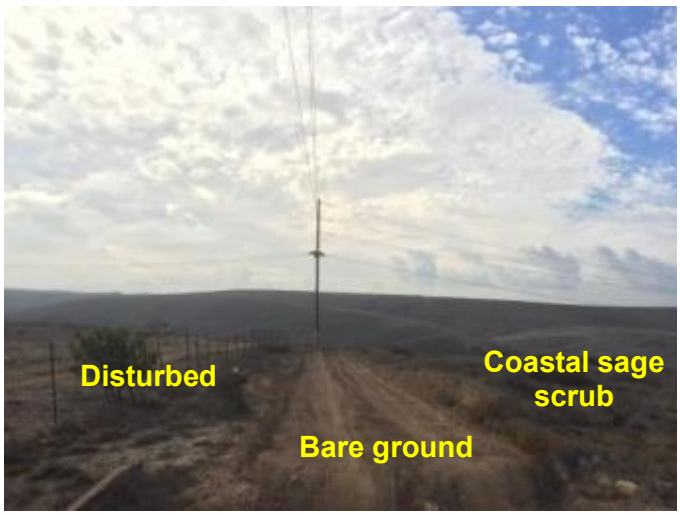
Stringing Site 20 with **coastal sage scrub** habitat and **bare ground**.

Photo taken facing east.

Photograph 166.

Stringing Site 21 with **bare ground**.

Photo taken facing east.



Photograph 167.

Stringing Site 22 with **coastal sage scrub** and **disturbed** habitats, as well as **bare ground**.

Photo taken facing south.

Photograph 168.

Stringing Site 23 with **bare ground**.

Photo taken facing east.

Photograph 169.

Stringing Site 24 with **disturbed** and **coastal sage scrub** habitat.

Photo taken facing east.

Photograph 170.

Stringing Site 25 with **bare ground** and **disturbed** habitat.

Photo taken facing northwest.

Photograph 171.

Stringing Site 26 with **bare ground** and **disturbed** habitat.

Photo taken facing north.

Photograph 172.

Stringing Site 27 with **bare ground** and **disturbed** habitat.

Photo taken facing north.

Photograph 173.

Stringing Site 28 with **bare ground** and **disturbed** habitat.

Photo taken facing north.

Photograph 174.

Turn around 1: proposed location of a vehicle turn around area in **disturbed** habitat.

Photo taken facing southeast.

Photograph 175.

Turn around 2: proposed location of a vehicle turn around area in **bare ground**.

Photo taken facing south.

Photograph 176.

Turn around 3: proposed location of a vehicle turn around area in **bare ground**.

Photo taken facing northeast.

Photograph 177.

Turn around 4: proposed location of a vehicle turn around area in **bare ground**.

Photo taken facing east.

Photograph 178.

Turn around 5: proposed location of a vehicle turn around area in **bare ground**.

Photo taken facing northeast.

Photograph 179.

Turn around 6: proposed location of a vehicle turn around area within **bare ground**.

Photo taken facing east.

Photograph 180.

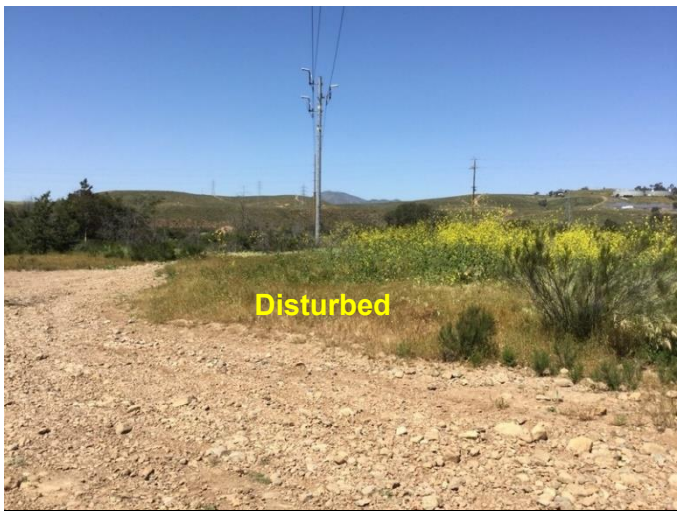
Turn around 7: proposed location of a vehicle turn around area in **bare ground**.

Photo taken facing east.

Photograph 181.

Turn around 8: proposed location of a vehicle turn around area in 50% **bare ground** and 50% **disturbed** habitat.

Photo taken facing southeast.



Photograph 182.

Turn around 9: proposed location of a vehicle turn around area in **disturbed habitat**.

Photo taken facing north.

Photograph 183.

Turn around 10: proposed location of a vehicle turn-around area in **bare ground**.

Photo taken facing south.

Photograph 184.

Guard Structure 1: proposed location of guard structure on west side of Heritage Road in **landscape/ornamental area**.

Photo taken facing west.

Photograph 185.

Guard Structure 2: proposed location of guard structure on east side of Heritage Road in **disturbed habitat**.

Photo taken facing south.

Appendix B- Site Specific Land Use/ Habitat/ Impact Mitigation Table

Site Number	Structure Number or Site Description	Preserve	Work Type	Water Feature	QCB Mapped Area	Vernal Pools	Narrow Endemic	NCCP Species	Habitat Types and Quino Checkerspot Butterfly Habitat	Permanent Impacts(Sq.ft.)	Permanent Mitigation Type	Permanent Impact Drawdown Ratio	Perm Impacts Credit Drawdown(Sq.ft.)	Temporary Impacts(Sq.ft.)	Temporary Mitigation Type	Temporary Impact Credit Drawdown(Sq.ft.)	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Site Elevation (ft)
8357.01-001	Z188714	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	314	None Required	0	32.586911	-116.974154	195
Comments:	Location 1, OH work only																		
8357.01-002	Z188715	Yes	OM	No	No	No	No	No	Bareground	13	None Required	0:1	0	151	None Required	0	32.587492	-117.021822	198
									Maritime Succulent Scrub	0	None Required	0:1	0	150	None Required	0			
Comments:	Location 2,direct bury pole																		
8357.01-003	Z188716	Yes	OM	No	No	No	No	No	Disturbed Habitat	14	None Required	0:1	0	225	None Required	0	32.587485	-117.020811	199
									Bareground	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 3, direct bury pole																		
8357.01-004	Z188717	Yes	OM	No	No	No	No	No	Disturbed Habitat	14	None Required	0:1	0	225	None Required	0	32.587466	-117.018199	195
									Bareground	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 4, direct bury pole																		
8357.01-005	Z188718	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.587459	-117.017237	180
									Disturbed Habitat	13	None Required	0:1	0	151	None Required	0			
Comments:	Location 5, direct bury pole																		
8357.01-006	Z188719	Yes	OM	No	No	No	No	No	Disturbed Habitat	13	None Required	0:1	0	226	None Required	0	32.587453	-117.016393	252
									Bareground	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 6, direct bury pole																		
8357.01-007	Z188720	Yes	OM	No	No	No	No	No	Grassland	13	Credit Drawdown	2:1	26	226	None Required	0	32.58744	-177.014639	250
									Bareground	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 7, direct bury pole																		
8357.01-008	Z1888721	Yes	OM	No	No	No	No	No	Grassland	35	Credit Drawdown	2:1	70	4500	Monitoring	4500	32.587442	-117.014084	240
									Bareground	0	None Required	0:1	0	1125	None Required	0			
Comments:	Location 8, pier foundation pole																		
8357.01-009	Z188722	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.586842	-117.013234	230
									Disturbed Habitat	13	None Required	0:1	0	150	None Required	0			
Comments:	Location 9, direct bury pole																		
8357.01-010	Z183072	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	2813	None Required	0	32.586078	-117.012178	220
									Coastal Sage Scrub	35	Credit Drawdown	2:1	70	2812	Enhancement	2812			
Comments:	Location 10, pier foundation pole																		
8357.01-011	Z186082	No	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.586032	-117.01091	200
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
Comments:	Location 11, direct bury pole																		
8357.01-012	Z188723	No	OM	No	No	No	No	No	Disturbed Habitat	0	None Required	0:1	0	150	None Required	0	32.586005	-117.009308	180
									Grassland	14	None Required	0:1	0	150	None Required	0			
Comments:	Location 12, direct bury pole																		
8357.01-013	Z188724, P204009S	No	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	2813	None Required	0	32.585991	-117.007743	180
									Grassland	35	None Required	0:1	0	2812	None Required	0			
Comments:	Location 13, pier foundation pole. Location 13A, RFS wood stub and anchor, no additional impacts for 13A workspace																		
8357.01-014	Z188725	Yes	OM	Yes	No	No	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.585737	-117.006981	185
									Grassland	13	Credit Drawdown	2:1	26	150	None Required	0			
Comments:	Location 14, direct bury pole																		
8357.01-015	Z183266	No	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	2813	None Required	0	32.585237	-117.005498	240
									Disturbed Habitat	35	None Required	0:1	0	2812	None Required	0			
Comments:	Location 15, pier foundation pole																		
8357.01-016	Z183265	Yes	OM	No	No	No	No	No	Disturbed Habitat	14	None Required	0:1	0	225	None Required	0	32.585096	-117.003808	240
									Grassland	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 16, direct bury pole																		
8357.01-017	Z188726	Yes	OM	No	No	No	No	No	Disturbed Habitat	35	None Required	0:1	0	3938	None Required	0	32.585006	-117.002345	230
									Bareground	0	None Required	0:1	0	1687	None Required	0			
Comments:	Location 17, pier foundation pole																		
8357.01-018	Z188727	Yes	OM	No	Yes	No	No	No	Bareground	35	None Required	0:1	0	5625	None Required	0	32.585215	-117.001402	230
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 18, pier foundation pole																		
8357.01-019	P188917	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	301	None Required	0	32.584967	-117.001288	220
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 18.1, direct bury pole																		
8357.01-020	P181964	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	34	None Required	0	32.525307	-117.00145	200
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 18.2, RFS wood pole																		
8357.01-021	P81123	Yes	OM	No	Yes	No	No	No	Bareground	7	None Required	0:1	0	307	None Required	0	32.585983	-117.001801	200
									QCB Unsuitable	7	None Required	0:1	0	307	None Required	0			
Comments:	Location 18.3, direct bury pole																		
8357.01-022	PXXXS	Yes	OM	No	Yes	No	No	No	Bareground	2	None Required	0:1	0	34	None Required	0	32.585983	-117.001801	195
									QCB Unsuitable	2	None Required	0:1	0	34	None Required	0			
Comments:	Location 18.3B, install stub pole PXXXS																		
8357.01-023	P89878	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	34	None Required	0	32.585983	-117.001801	195
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			

Appendix B- Site Specific Land Use/ Habitat/ Impact Mitigation Table

Comments:	Location 18.31, RFS wood pole																			
8357.01-024	P81124	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	34	None Required	0	32.586170	-117.002369	200
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 18.4, RFS wood pole																			
8357.01-025	P100309	Yes	OM	No	Yes	No	No	No	Bareground	2	None Required	0:1	0	74	None Required	0	32.586254	-117.002537	205
									QCB Unsuitable	2	None Required	0:1	0	74	None Required	0			
Comments:	Location 18.5, direct bury pole. Two UG work spaces proposed: one 2x20 foot trench [40 additional sq. ft. temp impacts] and one 4x4 foot trench [within existing work area].																			
8357.01-026	P81121	Yes	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	20	None Required	0	32.58529	-117.000624	205
									QCB Suitable Unoccupied	0	None Required	0:1	0	20	Credit Drawdown	20			
									Bareground	0	None Required	0:1	0	14	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	14	None Required	0			
Comments:	Location 19, RFS wood pole																			
8357.01-027	P81122	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	17	None Required	0	32.585515	-117.00108	208
									Disturbed Habitat	0	None Required	0:1	0	17	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 19.1, RFS wood pole																			
8357.01-028	Z188728	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	150	None Required	0	32.585372	-116.99978	210
									QCB Unsuitable	0	None Required	0:1	0	150	None Required	0			
									Grassland	14	Credit Drawdown	2:1	28	150	None Required	0			
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	150	Credit Drawdown	150			
Comments:	Location 20, direct bury pole																			
8357.01-029	Z81118	Yes	OM	No	Yes	No	No	No	Grassland	14	Credit Drawdown	2:1	28	195	None Required	0	32.585525	-116.99822	205
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	195	Credit Drawdown	195			
									Bareground	0	None Required	0:1	0	105	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	105	None Required	0			
Comments:	Location 21, direct bury pole																			
8357.01-030	P81117	No	OM	No	Yes	No	No	No	Grassland	13	None Required	0:1	0	150	None Required	0	32.585617	-116.997253	207
									Bareground	0	None Required	0:1	0	151	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 22, direct bury pole																			
8357.01-031	P209711S	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	17	None Required	0	32.58571	-116.997285	205
									Disturbed Habitat	2	None Required	0:1	0	17	None Required	0			
									QCB Unsuitable	2	None Required	0:1	0	34	None Required	0			
Comments:	Location 22C, direct bury pole																			
8357.01-032	Z81116, P204010S	No	OM	No	Yes	No	No	No	Bareground	35	None Required	0:1	0	2813	None Required	0	32.585663	-1116.996783	210
									Grassland	0	None Required	0:1	0	2812	Monitoring	2812			
									QCB Unsuitable	35	None Required	0:1	0	2813	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	2812	Credit Drawdown	2812			
Comments:	Location 23, pier foundation pole. Location 23D, RFS wood stub P204010S. No additional impacts for 23D workspace.																			
8357.01-033	P259680	No	OM	No	Yes	No	No	No	Disturbed Habitat	2	None Required	0:1	0	34	None Required	0	32.585663	-116.996783	205
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 23.2, direct bury																			
8357.01-034	Z81114	No	OM	No	Yes	No	No	No	Grassland	14	None Required	0:1	0	210	None Required	0	32.58538	-116.995298	209
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	210	Credit Drawdown	210			
									Bareground	0	None Required	0:1	0	90	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	90	None Required	0			
Comments:	Location 24, direct bury pole																			
8357.01-035	P81113 (RFS location)	No	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	9	None Required	0	32.58517	-116.994237	215
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
									Bareground	0	None Required	0:1	0	25	None Required	0			
Comments:	Location 25, RFS pole																			
8357.01-036	P81113 (New location)	No	OM	No	Yes	No	No	No	Grassland	13	None Required	0:1	0	200	None Required	0	32.58517	-116.994237	212
									QCB Unsuitable	13	None Required	0:1	0	401	None Required	0			
									Bareground	0	None Required	0:1	0	201	None Required	0			
Comments:	Location 25, direct bury pole is 45 east of existing location. Proposed 1 x 100 foot long UG trench includes 50 sq. ft. of grassland and 50 sq. ft. of bare ground.																			
8357.01-037	P182005	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	34	None Required	0	32	-116	210
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 25.1, OH work only																			
8357.01-038	Z81112	No	OM	No	Yes	No	No	No	Landscape/Ornamental	35	None Required	0:1	0	5625	None Required	0	32.585106	-116.993946	210
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 26, pier foundation pole. UG intercept conduit; 3' x 3' trench within existing work space.																			
8357.01-039	Z81110	No	OM	No	Yes	No	No	No	Disturbed Habitat	13	None Required	0:1	0	301	None Required	0	32.585148	-116.992414	210
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 27, direct bury pole																			
8357.01-040	Z81109	No	OM	No	Yes	No	No	No	Grassland	13	None Required	0:1	0	256	None Required	0	32.585185	-116.991625	211
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	256	Credit Drawdown	256			
									Bareground	0	None Required	0:1	0	45	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	45	None Required	0			
Comments:	Location 28, direct bury pole																			
8357.01-041	Z81107, P86238S	No	OM	No	Yes	No	No	No	Grassland	35	None Required	0:1	0	2813	Monitoring	2813	32.585216	-116.990605	212
									Bareground	0	None Required	0:1	0	2812	None Required	0			
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	2813	Credit Drawdown	2813			
									QCB Unsuitable	0	None Required	0:1	0	2812	None Required	0			

Appendix B- Site Specific Land Use/ Habitat/ Impact Mitigation Table

Comments:	Location 29, pier foundation pole. Location 29E, RFS wood stub P86238S. No additional impacts for RFS workspace.																			
8357.01-042	Z81105	No	OM	No	Yes	No	No	No	Grassland	13	None Required	0:1	0	240	None Required	0	32.585073	-116.989539	195
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
									Bareground	0	None Required	0:1	0	61	None Required	0			
Comments:	Location 30, direct bury, non-native grassland is QCB unsuitable.																			
8357.01-043	Z81104	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2531	None Required	0	32.584964	-116.988703	198
									Grassland	35	None Required	0:1	0	3094	None Required	0			
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	3094	Credit Drawdown	3094			
									QCB Unsuitable	0	None Required	0:1	0	2531	None Required	0			
Comments:	Location 31, pier foundation pole																			
8357.01-044	Z81102	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	181	None Required	0	32.58516	-116.987441	189
									Grassland	13	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 32, direct bury pole. Non-native grassland is QCB unsuitable.																			
8357.01-045	Z81101	No	OM	No	Yes	No	No	No	Grassland	13	None Required	0:1	0	181	None Required	0	32.585309	-116.986467	190
									QCB Unsuitable	13	None Required	0:1	0	314	None Required	0			
									Bareground	0	None Required	0:1	0	120	None Required	0			
Comments:	Location 33, direct bury pole. Non-native grassland is QCB unsuitable																			
8357.01-047	Z81100	No	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	105	None Required	0	32.585483	-116.985314	210
									Grassland	0	None Required	0:1	0	45	None Required	0			
									Disturbed Habitat	0	None Required	0:1	0	151	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 34, direct bury pole. This pole is associated with road modification #1. Non-native grassland is QCB unsuitable.																			
8357.01-048	Z81098	No	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	301	None Required	0	32.585711	-116.983822	210
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 35, direct bury pole. This pole is assocaited with access road modification #2.																			
8357.01-049	Z81097	No	OM	No	Yes	No	No	No	Bareground	29	None Required	0:1	0	1256	None Required	0	32.585861	-116.982851	211
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
Comments:	Location 36, micropile pole. This pole is assocaited with access road modification #3.																			
8357.01-050	Z81982	No	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	150	None Required	0	32.586029	-116.981768	210
									Disturbed Habitat	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 37, direct bury pole.																			
8357.01-051	Unnammed Stub	No	OM	No	Yes	No	No	No	Bareground	2	None Required	0:1	0	17	None Required	0	32.586038	-116.981713	211
									Grassland	0	None Required	0:1	0	17	None Required	0			
									QCB Unsuitable	2	None Required	0:1	0	34	None Required	0			
Comments:	Location 37.1, direct bury new stub pole. Non-native grassland is QCB unsuitable.																			
8357.01-052	Z81980	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.586234	-116.980433	215
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 38, direct bury pole																			
8357.01-053	Z82224	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	13	Credit Drawdown	2:1	26	301	None Required	0	32.586333	-116.949322	215
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	301	Credit Drawdown	301			
Comments:	Location 39, direct bury pole.																			
8357.01-054	Z81978	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	13	Credit Drawdown	2:1	26	240	None Required	0	32.586436	-116.978187	215
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	240	Credit Drawdown	240			
									Bareground	0	None Required	0:1	0	61	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	61	None Required	0			
Comments:	Location 40, direct bury pole.																			
8357.01-055	Z81976	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	13	Credit Drawdown	2:1	26	240	None Required	0	32.586543	-116.977017	215
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	240	Credit Drawdown	240			
									Bareground	0	None Required	0:1	0	61	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	61	None Required	0			
Comments:	Location 41, direct bury pole.																			
8357.01-056	Z81975	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	14	Credit Drawdown	2:1	28	300	None Required	0	32.586655	-116.975723	190
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	300	Credit Drawdown	300			
Comments:	Location 42, direct bury pole.																			
8357.01-057	Z81973	Yes	OM	No	Yes	No	No	No	Bareground	29	None Required	0:1	0	1256	None Required	0	32.586795	-116.974178	195
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
Comments:	Location 43, micropile pole.																			
8357.01-058	P229278S	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	114	None Required	0	32.586795	-116.974178	195
									Grassland	0	None Required	0:1	0	200	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	314	None Required	0			
Comments:	Location 43F, RFS wood pole. Non-native grassland is QCB unsuitable.																			
8357.01-059	Z81972	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	225	None Required	0	32.586905	-116.972931	192
									QCB Unsuitable	13	None Required	0:1	0	225	None Required	0			
									Grassland	0	None Required	0:1	0	76	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	76	Credit Drawdown	76			
Comments:	Location 44, direct bury pole																			
8357.01-060	Z81971	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	225	None Required	0	32.587012	-116.971733	198
									QCB Unsuitable	13	None Required	0:1	0	225	None Required	0			
									Grassland	0	None Required	0:1	0	76	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	76	Credit Drawdown	76			

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Comments:	Location 45, direct bury pole.																		
8357.01-061	Z81969	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	240	None Required	0	32.587112	-116.970604	201
									QCB Suitable Unoccupied	13	None Required	0:1	0	240	None Required	0			
									Grassland	0	None Required	0:1	0	61	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	61	Credit Drawdown	61			
Comments:	Location 46, direct bury pole.																		
8357.01-062	Z81081	Yes	OM	No	Yes	No	No	No	Bareground	18	None Required	0:1	0	2813	None Required	0	32.587228	-116.969416	205
									Grassland	17	Credit Drawdown	2:1	34	2812	Monitoring	2812			
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 47, pier foundation pole. Non-native grassland is QCB unsuitable.																		
8357.01-063	Z81079	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	225	None Required	0	32.587485	-116.968197	210
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
									Grassland	0	None Required	0:1	0	76	None Required	0			
Comments:	Location 48, direct bury pole. Non-native grassland is QCB unsuitable.																		
8357.01-064	Z81078	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	29	None Required	0	32.587716	-116.967092	205
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
									Grassland	0	None Required	0:1	0	5	None Required	0			
Comments:	Location 49, RFS wood pole. Non-native grassland is QCB unsuitable.																		
8357.01-065	z118863	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	240	None Required	0	32.587795	-116.966711	208
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
									Grassland	0	None Required	0:1	0	60	None Required	0			
Comments:	Location 50, direct bury pole. String new 430' distribution line to Z118864. Non-native grassland is QCB unsuitable.																		
8357.01-066	untagged pole	Yes	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	34	None Required	0	32.588074	-116.96648	198
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 50.2, RFS wood pole. Non-native grassland is QCB unsuitable																		
8357.01-067	Z118864	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	151	None Required	0	32.588083	-116.965354	201
									Grassland	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 51, direct bury pole. Non-native grassland is QCB unsuitable																		
8357.01-068	P204534	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	34	None Required	0	32.588168	-116.964962	205
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 52, RFS wood pole.																		
8357.01-069	Z81074	Yes	OM	No	Yes	No	No	No	Grassland	35	Credit Drawdown	2:1	70	4500	Monitoring	4500	32.588306	-116.964326	215
									Bareground	0	None Required	0:1	0	1125	None Required	0			
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 53, pier foundation pole. Non-native grassland is QCB unsuitable.																		
8357.01-070	Z81072	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	195	None Required	0	32.589306	-116.963385	211
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
									Grassland	0	None Required	0:1	0	105	None Required	0			
Comments:	Location 54, direct bury pole. Non-native grassland is QCB unsuitable.																		
8357.01-071	Z81069	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	3375	None Required	0	32.590445	-116.962298	217
									Grassland	35	Credit Drawdown	2:1	70	2250	Monitoring	2250			
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	2250	Credit Drawdown	2250			
									QCB Unsuitable	0	None Required	0:1	0	3375	None Required	0			
Comments:	Location 55, pier foundation pole.																		
8357.01-072	Z81067	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.59072	-116.961085	212
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 56, direct bury pole.																		
8357.01-073	Z81066	Yes	OM	No	Yes	No	No	No	Grassland	14	Credit Drawdown	2:1	28	255	None Required	0	32.591056	-116.959651	220
									Landscape/Ornamental	0	None Required	0:1	0	45	None Required	0			
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	255	Credit Drawdown	255			
									QCB Unsuitable	0	None Required	0:1	0	45	None Required	0			
Comments:	Location 57, direct bury pole.																		
8357.01-074	Z81064	Yes	OM	No	Yes	No	No	No	Grassland	13	Credit Drawdown	2:1	26	105	None Required	0	32.591351	-116.958382	222
									Maritime Succulent Scrub	0	None Required	0:1	0	105	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
									Bareground	0	None Required	0:1	0	91	None Required	0			
Comments:	Location 58, direct bury pole. Non-native grassland is QCB unsuitable.																		
8357.01-075	Z81063	Yes	OM	No	Yes	Yes	No	No	Grassland	13	Credit Drawdown	2:1	26	301	None Required	0	32.591653	-116.957094	229
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 59, direct bury pole. Non-native grassland is QCB unsuitable. Meadow/seep is located east of the existing pole location and will be avoided during construction.																		
8357.01-076	Z81061	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	75	None Required	0	32.592012	-116.955562	230
									Grassland	14	Credit Drawdown	2:1	28	225	None Required	0			
									QCB Suitable Unoccupied	14	Credit Drawdown	1:1	14	225	Credit Drawdown	225			
									QCB Unsuitable	0	None Required	0:1	0	75	None Required	0			
Comments:	Location 60, direct bury pole.																		
8357.01-077	Z81060	Yes	OM	No	Yes	No	No	No	Grassland	13	Credit Drawdown	2:1	26	256	None Required	0	32.592322	-116.954229	228
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	256	Credit Drawdown	256			
									Bareground	0	None Required	0:1	0	45	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	45	None Required	0			
Comments:	Location 61, direct bury pole																		
8357.01-078	Z81058	Yes	OM	No	Yes	No	No	No	Maritime Succulent Scrub	13	Credit Drawdown	2:1	26	241	None Required	0	32.592666	-116.952759	235

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									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	241	Credit Drawdown	241			
									Bareground	0	None Required	0:1	0	60	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	60	None Required	0			
Comments:	Location 62, direct bury pole.																		
8357.01-079	Z81057	Yes	OM	No	Yes	No	No	No	Maritime Succulent Scrub	13	Credit Drawdown	2:1	26	270	None Required	0	32.592937	-116.951603	236
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	270	Credit Drawdown	270			
									Bareground	0	None Required	0:1	0	31	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	31	None Required	0			
Comments:	Location 63, direct bury pole.																		
8357.01-080	P81056	Yes	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	34	None Required	0	32.593091	-116.950951	240
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 63.1, RFS wood pole. Non-native grassland is QCB unsuitable.																		
8357.01-081	Z81055	Yes	OM	No	Yes	No	No	No	Maritime Succulent Scrub	35	Credit Drawdown	2:1	70	5062	Enhancement	5062	32.59329	-116.950116	240
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	5062	Credit Drawdown	5062			
									Bareground	0	None Required	0:1	0	563	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	563	None Required	0			
Comments:	Location 64, pier foundation pole.																		
8357.01-082	Z81053	Yes	OM	No	Yes	No	No	No	Maritime Succulent Scrub	13	Credit Drawdown	2:1	26	255	None Required	0	32.593859	-116.949117	240
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	255	Credit Drawdown	255			
									Bareground	0	None Required	0:1	0	46	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	46	None Required	0			
Comments:	Location 65, direct bury pole.																		
8357.01-083	Z81052	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	13	Credit Drawdown	2:1	26	301	None Required	0	32.594475	-116.948038	270
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 66, direct bury pole																		
8357.01-084	Z81051	Yes	OM	No	Yes	No	No	No	Grassland	13	Credit Drawdown	2:1	26	301	None Required	0	32.595016	-116.947085	255
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 67, direct bury pole. Non-native grassland is QCB unsuitable.																		
8357.01-085	Z81049	Yes	OM	No	Yes	No	No	No	Maritime Succulent Scrub	35	Credit Drawdown	2:1	70	4781	Enhancement	4781	32.595577	-116.946095	255
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
									Bareground	0	None Required	0:1	0	844	None Required	0			
Comments:	Location 68, pier foundation pole. Non-native grassland understory is QCB unsuitable.																		
8357.01-086	Z731392	Yes	OM	No	Yes	Yes	No	No	Grassland	14	Credit Drawdown	2:1	28	300	None Required	0	32.596545	-116.945065	258
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 69, direct bury pole. Non-native grassland understory is QCB unsuitable. No impacts will occur to vernal pool within the acces road adjacent to project area.																		
8357.01-087	Z731604	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.597467	-116.944095	260
									Maritime Succulent Scrub	13	Credit Drawdown	2:1	26	150	None Required	0			
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	151	Credit Drawdown	151			
									QCB Unsuitable	0	None Required	0:1	0	150	None Required	0			
Comments:	Location 70, direct bury pole.																		
8357.01-088	Z81044	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	35	Credit Drawdown	2:1	70	4781	Enhancement	4781	32.598138	-116.943394	270
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	4781	Credit Drawdown	4781			
									Bareground	0	None Required	0:1	0	844	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	844	None Required	0			
Comments:	Location 71, pier foundation pole. P203016S RFS; located within bare ground and coastal sage scrub habitat will occur within work area of pier foundation pole.																		
8357.01-089	Z81968	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	13	Credit Drawdown	2:1	26	225	None Required	0	32.598175	-116.942705	270
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	225	Credit Drawdown	225			
									Bareground	0	None Required	0:1	0	76	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	76	None Required	0			
Comments:	Location 72, direct bury pole. Pole tagged P81409 in field.																		
8357.01-090	Z731591	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	17	None Required	0	32.598212	-116.941954	277
									Coastal Sage Scrub	0	None Required	0:1	0	17	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	17	Credit Drawdown	17			
									QCB Unsuitable	0	None Required	0:1	0	17	None Required	0			
Comments:	Location 73, RFS wood pole.																		
8357.01-091	Z253700	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	1406	None Required	0	32.598223	-116.941745	270
									Coastal Sage Scrub	35	None Required	2:1	70	4219	Enhancement	4219			
									QCB Suitable Unoccupied	35	Credit Drawdown	1:1	35	4219	Credit Drawdown	4219			
									QCB Unsuitable	0	None Required	0:1	0	1406	None Required	0			
Comments:	Location 73.1, pier foundation pole																		
8357.01-092	Z731391	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	34	None Required	0	32.598335	-116.939381	270
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			
Comments:	Location 74, RFS wood pole.																		
8357.01-093	Z31723, P204016S	Yes	OM	No	Yes	No	No	No	Bareground	18	None Required	0:1	0	1125	None Required	0	32.598334	-116.939381	269
									Coastal Sage Scrub	17	Credit Drawdown	2:1	34	4500	Enhancement	4500			
									QCB Suitable Unoccupied	17	Credit Drawdown	1:1	17	4500	Credit Drawdown	4500			
									QCB Unsuitable	18	None Required	0:1	0	1125	None Required	0			
Comments:	Location 75, foundation pole. Location 75H (P204016S) remove from service; no additional impacts for stub. This location is associated with access road modification #4.																		
8357.01-094	Z188730	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	300	None Required	0	32.598351	-116.938869	275
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 76, direct bury; SWI 649-5																		
8357.01-095	Z31724	Yes	OM	Yes	Yes	No	No	No	Bareground	0	None Required	0:1	0	34	None Required	0	32.597517	-116.939371	280
									QCB Unsuitable	0	None Required	0:1	0	34	None Required	0			

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Comments:	Location 77, OH work only; SWI 649-6																		
8357.01-096	Z31725	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	90	None Required	0	32.596684	-116.939368	277
									Coastal Sage Scrub	13	Credit Drawdown	2:1	26	211	None Required	0			
									QCB Suitable Unoccupied	13	Credit Drawdown	1:1	13	211	Credit Drawdown	211			
									QCB Unsuitable	0	None Required	0:1	0	90	None Required	0			
Comments:	Location 78, direct bury pole.																		
8357.01-097	Z31726	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	13	None Required	0:1	0	151	None Required	0	32.595826	-116.939366	320
									QCB Unsuitable	13	None Required	0:1	0	151	None Required	0			
									Coastal Sage Scrub	0	None Required	0:1	0	150	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	150	Credit Drawdown	150			
Comments:	Location 79, direct bury pole. Disturbed habitat also includes impacts within existing access road.																		
8357.01-098	Z31727	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.595265	-116.939366	390
									Disturbed Habitat	13	None Required	0:1	0	151	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 80, direct bury pole																		
8357.01-099	Z31728	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	13	None Required	0:1	0	211	None Required	0	32.594726	-116.939364	420
									QCB Unsuitable	13	None Required	0:1	0	211	None Required	0			
									Coastal Sage Scrub	0	None Required	0:1	0	90	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	90	Credit Drawdown	90			
Comments:	Location 81, direct bury pole																		
8357.01-100	Z31729	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	29	None Required	0:1	0	1256	None Required	0	32.594215	-116.939363	430
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
Comments:	Location 82, micropile pole.																		
8357.01-101	Z31730	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	150	None Required	0	32.593453	-116.939363	530
									Bareground	0	None Required	0:1	0	151	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 83, direct bury pole.																		
8357.01-102	Z31731	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	150	None Required	0	32.592631	-116.939361	530
									Bareground	0	None Required	0:1	0	151	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 84, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-103	Z31732	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	14	None Required	0:1	0	150	None Required	0	32.59181	-116.939359	550
									Bareground	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 85, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-104	Z31733	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	14	None Required	0:1	0	150	None Required	0	32.59094	-116.939359	553
									Bareground	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 86, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-105	Z31734	Yes	OM	No	Yes	Yes	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.58988	-116.939357	550
									Disturbed Habitat	13	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 87, direct bury pole. Within wet road restriction area.																		
8357.01-106	Z31735	Yes	OM	No	Yes	Yes	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.589289	-116.939355	550
									Disturbed Habitat	13	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 88, direct bury pole. Within wet road restriction area.																		
8357.01-107	Z31736	Yes	OM	No	Yes	Yes	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.588714	-116.939355	558
									Disturbed Habitat	13	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 89, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-108	Z31737	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	301	None Required	0	32.587855	-116.939351	560
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 90, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-109	Z31738	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	301	None Required	0	32.587028	-116.93935	560
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 91, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area.																		
8357.01-110	Z31739	Yes	OM	No	Yes	Yes	No	No	Bareground	0	None Required	0:1	0	151	None Required	0	32.586239	-116.939349	565
									Disturbed Habitat	13	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 92, direct bury pole. Within wet road restriction area.																		
8357.01-111	Z729583	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	14	None Required	0:1	0	300	None Required	0	32.585415	-116.939350	555
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 93, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area. Pole will be worked from the northwest or from the eastern access road.																		
8357.01-112	Z31741	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	301	None Required	0	32.584589	-116.939347	550
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 94, direct bury pole. Within wet road restriction area.																		
8357.01-113	Z31742	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	14	None Required	0:1	0	300	None Required	0	32.583733	-116.939346	549
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 95, direct bury pole. No impacts to adjacent vernal pools, within wet road restriction area. Pole will be worked from eastern access road.																		
8357.01-114	Z31743	Yes	OM	No	Yes	Yes	No	No	Disturbed Habitat	13	None Required	0:1	0	301	None Required	0	32.582941	-116.939351	550
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			

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Comments:	Location 96, direct bury pole. Within wet road restriction area.																		
8357.01-115	Z31744	Yes	OM	No	Yes	No	No	No	Bareground	29	None Required	0:1	0	0	None Required	0	32.582115	-116.939356	545
									Disturbed Habitat	0	None Required	0:1	0	624	None Required	0			
									Coastal Sage Scrub	0	None Required	0:1	0	632	Credit Drawdown	632			
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
Comments:	Location 97, micropile pole																		
8357.01-116	Z31767	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	13	None Required	0:1	0	240	None Required	0	32.582113	-116.940014	510
									Coastal Sage Scrub	0	None Required	0:1	0	61	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	61	Credit Drawdown	61			
									QCB Unsuitable	13	None Required	0:1	0	240	None Required	0			
Comments:	Location 98, direct bury pole																		
8357.01-117	Z31768	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	29	None Required	0:1	0	942	None Required	0	32.58211	-116.940774	476
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
									Bareground	0	None Required	0:1	0	314	None Required	0			
Comments:	Location 99, micropile pole																		
8357.01-118	P34258	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.582113	-116.941759	390
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 100, direct bury pole.																		
8357.01-119	P34257	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	14	None Required	0:1	0	300	None Required	0	32.582115	-116.942938	390
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 101, direct bury pole.																		
8357.01-120	Z34102	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	630	None Required	0	32.582118	-116.943925	425
									Disturbed Habitat	29	None Required	0:1	0	626	None Required	0			
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
Comments:	Location 102, micropile pole.																		
8357.01-121	Z31745	Yes	OM	No	Yes	No	No	No	Bareground	29	None Required	0:1	0	842	None Required	0	32.582115	-116.945091	530
									QCB Unsuitable	29	None Required	0:1	0	1256	None Required	0			
									Disturbed Habitat	0	None Required	0:1	0	414	None Required	0			
Comments:	Location 103, micropile pole. Otay tarplant adjacent to pole.																		
8357.01-122	Z31746	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	300	None Required	0	32.581504	-116.945093	540
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 104, direct bury pole																		
8357.01-123	Z31747	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	300	None Required	0	32.580792	-116.945095	560
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 105, direct bury pole.																		
8357.01-124	Z31748	Yes	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	150	None Required	0	32.580006	-116.945092	580
									Disturbed Habitat	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 106, direct bury pole																		
8357.01-125	Z31749	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.579175	-116.945091	602
									Disturbed Habitat	35	None Required	0:1	0	1125	None Required	0			
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 107, pier foundation pole.																		
8357.01-126	Z31750	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.57850	-116.94495	600
									Disturbed Habitat	35	None Required	0:1	0	1125	None Required	0			
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0			
Comments:	Location 108, pier foundation pole.																		
8357.01-127	P89151	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	199	None Required	0	32.578404	-116.94551	590
									Disturbed Habitat	7	None Required	0:1	0	108	None Required	0			
									QCB Unsuitable	7	None Required	0:1	0	307	None Required	0			
Comments:	Location 108.1, direct bury pole.																		
8357.01-128	Z31751	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.57791	-116.94495	582
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 109, direct bury pole.																		
8357.01-129	Z31752	Yes	OM	No	Yes	No	No	No	Bareground	13	None Required	0:1	0	151	None Required	0	32.577288	-116.944947	575
									Disturbed Habitat	0	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	13	None Required	0:1	0	301	None Required	0			
Comments:	Location 110, direct bury pole.																		
8357.01-130	Z31753	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	150	None Required	0	32.576497	-116.944941	560
									Disturbed Habitat	14	None Required	0:1	0	150	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 111, direct bury pole																		
8357.01-131	Z31754	No	OM	No	Yes	No	No	No	Disturbed Habitat	14	None Required	0:1	0	300	None Required	0	32.575679	-116.944937	555
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 112, direct bury pole.																		
8357.01-132	Z31755	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	90	None Required	0	32.574850	-116.944932	570
									Disturbed Habitat	14	None Required	0:1	0	210	None Required	0			
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0			
Comments:	Location 113, direct bury pole.																		
8357.01-133	Z31756	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	90	None Required	0	32.574079	-116.944926	560

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									Disturbed Habitat	14	None Required	0:1	0	210	None Required	0		
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0		
Comments:	Location 114, direct bury pole.																	
8357.01-134	Z31757	No	OM	No	Yes	No	No	No	Bareground	14	None Required	0:1	0	210	None Required	0	32.573253	-116.944922	555
									Disturbed Habitat	0	None Required	0:1	0	90	None Required	0		
									QCB Unsuitable	14	None Required	0:1	0	300	None Required	0		
Comments:	Location 115, direct bury pole.																	
8357.01-135	Z31758	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2813	None Required	0	32.572442	-116.944917	550
									Disturbed Habitat	35	None Required	0:1	0	2812	None Required	0		
									QCB Unsuitable	35	None Required	0:1	0	5625	None Required	0		
Comments:	Location 116, pier foundation pole.																	
8357.01-136	Z31759	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	157	None Required	0	32.57163	-116.94492	580
									Disturbed Habitat	0	None Required	0:1	0	157	None Required	0		
									QCB Unsuitable	0	None Required	0:1	0	314	None Required	0		
Comments:	Location 117, OH work only.																	
8357.01-137	Otay Staging Yard	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	116160	None Required	0	32.56917	-116.92558	617
									Disturbed Habitat	0	None Required	0:1	0	58080	None Required	0		
									QCB Unsuitable	0	None Required	0:1	0	174240	None Required	0		
Comments:	Staging Yard accounts for 4 acres																	
8357.01-138	Main Street Staging Yard	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	124544	None Required	0	32.59341	-117.020552	123
									Disturbed Habitat	0	None Required	0:1	0	124544	None Required	0		
									Riparian Scrub	0	None Required	0:1	0	12272	Enhancement	12272		
Comments:	Stagiing Yard Area accounds for 6 acres. Low-quality riparian scrub within man-made drainage.																	
8357.01-139	Stringing Site #1	No	OM	No	No	No	No	No	Developed	0	None Required	0:1	0	2100	None Required	0	32.587455	-117.023671	130
Comments:	Within Black Coral Way																	
8357.01-140	Stringing Site #2	Yes	OM	No	No	No	No	No	Developed	0	None Required	0:1	0	2100	None Required	0	32.586279	-117.012461	132
Comments:	within existing paved access road.																	
8357.01-141	Stringing Site #3	Yes	OM	No	No	No	No	No	Developed	0	None Required	0:1	0	2100	None Required	0	32.585949	-117.011684	140
Comments:	Within existing paved access road.																	
8357.01-142	Stringing Site #4	No	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	840	None Required	0	32.586297	-117.002571	200
Comments:	Within existing Project access road.																	
8357.01-143	Stringing Site #5	No	OM	No	No	No	No	No	Developed	0	None Required	0:1	0	840	None Required	0	32.585879	-117.001828	200
Comments:	Within existing Project access road.																	
8357.01-144	Stringing Site #6	No	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	840	None Required	0	32.585884	-117.001718	200
Comments:	Within existing Project access road.																	
8357.01-145	Stringing Site #7	Yes	OM	No	No	No	No	No	Bareground	0	None Required	0:1	0	840	None Required	0	32.584849	-117.001291	120
Comments:	Within existing Project access road.																	
8357.01-146	Stringing Site #8	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.585684	-116.997041	150
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-147	Stringing Site #9	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.585656	-116.996491	130
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-148	Stringing Site #10	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.585265	-116.991061	220
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Stringing site occurs within road. Non jurisdictional road rut vernal pool located within bare ground in access road. QCB unsuitable.																	
8357.01-149	Stringing Site #11	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	4500	None Required	0	32.585181	-116.99002	230
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-150	Strining Site #12	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2100	None Required	0	32.587610	-116.967459	300
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-151	Stringing Site #13	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2100	None Required	0	32.588043	-116.965166	350
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-152	Stringing Site #14	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2100	None Required	0	32.588169	-116.964561	310
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-153	Stringing Site #15	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	3750	None Required	0	32.588491	-116.964071	360
									QCB Unsuitable	0	None Required	0:1	0	3750	None Required	0		
Comments:	Within existing Project access road.																	
8357.01-154	Stringing Site #16	No	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	3600	None Required	0	32.590318	-116.962699	350
									Disturbed Habitat	0	None Required	0:1	0	900	None Required	0		
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Within existing Project access road and adjacent area.																	
8357.01-155	Stringing Site #17	No	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	4500	None Required	0	32.590735	-116.961965	380
									QCB Unsuitable	0	None Required	0:1	0	4500	None Required	0		
Comments:	Site within non-native grassland habitat; QCB unsuitable.																	
8357.01-156	Stringing Site #18	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	1785	None Required	0	32.597974	-116.943610	400
									Coastal Sage Scrub	0	None Required	0:1	0	315	None Required	0		

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									QCB Unsuitable	0	None Required	0:1	0	1785	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	315	Credit Drawdown	315			
Comments:	Within existing Project access road and adjacent area west of Z81044.																			
8357.01-157	Stringing Site #19	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	1050	None Required	0	32.598222	-116.943019	420
									Coastal Sage Scrub	0	None Required	0:1	0	1050	Enhancement	1050			
									QCB Unsuitable	0	None Required	0:1	0	1050	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	1050	Credit Drawdown	1050			
Comments:	Within existing Project access road amd adkacemt area east of Z81044.																			
8357.01-158	Stringing Site #20	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	1000	None Required	0	32.598353	-116.939694	500
									Coastal Sage Scrub	0	None Required	0:1	0	1100	Enhancement	1100			
									QCB Unsuitable	0	None Required	0:1	0	1000	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	1100	Credit Drawdown	1100			
Comments:	Within existing Project access road and adjacent area west of Z31723 (Location 75).																			
8357.01-159	Stringing Site #21	Yes	OM	Yes	Yes	No	No	No	Bareground	0	None Required	0:1	0	1050	None Required	0	32.598374	-116.938236	440
									Coastal Sage Scrub	0	None Required	0:1	0	1050	Enhancement	1050			
									QCB Unsuitable	0	None Required	0:1	0	1050	None Required	0			
									QCB Suitable Unoccupied	0	None Required	0:1	0	1050	Credit Drawdown	1050			
Comments:	Within existing Project access road and adjacent area east of Z188730 (location 76).																			
8357.01-160	Stringing Site #22	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2100	None Required	0	32.582412	-116.939346	480
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0			
Comments:	Within existing Project access road north of Z31744 (location 97).																			
8357.01-161	Stringing Site #23	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	2100	None Required	0	32.582110	-116.9393734	500
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0			
Comments:	Within existing Project access road west of Z31744 (location 97).																			
8357.01-162	Stringing Site #24	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	0	None Required	0:1	0	11250	Enhancement	11250	32.582215	-116.9393021	510
									Disturbed Habitat	0	None Required	0:1	0	11250	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	22500	None Required	0			
Comments:	Within existing Project access road east of Z31744 (location 97). Disturbed area consists of non-native grasses. CSS has disturbed understory; QCB unsuitable.																			
8357.01-163	Stringing Site #25	Yes	OM	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	10500	None Required	0	32.582309	-116.945382	400
									Grassland	0	None Required	0:1	0	6300	Monitoring	6300			
									Disturbed Habitat	0	None Required	0:1	0	4200	None Required	0			
									QCB Unsuitable	0	None Required	0:1	0	21000	None Required	0			
Comments:	Within disturbed area west of Z31745. Otay tarplant within and adjacent to work area. Non-native grassland; QCB unsuitable.																			
8357.01-164	Stringing Site #26	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	2100	None Required	0	32.578792	-116.945084	250
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0			
Comments:	Within existing access road and disturbed area north of Z31750 (Location 108).																			
8357.01-165	Stringing Site #27	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	2100	None Required	0	32.578172	-116.945019	223
									QCB Unsuitable	0	None Required	0:1	0	2100	None Required	0			
Comments:	Within existing access road and disturbed area south of Z31750 (Location 108).																			
8357.01-166	Stringing Site #28	No	New	No	Yes	No	No	No	Bareground	0	None Required	0:1	0	5250	None Required	0	32.571980	-116.944962	130
									QCB Unsuitable	0	None Required	0:1	0	5250	None Required	0			
Comments:	Within existing access road south of Z31758 (Location 116).																			
8357.01-167	Turnaround 1	Yes	OM	No	No	No	No	No	Disturbed Habitat	0	None Required	0:1	0	1120	None Required	0	32.587514	-117.020074	200
Comments:	Near location 3																			
8357.01-168	Turnaround 2	Yes	OM	No	No	No	No	No	Disturbed Habitat	0	None Required	0:1	0	1100	None Required	0	32.587418	-117.019014	203
Comments:	Near location 4																			
8357.01-169	Turnaround 3	No	OM	No	No	No	No	No	Disturbed Habitat	0	None Required	0:1	0	2060	None Required	0	32.585110	-117.002278	213
Comments:	Near location 17																			
8357.01-170	Turnaround 4	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	3130	None Required	0	32.585225	-116.993378	240
									QCB Unsuitable	0	None Required	0:1	0	3130	None Required	0			
Comments:	Near location 26																			
8357.01-171	Turnaround 5	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	4310	None Required	0	32.588053	-116.965967	245
									QCB Unsuitable	0	None Required	0:1	0	4310	None Required	0			
Comments:	Near location 35																			
8357.01-172	Turnaround 6	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	3686	None Required	0	32.585955	-116.974357	250
									QCB Unsuitable	0	None Required	0:1	0	3686	None Required	0			
Comments:	Near location 51																			
8357.01-173	Turnaround 7	No	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	1760	None Required	0	32.591362	-116.958048	300
									QCB Unsuitable	0	None Required	0:1	0	1760	None Required	0			
Comments:	Near location 58																			
8357.01-174	Turnaround 8	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	835	None Required	0	32.597598	-116.939306	405
									QCB Unsuitable	0	None Required	0:1	0	835	None Required	0			
Comments:	Near location 77																			
8357.01-175	Turnaround 9	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	2185	None Required	0	32.596988	-116.939381	260
									QCB Unsuitable	0	None Required	0:1	0	2185	None Required	0			
Comments:	Near location 78																			
8357.01-176	Turnaround 10	Yes	OM	No	Yes	No	No	No	Disturbed Habitat	0	None Required	0:1	0	860	None Required	0	32.596356	-116.940039	270
									QCB Unsuitable	0	None Required	0:1	0	860	None Required	0			
Comments:	Near location 79																			
8357.01-177	GS 1	No	OM	No	No	No	No	No	Landscape/Ornamental	0	None Required	0:1	0	72	None Required	0	32.585011	-117.001792	220
Comments:	West side of Heritage Road																			

Appendix B- Site Specific Land Use/ Habitat/ Impact Mitigation Table

8357.01-178	GS 2	No	OM	No	No	No	No	No	Disturbed Habitat	0	None Required	0:1	0	72	None Required	0	32.585018	-117.1632	221
Comments:	East side of Heritage Road																		
8357.01-179	Road Modification 1	No	OM	No	Yes	No	No	No	Grassland	150	None Required	0:1	0	0	None Required	0	32.58549	-116.98535	210
									QCB Unsuitable	150	None Required	0:1	0	0	None Required	0			
Comments:	5 foot wiode by 30 foot long impact are for modification of existing access road at Z81100 (Location 34)																		
8357.01-179	Road Modification 2	No	OM	No	Yes	No	No	No	Grassland	150	None Required	0:1	0	0	None Required	0	32.585667	-116.983876	212
									QCB Unsuitable	150	None Required	0:1	0	0	None Required	0			
Comments:	5 foot wiode by 30 foot long impact are for modification of existing access road at Z81098 (Location 35)																		
8357.01-180	Road Modification 3	No	OM	No	Yes	No	No	No	Disturbed Habitat	150	None Required	0:1	0	0	None Required	0	32.585816	-116.982913	213
									QCB Unsuitable	150	None Required	0:1	0	0	None Required	0			
Comments:	5 foot wiode by 30 foot long impact are for modification of existing access road at Z81097 (Location 36).																		
8357.01-181	Road Modification 4	Yes	OM	No	Yes	No	No	No	Coastal Sage Scrub	75	Credit Drawdown	2:1	150	0	None Required	0	32.598363	-116.93942	250
									Bareground	75	None Required	0:1	0	0	None Required	0			
									QCB Suitable Unoccupied	75	Credit Drawdown	1:1	75	0	None Required	0			
									QCB Unsuitable	75	None Required	0:1	0	0	None Required	0			
Comments:	5 foot wiode by 30 foot long impact are for modification of existing access road at P204016S (Location 75).																		
8357.01-182	Pulling Site 1	Yes	OM	No	Yes	No	No	No	Grassland	0	None Required	0:1	0	1875	Monitoring	1875	32.587804	-116.967074	210
									QCB Unsuitable	0	None Required	0:1	0	1875	None Required	0			

Criteria for Evaluating Sensitive Plant Species Potential for Occurrence (PFO)

PFO	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Project site.
Low:	Historical records for this species do not exist within the immediate vicinity (greater than 1 mile) of the Project site, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the immediate vicinity of the project site (within approximately 1 mile) and marginal habitat exists on the Project site, or the habitat requirements or environmental conditions associated with the species occur within the Project site, but no historical records exist within 1 mile of the Project site.
High:	Both a historical record exists of the species within the Project site or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Project site.
Present:	Species was detected within the Project site at the time of the survey.

The following information is a list of abbreviations used to help determine the significance of biologically sensitive resources potentially occurring within the Project Survey Area.

Federal

FE = Federally listed; Endangered
FT = Federally listed; Threatened
FC = Federal Candidate Species
FCC = Former Federal Species of Concern
BCC = Birds of Conservation Concern
FSS = Forest Service Sensitive
BLMS = Bureau of Land Management Sensitive

State

ST = State listed; Threatened
SE = State listed; Endangered
RARE = State-listed; Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
SSC = State Species of Special Concern
FP = State Fully Protected
WL = California Watch List Species

California Rare Plant Rank (CRPR)

List 1A = Plants presumed extinct in California
List 1B = Plants Rare and Endangered in California and throughout their range
List 2 = Plants Rare, Threatened, or Endangered in California but more common elsewhere in their range
List 3 = Plants about which we need more information; a review list
List 4 = Plants of limited distribution; a watch list

CRPR Extensions

0.1 = Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat)

0.2 = Fairly endangered in California (20 to 80 percent occurrences threatened)

0.3 = Not very endangered in California (less than 20 percent of occurrences threatened)

Table 1: Sensitive Plant Species Potentially Occurring on the Proposed Project Site

Common Name *Scientific Name*	Status Federal/State/CRPR or CNPS Rank	Flowering Season	Habitat and Distribution	Potential to Occur
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FE/--/CRPR List 1B.1 NCCP-Covered Narrow Endemic	April-June	Annual herb. Occurs in vernal pools, clay, openings, chaparral, valley and foothill grassland, and coastal sage scrub habitats. Can be found at elevations between 33 and 3,150 feet.	Suitable habitat occurs on the site, and the upper reaches of the Project are within the elevation range of species. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
San Diego ambrosia (*Ambrosia pumila*)	FE/--/CRPR List 1B.1 NCCP-Covered Narrow Endemic	April-October	Perennial rhizomatous herb. Occurs in disturbed areas, chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitats. Can be found at elevations less than 1,360 feet.	Suitable habitat occurs on the site and is within the elevation range of the species. Historical records show this species has occurred within the Project Survey Area. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
Otay manzanita (*Arctostaphylos otayensis*)	--/--/CRPR List 1B.2 NCCP-covered	January-April	Perennial evergreen shrub. Occurs in metavolcanic, chaparral, and cismontane woodland habitats. Otay manzanita can be found at elevations less than 1,300 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.
San Diego goldenstar (*Bloomeria clevelandii*)	--/--/CRPR List 1B.1 NCCP-covered	April-May	Perennial bulbiferous herb. Occurs in chaparral, valley and foothill grassland, coastal scrub, and vernal pool habitats. Can be found at elevations between 164 and 1,525 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.

Table 1: Sensitive Plant Species Potentially Occurring on the Proposed Project Site

Common Name *Scientific Name*	Status Federal/State/CRPR or CNPS Rank	Flowering Season	Habitat and Distribution	Potential to Occur
Orcutt's brodiaea (*Brodiaea orcuttii*)	--/--/CRPR List 1B.1	May-July	Annual herb. Occurs in grassland near streams and **vernal pools**. Can be found at elevations between 98 and 5,560 feet.	Suitable habitat occurs on site and is within the elevation range of the species. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
Lakeside ceanothus (*Ceanothus cyaneus*)	--/--/CRPR List 1B.2 NCCP-Covered	April-June	Evergreen shrub. Occurs in sandy or rocky openings of closed-cone coniferous forests and chaparral habitats. Lakeside ceanothus can be found at elevations between 770 and 2,550 feet.	Suitable habitat occurs on site and is within the elevation range of the species. This species is restricted to a small area near Lakeside in San Diego County. However, this species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period and is presumed **absent** from the Project Survey Area.
snake cholla (*Cylindropuntia californica*)	--/--/CRPR List 1B.1 NCCP-Covered	April-May	Perennial stem succulent. This cactus species is almost always found on the coast in chaparral and sage scrub habitats. Snake cholla typically occurs at elevations below 820 feet.	Suitable habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period and is presumed **absent** from the Project Survey Area.
Otay tarplant (*Deinandra conjugens*)	FT/CE/CRPR List 1B.1 NCCP-Covered	May-June	Annual herb. This species grows on clay soils within coastal scrub and valley and foothill grassland habitats. Found at elevations between 80 and 980 feet.	This species was observed is **present** within the Project Survey Area and in immediately adjacent areas.

Table 1: Sensitive Plant Species Potentially Occurring on the Proposed Project Site

Common Name *Scientific Name*	Status Federal/State/CRPR or CNPS Rank	Flowering Season	Habitat and Distribution	Potential to Occur
variegated dudleya (*Dudleya variegata*)	--/--/CRPR List 1B.2 NCCP-Covered	April-June	Perennial herb. This species is found in heavy clay soils within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool habitats at elevations between 10 and 1,900 feet	Suitable habitat occurs on the site and is within the elevation range of the species. However, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period and is presumed **absent** from the Project Survey Area.
Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)	--/--/CNPR List 1B.1 NCCP-Covered Narrow Endemic	July-November	Perennial, evergreen shrub found in mesic soils within chaparral and coastal scrub habitats. The elevation range of this species ranges between 98 and 1,970 feet (30 to 600 m) amsl.	Suitable habitat for this species occurs on the site and is within the elevaton range of the species.. However, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period. Therefore, this species is presumed **absent** within the Project Survey Area.
San Diego button-celery (*Eryngium aristulatum var. parishii*)	FE/CE/CRPR List 1B.1 NCCP-Covered	April-June	Annual/perennial herb. This species can be found mesic soils of coastal scrub, valley and foothill grassland, and **vernal pools**. San Diego button-celery can be found at elevations between 65 and 2,034 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.
San Diego barrel cactus (*Ferocactus viridescens*)	--/--/CRPR List 2B.1 NCCP-Covered	May-June	Stem succulent. This barrel cactus species grows in sandy and rocky areas within chaparral, coastal sage scrub, vernal pools, and valley grassland habitats at elevations between 10 and 1,476 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.
Palmer’s grapplinghook (*Harpagonella palmeri*)	--/--/CRPR 4.2	March-May	Annual herb. This species is found growing in chaparral, coastal scrub, and valley and foothill grassland habitats at elevations between 65 and 3,130 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.

Table 1: Sensitive Plant Species Potentially Occurring on the Proposed Project Site

Common Name *Scientific Name*	Status Federal/State/CRPR or CNPS Rank	Flowering Season	Habitat and Distribution	Potential to Occur
Tecate cypress (*Hesperocyparis forbesii*)	--/--/CRPR List 1B.1 NCCP-Covered	N/A	Perennial, evergreen tree. This species often grows in clay, gabrroic, or metavolcanic soils in closed-cone coniferous forest and chaparral habitats. Tecate cypress can be found at elevations between 840 and 4,900 feet.	This species was observed and is **present** within the Project Survey Area and in immediately adjacent areas.
Gander's pitcher sage (*Lepechinia gander*)	--/--/CRPR List 1B.3 NCCP-Covered	June-July	Perennial shrub. This species grows in gabrroic or metavolcanic soils in closed-cone coniferous forest and chaparral, coastal scrub, and valley and foothill grassland habitats. Can be found at elevations between 1,000 and 3,300 feet.	Suitable habitat occurs on the site and is within the elevation range of species. However, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period and is presumed **absent** from the Project Survey Area.
little mousetail (*Myosurus minimus* ssp. *apus*)	--/--/CRPR List 3.1 NCCP-Covered Narrow Endemic	March-June	Annual herb. This species is found growing in valley and foothill grassland and **vernal pool** (alkaline) habitats at elevations between 65 and 2,100 feet.	Suitable habitat occurs on the site and is within the elevation range of species. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
spreading navarretia (*Navarretia fossalis*)	FT/--/CRPR List 1B.1 NCCP-Covered	April-June	Annual herb. This species is found growing in chenopod scrub, marsh/swamp, playa, and **vernal pool** habitats at elevations between 98 and 2,040 feet .	Suitable habitat occurs on the site and is within the elevation range of species. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.

Table 1: Sensitive Plant Species Potentially Occurring on the Proposed Project Site

Common Name *Scientific Name*	Status Federal/State/CRPR or CNPS Rank	Flowering Season	Habitat and Distribution	Potential to Occur
California Orcutt grass (*Orcuttia californica*)	FE/CE/CRPR List 1B.1 NCCP-Covered	April-August	Annual herb. This species is found growing in **vernal pool** habitats at elevations between 49 and 2,363 feet.	Suitable habitat occurs on the site and is within the elevation range of species. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
Otay mesa mint (*Pogogyne nudiuscula*)	--/--/CRPR List 1B.1 NCCP-Covered Narrow Endemic	May-July	Perennial herb. This species often grows in clay soils within **vernal pool** habitats. Otay Mesa mint can be found at elevations between 295 and 820 feet.	Suitable habitat occurs on the site and is within the elevation range of species. Historical records show this species has occurred within the Project Survey Area. This species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Therefore this species has a **moderate** potential for occurrence within the Project Survey Area.
small-leaved rose (*Rosa Minutifolia*)	--/CE/CRPR List 1B.1 NCCP-covered	January-June	Perennial deciduous shrub. This species is found growing in chaparral and coastal scrub habitats at elevations between 492 and 525 feet.	This species i was observed and is **present** within the Project Survey Area and in immediately adjacent areas.
Parry's tetracoccus (*Tetracoccus dioicus*)	--/--/CNPR List 1B.2	April-May	Deciduous shrub found on dry, stony slopes. Habitat includes chaparral and coastal scrub at elevations between 500 feet and 3,300 feet (150 to 1,000 m) amsl.	Suitable habitat for this species occurs on the site; however, this species was not observed during the protocol-level focused plant surveys conducted during the 2014 blooming period. Therefore this species is presumed **absent** within the Project Survey Area.

San Diego thorn-mint (*Acanthomintha ilicifolia*) FT, CE, CRPR 1B.1, NCCP-covered Narrow Endemic

San Diego thorn-mint is an annual herb in the Lamiaceae family that flowers between April and June. This species often grows in vernal pools, clay, openings, chaparral, valley and foothill grassland, and coastal sage scrub habitats. San Diego thorn-mint can be found at elevations between 33 and 3,150 feet (10-960 m) amsl. Approximately one-third of the historical occurrences in California have been extirpated; this species is threatened by urbanization, road construction, vehicles, grazing, trampling, foot traffic, recreational activities, erosion, and non-native plants (CNPS 2014).

Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Historic records indicate this species has bee documented within one mile of the project; therefore, San Deigo thorn-mint is expected to have a moderate potential to occur.

San Diego ambrosia (*Ambrosia pumila*) FE, CRPR 1B.1, NCCP-covered Narrow Endemic

San Diego ambrosia is a perennial rhizomatous herb in the Asteraceae family that flowers between April and October. This species often grows in disturbed areas, chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitats. San Diego ambrosia can be found at elevations less than 1,360 feet (20 to 415 meters) amsl. This species is threatened by development, non-native plants, vehicles, road maintenance, and foot traffic (CNPS 2014).

Marginal quality suitable habitat for this species is occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Historic records indicate this species has bee documented within one mile of the project; therefore, San Diego ambrosia is expected to have a moderate potential to occur.

Otay manzanita (*Arctostaphylos otayensis*) CRPR 1B.2, NCCP-covered

Otay manzanita is a perennial evergreen shrub in the Ericaceae family that flowers between January and April. This species often grows in metavolcanic, chaparral, and cismontane woodland habitats. Otay manzanita can be found at elevations between 986 and 5,576 feet (275 to 1,700 meters) amsl. Historical occurrences need field surveys. This species is threatened by development and frequent wildfires (CNPS 2014).

One Otay manzanita was observed within the Project Survey Area near an access road within an area that appears to be undergoing habitat restoration.

San Diego goldenstar (*Bloomeria clevelandii*) CRPR 1B.1, NCCP-covered

San Diego goldenstar is a perennial bulbiferous herb in the Themidaceae family that flowers between April and May. This species often grows in clay, chaparral, valley and foothill grassland, coastal scrub, and vernal pool habitats. San Diego goldenstar can be found at elevations between 164 and 1,525 feet (50 to 465 meters) amsl. This species is threatened by urbanization, road construction, vehicles, non-native plants, and illegal dumping (CNPS 2014).

San Diego goldenstar was observed within the Project Survey Area. Chambers Group mapped 20 individuals within the San Diego Mesa Claypan Vernal Pool habitat within the Project Survey Area. Due to 2014 environmental conditions, this species may have been dormant or occurred in reduced frequencies, and may be more abundant during favorable environmental conditions.

Orcutt's brodiaea (*Brodiaea orcuttii*) CRPR 1B.1, NCCP-covered

Orcutt's brodiaea is a perennial bulbiferous herb in the Themidaceae family that flowers between May and July. This species often grows in mesic, clay, sometimes serpentine habitats, including closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Orcutt's brodiaea can be found at elevations between 98 and 5,560 feet (30 to 1,695 meters) amsl. Historical occurrences need field surveys. This species is seriously threatened by development, foot traffic, grazing, non-native plants, military activities, vehicles, road construction, road maintenance, and dumping (CNPS 2014).

Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Historic records indicate this species has bee documented within one mile of the project; therefore, Orcutt's brodiaea is expected to have a moderate potential to occur.

Lakeside ceanothus (*Ceanothus cyaneus*) CRPR 1B.2, NCCP-covered

Lakeside ceanothus is an evergreen shrub in the Rhamnaceae family that flowers between April and June. This species often grows in sandy or rocky openings of closed-cone coniferous forests and chaparral habitats. Lakeside ceanothus can be found at elevations between 770 and 2,550 feet (235 to 777 meters) amsl. This species is threatened by development and potentially threatened by frequent wildfires (CNPS 2014).

Lakeside ceanothus is presumed absent within the Project Survey Area. Suitable habitat for this species occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period Additionally, this species is a perennial evergreen shrub, and would have been expected to be observed during focused surveys if present, regardless of environmental conditions or survey timing.**Snake cholla (*Cylindropuntia californica*) CRPR 1B.1, NCCP-covered**

Snake cholla is a perennial stem succulent in the Cactaceae family that flowers between April and May. This cactus species is almost always found on the coast in chaparral and coastal scrub habitats. Snake cholla typically occurs at elevations between 98 and 492 feet (30 to 150 meters) amsl. This species is threatened by development and vehicles (CNPS 2014).

Snake cholla is presumed absent within the Project Survey Area. Suitable habitat for this species occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period. Additionally, this species is a perennial succulent, and would have been expected to be observed during focused surveys if present, regardless of environmental conditions or survey timing.

Otay tarplant (*Deinandra conjugens*) FT, CE, CRPR 1B.1, NCCP-covered

Otay tarplant is an annual herb in the Asteraceae family that flowers between May and June. This species grows on clay soils within coastal scrub, and valley and foothill grassland habitats. Otay tarplant is found at elevations between 80 and 980 feet (25 to 300 m) amsl. This species is threatened by development, agriculture, vehicles, illegal dumping, foot traffic, non-native plants, habitat disturbance, Border Patrol activities, and possibly threatened by landfill construction (CNPS 2014).

Otay tarplant was observed within the Project Survey Area. Forty-one individuals were observed throughout disturbed open areas throughout the tie line.

Variegated dudleya (*Dudleya variegata*) CRPR 1B.2, NCCP-covered

Variegated dudleya is a summer-deciduous perennial herb in the Crassulaceae family that flowers from April to June. This species is found in heavy clay soils within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool habitats at elevations between 10 and 1,900 feet (3 to 580 meters) amsl. This species is threatened by development and grazing and possibly threatened by competition with non-native plants (CNPS 2012).

Variegated dudleya is presumed absent within the Project Survey Area. Suitable habitat for this species occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period. Additionally, this species is a perennial herb, and would have been expected to be observed during focused surveys if present, regardless of environmental conditions.

Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*) CNPS 1B.1, NCCP-covered Narrow Endemic

Palmer's goldenbush is a perennial, evergreen shrub in the Asteraceae family that flowers from July through November. This species is found in mesic soils within chaparral and coastal scrub habitats. The elevation range of this species ranges between 98 and 1,970 feet (30 to 600 m) amsl. Threats to this species include development, road construction, road maintenance, and vehicles (CNPS 2011).

Palmer’s goldenbush is presumed absent within the Project Survey Area. Suitable habitat for this species occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period. Additionally, this species is a perennial evergreen shrub, and would have been expected to be observed during focused surveys if present.

San Diego button-celery (*Eryngium aristulatum* var. *parishii*) FE, CE, CRPR 1B.1, NCCP-covered

San Diego button-celery is an annual/perennial herb in the Apiaceae family that flowers between April and June. This species can be found mesic soils of coastal scrub, valley and foothill grassland, and vernal pools. San Diego button-celery can be found at elevations between 65 and 2,034 feet (20 to 620 meters) amsl. This species is threatened by agriculture, urbanization, road maintenance, grazing, vehicles, illegal dumping, competition from non-native plants, and foot traffic (CNPS 2014).

San Diego button-celery was observed within the Project Survey Area. Chambers Group mapped 12 individuals within the San Diego Mesa Claypan Vernal Pool habitat within the Project Survey Area. This

habitat is considered sensitive. Due to 2014 environmental conditions, this species may have been dormant or occurred in reduced frequencies, and may be more abundant during favorable environmental conditions.

San Diego barrel cactus (*Ferocactus viridescens*) CRPR 2B.1, NCCP-covered

San Diego barrel cactus is a perennial stem succulent in the Cactaceae family that flowers between May and June. This barrel cactus species grows in sandy and rocky areas within chaparral, coastal sage scrub, vernal pools, and valley and foothill grassland habitats at elevations between 10 and 1,476 feet (3 to 450 meters) amsl. San Diego barrel cactus is threatened by urbanization, vehicles, horticultural collecting, agriculture, and competition with non-native plant species (CNPS 2014).

San Diego barrel cactus was observed widespread within the Project Survey Area in a variety of habitats such as maritime succulent scrub, native grasslands, coastal sage scrub, and many others. Chambers Group mapped 363 individuals along the entirety of the TL.

Palmer's grapplinghook (*Harpagonella palmeri*) CRPR 4.2, NCCP-covered

Palmer's grapplinghook is an annual herb in the Boraginaceae family that flowers between March and May. This species is found growing in clay soils of chaparral, coastal scrub, and valley and foothill grassland habitats at elevations between 65 and 3,130 feet (20 to 955 meters) amsl. This species is threatened by development, non-native plants, and agriculture (CNPS 2014).

Palmer's grapplinghook was observed within the Project Survey Area. One individual was observed in an open area near the access road within the Dennery Canyon Habitat Restoration Project.

Tecate cypress (*Hesperocyparis forbesii*) CRPR 1B.1, NCCP-covered

Tecate cypress is a perennial, evergreen tree in the Cupressaceae family. This species often grows in clay, gabrroic, or metavolcanic soils in closed-cone coniferous forest and chaparral habitats. Tecate cypress can be found at elevations between 262 and 4,920 feet (80 to 1,500 meters) amsl. This species is threatened by alteration of fire regimes and mining and by development in Orange and Riverside counties. Much of this species is planted. In San Diego County, Tecate cypress is protected in part at Otay Mountain (CNPS 2014).

Tecate cypress was observed within the Project Survey Area. Chambers Group mapped 1,009 individuals within a large dry wash that serves as a restoration site. This species is covered under the San Diego NCCP.

Gander's pitcher sage (*Lepechinia ganderi*) CRPR 1B.3, NCCP-covered

Gander's pitcher sage is a perennial shrub in the Lamiaceae family that flowers between June and July. This species grows in gabrroic or metavolcanic soils in closed-cone coniferous forest and chaparral, coastal scrub, and valley and foothill grassland habitats. Gander's pitcher sage can be found at elevations between 1,000 and 3,300 feet (305 to 1,005 meters) amsl. Threats to this species include development (CNPS 2014). Gander's pitcher sage is considered sensitive by the BLM.

Gander's pitcher sage is presumed absent from the Project Survey Area. Suitable habitat for this species occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period.

Little mousetail (*Myosurus minimus* subsp*. apus*) CRPR 3.1, NCCP-covered

Little mousetail is an annual herb in the Ranunculaceae family that flowers in March and June. This species is found growing in valley and foothill grassland and vernal pool (alkaline) habitats at elevations between 65 and 2,100 feet (20 to 640 meters) amsl. This species is threatened by loss of vernal pool habitat and threatened by vehicles, grazing, development, and agriculture (CNPS 2014).

Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period; however, environmental conditions may have reduced occurrences. Project Survey Area historic records indicate this species has been documented within one mile of the project; therefore, little mousetail is expected to have a moderate potential to occur.

Spreading navarretia (*Navarretia fossalis*) FT, CRPR 1B.1, NCCP-covered

Spreading navarretia is an annual herb in the Polemoniaceae family that flowers between April and June. This species is found growing in chenopod scrub, marsh/swamp, playa, and vernal pool habitats at elevations between 98 and 2,040 feet (30 to 655 meters) amsl. This species is threatened by urbanization, agriculture, road construction, grazing, flood control, non-native plants, illegal dumping, foot traffic, and OHV use and potentially threatened by hydrological alterations (CNPS 2014).

Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Project Survey AreaHistoric records indicate this species has bee documented within one mile of the project; therefore, spreading navarretia is expected to have a moderate potential to occur.

California Orcutt grass (*Orcuttia californica*) FE, CE, CRPR 1B.1, NCCP-covered

California Orcutt grass is an annual herb in the Poaceae family that flowers between April and August. This species is found growing in vernal pool habitats at elevations between 49 and 2,363 feet (15 to 660 meters) amsl. This species is threatened by agriculture, development, non-native plants, grazing, and vehicles (CNPS 2014).Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Project Survey AreaHistoric records indicate this species has bee documented within one mile of the project; therefore, California orcutt grass is expected to have a moderate potential to occur.

Otay mesa mint (*Pogogyne nudiuscula*) CRPR 1B.1, NCCP-covered Narrow Endemic

Otay Mesa mint is an annual herb in the Lamiaceae family that flowers between May to July. This species often grows in clay soils within vernal pool habitats. Otay Mesa mint can be found at elevations between 295 and 820 feet (90 to 250 meters) amsl. This species is known from fewer than 20 occurrences and is threatened by recreational activities, vehicles, and trampling (CNPS 2014).

Marginal quality suitable habitat for this species occurs within the Project Survey Area within San Diego Mesa Claypan Vernal Pool habitat. This species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period, however environmental conditions may have reduced occurrences. Project Survey AreaHistoric records indicate this species has bee documented within one mile of the project; therefore, Otay mesa mint is expected to have a moderate potential to occur.

Small-leaved rose (*Rosa minutifolia*) CE, CRPR 1B.1, NCCP-covered

Small-leaved rose is a perennial deciduous shrub in the Rosaceae family that flowers between January and June. This species is found growing in chaparral and coastal scrub habitats at elevations between 492 and 525 feet (150 to 160 meters) amsl. This species is threatened by development and vehicles and possibly threatened by competition with non-native plants (CNPS 2014).

Small-leaved rose was observed within the Project Survey Area. Chambers Group mapped 18 individuals within the restored maritime succulent scrub located in Dennery Canyon Habitat Restoration Project. This species is covered under the San Diego NCCP.

Parry's tetracoccus (*Tetracoccus dioicus*) CNPS 1B.2, NCCP-covered

Parry's tetracoccus is a perennial deciduous shrub that flowers between April and May and is found on dry, stony slopes. Habitat includes chaparral and coastal scrub at elevations between 500 feet and 3,300 feet (150 to 1,000 m) amsl. This species is threatened by agriculture and development (CNPS 2011).

Parry's tetracoccus is presumed absent within the Project Survey Area. Suitable habitat for this occurs within the Project Survey Area; however, this species was not observed during protocol-level focused plant surveys conducted during the 2014 blooming period. Additionally, this species is a perennial deciduous shrub, and would have been expected to be observed during focused surveys if present, regardless of environmental conditions or survey timing.

Criteria for Evaluating Sensitive Wildlife Species Potential for Occurrence (PFO)

PFO	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Project site.
Low:	Historical records for this species do not exist within the immediate vicinity (greater than 1 mile) of the Project site, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the immediate vicinity of the project site (within approximately 1 mile) and marginal habitat exists on the Project site, or the habitat requirements or environmental conditions associated with the species occur within the Project site, but no historical records exist within 1 mile of the Project site.
High:	Both a historical record exists of the species within the Project site or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Project site.
Present:	Species was detected within the Project site at the time of the survey.

1.1.1 Special Status Species

The following information is a list of abbreviations used to help determine the significance of biologically sensitive resources potentially occurring within the Survey Area.

Federal

FE = Federally listed; Endangered
FT = Federally listed; Threatened
FC = Federal Candidate Species
FCC = Former Federal Species of Concern
BCC = Birds of Conservation Concern
FSS = Forest Service Sensitive

State

ST = State listed; Threatened
SE = State listed; Endangered
RARE = State-listed; Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
SSC = State Species of Special Concern
FP = State Fully Protected
WL = California Watch List Species

Table 1: Sensitive Wildlife Species with Potential to Occur

Common Name (*Scientific Name*)	Federal/State Listing	NCCP Status	Habitat and Distribution	Potential to Occur
CLASS MAMMALIA				
northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	CDFW SSC	Covered	Occurs in chaparral, sage scrubs, and grasslands with rocks and course gravel. Primarily granivorous, however will also consume green vegetation and insects.	Suitable habitat for this species occurs on site and the CNDDB lists one record of occurrence within 1 mile of the Project, with the closest approximately 570 feet from the Project. Therefore, this species has a **moderate** potential for occurrence witin the Project Survey Area.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	CDFW SSC	Covered	Found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges in coastal sage scrub habitats in Southern California	This species is **present** within the Project Survey Area and in immediately adjacent areas.
San Diego desert woodrat (*Neotoma lepida intermedia*)	CDFW SSC	Covered	Occurs in coastal scrub of Southern California from San Diego county to San Luis Obispo county. Moderate to dense canopies are preferred; particularly abundant in rock outcrops and rocky cliffs and slopes.	Suitable habitat for this species occurs on site and the CNDDB lists one record of occurrence within 1 mile of the Project (approximately 570 feet from Project). Therefore, this species has a **moderate** potential to occur within the Project Survey Area.
CLASS AVES				
burrowing owl (*Athene cunicularia*)	CDFW SSC, BLM S	NCCP-covered, narrow endemic species	Occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notable the California ground squirrel.	CNDDB lists 11 records of occurrence within 1 mile of the Project with three records being within 1,500 feet of the Project. This species was not observed in the Project during focused surveys conducted by Chambers Group in 2014. One potentially active burrow was found near pole Z31750. Therefore, this species has a **high** potential to forage and nest within the Project Survey Area.

Table 1: Sensitive Wildlife Species with Potential to Occur

Common Name (*Scientific Name*)	Federal/State Listing	NCCP Status	Habitat and Distribution	Potential to Occur
coastal cactus wren (*Campylorhynchus brunneicapillus*)	CDFW SSC, USFWS BCC, USFS Sensitive	NCCP-covered, narrow endemic species	Occurs in coastal sage scrub interlaced with patches of opuntia. Diet is primarily insectivorous, forages on the ground for prey items such as caterpillars, moths, and grasshoppers.	Low quality suitable habitat for this species occurs on site and the CNDDB lists seven records of occurrence within 1 mile of the Project, with two less than 1,000 feet from the Project. This species was not observed during focused surveys conducted by Chambers Group in 2014. Therefore, this species has a **moderate** potential to occur for foraging and **low** potential for nesting wihin the Project Survey Area.
coastal California gnatcatcher (*Polioptila californica californica*)	ESA threatened, CDFW SSC	Covered	An obligate, permanent resident of coastal sage scrub below 2,500 feet in elevation in Southern California. Found in low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	This species is **present** within the Project Survey Area and in immediately adjacent areas.
Cooper's hawk (*Accipiter cooperii*)	CDFW WL	Covered	Cooper's hawk (nesting) is a California SSC and is covered under the NCCP. This species occurs as a migrant and/or resident over most of the United States from southern Canada to northern Mexico.	This species is **present** within the Project Survey Area and in immediately adjacent areas. This species has a **moderate** potential to nest within the immediately adjacent areas.
grasshopper sparrow (*Ammodramus savannarum perpallidus*)	CDFW SSC	Covered	Found in most coastal counties, along the Western side of the Sacramento Valley, and in the Western foothills of the Sierra Nevada Mountains. Prefer breeding habitat comprised of open grasslands, preferably with bunch grass (versus sod-type) as the predominant cover, although through much of California, non-native annual grasslands and agricultural fields are used in the absence of native bunch-grass ecosystems.	This species is **present** within the Project Survey Area and in immediately adjacent areas.

Table 1: Sensitive Wildlife Species with Potential to Occur

Common Name (*Scientific Name*)	Federal/State Listing	NCCP Status	Habitat and Distribution	Potential to Occur
least Bell's vireo (*Vireo bellii pusillus*)	ESA Endangered, CESA Endangered	Covered	Occurs in early-successional habitats along rivers with low, dense vegetation. Diet consists of insects and spiders.	This species is **present** within the Project Survey Area and in immediately adjacent areas.
southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	CDFW WL	Covered	Occurs coastal sage scrub, chaparral, and rocky brush-laden hillsides. Diet consists primarily of small grass and forb seeds, occasionally will also consume insects.	This species is **present** within the Project Survey Area and in immediately adjacent areas.
CLASS REPTILIA				
San Diego horned lizard (*Phrynosoma coronatum blainvillii*)	California SSC, BLM Sensitive, USFS Sensitive	Covered	Occurs in a variety of habitats, such as coastal sage scrub, chaparral, various woodlands, and annual grasslands. Diet consists almost exclusively of ants.	High quality suitable habitat for this species occurs on site and the CNDDB lists one records of occurrence for this species within 1 mile of the Project. Therefore, this species has a **high** potential to occur within the Project Survey Area.
orange-throated whiptail (*Aspisdoscelis hyperythra beldingi*)	CDFW SSC	Covered	Occurs in coastal sage scrub and chaparral habitats with sandy washes, rocky outcrops, and adequate shading. Diet consists mainly of insects and spiders.	This species is **present** within the Project Survey Area and in immediately adjacent areas. 1 mile
red diamond rattlesnake (*Crotalus ruber*)	CDFW SSC	Covered	Found in several habitat types, such as coastal sage scrub, grassland, woodland associated large rocks or boulders. Diet consists mainly of squirrels for adults and lizards for juveniles.	High quality suitable habitat for this species occurs within the Project Survey Area and the CNDDB lists one record of occurrence within 1 mile of the Project. Therefore, this species has a **high** potential to occur within the Project Survey Area.

Table 1: Sensitive Wildlife Species with Potential to Occur

Common Name (*Scientific Name*)	Federal/State Listing	NCCP Status	Habitat and Distribution	Potential to Occur
CLASS INSECTA				
quino checkerspot butterfly (*Euphydryas editha quino*)	ESA Endangered	Covered under the SDG&E low-effect QCB HCP	Adults found along low hilltops, rocky outcrops, and ridges.	Due to poor survey conditions Chambers Group was unable to conducted focused surveys for this species in 2014. High quality habitat for this species occurs within the Project Survey Area. CNDDB lists five records of occurrence within 1 mile, the closest being approximately 1,137 feet from the Project. Therefore, this species has **high** potential to occur with the Project Survey Area.
Thorne's hairstreak (*Mitoura thornei*)	BLM sensitive species	Covered	Only found on Otay Mountain in interior cypress woodland located between 800-3,290 feet in elevation. Immatures are herbivorous and adults are nectivorous.	This species is **present** within the Project Survey Area and in immediately adjacent areas.
CLASS BRANCHIPODA				
Riverside fairy shrimp (*Streptocephalus woottoni*)	ESA endangered	Covered	Found in deep cool vernal pools. Lives as a filter feeder, consumes algae, bacteria, and various detritus in water.	The Project Survey Area contains good quality suitable habitat and the CNDDB lists seven records of occurrence within 1 mile of the Project, the closest 1,359 feet from Project. This species has a **high** potential to occur with the Project Survey Area.
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	ESA endangered	Covered	Occurs only in high-quality vernal pools. Lives as a filter feeder, consumes algae, bacteria, and various detritus in water.	The Project Survey Area contains good quality suitable habitat and the CNDDB lists 12 records of occurrences within 1 mile of the Project, the closest being with 1,288 feet from the Project. Therefore, this species has **high** potential to occur with the Project Survey Area.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) CDFW SSC, NCCP-covered

This species occurs in western Riverside, southwestern San Bernardino, eastern Orange, and San Diego counties in California, as well as northwestern Baja California, Mexico. It prefers sage scrub, chaparral, and non-native grasslands in association with rocks or coarse gravel (McClenaghan 1983; Bleich 1973). The northwestern San Diego pocket mouse has relatively small ears and yellowish or orange hair on its sides, contrasting with a dark brown back (Lackey 1996). Primarily a granivore, this pocket mouse will occasionally eat herbaceous forbs, green grasses, and insects during certain seasons. Habitat fragmentation and development are primary threats to this species.

The CNDDB lists one record of occurrence within one mile of the Project, with the closest approximately 570 feet from the Project and the Project Survey Area contains moderate quality habitat to support this speices. Therefore, the Northwestern San Diego pocket mouse has a **moderate** potential to occur within the Project Survey Area.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) CDFW SSC, NCCP-covered

This species is found on coastal slopes from Kern County, California, south into Baja California, Mexico, between sea level and approximately 3,000 feet amsl. It occurs in a variety of habitats but prefers intermediate canopy stages of shrub habitats, grasslands, and open scrub along herbaceous and tree edges within coastal sage scrub habitats in southern California. It also occurs on agricultural lands. This species does not typically burrow but sits in depressions called forms at the bases of shrubs by day. It is chiefly nocturnal and is an opportunistic forager that feeds on a variety of herbaceous matter, depending on plant availability and time of year. Reasons for decline include habitat loss, fragmentation, and disease outbreaks.

The CNDDB lists six records of occurrence within one mile of the Project, the closest being 214 feet from the Project. The San Diego black-tailed jackrabbit was observed and is **present** within the Project Survey Area.

San Diego desert woodrat (*Neotoma lepida intermedia*) CDFW SSC, NCCP-covered

The San Diego desert woodrat occurs in southern California from San Diego County to San Luis Obispo County and is covered under the NCCP. It inhabits moderate to dense canopies in a variety of shrub and desert habitats, especially in rock outcrops, rocky cliffs, and slopes. The desert woodrat is often associated with large cactus patches (Montgomery 1998); within coastal sage scrub communities, it almost is invariably associated with prickly pear (*Opuntia littoralis*). This species is also found in rocky outcroppings and boulder-covered hillsides in chaparral or oak woodlands.

The CNDDB lists one record of occurrence within one mile of the Project (570 feet from Project), and the Project Survey Area contains moderate quality suitable habitat to support this species. The San Diego desert woodrat has a **moderate** potential to occur within the Project Survey Area.

Western burrowing owl (*Athene cunicularia*; BUOW) CDFW SSC, BLMS, NCCP narrow-endemic species

Burrowing owls breed in open plains from western Canada and the western United States, Mexico through Central America, and into South America to Argentina (Klute et al. 2003). This species inhabits dry, open, native or non-native grasslands, deserts, and other arid environments with low-growing and low-density vegetation (Ehrlich et al. 1988). It may occupy golf courses, cemeteries, road ROWs,

airstrips, abandoned buildings, irrigation ditches, and vacant lots with holes or cracks suitable for use as burrows (TLMA 2006). It occupies mammal burrows such as badger, prairie dog, and ground squirrel burrows for subterranean shelter and nesting (Trulio 1997). When burrows are scarce, the burrowing owl may use man-made structures such as openings beneath cement or asphalt pavement, pipes, culverts, and nest boxes (TLMA 2006). One burrow is typically selected for use as the nest; however, satellite burrows are usually found in the immediate vicinity of the nest burrow within the defended territory of the owl.

Burrowing owls are active day and night, with peak times at dawn and dusk (Klute et al. 2003). Breeding typically occurs from March through August, with peak periods in May and July. The burrowing owl is a small, ground-dwelling owl with a round, grey-brown, tuftless head; long, bare yellow legs; bright yellow iris; brown back; and buffy-white underparts with brown barring (Klute et al. 2003). Insects form the bulk of its diet in the summer and small mammals, birds and reptiles in the winter (Klute et al. 2003). Threats to burrowing owl populations include the loss of and destruction of habitat from agriculture and urban development, the destruction of burrows, and indirect poisoning via rodent eradication efforts (Klute et al. 2003).

The CNDDB lists 11 records of occurrence within one mile of the Project, with three records being within 1,500 feet of the Project. The Project Survey Area contains high quality foragiong and nesting habitat for BUOW. This species was not observed in the ROW during focused surveys conducted by Chambers Group in 2014. One potentially occupied burrow was found near pole Z31750 (Location 108). The burrowing owl has a **high** potential to forage and nest within the Project Survey Area.

Coastal cactus wren (*Campylorhynchus brunneicapillus*) CDFW SSC, USFWS BCC, USFS Sensitive and NCCP narrow endemic species

This species occurs from the lower southwestern United States south into Mexico; in California it is found only in Orange and San Diego counties. Its preferred habitat includes coastal sage scrub interlaced with patches of opuntia cactus (such as chollas and prickly pear), which it uses almost exclusively for the construction of nests (Unitt 2008). The nests are remarkably large and conspicuous, given the size of the bird, and are constructed as woven spherical nests with a side opening in the branches of the host cactus. San Diego coastal cactus wrens nest primarily from early March through July, and young disperse only a short distance from nesting sites. This species is predominantly insectivorous, foraging on the ground and within vegetation for a variety of insects, including caterpillars, moths, and grasshoppers. San Diego cactus wrens establish resident territories and maintain them for life. The primary threat to this species is urbanization. Additional threats include fire, habitat degradation, and fragmentation (Unitt 2008).

The CNDDB lists seven records of occurrence within one mile of the Project, with two less than 1,000 feet from the Project. This species was not observed in the Project Survey Area during focused surveys conducted by Chambers Group in 2014. The San Diego coastal cactus wren has a **moderate** potential to occur within the Project Survey Area for foraging and **low** potential for nesting.

Coastal California gnatcatcher (*Polioptila californica californica*; CAGN) ESA threatened, CDFW SSC, NCCP-covered

The historical range of this species extended from the coast and foothills of Ventura County and south through Los Angeles, southwestern San Bernardino, western Riverside, Orange, and San Diego counties of California into northwestern Baja California, Mexico. Populations have since become increasingly

fragmented (Bontrager 1991). It is a permanent resident of Diegan, Riversidian, and Venturan sage scrub sub-associations found from sea level to 2,500 feet in elevation.

The CAGN is a small, secretive songbird with grayish coloration and faint white outer tail margins. Males of this species exhibit a black cap during the breeding season. This insectivorous bird nests and forages in moderately dense stands along gentle slopes, arid hillsides, mesas, foothills, and alluvial washes. It gleans a variety of insects within its territory, including caterpillars and other larval insects. It builds a cup nest in suitably dense shrubs and lays four eggs, on average. Contributing factors in the decline of this species include overly frequent fire cycles, non-native plant invasions, brown-headed cowbird (*Molothrus ater*) nest parasitism, predation, and widespread habitat loss to urbanization and agriculture (Mock et al. 1990; Bontrager1991).

The CNDDB lists 12 records of occurrence of this species within one mile of the Project. Two of these observations were within 1,000 feet of the Project. In addition, the Project Survey Area contains high quality suitable habitatfor this species. The CAGN was observed and can be considered **present** within the Project Survey Areafor both foraging and nesting purposes.

Cooper's hawk (*Accipiter cooperii*) CDFW WL, NCCP-covered

Historically, the Cooper's hawk's favored habitats included open woodlands, mature forests, woodland edges, and river groves. More recently, the Cooper's hawk has been known to breed in suburban and urban areas with similar tree structure to native habitats. This species is similar in appearance to the sharp-shinned hawk (*Accipiter striatus*) but is distinguished by its larger size, more rounded tail, and darker crown. The Cooper's hawk is a medium-sized (14 to 20 inches) hawk and is well-adapted for hunting birds as prey with its long tail and short, rounded wings; these features allow maneuverability in pursuit and on the ambush. In addition to birds, it may also take amphibians, reptiles, and small mammals as supplemental prey items. Historic population losses resulted from the widespread use of DDT. Other threats include habitat loss and illegal hunting (Remsen 1978).

CNDDB lists no records of occurrence within one mile of the Project. However, this species was observed during the survey effort and can be considered **present** for foraging purposes and has a **moderate** potential to nest within the Project Survey Area.

Grasshopper sparrow (*Ammodramus savannarum perpallidus*) CDFW SSC, NCCP-covered

The grasshopper sparrow occurs in both North and South America, ranging from southern Canada south to Ecuador in a discontinuous distribution. Within California, the grasshopper sparrow is found in most coastal counties, along the western side of the Sacramento Valley, and in the western foothills of the Sierra Nevada Mountains. Grasshopper sparrows prefer breeding habitat consisting of open grasslands, preferably with bunch grass (versus sod type) as the predominant cover, although through much of California, non-native annual grasslands and agricultural fields are used in the absence of native bunch-grass ecosystems. Nests are well hidden on the ground under clumps of grass, screened from above by a dome. The primary threats to grasshopper sparrows involve habitat loss to anthropogenic causes which include urbanization and conversion of grasslands to agricultural uses not compatible with grasshopper sparrow habitat requirements (Unitt 2008).

The CNDDB lists no records of occurrence within one mile of the Project. However this species was observed during the survey effort and can be considered **present** foraging purposes and has a **high** potential to nest within the Project Survey Area.

Least Bell's vireo (*Vireo bellii pusillus*) ESA Endangered, CESA Endangered, NCCP-covered

Least Bell's vireo is restricted to coastal California and Baja California, Mexico, and a few inland populations. Its winter range extends along the Pacific coast from northern Mexico south to northern Nicaragua. It is a small, gray songbird with two faint wingbars and a faint eyering and is whiter below. This species prefers to nest in low, dense, scrubby vegetation in early successional areas and is particularly dependent on corridors of habitat along rivers and streams (Brown 1993; Goldwasser 1981). The two major factors in the decline of LBVI populations are loss of habitat and nest parasitism by the brown headed-cowbird. Despite historical population losses, recent trends indicate that populations are on the rise and that the LBVI is returning to parts of its former range as well as colonizing some new areas.

The CNDDB lists five records of occurrence of this species within one mile of the Project. Three of these observations were within 1,000 feet of the Project. In addition, the Project Survey Area contains high quality suitable habitat. This species was observed during the survey effort and can be considered **present** within the Project Survey Area for both foraging and nesting purposes.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) CDFW WL, NCCP-covered

The southern California rufous-crowned sparrow is one of 17 recognized subspecies of the rufous–crowned sparrow, whose overall range includes parts of California, Arizona, New Mexico, Texas, Oklahoma, and Arkansas, as well as Mexico. This subspecies is a resident of southwest California on the slopes of the Transverse and Coast ranges from Los Angeles County south to Baja California Norte; it can also be found on San Martin Island. Habitats include broken sage scrub and chaparral; native grasslands with sparse shrubs; and rocky, brush laden hillsides and canyons with open patches. It is a small, nondescript sparrow with a rusty crown, white eye ring, dark whisker marks, and a flat-headed appearance. It is a secretive species that is more often heard than seen as it forages among the shrubs. Habitat loss is the primary factor in the decline of the southern California rufous-crowned sparrow.

The CNDDB lists two records of occurrence within one mile of the Project. High quality nesting habitat for this species occurs with the Project Survey Area. This species was observed during the survey effort and can be considered **present** for foraging, with a **high** potential to nest within the Project Survey Area. This species was observed foraging in several locations within the Project Survey Area, and the Project Survey Area contains good quality suitable habitat.

San Diego horned lizard (*Phrynosoma coronatum*) California SSC, BLM Sensitive, USFS Sensitive, and NCCP-covered

This species occurs from the Transverse Ranges in Kern, Los Angeles, Santa Barbara, and Ventura counties southward throughout the Peninsular Ranges of southern California to Baja California, Mexico, as far south as San Vicente. It is found in a wide variety of habitats, including coastal sage scrub, annual grasslands, chaparral, oak woodlands, riparian woodlands, and coniferous forests. It is perhaps most abundant in riparian and coastal sage scrub habitats on old alluvial fans of the southern California coastal plain. In foothill and mountain habitats that are covered with dense brush or other vegetation, the species is largely restricted to areas with pockets of open microhabitat; this habitat structure can be created by natural events such as fire and floods or human-created disturbances such as livestock grazing, fire breaks, and road construction. The key elements of these microhabitats are loose, fine, sandy soils; an abundance of native ants; open areas for basking; and low but relatively dense shrubs for refuge. The coast horned lizard is a moderately sized, dorso-ventrally flattened lizard with five

backwardly projecting head spines; a large shelf above each eye; large, convex, smooth scales on the forehead; and two parallel rows of pointed scales fringing each side of the body. No stripes radiate from the eyes, and the iris is black. The dorsal color is highly variable but typically gray, tan, reddish-brown, or whitish and usually resembling the prevailing soil color; while the venter is yellow to white with discrete, dark spots. Its diet is composed almost entirely of ants, especially harvester ants; but it will take other insects on an opportunistic basis. The primary threat to the continued existence of this species is habitat loss. Other threats include non-native ants (especially Argentine ants) and disturbances related to off-road vehicles.

The CNDDB lists one records of occurrence for this species within one mile of the Project. High quality habitat for this species occurs within the Project Survey area; therefore this species has a **high** potential to occur.

Orange-throated whiptail (*Aspisdoscelis hyperythra beldingi*) CDFW SSC, NCCP-covered

This species is found from San Bernardino County, California, through Baja California, Mexico. It is found in Diegan Coastal Sage Scrub and Coastal Sage-Chaparral Scrub, which provide both open territory and adequate shading, and in sandy washes, rocky outcrops, and open dirt roads. This species is undoubtedly limited by habitat but may be a species that is locally abundant as long as appropriate habitat exists. This species is often found in California buckwheat, California sagebrush, black sage, white sage (*Salvia apiana*), chamise, and redshank (*Adenostoma sparsifolium*) sage scrub and chaparral habitats. Due to similar habitat requirements, it typically occurs in association with the San Diego horned lizard. Hibernation sites occur on well-insulated, south-facing, open slopes that are often adjacent to terraces with woody perennials. The orange-throated whiptail is a moderately sized, gray, reddish brown, dark brown, or black lizard with five to seven pale yellow or tan stripes along each side. The top of the head has a yellow-brown to olive gray, single, fused frontoparietal scale. Undersurfaces are yellowish white, often with gray or bluish slate on the belly. Adults have varying degrees of red-orange wash that may occur on all undersurfaces. The latter is especially prominent on the throat and chest in breeding males. In hatchlings and juveniles, the tail is a highly visible, bright blue. Prey items include a variety of insects and spiders. The primary threat to the continued existence of this species is habitat loss (Brattstrom 2000).

The CNDDB lists nine records of occurrence within one mile of the Project, with the closest occurrence being approximately 2,000 feet away. This speices was observed during the survey effort and can be considered **present** within the Project Survey Area.

Red diamond rattlesnake (*Crotalus ruber*) CDFW SSC, NCCP-covered

This species occurs throughout southern California from San Bernardino County to Cabo San Lucas, Baja California, Mexico, at elevations from sea level to 1,520 meters, with most encountered below 1,200 meters. It occurs in habitats with heavy brush associated with large rocks or boulders. This species is found in chamise and redshank-dominated associations, as well as coastal sage scrub, grassland, woodland, and desert slope scrub associations within canyons, mountains, deserts, and foothills. The northern red diamond rattlesnake is a large (75 to 163 centimeters), heavy-bodied rattlesnake with a tan, pink, brick-red, or reddish-colored dorsal color and obscure, usually light-edged brick or pinkish diamond-shaped blotches.

The tail base is prominently “raccoon tail” marked with broadly spaced but relatively narrow, distinct, black rings contrasting with the rest of the body color. The belly is white to pale yellow, and the

undersurface of the tail is pinkish buff. The iris is brown. Northern red diamond rattlesnakes are crepuscular or nocturnal during periods of excessive heat and active during the day when temperatures are more moderate. Some individuals have been observed year-round, but it is thought that most hibernate in the winter (Calherps 2011). Peak activity occurs between April and May, potentially in relation to the breeding season. Between 3 and 20 live young are born between late July and September. Range restriction and habitat loss are the primary reasons for the decline of this species (California Reptiles and Amphibians 2011b).

The CNDDB lists one record of occurrence within one mile of the Project and the Project Survey Area contains high quality suitable habitat. Therefore, this species has a **high** potential to occur within the Project Survey Area.

Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) ESA Endangered, SDG&E QCB low effect-HCP

The species ranges from northern Baja California to Canada along the Pacific coast and east to Colorado. The historical range of this subspecies once included the coastal plains and inland valleys of southern California and northern Baja California. It formerly occurred at many sites in San Diego, Orange, Los Angeles, and western Riverside counties. It is associated with habitats that contain its primary larval host plant, western plantain (*Plantago erecta*) and other host plants such as bird's beak (*Cordylanthus rigidus*) and owl's clover (*Castilleja exserta*). Specifically, owl's clover serves as an additional larval host plant for some quino checkerspot colonies located east of Temecula. These host plants tend to occur in clay or cryptogamic soils in areas mostly devoid of tall, weedy growth and/or a dense cover of shrubs. Adult butterflies characteristically tend to patrol low hilltops, rocky outcrops, and ridges. Additional habitat requirements include the presence of adult nectar sources and topographic features that include bare, open soils and ridgetops. Habitat loss and invasive plant species are contributing factors in the continuing decline of this species.

Due to poor survey conditions, Chambers Group was unable to conduct focused surveys for QCB in 2014. The CNDDB lists five records of occurrence within one mile, the closest being approximately 1,137 feet from the Project. High quality habitat for this species is likely to occur within the Project Survey Area; Therefore, this species has a **high** potential to occur.

Thorne's hairstreak (*Mitoura thornei*) BLM sensitive species, NCCP-covered

The Thorne's hairstreak butterfly is found only on Otay Mountain in southern San Diego County. On Otay Mountain, it is restricted to elevations between 800 and 3,290 feet. It is closely associated with Tecate cypress - dominated habitat. Thorne's hairstreaks are small, plain brown butterflies. The ventral side of their wings are brown and copper with a bluish-lavender streak; the dorsal side of its wings are difficult to see in the field but are a mahogany brown color. The Tecate cypress is an integral part of this species' life history. Adults lay their eggs on this cypress, and the immatures spend the first part of their life feeding on the foliage of the cypress until they become adults. Adults are nectivorous and will venture into chaparral habitats to feed off California buckwheat, Ramona lilac (*Ceanothus tomentosus*), deerweed, and narrowleaf milkweed (*Asclepias fascicularis*). Currently, the greatest potential threat to this species is wildlfire that would destroy existing habitat (USFWS 2011).

The CNDDB lists two records of occurrence within one mile of the Project. This species was observed during the survey effort and can be considered **present** within the Project Survey Area.

Riverside fairy shrimp (*Streptocephalus woottoni*) ESA endangered, NCCP-covered

This species' range encompasses vernal pools found in western Riverside County, San Diego County, and through Baja California. Extremely habitat-restricted, it is found only in vernal pools deeper than 30 centimeters, with cool water that will be sustained through warmer weather and a pH of neutral nor just below neutral. It subsists as a filter feeder, consuming bacteria, algae, protozoa, and detritus. When breeding, this species produces eggs that hatch into drought-resistant cysts that will only mature if the vernal pool is deep enough and if the water is below 77 °F. Threats to this species are the loss of suitable habitat by human disturbance such as soil compaction, trampling, livestock grazing, off-road vehicles, and agricultural development. (USFWS ECOS 2014b)

Due to poor survey conditions, Chambers Group was unable to conduct focused surveys for this species in 2014. The CNDDB lists seven records of occurrence within one mile of the Project, the closest being 1,359 feet from Project, and the Project Survey Area contains high quality suitable habitat in the form of natural vernal pools and road rud seasonal pools. Therefore, this species has a **high** potential to occur.

San Diego fairy shrimp (*Branchinecta sandiegonensis*) ESA endangered, NCCP-covered

San Diego fairy shrimp are found within coastal mesa systems in Orange County (small population) and San Diego County, California, and Baja California, Mexico (INRMP 2007). In San Diego County, this species has been identified from Camp Pendleton inland to the Ramona area and south through Del Mar Mesa, Proctor Valley, and Otay Mesa. It is generally limited to high quality vernal pools but can also be found in man-made pools that have not been disturbed for several years (INRMP 2007). Although less common, fairy shrimp species have been identified along road ruts with hard-pan clay type soils. It is a small, freshwater shrimp with large, stalked eyes; no carapace; and 11 pairs of swimming legs, which it uses to swim/walk upside down using a complex movement of the legs passing from back to front (NatureServe 2011). Females carry cysts (eggs) in a brood sac, which either drops off as the eggs hatch or stays attached to the female after she dies. The eggs sink to the bottom of the pool environ, where they can withstand temperature extremes or pool drying and hatch in the future when conditions are more favorable. Eggs can stay dormant for years until conditions are right. Eggs that are dropped hatch between 7 and 14 days later, depending on temperature (NatureServe 2011). Populations vary between years of favorable and unfavorable conditions, with populations being higher in the former and lower in the latter. A variation in age of "resting eggs" appears critical for the survival of this species (NatureServe 2011). Loss of habitat is the major threat to the San Diego fairy shrimp.

Due to poor survey conditions, Chambers Group was unable to conduct focused surveys for this species in 2014. The CNDDB lists 12 records of occurrence within one mile of the Project, the closest being 1,288 feet from Project, and the Project Survey Area contains high quality suitable habitat in the form of natural vernal pools and road rud seasonal pools. Therefore, this species has a **high** potential to occur.

Scientific Name	Common Name	Special Status
INVERTEBRATES		
Class: Insecta	**Insects**	
Order: Lepidoptera	**Butterflies**	
Family: Lycaenidae	**Gossamer Wings**	
Callophrys thornei	Thorne's Hairstreak	
VERTEBRATES		
Class Sauropsida	**Reptiles**	
Order Squamata	**Lizards and Snakes**	
Family Phrynosomatidae	**Spiny Lizards**	
Sceloporus occidentalis	Western Fence Lizard	
Uta stansburiana	Common Side-blotched Lizard	
Family Teiidae	**Whiptails**	
Cnemidophorus hyperythrus	Orange-throated Whiptail	NCCP, SSC
Cnemidophorus tigris stejnegeri	Coastal Western Whiptail	
Family Colubridae	**Egg-laying Snakes**	
Lampropeltus getulus californiae	California Kingsnake	
Class Aves	**BIRDS**	
Order Anseriformes	**Geese, Swans, and Ducks**	
Anas platyrhynchos	Mallard	
Order Galliformes	**Gallinaceous Birds**	
Family Odontophoridae	**New World Quail**	
Callipepla californica	California Quail	
Order Podicipediformes	**Grebes**	
Podilymbus podiceps	Pied-billed Grebe	
Order Pelecaniformes	**Totipalmate Birds**	
Family Phalacrocoracidae	**Cormorants**	
Phalacrocorax auritus	Double-crested Cormorant	WL
Order Ciconiiformes	**Herons, Ibises, Storks, American Vultures, and Allies**	
Family Ardeidae	**Herons, Bitterns, and Allies**	
Ardea herodias	Great Blue Heron	
Egretta thula	Snowy Egret	
Butorides virescens	Green Heron	
Family Cathartidae	**New World Vultures**	
Cathartes aura	Turkey Vulture	
Order Falconiformes	**Diurnal Birds of Prey**	
Family Accipitridae	**Hawks, Kites, Eagles, and Allies**	
Pandion haliaetus	Osprey	WL
Elanus leucurus	White-tailed Kite	FP, WL
Circus cyaneus	Northern Harrier	SSC

Scientific Name	Common Name	Special Status
Accipiter cooperii	Cooper's Hawk	NCCP, WL
Buteo lineatus	Red-shouldered Hawk	
Buteo jamaicensis	Red-tailed Hawk	
Family Falconidae	**Falcons**	
Falco sparverius	American Kestrel	
Order Gruiformes	**Rails, Cranes, and Allies**	
Family Rallidae	**Rails, Gallinules, and Coots**	
Rallus limicola	Virginia Rail	
Gallinula galeata	Common Gallinule	
Fulica americana	American Coot	
Order Charadriiformes	**Shorebirds, Gulls, Auks, and Allies**	
Family Charadriidae	**Plover**	
Charadrius vociferus	Killdeer	
Family Laridae	**Gulls, Terns, and Skimmers**	
Larus occidentalis	Western Gull	
Order Columbiformes	**Pigeons and Doves**	
Family Columbidae	**Pigeons and Doves**	
Columba livia	Rock Pigeon	I
Zenaida macroura	Mourning Dove	
Order Cuculiformes	**Cuckoos and Allies**	
Family Cuculidae	**Cuckoos and Roadrunners**	
Geococcyx californianus	Greater Roadrunner	
Order Strigiformes	**Owls**	
Family Tytonidae	**Barn Owls**	
Tyto alba	Barn Owl	
Order Caprimulgiformes	**Goatsuckers and Allies**	
Family Caprimulgidae	**Goatsuckers**	
Chordeiles acutipennis	Lesser Nighthawk	
Order Apodiformes	**Swifts and Hummingbirds**	
Family Apodidae	**Swifts**	
Aeronautes saxatalis	White-throated Swift	
Family Trochilidae	**Hummingbirds**	
Calypte anna	Anna's Hummingbird	
Calypte costae	Costa's Hummingbird	
Selasphorus sasin	Allen's Hummingbird	
Order Piciformes	**Woodpeckers and Allies**	
Family Picidae	**Woodpeckers**	
Melanerpes formicivorus	Acorn Woodpecker	
Picoides nuttallii	Nuttall's Woodpecker	

Scientific Name	Common Name	Special Status
Picoides pubescens	Downy Woodpecker	
Colaptes auratus	Northern Flicker	
Order Passeriformes	**Perching Birds**	
Family Tyrannidae	**Tyrant Flycatchers**	
Contopus cooperi	Olive-sided Flycatcher	SSC
Empidonax traillii brewsteri	Little Willow Flycatcher	SE
Empidonax difficilis	Pacific-slope Flycatcher	
Sayornis nigricans	Black Phoebe	
Sayornis saya	Say's Phoebe	
Myiarchus cinerascens	Ash-throated Flycatcher	
Tyrannus vociferans	Cassin's Kingbird	
Tyrannus verticalis	Western Kingbird	
Family Vireonidae	**Vireos**	
Vireo bellii pusillus	Least Bell's Vireo	NCCP, SE, FE
Vireo huttoni	Hutton's Vireo	
Family Corvidae	**Crows and Jays**	
Aphelocoma californica	Western Scrub-Jay	
Corvus brachyrhynchos	American Crow	
Corvus corax	Common Raven	
Family Alaudidae	**Larks**	
Eremophila alpestris actia	California Horned Lark	WL
Family Hirundinidae	**Swallows**	
Tachycineta bicolor	Tree Swallow	
Stelgidopteryx serripennis	Northern Rough-winged Swallow	
Hirundo pyrrhonota	Cliff Swallow	
Family Aegithalidae	**Bushtits**	
Psaltriparus minimus	Bushtit	
Family Troglodytidae	**Wrens**	
Salpinctes obsoletus	Rock Wren	
Thryomanes bewickii	Bewick's Wren	
Troglodytes aedon	House Wren	
Cistothorus palustris	Marsh Wren	SSC
Family Sylviidae	**Gnatcatchers**	
Polioptila caerulea	Blue-gray Gnatcatcher	
Polioptila californica californica	Coastal California Gnatcatcher	NCCP, FT, SSC
Family Turdidae	**Thrushes**	
Sialia mexicana	Western Bluebird	
Catharus guttatus	Hermit Thrush	

Scientific Name	Common Name	Special Status
Family Timaliidae	**Babblers**	
Chamaea fasciata	Wrentit	
Family Mimidae	**Mockingbirds and Thrashers**	
Mimus polyglottos	Northern Mockingbird	
Toxostoma redivivum	California Thrasher	
Family Sturnidae	**Starlings**	
Sturnus vulgaris	European Starling	I
Family Ptilogonatidae	**Silky-flycatchers**	
Phainopepla nitens	Phainopepla	
FamilyParulidae	**Wood-Warblers**	
Vermivora celata	Orange-crowned Warbler	
Dendroica petechia brewsteri	Yellow Warbler	SSC
Geothlypis trichas	Common Yellowthroat	
Wilsonia pusilla	Wilson's Warbler	
Icteria virens	Yellow-breasted Chat	SSC
Family Emberizidae	**Embrezids**	
Pipilo maculatus	Spotted Towhee	
Pipilo crissalis	California Towhee	
Aimophila ruficeps canescens	Southern California Rufous-crowned Sparrow	NCCP, WL
Ammodramus savannarum	Grasshopper Sparrow	NCCP, SSC
Zonotrichia leucophrys	White-crowned Sparrow	
Family Cardinalidae	**Cardinals and Allies**	
Pheucticus melanocephalus	Black-headed Grosbeak	
Passerina caerulea	Blue Grosbeak	
Family Icteridae	**Blackbirds**	
Agelaius phoeniceus	Red-winged Blackbird	
Sturnella neglecta	Western Meadowlark	
Euphagus cyanocephalus	Brewer's Blackbird	
Molothrus ater	Brown-headed Cowbird	
Icterus cucullatus	Hooded Oriole	
Icterus bullockii	Bullock's Oriole	
Family Fringillidae	**Fringilline and Cardueline Finches and Allies**	
Carpodacus mexicanus	House Finch	
Carduelis psaltria	Lesser Goldfinch	
Carduelis lawrencei	Lawrence's Goldfinch	
Carduelis tristis	American Goldfinch	
Class Mammalia	**MAMMALS**	
Order Lagomorpha	**Rabbits, Hares and Pikas**	
Family Leporidae	**Rabbits and Hares**	

Scientific Name	Common Name	Special Status
Sylvilagus audubonii	Desert Cottontail	
Sylvilagus bachmani	Brush Rabbit	
Lepus californicus bennettii	San Diego Black-tailed Jackrabbit	NCCP, SSC
Order Rodentia	**Rodents**	
Family Sciuridae	**Squirrels and Chipmunks**	
Spermophilus beecheyi	California Ground Squirrel	
Family Geomyidae	**Pocket Gophers**	
Thomomys bottae	Botta's Pocket Gopher	
Family Heteromyidae	**Pocket Mice and Kangaroo Rats**	
Dipodomys simulans	Dulzura Kangaroo Rat	
Family Muridae	**Mice, Rats and Voles**	
Peromyscus maniculatus	Deer Mouse	
Neotoma sp.	Woodrat sp.	
Order Carnivora	**Carnivores**	
Family Canidae	**Dogs and foxes**	
Canis latrans	Coyote	
Urocyon cinereoargenteus	Gray Fox	
Order Artiodactyla	**Even-Toed ungulates**	
Family Bovidae	**Bison, Goats & Sheep**	
Bos taurus	Cattle	I

I= Introduced Species
X= Extirpated

NCCP= NCCP-covered Species
NE=NCCP Narrow Endemic Species

FE= Federally Endangered
FT= Federally Threatened
SE= State Endangered
ST= State Threatened
SSC= CDFW Species of Special Concern
WL= CDFW List of Taxa to Watch
FP= CDFW Fully Protected