Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status[1]	CRPR[1]	County[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Lilium humboldtii ssp. *ocellatum*	Ocellated humboldt lily	None/ None	4.2	List D	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland/ openings/ bulbiferous herb/March–July/ 90–5,900 feet	No	Low potential to occur.	Limited suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Lilium parryi	Lemon Lily	None/ None	1B.2	List A	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest/mesic/bulbiferous herb/July–August/ 4,000-9,000 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Linanthus bellus	Desert beauty	None/ None	2B.1	List B	Chaparral/sandy/annual herb/April–May/3,280–4,600 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Linanthus orcuttii	Orcutt's linanthus	None/ None	1B.3	List A	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/openings/ annual herb/ May–June/ 3,002–7,037 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Lupinus excubitus var. *medius*	Mountain Springs bush lupine	None/ None	1B.3	List A	Pinyon and juniper woodland, Sonoran desert scrub/ shrub/ March–May/1,400–4,500 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Lycium californicum	California box-thorn	None/ None	4.2	List D	Coastal bluff scrub, Coastal scrub/ perennial shrub/ (December),March-August/ 16–492 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
Lycium parishii	Parish's desert-thorn	None/ None	2B.3	List B	Coastal scrub, Sonoran desert scrub/shrub/ March–April/1,000–3,280 feet	No	Low potential to occur.	Limited suitable habitat on site, but not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Lyrocarpa coulteri	Palmer's lyrepod	None/ None	4.3	List D	Sonoran desert scrub(gravelly or rocky)/ perennial herb/ December–April/ 394–2,608 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Malacothamnus aboriginum	Indian Valley-bush mallow	None/ None	1B.2	List A	Chaparral, cismontane woodland/rocky, often in burned areas/ deciduous shrub/ April–October/490–5,600 feet	No	Low potential to occur.	Suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Malperia tenuis	brown turbans	None/ None	2B.3	List B	Sonoran desert scrub(sandy, gravelly)/ annual herb/ (February) March–April/ 50–1,100 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Matelea parvifolia	spearleaf	None/ None	2B.3	List B	Mojavean desert scrub, Sonoran desert scrub/rocky/ perennial herb/ March–May/ 1,444–3,593 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Mentzelia hirsutissima	Hairy stickleaf	None/ None	2B.3	List B	Sonoran desert scrub/rocky/annual herb/ March–May/0–2,300 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Microseris douglasii ssp. *platycarpha*	Small-flowered microseris	None/ None	4.2	List D	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay/ annual herb/ March–May/ 50–3,500 feet	No	Low potential to occur.	Clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road and species not observed during previous surveys. Not detected during 2013 focused plant surveys.
Mimulus aurantiacus var. *aridus*	low bush monkeyflower	None/ None	4.3	List D	Chaparral(rocky), Sonoran desert scrub/ perennial evergreen shrub/ April–July/ 2,461–3,937 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Mimulus clevelandii	Cleveland's bush monkeyflower	None/ None	4.2	List D	Chaparral, Cismontane woodland, Lower montane coniferous forest/Gabbroic, often in disturbed areas, openings, rocky/ perennial rhizomatous herb/April–July/1,675–6,560 feet	No	Low potential to occur.	Some suitable habitat on site, but not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Mimulus diffusus [=palmeri]	Palomar monkeyflower	None/ None	4.3	List D	Chaparral, lower montane coniferous forest; sandy or gravelly/ annual herb/ April–June/ 4,000–6,000 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
Mimulus latidens	broad-toothed monkeyflower	None/ None	None	List A	Vernally wet depressions/ annual herb/ April–June/ elevation unknown	No	Not expected to occur.	This species is typically associated with vernal pools, which do not occur on site. Not detected during 2013 focused plant surveys.
Mirabilis tenuiloba	slender-lobed four o'clock	None/ None	4.3	List D	Sonoran desert scrub/ perennial herb/ (February) March–May/ 984–3,593 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Monardella macrantha ssp. *hallii*	Hall's monardella	None/ None	1B.3	List A	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/ perennial rhizomatous herb/ June–October/ 2,395–7,201 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Monardella nana ssp. *leptosiphon*	San Felipe monardella	None/ None	1B.2	List A	Chaparral, lower montane coniferous forest/rhizomatous herb/June–July/ 3,940–6,090 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Monardella stoneana	Jennifer's monardella	None/ None	1B.2	List A	Closed-cone coniferous forest, Chaparral, Coastal scrub, Riparian scrub/usually rocky intermittent streambeds/ perennial herb/ June–September/ 33–2,592 feet	No	Not expected to occur.	No suitable streambeds on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Monardella viminea	willowy monardella	FE/ SE	1B.1	List A	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland/alluvial ephemeral washes/ perennial herb/ June–August/ 164–738 feet	No	Not expected to occur.	No suitable washes on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Mucronea californica	California spineflower	None/ None	4.2	List D	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland/sandy/ annual herb/ March–July (August),/ 0–4,593 feet	No	Low potential to occur.	Some suitable habitat on site, but not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Myosurus minimus ssp. *apus*	Little mousetail	None/ None	3.1	List C	Vernal pools, valley and foothill grassland; alkaline/ annual herb/ March–June/ 60–2,100 feet	No	Not expected to occur.	No vernal pools or alkaline habitat on site. Not detected during 2013 focused plant surveys.
Nama stenocarpa	Mud nama	None/ None	2B.2	List B	Marshes and swamps, lake margins, riverbanks/ annual-perennial herb/ January–July/ 15–1,650 feet	No	Not expected to occur.	No suitable habitat present. Not detected during 2013 focused plant surveys or jurisdictional delineation.
Nasturtium [=Rorippa] gambelii	Gambel's water cress	FE/ ST	1B.1	List A	Marshes and swamps(freshwater or brackish)/ perennial rhizomatous herb/ April–October/ 16–1,083 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys or jurisdictional delineation.
Navarretia fossalis	Spreading navarretia	FT/ None	1B.1	List A	Chenopod scrub, shallow freshwater marshes and swamps, playas, vernal pools/ annual herb/ April–June/ 100–4,300 feet	No	Not expected to occur.	Recorded within San Marcos quad (CNPS 2014), but no vernal pools on site. Not detected during 2013 focused plant surveys.

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Navarretia peninsularis	Baja navarretia	None/ None	1B.2	List A	Chaparral (openings). lower montane coniferous forest/mesic/annual herb/ June–August/ 4,920–7,545 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Navarretia prostrata	prostrate vernal pool navarretia	None/ None	1B.1	List A	Coastal scrub, Meadows and seeps, Valley and foothill grassland(alkaline), Vernal pools/Mesic/ annual herb/ April–July/ 49–3,970 feet	No	Not expected to occur.	No suitable soils present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Nemacaulis denudata var. *denudata*	Coast woolly-heads	None/ None	1B.2	List A	Coastal dunes/ annual herb/ April–September/ < 330 feet	No	Not expected to occur.	The site is outside of the species' known elevation range, and there is no suitable vegetation present. Not detected during 2013 focused plant surveys.
Nemacaulis denudata var. *gracilis*	slender cottonheads	None/ None	2B.2	List B	Coastal dunes, Desert dunes, Sonoran desert scrub/ annual herb/ (March) April–May/ 164–1,312	No	Not expected to occur.	No suitable vegetation present. Not detected during 2013 focused plant surveys.
Nolina cismontana	Chaparral nolina	None/ None	1B.2	List A	Chaparral, coastal scrub; sandstone or gabbro/ evergreen shrub/ May–July/ 460–4,200 feet	No	Low potential to occur.	Suitable vegetation and soils present, but this evergreen shrub species likely would have been identified during previous surveys if present. Not detected during 2013 focused plant surveys.

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Nolina interrata	Dehesa nolina	None/ SE	1B.1	List A	Chaparral (gabbroic, metavolcanic, or serpentinite)/ perennial herb/ June–July/ 607–2,805 feet	No	Not expected to occur.	No suitable soils present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Ophioglossum californicum	California adder's-tongue	None/ None	4.2	List D	Chaparral, Valley and foothill grassland, Vernal pools(margins)/ mesic/ perennial rhizomatous herb/ (December) January–June/ 197–1,722 feet	No	Not expected to occur.	No vernal pools present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Orcuttia californica	California Orcutt grass	FE/ SE	1B.1	List A	Vernal pools/ annual herb/ April–August/ 50–2,200 feet	No	Not expected to occur.	No vernal pools on site. Not detected during 2013 focused plant surveys.
Ornithostaphylos oppositifolia	Baja California birdbush	None/ SE	2B.1	List B	Chaparral/ perennial evergreen shrub/ January–April/ 180–2,625 feet	No	Low potential to occur.	Would likely have been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Orobanche parishii ssp. *brachyloba*	Short-lobed broom-rape	None/ None	4.2	List D	Coastal bluff scrub, coastal dunes, coastal scrub; sandy/ perennial herb parasitic/ April–October/ <1,000 feet	No	Low potential to occur.	Suitable vegetation and soils are present on site, but species is only known from coastal locations. Not detected during 2013 focused plant surveys.
Packera ganderi	Gander's ragwort	None/ SR	1B.2	List A	Chaparral (burned areas and gabbroic outcrops)/perennial herb/April–May/1,312–3,940 feet	No	Low potential to occur.	No suitable soils present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Pectocarya peninsularis	peninsular pectocarya	None/ None	None	List D	Sonoran desert scrub/ annual herb/ February–April/ 0–984 feet	No	Not expected to occur.	Outside of known range for this species. Not detected during 2013 focused plant surveys.
Penstemon clevelandii var. *connatus*	San Jacinto beardtongue	None/ None	4.3	List D	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub/rocky/ perennial herb/ March–May/ 1,312–4,921 feet	No	Low potential to occur.	Species typically found in eastern San Diego County. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Penstemon thurberi	Thurber's beardtongue	None/ None	4.2	List D	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland, Sonoran desert scrub/ perennial herb/ May–July/ 1,640–4,003 feet	No	Low potential to occur.	Species typically found in eastern San Diego County. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Perideridia gairdneri ssp. *gairdneri*	Gairdner's yampah	None/ None	4.2	List D	Broadleafed upland forest, Chaparral, Coastal prairie, Valley and foothill grassland, Vernal pools/vernally mesic/ perennial herb/ June–October/ 0–2,001 feet	No	Low potential to occur.	Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Phacelia ramosissima var. *austrolitoralis*	South coast branching phacelia	None/ None	3.2	None	Chaparral, coastal dunes, coastal scrub, coastal salt marshes and swamps; sandy, sometimes rocky/ perennial herb/ March-August/ 20–1,000 feet	No	Low potential to occur.	Phacelia ramosissima detected on site (PSBS 2007) and identified as P. r. var. latifolia. Current taxonomy does not recognize varieties of this species (Jepson Flora Project 2014). Suitable vegetation and soils present on site, but the variety P. r. var. austrolitoralis is limited to coastal localities (CNPS 2014). Not detected during 2013 focused plant surveys.
Phacelia stellaris	Brand's star phacelia	None/ None	1B.1	List A	Coastal dunes, Coastal scrub/ annual herb/ March–June/ 3–1,312 feet	No	Low potential to occur.	Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Pilostyles thurberi	Thurber's pilostyles	None/ None	4.3	List D	Sonoran desert scrub/ perennial herb parasitic/ January/ 0–1,200 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Pinus torreyana ssp. *torreyana*	Torrey pine	None/ None	1B.2	List A	Closed-cone conifer forest, chaparral; sandstone/ evergreen tree/ NA/ 250–550 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
Piperia leptopetala	Narrow-petaled rein orchid	None/ None	4.3	List D	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest/perennial herb/May–July/1,250–7,300 feet	No	Not expected to occur.	Limited suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Poa atropurpurea	San Bernardino bluegrass	FE/ None	1B.2	List A	Meadows and seeps/ mesic/ rhizomatous herb/ May–July/4,460–8,055 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Pogogyne abramsii	San Diego mesa mint	FE/ SE	1B.1	List A	Vernal pools/ annual herb/ March–July/ 295–656 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Pogogyne nudiuscula	Otay Mesa mint	FE/ SE	1B.1	List A	Vernal pools/ annual herb/ May–July/ 295–820 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Polygala cornuta var. *fishiae*	Fish's milkwort	None/ None	4.3	List D	Chaparral, Cismontane woodland, Riparian woodland/ perennial deciduous shrub/ May–August/ 328– 3,281 feet	No	Not expected to occur.	Would have likely been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Proboscidea althaeifolia	desert unicorn-plant	None/ None	4.3	List D	Sonoran desert scrub(sandy)/ perennial herb/ May–Aug/ 279–3281 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Psilocarphus brevissimus var. *multiflorus*	Delta woolly-marbles	None/ None	4.2	None	Vernal pools/ annual herb/ May–June/ 30–1,650 feet	No	Not expected to occur.	Recorded within San Marcos quad (CNPS 2014), but no suitable vernal pools present. Not detected during 2013 focused plant surveys.

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Quercus cedrosensis	Cedros Island oak	None/ None	2B.2	List B	Closed-cone coniferous forest, Chaparral, Coastal scrub/ perennial evergreen tree/ April–May/ 837–3,150 feet	No	Not expected to occur.	Would have been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Quercus dumosa	Nuttall's scrub oak	None/ None	1B.1	List A	Chaparral, coastal scrub, closed-cone coniferous forest; sandy, clay loam/ evergreen shrub/ February–April/ 50–1,300 feet	No	Low potential to occur.	Suitable vegetation and soils present and species recorded within San Marcos quad (CNPS 2014), but this conspicuous shrub species likely would have been identified during previous surveys if present. Not detected during 2013 focused plant surveys.
Rhus aromatica var. *simplicifolia*	single-leaved basketbrush	None/ None	2B.3	List B	Chaparral, pinyon-juniper woodland/perennial deciduous shrub/April–July/4,003–4,495 feet	No	Not expected to occur.	Would have been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Ribes canthariforme	Moreno currant	None/ None	1B.3	List A	Chaparral/deciduous shrub/February–April/ 1,110–3,940 feet	No	Not expected to occur.	Some suitable habitat, but this shrub would have likely been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Ribes viburnifolium	Santa Catalina Island currant	None/ None	1B.2	List A	Chaparral, cismontane woodland/evergreen shrub/February–April/100–1,000 feet	No	Not expected to occur.	Some suitable habitat, but this shrub would have likely been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Romneya coulteri	Coulter's matilija poppy	None/ None	4.2	List D	Chaparral, Coastal scrub/Often in burns/ perennial rhizomatous herb/ March–Jul/ 66–3,937 feet	No	Low potential to occur.	Suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Rosa minutifolia	small-leaved rose	None/ SE	2B.1	List B	Chaparral, Coastal scrub/ perennial deciduous shrub/ January–June/ 492–525 feet	No	Not expected to occur.	Would have been observed if present. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Rubus glaucifolius var. *ganderi*	Cuyamaca raspberry	None/ None	3.1	List A	Lower montane coniferous forest/ gabbroic/ evergreen shrub/ May–June/3,940–5,500 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Rupertia rigida	Parish's rupertia	None/ None	4.3	List D	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland/ perennial herb/June–August/2,300–8,200 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Saltugilia [=Gilia] caruifolia	caraway-leaved woodland-gilia	None/ None	4.3	List D	Chaparral, Lower montane coniferous forest/Sandy, openings/ annual herb/ May–August/ 2,756–7,546 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

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Salvia eremostachya	desert sage	None/ None	4.3	List D	Sonoran desert scrub(rocky or gravelly)/ perennial evergreen shrub/ March–May/ 2,297–4,593 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Scutellaria bolanderi ssp. *austromontana*	Southern mountains skullcap	None/ None	1B.2	List A	Chaparral, cismontane woodland, lower montane coniferous forest/mesic/ rhizomatous herb/June–August/1,970–6,560 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Selaginella asprella	bluish spike-moss	None/ None	4.3	List D	Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest/granitic, rocky/ perennial rhizomatous herb/ July/ 5,249–8,858 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Selaginella eremophila	Desert spike-moss	None/ None	2B.2	List B	Sonoran desert scrub/gravelly or rocky/ rhizomatous herb/ June/656–2,950 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status[1]	CRPR[1]	County[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Senecio aphanactis	Chaparral ragwort	None/ None	2B.2	List B	Chaparral, cismontane woodland, coastal scrub/sometimes alkaline/annual herb/ January–April/50–2,625 feet	No	Low potential to occur.	No alkaline soils on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Senna covesii	Coves' cassia	None/ None	2B.2	List B	Sonoran desert scrub(sandy)/ perennial herb/ March–June/ 935–3,510 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Sibaropsis hammittii	Hammitt's clay-cress	None/ None	1B.2	List A	Chaparral(openings), Valley and foothill grassland/clay/ annual herb/ March–April/ 2,362–3,494 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Spermolepis echinata	bristly scaleseed	None/ None	2B.3	List B	Sonoran desert scrub(sandy or rocky)/ annual herb/ March–April/ 197–4,921 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Stemodia durantifolia	Purple stemodia	None/ None	2B.1	List B	Sonoran desert scrub; often mesic, sandy/ perennial herb / January –December/ 600–1,000 feet	No	Not expected to occur.	No suitable Sonoran desert scrub vegetation present. Not detected during 2013 focused plant surveys.
Stipa [=Achnatherum] diegoensis	San Diego County needle grass	None/ None	4.2	List D	Chaparral, Coastal scrub/rocky, often mesic/ perennial herb/ February–June/ 33–2,625 feet	No	Low potential to occur.	Some suitable habitat on site, but this species' distribution appears to be limited to southern San Diego County (Jepson Flora Project 2014). Not detected during 2013 focused plant surveys.

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status[1]	CRPR[1]	County[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Streptanthus bernardinus	Laguna Mountains jewel-flower	None/ None	4.3	List D	Chaparral, Lower montane coniferous forest/ perennial herb/ May–Aug/ 2,200–8,200 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Streptanthus campestris	Southern jewel-flower	None/ None	1B.3	List A	Chaparral, lower montane coniferous forest, pinyon and juniper woodland/ rocky/perennial herb/May–July/2,950–7,550 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Stylocline citroleum	oil neststraw	None/ None	1B.1	List A	Chenopod scrub, Coastal scrub, Valley and foothill grassland/clay/ annual herb/ March–April/ 164–1,312 feet	No	Not expected to occur.	No suitable soils on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Suaeda esteroa	Estuary seablite	None/ None	1B.2	List A	Coastal salt marshes and swamps/ perennial herb/ May–October (January)/ < 20 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
Suaeda taxifolia	woolly seablite	None/ None	4.2	List D	Coastal bluff scrub, Coastal dunes, Marshes and swamps(margins of coastal salt)/ perennial evergreen shrub/ January–December/ 0–164 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status[1]	CRPR[1]	County[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Thermopsis californica var. *semota*	Velvety false lupine	None/ None	1B.2	List A	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland/rhizomatous herb/March–June/3,280–6,135 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Viguiera laciniata	San Diego County viguiera	None/ None	4.3	List D	Chaparral, coastal scrub/ shrub/ February–June/ 200–2,460 feet	No	Low potential to occur.	Suitable vegetation present, but this conspicuous shrub species likely would have been identified during previous surveys if present. Not detected during 2013 focused plant surveys.
Viguiera purisimae	La Purisima viguiera	None/ None	2B.3	List A	Coastal bluff scrub, Chaparral/ shrub/ April–September/ 1,198–1,394 feet	No	Low potential to occur.	Suitable habitat on site, but not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
Viola purpurea ssp. *aurea*	golden violet	None/ None	2B.2	List B	Great Basin scrub, Pinyon and juniper woodland/sandy/ perennial herb/ April–June/ 3,281–8,202 feet	No	Not expected to occur.	The site is outside of the species' known elevation range and there is no suitable vegetation present. Not detected during 2013 focused plant surveys.
Xanthisma junceum	Rush-like bristleweed	None/ None	4.3	List D	Chaparral, Coastal scrub/ perennial herb/ June–January/ 787–3,281 feet	No	Low potential to occur.	There is some suitable habitat on site. Recorded in the vicinity[2], but not detected during 2013 focused plant surveys and is not likely to occur within dense chaparral.

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status[1]	CRPR[1]	County[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Xylorhiza orcuttii	Orcutt's woody aster	None/ None	1B.2	List A	Sonoran desert scrub/perennial herb/March–April/66–1,200 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity[2] (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

1 **Status Legend:**
FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal Candidate for listing
SE: State listed as endangered
ST: State listed as threatened
SR: State Rare
CRPR 1A: Plants presumed extinct in California
CRPR List 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR List 2: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR List 3: Plants about which more information is needed – a review list
CRPR List 4: Plants of limited distribution – a watch list
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

County:
List A: Plants rare, threatened or endangered in California and elsewhere
List B: Plants rare, threatened or endangered in California but more common elsewhere
List C: Plants which may be rare, but need more information to determine their true rarity status
Plants of limited distribution and are uncommon, but not presently rare or endangered

2 Vicinity refers to records within the San Marcos, Morro Hill, Bonsall, Pala, San Luis Rey, Valley Center, Encinitas, Rancho Santa Fe, and Escondido quadrangles.

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APPENDIX G

Wildlife Species with Low Potential or Not Expected to Occur

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Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
			Amphibians			
Anaxyrus [=*Bufo*] *californicus*	Arroyo toad	FE/SSC/ Group 1	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically 3rd order); adjacent stream terraces and uplands for foraging and wintering	No	Not expected to occur.	No appropriate breeding habitat on site or in vicinity and the site is not within 0.62 mile of any known breeding habitat (PSBS 2007). Closest species occurrences documented approximately 4 miles northwest in San Luis Rey River (USFWS 2014a). Additional detections occur throughout the upper San Luis Rey River, approximately 5 miles north of site (CDFW 2014; USFWS 2014a).
Batrachoseps major aridus	Desert slender salamander	FE/SE/ Group 1	Barren, palm oasis, desert wash and desert scrub. Limited geographic distribution: known only from Hidden Palm Canyon and Guadalupe Canyon on east slope of Santa Rosa Mountains, Riverside County. Occurs under limestone sheets, rocks, and talus; at the base of damp, shaded locations (e.g., spring oasis, moist cliffs) without direct sunlight (1).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Closest occurrence is approximately 47 miles northeast of the site (CDFW 2014).
Ensatina ensatina klauberi	Large-blotched salamander	None/WL/ Group 1	Moist shaded evergreen and deciduous woodlands, forests, oak woodlands, under rocks, logs, debris, especially peeled off bark. Found in peninsular ranges of Southern California and eastern San Bernardino Mountains (1).	No	Low potential to occur.	Some suitable habitat is present within the project area in the chaparral habitat and rocky areas; however, the site lacks large shaded areas. Closest occurrence is approximately 17 miles east of the site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Rana draytonii	California red-legged Frog	FT/SSC/ Group 1, Narrow Endemic	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	No	Not expected to occur.	No perennial streams to provide habitat for this species. Closest occurrence is approximately 24 miles north of the site (CDFW 2014).
Rana muscosa	Southern mountain yellow-legged frog	FE (Population in San Gabriel, San Jacinto & SB Mountains only)/SE, WL/ Group 1	Lakes, ponds, meadow streams, isolated pools and open riverbanks; rocky canyons in narrow canyons and in chaparral; montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Occurs in the Sierra Nevada from Fresno County to Kern County In Southern California, isolated populations exist in the San Gabriel, San Bernardino, and San Jacinto Mountains; Sierra elevations range from 1,214 to over 11,975 feet (1, 2).	No	Not expected to occur.	The project area lacks suitable wetland or stream habitat for this highly aquatic species. Closest occurrence is approximately 17 miles east of the site (CDFW 2014).
			Reptiles			
Actinemys [=Emys] marmorata	Western pond turtle	None/SSC/ Group 1	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	No	Not expected to occur.	No appropriate breeding habitat on site or in vicinity (PSBS 2007). Closest occurrence documented 7 miles east (in 1987) and 8.5 miles southeast and 11 miles northwest (unknown dates) of site (CDFW 2014).
Coleonyx switaki	Switak's banded gecko, barefoot gecko	None/ST/ Group 2	Rocklands, especially massive rocks and rock formations at the heads of canyons: rock outcrops, rock cracks, and crevices. Found in Peninsular Ranges and at Scissor Crossing near Anza-Borrego Desert (2).	No	Low potential to occur.	The project area lacks suitable habitat and is above the recorded elevation range for this species. Closest occurrence is approximately 41 miles east of the site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Lampropeltis zonata pulchra	California Mountain kingsnake (San Diego Population)	None/WL/ Group 2	Habitat generalist found in habitats ranging from conifer forest, oak-pine woodlands, riparian woodland, chaparral, manzanita and coastal scrub	No	Low to moderate potential to occur.	Suitable vegetation and rock outcrops present. Closest species detection in Cleveland National Forest, approximately 19 miles northeast of site (in 1989; CDFW 2014).
Phrynosoma mcallii	Flat-tailed horned lizard	None/CE, SSC/ Group 1	Desert washes and flats with sparse low-diversity vegetation cover and sandy soils. It is probably most abundant in areas of creosote bush and is found in desert scrub, wash, succulent shrub, and alkali scrub habitats. Common in areas with high density of harvester ants and fine windblown sand, rarely occurs on dunes. Found in central Riverside, eastern San Diego, and Imperial Counties, 0–590 feet (1, 2).	No	Not expected to occur.	The project site lacks suitable desert habitat for this species. Closest occurrence is approximately 44 miles east of the site (CDFW 2014).
Sauromalus ater	Common chuckwalla	None/None/ Group 2	Rocky flats and hillsides, lava flows, large outcrops, creosote bush habitats. Also found in atypical places (e.g., burrows in dirt, piles of railroad ties, artificial riprap). Found in the Mojave and Colorado Deserts from desert slopes of mountains, north through the Owens Valley and east to the Colorado River, 0–5,905 feet (1).	No	Not expected to occur.	The project area lacks suitable desert habitat. Not recorded in the CNDDB 9-quad search[2] (there are no CNDDB records for this species).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Sceloporus graciosus vanderburgianus	Southern sagebrush lizard	None/None/ Group 2	Shrublands such as chaparral, manzanita, ceanothus; open pine and Douglas-fir forests in mountains; found in areas with scattered low bushes, abundant sun. Transverse and Peninsular Ranges of Southern California, Sierra San Pedro Martir of northern Baja California. Subspecies found at higher elevations: 4,498–9,600 feet (1).	No	Not expected to occur.	Species typically found at higher elevations (4,500–9,600 feet). Not recorded in the CNDDB 9-quad search[2] (there are no CNDDB records for this species).
Taricha torosa torosa	Coast range newt (Monterey County south only)	None/SSC/ Group 2	Wet forests, oak forests, chaparral, rolling grasslands; in Southern California, occupies drier chaparral, oak woodland, grasslands. Coastal ranges from central Mendocino County south to northern San Diego County south to the vicinity of Boulder Creek. Found the length of the Sierra, primarily in foothills. Monterey County to San Diego County. Migrations to and from breeding site may occasionally exceed 0.62 mile; 0–6,004 feet (1, 2).	No	Low potential to occur.	Suitable habitat is present the project area. Not recorded in the CNDDB 9-quad search[2]. Closest occurrence is approximately 18 miles north of the site (CDFW 2014).
Thamnophis sirtalis ssp. *novum* (*Thamnophis sirtalis* spp.)	South Coast garter snake (Common garter snake)	None/SSC/ Group 2	Marsh and upland habitats near permanent water and riparian vegetation. Permanent or semi-permanent bodies of water in a variety of habitats. Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools. Coastal plain from Ventura to San Diego County, 0–2,788 feet (2, 3).	No	Low potential to occur.	The project area lacks suitable water bodies. Species recorded in the CNDDB 9-quad search[2]. Closest occurrence is approximately 11 miles west of the site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Uma notata	Colorado Desert fringe-toed lizard	None/SSC/ Group 1	Wind-blown sand dunes, dry lakebeds, sandy beaches, riverbanks, desert washes, and sparse desert scrub in the Colorado and Sonoran Deserts south of the Salton Sea in Imperial and San Diego Counties, 0–590 feet (2).	No	Low potential to occur.	The project area lacks suitable desert habitat. Not recorded in the CNDDB 9-quad search[2]. Closest occurrence is approximately 48 miles east of the site (CDFW 2014).
			Birds			
Aechmophorus occidentalis	Western grebe	None/None/ Group 1	Along coast in marine subtidal and estuary waters. Uncommon to fairly common on large lakes near coast and inland at low elevations. Breed on large, marshy lakes, normally deeper than required by eared grebe. Nest on Modoc Plateau and south locally to Inyo County; also Sacramento National Wildlife Refuge, Salton Sea, Colorado River, and Sweetwater Reservoir (2).	No	Not expected to occur.	The project area lacks perennial water sources. Species not detected in the vicinity (CDFW 2014).
Accipiter striatus (nesting)	Sharp-shinned hawk	None/WL/ Group 1	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats	Observed	Not expected to nest; observed foraging on site.	Detected on site during recent surveys (Dudek 2013). Species detected soaring overhead at the abandoned landing strip in the northern portion of the project site (Dudek 2013). Not observed during previous surveys (PSBS 2007). Not expected to nest as they are not known to nest on the coastal slope in Southern California. No nesting detected in project site.

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Agelaius tricolor (colony)	Tricolored blackbird	BCC/CE, SSC/ Group1	Nests near fresh water, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture.	No	Not expected nest on site.	Species is not known to nest on the coastal slope in Southern California. Moderate potential to occur during the winter period; not observed (PSBS 2007). Nesting species not detected in vicinity (CDFW 2014). Closest occurrence is approximately 16 miles south of the site (CDFW 2014).
Ammodramus savannarum	Grasshopper sparrow	None/SSC/ Group 1	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches.	No	Low potential to occur.	No extensive grassy habitats required by this species. The grassland habitat and extent of that habitat on site is atypical for this species. Unitt (2004), describes it as the bird that is most restricted to native grasslands in San Diego County and typically requires larger and more intact areas of native grasslands. Therefore, this migrant species is considered to have low potential to occur. According to the CNDDB, the closest occurrence is approximately 25 miles south of the site (CDFW 2014). However, this species has also been observed at the Valiano site located 5 miles south of the project (Helix Environmental Planning, Inc. 2015).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Anas strepera	Gadwall	None/None/ Group 2	Interior valleys, wetlands, ponds, and streams. Feeds and rests in freshwater lacustrine and emergent habitats, and to a lesser extent, estuarine and saline emergent habitats, and nests in nearby herbaceous and cropland habitats. Common in Central Valley and less common in Coast Range foothills of central and Southern California. Locally common in Imperial Valley and along Colorado River, October to March. Breeds on northeastern plateau and east of Sierra Nevada (2).	No	Not expected to occur.	The project area lacks perennial water sources. Species not detected in the vicinity (CDFW 2014).
Aquila chrysaetos (nesting and nonbreeding/ wintering)	Golden eagle	BCC/WL, FP/ Group 1	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	No	Low potential to occur.	Historic nest on site, but not observed during numerous field visits (PSBS 2007). There are no records of golden eagle on site in the CNDDB (CDFW 2014). Closest species occurrence approximately 8 miles northeast in 1991 (nest located) and 2000 (adult and young flying over; CDFW 2014).
Ardea herodias	Great blue heron	None/None/ Group 2	Nests in large trees or snags; forages in wetlands, water bodies, water courses, and opportunistically in uplands, including pasture and croplands	No	Not expected to occur.	Limited suitable wetland/riparian habitat on site. Not observed on site during surveys. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Asio flammeus (nesting)	Short-eared owl	None/SSC/ Group 2	Open areas with few trees, Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands. Breeds in coastal areas in Del Norte and Humboldt Counties, San Francisco Bay Delta, northeastern Modoc plateau, east side of Sierra from Lake Tahoe south to Inyo County, and San Joaquin Valley. Uncommon winter migrant in Southern California, and widespread during winter in Central Valley and coastline (2).	No	Not expected to occur.	The project area lacks suitable open grassland or wetland habitats for this species. Closest occurrence for this species is approximately 90 miles east of the site (CDFW 2014).
Asio otus (nesting)	Long-eared owl	None/SSC/ Group 1	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	No	Low potential to occur.	Limited suitable habitat. Closest occurrence recorded over 30 miles northwest of site (CDFW 2014).
Aythya americana (nesting)	Redhead	None/SSC/ Group 2	Nests in relatively deep (>3 feet) permanent or semi-permanent wetlands of at least 1 acre, with about 75% open water and emergent tules, bulrushes (*Scirpus* spp.) and cattails (*Typha* spp.) up to about 3 feet in height; winters in coastal estuaries and large, deep ponds, lakes, and reservoirs of the interior. Found south of Modoc County to Mono County, Central Valley, Monterey County south to Ventura County; breeds in Central Valley, eastern Kern County, coastal Southern California, and the Salton Sea (2).	No	Not expected to occur.	The project area lacks perennial water sources. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Branta Canadensis	Canada goose	None/None/ Group 2	Abundant but localized winter visitor in San Diego County.	No	Not expected to occur.	Little suitable foraging habitat on site. Species not observed on site. Species not detected in the vicinity (CDFW 2014).
Bucephala islandica (nesting)	Barrow's golden eye	None/SSC/ Group 2	Winters in lagoons, bays, estuaries in coastal areas, and riverine waters, lakes, and reservoirs in the interior. Found along central California coast, San Francisco Bay, Marin and Sonoma Counties, Colorado River (2).	No	Not expected to occur.	The project area lacks perennial water sources. Not recorded in the 9-quad search[2]. Species not detected in the vicinity (CDFW 2014).
Buteo regalis	Ferruginous hawk	BCC/WL/ Group 1	Winters and forages in open, dry country, grasslands, open fields, and agriculture.	No	Low potential to occur.	No extensive open grassland habitat on site. Closest species detected approximately 20 miles northeast of site in 2009 (CDFW 2014).
Buteo swainsoni	Swainson's hawk	BCC/ST/ Group 1	Nests in open woodland and savannah, riparian habitat, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture.	No	Low potential to occur.	No extensive open grassland habitat on site. Species not detected in the vicinity (CDFW 2014). Closest species detected approximately 7 miles north of site in early twentieth century. Nearest recent occurrences are approximately 160 miles north of site (CDFW 2014).
Butorides virescens	Green heron	None/None/ Group 2	Nests and roosts in valley foothill and desert riparian habitats; feeds in fresh emergent wetland, lacustrine, slow-moving riverine habitats. Resident in foothills and lowlands throughout California; common August to March in southern coastal ranges, in summer along the Colorado River, and found all year at the Salton Sea (2).	No	Not expected to occur.	The project area lacks perennial water sources. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	Coastal cactus wren	BCC/SSC/ Group 1	Southern cactus scrub patches, maritime succulent scrub, cactus thickets in coastal sage scrub.	No	Low potential to occur.	No appropriate breeding habitat on site or in vicinity; however, numerous species occurrences in vicinity surrounding site. Closest species occurrence 4.5–5.0 miles north of project site. Additional occurrences north, west, and south of site (CDFW 2014).
Cerorhinca monocerata (nesting colony)	Rhinoceros auklet	None/WL/ Group 2 (for Oceanic - Winter)	Marine pelagic and subtidal habitats. Nests in a burrow on undisturbed, forested, or unforested islands, and probably in cliff caves. Found off northern and central California, and south of northern Channel Islands. Breeds off Del Norte and Humboldt Counties, and Farallon Islands (2).	No	Not expected to occur.	The project area lacks large bodies of water and suitable nesting habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 192 miles northwest of project site (CDFW 2014).
Charadrius alexandrinus nivosus	Western snowy plover	FT, BCC/ SSC/ Group 1	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds.	No	Not expected to occur.	No coastal salt marsh or salt pan habitat on site. The closest occurrences are documented approximately 10 miles southwest of site on Pacific coast (CDFW 2014; USFWS 2014a).
Charadrius montanus (wintering)	Mountain plover	BCC / SSC/ Group 2	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts. Short vegetation, bare ground, flat topography. Prefers grazed areas and areas w/burrowing rodents.	No	Low potential to occur.	No extensive open grassland habitat on site. Species not detected in the vicinity (CDFW 2014). Closest species occurrence 75 miles east of project site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Chen caerulescens (winter)	Snow goose	None/None/ Group 2	Fresh emergent wetlands, adjacent lacustrine waters, and nearby wet croplands, pastures, meadows, and grasslands. Occasionally found in saline (brackish) emergent wetlands and adjacent estuarine waters. Found primarily in Central Valley; less common southward in the interior but abundant in Imperial Valley and locally common along Colorado River. Found regularly only in Southern California along Coast Ranges and immediate coast from mid-November to February (2).	No	Not expected to occur.	The project area lacks suitable freshwater habitats for this species. Species not detected in the vicinity (CDFW 2014).
Chlidonias niger (nesting colony)	Black tern	None/SSC/ Group 2 (Non-breeder)	Freshwater marsh with emergent vegetation; in the Central Valley primarily nest and forage in rice fields and other flooded agricultural fields with weeds and other residual aquatic vegetation.	No	Not expected to occur.	The project area lacks suitable freshwater habitats for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence over 600 miles north of project site (CDFW 2014).
Circus cyaneus (nesting)	Northern harrier	None/SSC/ Group 1	Nests in open wetlands including marshy meadows; wet, lightly grazed pastures; old fields; freshwater and brackish marshes; but also in drier habitats such as grassland and grain fields. Forages in variety of habitats, including grassland, scrubs, rangelands, emergent wetlands, and other open habitats.	No	Low potential to occur.	No suitable nesting habitat on site; extensive open grassland habitat on site and very small marsh habitat (<0.1 acre). Closest nesting occurrence is approximately 10.5 miles east of project site on Camp Pendleton where it is reported to have 2–3 pairs nesting every year (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Coccyzus americanus occidentalis (nesting)	Western yellow billed cuckoo	FT, BCC/SE/ Group 1	Dense, wide riparian woodlands and forest with well-developed understories. Valley foothill and desert riparian habitats scattered throughout California – Colorado River, Sacramento and Owens Valleys, South Fork of the Kern River, Santa Ana River, and Amargosa River (2). Nests in dense, wide riparian woodlands and forest with well-developed understories.	No	Not expected to occur.	The project area lacks suitable riparian habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 17 miles north of project site (CDFW 2014).
Contopus cooperi (nesting)	Olive-sided flycatcher	BCC/SSC/ Group 2	Summer resident in a wide variety of forest and woodland habitats. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine. Found throughout California excluding deserts, Central Valley and other lowland valleys and basins, below 9,186 feet (2). Nests in mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, lodgepole pine; usually close to water.	No	Not expected to occur.	The project area lacks suitable woodland habitat for this species. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Cypseloides niger (nesting)	Black swift	BCC/SSC/ Group 2 (non-breeder)	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats. Nests in Sierra Nevada, Cascade Range, San Gabriel, San Bernardino, San Jacinto Mountains, coastal bluffs and mountains from San Mateo County south to San Luis Obispo County (2).	No	Not expected to occur.	The project area lacks suitable cliffs for nesting. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 40 miles north of project site (CDFW 2014).
Dendrocygna bicolor (nesting)	Fulvous whistling-duck	None/SSC/ Group 2	Nests in freshwater wetlands, especially shallow impoundments managed for rice production and temporarily flooded grasslands; also nests in pastures, haylands, and small grain fields adjacent to ricefields. Nests in dense wetlands of cattails in Imperial Valley along south end of Salton Sea (2).	No	Not expected to occur.	The project area lacks suitable wetlands or waters. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 183 miles northwest of project site (CDFW 2014).
Egretta rufescens	Reddish egret	None/None/ Group 2	Very rare visitor in fall and winter, casual in spring and summer in coastal estuaries and bays in San Diego County.	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Species not observed on site. Species not detected in the vicinity (CDFW 2014).
Empidonax traillii extimus (nesting)	Southwestern willow flycatcher	FE/SE/ Group 1	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	No	Low potential to occur	Not detected during focused protocol surveys in 2013 (Dudek 2013). Several occurrences documented along the lower and upper San Luis Rey River (nearest being 4.5 miles northeast of site); additional breeding locations documented on Camp Pendleton (CDFW 2014; USFWS 2014a).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Eremophila alpestris actia	California horned lark	None/WL/ Group 2	Nests and forages in grasslands, disturbed lands, agriculture, and beaches; nests in alpine fell fields of the high Sierra.	No	Low potential to occur.	No extensive grassy habitats required by this species. The non-native grassland on site is confined to one area and is highly disturbed. If present, this species would have been observed during numerous surveys throughout the site. One occurrence record in the vicinity, located approximately 7 miles southwest of site in 1999 (CDFW 2014).
Falco columbarius (wintering)	Merlin	None/WL/ Group 2	Forages in semi-open areas, including coastline, grassland, agriculture, savannah, woodland, lakes, and wetlands. Found throughout western half of state below 4,921 feet (2).	No	Low potential to occur.	The project area lacks suitable open habitats for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 70 miles north of project site (CDFW 2014).
Falco mexicanus	Prairie falcon	BCC/WL/ Group 1	Forages in grassland, savannah, rangeland, agriculture, desert scrub, alpine meadows; nests on cliffs or bluffs.	No	Not expected to nest on site.	Prairie falcons only breed at inland sites in San Diego east of this site. Low to moderate potential to occur to forage over site during the winter. Species not detected in vicinity (CDFW 2014). Closest species occurrence 27 miles east of project site (CDFW 2014).
Falco peregrinus anatum	American peregrine falcon	BCC, Delisted/ FP, Delisted/ Group 1	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	No	Not expected to occur.	Absence of open water probably precludes this species from foraging on site. Species not detected in vicinity (CDFW 2014). Closest species occurrence 35 miles south of project site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Fratercula cirrhata (nesting colony)	Tufted puffin	None/SSC/ Group 2 (Oceanic)	Nests on offshore rocks and islands free of mammalian predators, either in earthen burrows or crevices on steep rocky slopes. Found along coast from Prince Island in Del Norte County to Point Conception (2).	No	Not expected to occur.	No suitable coastal cliffs to support nesting, found within the project area. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 192 miles northwest of project site (CDFW 2014).
Gavia immer (nesting)	Common loon	None/SSC/ Group 2 (winter)	Extirpated as a breeder from California; winters in coastal waters such as bays, channels, coves, and inlets; also winters inland at large, deep lakes and reservoirs.	No	Not expected to occur.	The project area lacks suitable wetland habitat for this species. Species not detected in the vicinity (CDFW 2014).
Grus canadensis canadensis (wintering)	Lesser sandhill crane	None/SSC/ Group 2 (full species)	Wet meadow, shallow lacustrine, and fresh emergent wetland habitats during summer; annual and perennial grassland habitats, moist croplands, and open, emergent wetlands during winter. Winters in San Joaquin, Imperial Valleys; Carrizo Plain, Brawley, and Blythe (2).	No	Not expected to occur.	The project area lacks suitable wetland habitat for this species. Species not detected in the vicinity (CDFW 2014).
Grus canadensis tabida (nesting and wintering)	Greater sandhill crane	None/ST, FP/ Group 2 (full species)	Winter foraging in cropland, grazed and mowed grassland, pasture, alfalfa fields, and shallow wetlands; roosting sites are flooded and support several inches of water. Breeds in Siskiyou, Modoc, and Lassen Counties, and Sierra Valley. Winters in Sacramento and San Joaquin Valleys. Was more common in Southern California (2).	No	Not expected to occur.	The project area lacks suitable wetland habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 490 miles north of project site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Haliaeetus leucocephalus	Bald eagle	BCC, Delisted/ SE, FP/ Group 1	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains.	No	Not expected to occur.	No appropriate aquatic habitat for this species. Species not detected in vicinity (CDFW 2014). Closest species occurrence 25 miles north of project site (CDFW 2014).
Ixobrychus exilis (nesting)	Least bittern	BCC/SSC/ Group 2	Dense emergent wetland vegetation, sometimes interspersed with woody vegetation and open water. Nests in freshwater and brackish marshes with dense, tall growths of aquatic and semi-aquatic vegetation. Common summer resident at Salton Sea and Colorado River. Breeds locally in Owens Valley and Mojave Desert and uncommon in emergent wetlands of cattails and tules in San Diego County, and Sacramento and San Joaquin Valleys (2).	No	Low potential to occur.	The project area lacks suitable wetland habitat for this species. Recorded in the CNDDB 9-quad search[2]. Closest species occurrence 7 miles north of project site (CDFW 2014).
Junco hyemalis caniceps (nesting)	Gray-headed junco	None/WL/ Group 2 (winter-rare)	Found in forests and woodlands from montane hardwood-conifer forests up through alpine dwarf-shrub habitats. Nests and forages in pine and juniper-pine forests. Breeds locally in White and Grapevine Mountains, and on Clark Mountain in southeastern California. Species is more common east of Sierra Nevada during winter (2).	No	Low potential to occur.	The project area lacks suitable nesting habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 77 miles north of project site (CDFW 2014).
Lanius ludovicianus	Loggerhead shrike	BCC/SSC/ Group 1	Nests and forages in open habitats with scattered shrubs, trees, or other perches.	No	Low potential to occur.	Site supports little open grassy or shrub habitats; not observed. Species not detected in vicinity (CDFW 2014). Closest species occurrence 25 miles north of project site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Larus californicus	California gull	None/WL/ Group 2	Inland: lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. Nests in alkali and freshwater lacustrine habitats; abundant in coastal and interior lowlands during non-nesting period.	No	Not expected to occur.	No appropriate lacustrine breeding habitat on site or in the vicinity. Species not detected in vicinity (CDFW 2014). Closest species occurrence 87 miles east of project site (CDFW 2014).
Laterallus jamaicensis coturniculus	California black rail	BCC/ST, FP/ Group 2	Tidal marshes, shallow freshwater margins, wet meadows and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra foothill populations.	No	Not expected to occur.	The project area lacks suitable emergent wetlands for this species. Recorded in the CNDDB 9-quad search[2]. Closest species occurrence 7 miles north of project site (CDFW 2014).
Leucophaeus atricilla (nesting colony)	Laughing gull	None/WL/ Group 2 (non breeding, very rare)	Coastal saltmarsh, bays and estuaries. Flocks rest on salt-pond dikes and sandpits. Breeds along seacoasts, bays, salt marshes, dunes, beaches, estuaries, rarely on large inland bodies of water. Formerly nested at southern end of the Salton Sea (4).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Species not detected in the vicinity (CDFW 2014).
Melanerpes lewis (winter)	Lewis' woodpecker	BCC/None/ Group 1	Winters in open oak woodland and savannah; nests in open ponderosa pine forest and logged or burned pine forest. Eastern slopes of coast ranges south to San Luis Obispo County, winters in Central Valley, Modoc Plateau, and Transverse and other ranges in Southern California. Breeds on eastern slopes of coast ranges, Sierra Nevada, Cascade Range (2).	No	Not expected to occur.	The project area lacks suitable woodland and savannah habitat for this species. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Mycteria americana (non-breeding, very rare)	Wood stork	None/SSC/ Group 2	Nests in freshwater and marine-estuarine forested habitats; forages in natural and artificial wetlands; roosts in trees, usually over water. Found at south end of Salton Sea and San Diego Wild Animal Park (2).	No	Not expected to occur.	The project area lacks suitable water bodies that could support this species. Species not detected in the vicinity (CDFW 2014).
Numenius americanus	Long-billed curlew	BCC/WL/ Group 2	Nests in grazed, mixed grass, and short-grass prairies. Localized nesting along the California coast; winters and forages in coastal estuaries, mudflats, open grassland, and cropland.	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Species not detected in vicinity (CDFW 2014).
Oceanodroma furcata (nesting colony)	Fork-tailed storm petrel	None/SSC/ Group 2 (Ocean)	Nests on offshore islands with restricted access and free of mammalian predators; nesting habitat varies across islands from natural crevices in talus slopes to earthen burrows dug by themselves or other species. Breeds on islets in Del Norte and Humboldt Counties (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Nearest CNDDB records are in Northern California (CDFW 2014).
Oceanodroma homochroa (nesting colony)	Ashy storm petrel	BCC/SSC/ Group 2 (Ocean)	Nests on rocky offshore islands on talus slopes, rock walls, sea caves, cliffs, and under piles of driftwood; they do not excavate their own nesting burrows. Resident of offshore waters from Cape Mendocino to northern Baja California, Mexico. Breeds on offshore islands from Southeast Farallon Island to Los Coronados (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Closest species occurrence 80 miles west of project site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Oceanodroma melania (nesting colony)	Black storm petrel	None/SSC/ Group 2 (Ocean)	Nests on small rocky islands or talus slopes of larger islands free of mammalian predators; only occurs on land to breed. Nests in burrows and rock cavities on Santa Barbara Island and Sutil Island (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 112 miles west of project site (CDFW 2014).
Oreothlypis luciae (nesting)	Lucy's warbler	BCC/SSC/ Group 1	Nests and forages in desert wash and desert riparian habitats, especially dominated by mesquite, but also in other shrubs and tamarisk. Breeds along Colorado River, common locally in a few other desert areas, rare near Salton Sea. Rare transient in other southern interior locations and rare fall transient along the coast, mainly in San Diego County (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence 143 miles east of project site (CDFW 2014).
Oreortyx pictus eremophilus	Mountain quail	None/ None/ Group 2	Dense montane chaparral and brushy areas within coniferous forest, pinyon–juniper–yucca associations; uses shrubs, brush stands and trees on steep slopes for cover in most major montane habitats of the state (2).	No	Not expected to occur.	There is limited suitable habitat on site for this species. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Pandion haliaetus (nesting; rarely breeds in San Diego)	Osprey	None/ WL/ Group 1	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast. Breeds from Cascade Ranges south to Lake Tahoe and along northwest coast. Uncommon breeder along southern Colorado River. Uncommon along coast of Southern California (2).	No	Not expected to occur.	There are no large lakes present on site that could support this species. Closest species occurrence 36 miles south of project site (CDFW 2014).
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/SE/ Group 1	Nests and forages in coastal saltmarsh dominated by pickleweed.	No	Not expected to occur.	No appropriate coastal saltmarsh habitat for this species. Closest species occurrence approximately 9 miles southwest of site near coast (in 2001; CDFW 2014)
Passerculus sandwichensis rostratus	Large-billed savannah sparrow	None/SSC/ Group 2	Rare winter visitor to coastal Southern California; breeds in Colorado River delta. Nests and forages in open, low saltmarsh vegetation including low halophytic scrub.	No	Not expected to occur.	No appropriate coastal saltmarsh habitat for this species. Species not detected in vicinity (CDFW 2014). (There are no CNDDB records for this species).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Pelecanus erythrorhynchos (nesting colony)	American white pelican	None/SSC/ Group 2 (winter)	Nests colonially on isolated islands in freshwater lakes with sandy, earthen, or rocky substrates; minimal disturbance from humans or mammalian predators required, as is close access to productive foraging areas; forages on inland marshes, lakes or rivers; winters on shallow coastal bays, inlets, and estuaries. Nests at large lakes in Klamath Basin. Common migrant at Salton Sea, Colorado River, and rare during winter at Salton Sea, Morro Bay, San Diego Bay (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Closest species occurrence approximately 640 miles north of site near coast (CDFW 2014).
Pelecanus occidentalis californicus	California brown pelican	Delisted/Delisted , FP/ Group 2	Forage in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Species not detected in vicinity (CDFW 2014). Closest species occurrence approximately 37 miles south of site (CDFW 2014).
Phalacrocorax auritus (Rookery site)	Double-crested cormorant	None/WL/Group 2	Nests in riparian trees near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries and open coastlines; winter habitat includes lakes, rivers, and coastal areas.	No	Not expected to occur.	No coastal habitat to support this species. Species not observed on site. Closest species occurrence approximately 35 miles south of site (CDFW 2014).
Piranga rubra (nesting)	Summer tanager	None/SSC/ Group 2	Nests and forages in mature desert riparian habitats dominated by cottonwoods and willows. Found along lower Colorado River and locally in Southern California deserts (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Not recorded in the CNDDB 9-quad search[2]. Closest species occurrence approximately 25 miles northeast of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Plegadis chihi	White-faced ibis	None/WL/ Group 1	Nests in shallow marshes with areas of emergent vegetation; winter foraging in shallow lacustrine waters, flooded agricultural fields, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries.	No	Not expected to occur.	No ponded water habitat on site. Closest occurrences documented 5 miles southeast, 6 miles north, and 10 miles east of site with most recent occurrence north of site in 2001 (CDFW 2014).
Progne subis (nesting)	Purple martin	None/SSC/County 1	Nest and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	No	Low potential to occur.	The project area supports suitable oak woodland habitat for this species. Would not be expected to nest on site. Closest species occurrence approximately 27 miles southeast of site (CDFW 2014).
Pyrocephalus rubinus (nesting)	Vermillion flycatcher	None/SSC/ Group 1 (for P.r.flammeus)	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated fields, ditches or pastures. Found along Colorado River, especially near Blythe, Riverside County (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Closest species occurrence approximately 60 miles northeast of site (CDFW 2014).
Rallus longirostris levipes	Light-footed clapper rail	FE/SE, FP/ Group 1	Coastal wetlands, brackish areas, coastal saline emergent wetlands.	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Several occurrences documented east of site near coast. Closest occurrence located 5.5 miles northeast of site in 2007 (CDFW 2014).
Riparia riparia (nesting)	Bank swallow	None/ST/ Group 1	Nests in riparian, lacustrian, and coastal areas with vertical banks, bluffs and cliffs with sandy soils; open country and water during migration.	No	Not expected to occur.	The project area lacks riparian habitat for this species. There are no suitable cliffs for nesting. Closest occurrence located 13 miles west of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Rynchops niger (nesting colony)	Black skimmer	BCC/SSC/ Group 1	Nests on barrier beaches, shell banks, spoil islands, and saltmarsh; forages over open water; roosts on sandy beaches and gravel bars. Summer resident at Salton Sea. Year-long resident at San Diego Bay. Known infrequently from additional interior locations on Colorado River and Lakeview, Riverside County (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Closest species occurrence approximately 60 miles northwest of site (CDFW 2014).
Sterna [=Sternula] antillarum browni	California least tern	FE/SE, FP/ Group 1	Nests along coast, especially colonial breeder on bare flat substrates, sand beaches, alkali flats, paved areas. Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flat.	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Several occurrences documented east of site near coast. Closest occurrence located 5.5 miles northeast of site on San Luis Rey River in 1975 (CDFW 2014).
Strix occidentalis occidentalis	California spotted owl	BCC /SSC/ Group 1	Nests and forages in dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir habitats.	No	Not expected to occur.	The project area lacks suitable woodland habitat for this species. Species not detected in the vicinity (CDFW 2014).
Synthliboramphus hypoleucus (nesting colony)	Xantus' murrelet, Guadalupe murrelet	FC, BCC/ST/ Group 2 (oceanic) / WLBCC	Offshore waters. Rare visitor to southern offshore waters in late summer and fall (2).	No	Not expected to occur.	Habitat typical for supporting this species is not present on site. Individuals could be detected during migration, but there is low potential for that. Species not detected in the vicinity (CDFW 2014).
Thalasseus [=Sterna] elegans	Elegant tern	None/WL/ Group 1	Inshore coastal waters, bays, estuaries and harbors; forages over open water	No	Not expected to occur.	No appropriate coastal wetlands habitat for this species. Species not detected in the vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Toxostoma bendirei	Bendire's thrasher	BCC/SSC/ Group 2 (non-breeding)	Nests and forages in desert succulent shrub and Joshua tree habitat in Mojave Desert; nests in yucca, cholla, and other thorny scrubs or small trees. Flat areas of desert succulent shrub and Joshua tree habitats in Mojave desert area of San Bernardino and western Kern Counties (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Closest occurrence located 27 miles northeast of site (CDFW 2014).
Toxostoma crissale	Crissal thrasher	None/SSC/ Group 1	Nests and forages in desert riparian and desert wash; dense thickets of sagebrush and other shrubs such as mesquite, iron catclaw acacia, and arroweed willow within juniper and pinyon–juniper woodlands. Common in Colorado River Valley; less common in eastern Mojave Desert, Imperial, Coachella and Borrego Valleys (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Closest occurrence located 54 miles northeast of site near Palm Springs (CDFW 2014).
Toxostoma lecontei lecontei	Le Conte's thrasher	BCC/SSC/ Group 2 (for subspecies T.l.lecontei)	Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree; nests in spiny shrubs or cactus..Uncommon to rare, local resident in Southern California deserts from southern Mono County to the Mexican border and in San Joaquin Valley (2).	No	Not expected to occur.	The project area lacks desert habitat for this species. Not recorded in the CNDDB 9-quad search[2]. The nearest CNDDB record for this species is 52 miles northeast of the site (CDFW 2014).
Vireo bellii pusillus (nesting)	Least Bell's vireo	FE/SE/ Group 1	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	No	Low potential to occur.	Not detected during focused protocol surveys in 2013 (Dudek 2013). Species regularly nests in San Luis Rey River, located approximately 4 miles northwest of site (CDFW 2014; USFWS 2014a).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Vireo vicinior (nesting)	Gray vireo	BCC /SSC/ Group 1	Nests and forages in pinyon-juniper woodland, oak, and chamise and redshank chaparral	No	Not expected to occur.	The project area lacks suitable habitat for this species. Chaparral habitat on site is primarily southern mixed chaparral. Closest occurrence located 80 miles north of site near Hesperia (CDFW 2014).
Xanthocephalus xanthocephalus	Yellow-=headed blackbird	None/SSC/Non e	Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat. Uncommon to rare migrant and winter visitor and very rare summer visitor in freshwater marshes in coastal low land of San Diego County (Unitt 1984).	No	Low potential to occur.	No extensive freshwater marsh, croplands, or grasslands on site. Species not detected in vicinity (CDFW 2014). Closest occurrence located 140 miles east of site along Colorado River (CDFW 2014).
Mammals						
Chaetodipus fallax pallidus	Pallid San Diego pocket mouse	None/SSC (full species)/ Group 2	Desert wash, desert scrub, desert succulent scrub and pinyon–juniper woodland. Found along southern margins of Mojave Desert, along northern slopes of San Bernardino Mountains, western edge of Colorado Desert south to Baja California (6).	No	Low potential to occur.	Suitable coastal scrub and chaparral habitat found within the project area. Closest occurrence located 36 miles east of site (CDFW 2014).
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC/Grou p 2	Grassland, coastal sage scrub, disturbed habitats; fine, sandy soils.	No	Moderate potential to occur.	Suitable vegetation occurs on site as well as fine sandy loam soil. Species not detected in vicinity.

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC/ Group 2/WBWG:M	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings.	No	Low potential to occur.	The project area lacks desert habitats that would be suitable for this species. Closest occurrence located 14 miles southwest of site near Encinitas (CDFW 2014).
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/ Group 2/WBWG:H	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, also man-made structures and tunnels.	No	Low potential to occur.	No appropriate day roosting (cave or cave-like) habitat on site . . Species recorded 4 miles south of the project site (CDFW 2014).
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST/ Group 1	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover or in disturbed areas.	No	Low potential to occur.	No appropriate habitat on site. Numerous occurrences documented approximately 10.5 miles southeast and 5 miles northwest of project site (CDFW 2014; USFWS 2014a).
Euderma maculatum	Spotted bat	None/SSC/ Group 2/WBWG:H	Foothills, mountains, desert regions of Southern California, including arid deserts, grasslands, and mixed conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes.	No	Low potential to occur.	Low potential to forage within the limited riparian habitat on site . Not detected in vicinity (CDFW 2014). Closest occurrence located 24 miles southwest of site near La Jolla (CDFW 2014).
Eumops perotis californicus	Greater Western mastiff bat	None/SSC/ Group 2/ WBWG: H	Chaparral, coastal, and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels.	No	Low potential to occur.	No day roosting (cliff faces) habitat on site. May forage over the site. Closest species occurrence approximately 2.5 miles northeast of site recorded in 1996 (CDFW 2014). Additional occurrences scattered approximately 9 miles south and 11 miles northwest of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Lasiurus cinereus	Hoary bat	None/None/None/WBWG:M	Forest, woodland riparian, and wetland habitats, also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes.	No	Low potential to occur.	Restricted suitable open habitats on site for this species. Closest occurrence located 4 miles west of site in Vista (CDFW 2014).
Lasiurus xanthinus	Western yellow bat	None/SSC/None/ WBWG:H	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet; roosts in riparian and palms.	No	Not expected to occur.	There is no suitable habitat within the project area for this species. Closest occurrence located 4 miles west of site in Vista (CDFW 2014).
Leptonycteris yerbabuenae	Lesser long-nosed bat	FE/None/None/ WBWG:H	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands.	No	Not expected to occur.	No suitable roosting habitat found within the project area. Closest occurrence located 13 miles west of site along the coast (CDFW 2014).
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/SSC/Group 2	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, rangelands.	No	Low potential to occur.	Marginal suitable habitat present; however, much of the habitat is too dense for this species. Species occurrences detected approximately 5.5 miles south and 8.5 miles southwest of site in 2003 and 1999 (CDFW 2014a).
Macrotus californicus	Californian leaf-nosed bat	None/SSC/ Group 2/WBWG:H	Riparian woodlands, desert wash, desert scrub; roosts in mines and caves, occasionally buildings.	No	Not expected to occur.	Primarily confined to desert mountain ranges in the Colorado River basin. Species not detected in vicinity (CDFW 2014). Closest occurrence located 48 miles southeast of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Myotis evotis	Long-eared myotis	None/None/ Group 2/WBWG:M	Nearly all brush, woodland, and forest habitats from sea level to 9,000 feet, but prefers coniferous habitats; forages along habitat edges, in open habitats, and over water; roosts in buildings, crevices, under bark, and snags; caves are used as night roosts.	No	Low potential for roosting or nursery sites.	May forage within riparian habitat on site, however the site does not support roosting habitat or nursery sites. Species not detected in vicinity (CDFW 2014). Closest occurrence located 14 miles southeast of site (CDFW 2014).
Myotis thysanodes	Fringed myotis	None/None/ Group 2/WBWG:H	Primarily drier woodlands, including oak, pinyon–juniper, ponderosa pine, and also desert scrub, mesic coniferous forest, grassland, and sage-grass steppe from sea level to 9,350 feet; roosts in crevices in buildings, mines, rocks, cliff faces, and bridges, and large, decadent trees and snags.	No	Not expected to occur.	Species not detected in vicinity (CDFW 2014). Closest occurrence located 45 miles southeast of site (CDFW 2014).
Myotis volans	Long-legged myotis	None/None/ Group 2/WBWG:H	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags.	No	Low potential for roosting or nursery sites.	May forage within riparian habitat on site, however the site does not support roosting habitat or nursery sites . Species not detected in vicinity (CDFW 2014). Closest occurrence located 38 miles southeast of site (CDFW 2014).
Nyctinomops femorosaccus	Pocketed free-tailed bat	None /SSC/ Group 2/ WBWG:M	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oases; roosts in high cliffs or rock outcrops with dropoffs, caverns, and buildings.	No	Not expected to occur.	Primarily confined to desert areas. Closest species detection approximately 5 miles southeast of site recorded in 1988. Additional close occurrences approximately 10–11 miles southwest of site documented recorded in 1986 and 1988 (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Nyctinomops macrotis	Big free-tailed bat	None/SSC/ Group 2/ WBWG:MH	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water.	No	Low potential to occur.	No day roosting (cliff faces) habitat on site. May forage over the site. Species occurrence documented approximately 5 miles southeast of site in 1988 (CDFW 2014).
Onychomys torridus ramona	Southern grasshopper mouse	None/SSC/ Group 2	Grassland and sparse coastal scrub.	No	Low potential to occur.	Limited grassy habitats and sparse coastal scrub. Species not detected in vicinity (CDFW 2014). Closest occurrence located 23 miles northeast of site (CDFW 2014).
Ovis canadensis nelsoni pop. 2	Peninsular bighorn sheep DPS	FE/ST, FP/ Group 1	Dry, rocky, low elevation desert slopes canyons and washes; females near water during lambing season. Alpine dwarf-shrub, low sage, sagebrush, bitterbrush, pinyon–juniper, palm oasis, desert riparian, desert succulent shrub, desert scrub, subalpine conifer, perennial grassland, montane chaparral, and montane riparian from San Jacinto and Santa Rosa Ranges south to Mexico (2).	No	Not expected to occur.	No suitable habitat found within the project area. Closest occurrence located 70 miles northeast of site (CDFW 2014).
Perognathus longimembris internationalis	Jacumba pocket mouse	None/SSC/ Group 2	Desert scrub and sparse sage scrub in areas with fine sandy soils.	No	Not expected to occur.	No suitable habitat found within the project area. Closest occurrence located 21 miles north of site (CDFW 2014).
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC/ Group 1	Fine-grain sandy substrates in open coastal strand, coastal dunes, and river alluvium.	No	Not expected to occur.	Project area is outside of the known range of this species. Moderately suitable coastal scrub habitat on site. Closest occurrence located 13 miles southwest of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Puma concolor	Mountain lion	None/None/ Group 2	Scrubs, chaparral, riparian, woodland, forest; rests in rocky area, and on cliffs and ledges that provide cover; most abundant in riparian area and brushy stages of most habitats throughout California, except deserts.	No	Low potential to occur.	Species noted as present in the Safa Ranch report without supporting information (Pacific Southwest 1998, as cited in PSBS 2007). Nearby residents indicate this species occurred on extreme northeastern part of site but not seen in several years.
Taxidea taxus	American badger	None/SSC/ Group 2	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, pastures, especially with friable soils.	No	Low potential to occur.	Site lacks extensive open areas of grassland open shrublands; very poor connectivity to other suitable habitat for this wide-ranging species. Two records (no date) documented directly southwest of the project site; two additional nearby occurrences documented approximately 4 miles southwest and 5 miles southeast of site. All unknown dates of occurrence (CDFW 2014).
Invertebrates						
Apodemia mormo peninsularis	Mormon metalmark	None/None/ Group 1	Meadows. Larval host plant *Eriogonum wrightii* ssp. *membranaceum.* Specimen from meadows in Laguna Mountains, 5,499 feet (10).	No	Not expected to occur.	No suitable habitat within project area, and host plant absent. Species not detected in vicinity (CDFW 2014).
Ariolimax columbianus stramineus	Palomar banana slug	None/None/ Group 2	Humid coastal forests; Santa Cruz Island (9).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None/ Group 1, Narrow Endemic	Vernal pools, non-vegetated ephemeral pools.	No	Low potential to occur.	While some ponding occurred within the old quarry area, these areas have been highly modified, and there are no historically suitable soils in the area. However, the San Diego region has experienced a number of large rain events in January which resulted in ponding throughout the site. Surveys are currently underway with no sensitive fairy shrimp observed. Dry season surveys will be conducted following the conclusion of the wet season. Due to the low quality of habitat (road ruts) observed, this species is not expected to occur.The closest known location of occupied pools are approximately 5 miles southwest of the project Site in San Marcos, with other occurrences 15 miles to the southeast in Ramona and 16 miles northwest within Camp Pendleton (USFWS 2017).
Brennania belkini	Belkin's dune tanabid fly	None/None/ Group 2	Coastal sand dunes of Southern California. Only CNDDB records are from USGS Quad: Venice, Los Angeles County (6).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Callophrys [=Mitoura] gryneus thornei	Thorne's juniper hairstreak butterfly	None/None/ Group 1	Endemic to San Diego County, where host plant Tecate cypress (*Cupressus forbesii*) occurs, including Otay Mountain (Little Cedar Canyon).	No	Not expected to occur.	No Tecate cypress on site. Species not detected in vicinity (CDFW 2014). Closest occurrence located 37 miles south of site near Otay Mountain (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Cicindela gabbii	Western tidal flat tiger beetle	None/None/ Group 2	Estuaries and mudflats; generally on dark-colored mud; occasional on dry saline flats of estuaries or mouth of river, Orange and San Diego Counties (6).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Cicindela hirticollis gravida	Hairy-necked tiger beetle	None/None/ Group 2	Clean, dry, light-colored sand in upper zone of the beach dunes, close to non-brackish water along coastal California (6).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Cicindela latesignata obliviosa	Western beach tiger beetle	None/None/ Group 2	Inhabited the Southern California coastline, from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years (4).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Cicindela senilis frosti	Senile tiger beetle	None/None/ Group 2	Coastal salt marshes; fresh/brackish lagoons, open patches of Salicornia, dried salt pans, muddy alkali area. Records in Riverside, San Diego, Los Angeles, Ventura Counties (4, 6).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Cicindela trifasciata sigmoidea	S-banded tiger beetle	None/None/ Group 2	Has been identified along the fringe of a mudflat and low marsh habitat in San Diego County (10).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Coelus globosus	Globose dune beetle	None/None/ Group 1	Fore dunes, sand hummocks, back dunes along immediate coast. Larvae, adults spend time under vegetation or debris from Santa Cruz south to Ventura Cos. Possibly extirpated in San Diego and other coastal counties (4).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Euphydryas editha quino	Quino checkerspot butterfly	FE/None/ Group 1	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego Counties; especially on hills and mesas near the coast, with high densities of food plants *Plantago erecta, P. insularis, Orthocarpus purpurescens*.	No	Low potential to occur.	Unlikely to occur because of dense chaparral habitats on site; outside of USFWS 2014 survey area (USFWS 2014b). There are older records (1930–1951) of this species recorded a few miles west and further south of the project site, and one record from 1982 by Lake Hodges (USFWS 2014a).
Euphyes vestris harbisoni	Harbison's dun skipper	None/None/ Group 1	Silverado Canyon, Orange County, through San Diego County foothills; associated with drainages containing *Carex spissa*. Flight season: mid-May to mid-July	No	Low to moderate potential to occur.	Known from Daley Ranch and extreme eastern part of Escondido, among other areas. Although *Carex spissa* has been found on the site, surveys in that habitat were negative. Species not detected in vicinity (CDFW 2014).
Helminthoglypta traskii coelata (=Helminthoglypta coelata)	Peninsular Range shoulderband snail (Mesa shoulderband snail)	None/ None/ Group 2	Coastal San Diego County (6).	No	Not expected to occur.	Project area not within this species' known range. Species not detected in vicinity (CDFW 2014).
Linderiella occidentalis	California fairy shrimp	None/None/ Group 1	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids (TDS). Central Valley, Santa Rosa Plateau (4).	No	Not expected to occur.	No vernal pools recorded within the project area. Species not detected in vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Lycaena hermes	Hermes copper	FC/None/ Group 1	Endemic to San Diego County. Continuous stands of southern mixed chaparral/coastal sage scrub with both host plant *Rhamnus crocea* and primary nectaring plant *Eriogonum fasciculatum* in very close proximity. Species usually found along fairly open dirt roads/trails. Fallbrook is most northern record. Flight season: late May to early July	No	Low potential to occur.	No *Rhamnus crocea* was observed on site. Project site is north of most recent records for this species. Species not detected in vicinity (CDFW 2014). Closest occurrence located 25 miles south of site near Mission Trails (CDFW 2014).
Megathymus yuccae (harbisoni)	Yucca giant skipper	None/None/ Group 2	Coastal dunes, open yucca flats, desert canyons, open woodland, grassland, and old fields. Record from eastern San Diego County near Scissors Crossing (4, 8).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Panoquina errans	Wandering skipper	None/None/ Group 1	Confined to coastal salt marshes from Santa Barbara through Baja California peninsula; host plant *Distichlis spicata*. Flight season: July–September. Confined to coastal salt marshes	No	Not expected to occur.	No salt marsh habitat on site. Species not detected in vicinity (CDFW 2014).
Papilio multicaudata	Two-tailed swallowtail	None/None/ Group 1	Semi-arid canyon land, mid-level mountains, canyon bottoms; groves, parks, roadsides (4).	No	Low potential to occur.	Suitable habitat within the project area for this species. Species not detected in vicinity (CDFW 2014).
Plebejus saepiolus hilda	Hilda greenish blue	None/None/ Group 1	Grassy meadow, near small pond; oviposit on *Trifolium wormskioldii*. In San Bernardino Mountains (8).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Host plant absent. Species not detected in vicinity (CDFW 2014).
Pseudocopaeodes eunus eunus	Alkali skipper	None/None/ Group 1	Grassy spots on alkali flats; playa/salt flats. Desert seeps, alkali flats of Kern River, Kern County Host plant grass: *Distichils spicata* var. *spicata* (4).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Pyrgus ruralis lagunae	Laguna Mountain skipper	FE/None/ Group 1, XERCES:CI	Restricted to montane meadows of Laguna Mountains and Palomar Mountain. Only in a few open meadows in yellow pine forest between 5,000 and 6,000 feet in the vicinity of Mt. Laguna and Palomar Mountain. Eggs laid on leaves of *Horkelia clevelandi*. Larvae feed on leaves and overwinter on the host plant (4).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Closest occurrence located 16 miles northeast of site near Palomar Mountain (CDFW 2014).
Streptocephalus woottoni	Riverside fairy shrimp	FE/None/ Group 1, Narrow Endemic	Vernal pools, non-vegetated ephemeral pools. Endemic to western Riverside and San Diego Counties, in area of tectonic swales, earth slump basins, in grassland and coastal sage scrub; especially inhabits seasonally astatic pools, filled by winter/spring rains; hatch in warm water later in the season.	No	Low potential to occur.	While some ponding occurred within the mine area, these areas have been highly modified and there are no historically suitable soils in the area. Closest species detection approximately 11 miles southwest of site in 2005 on the Pacific coast (CDFW 2014; USFWS 2014a).
Trigonoscuta blaisdelli	Blaisdell trigonoscuta weevil	None/None/ Group 2	*Trigonoscuta* sp.: Coastal, desert, or inland sand dunes; wide variety of plant types used; the larvae feed on the roots and the adults on the leaves (12).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).
Tryonia imitator	Mimic tryonia, California brackishwater snail	None/None/ Group 2	Coastal lagoons, herbaceous wetlands, brackish salt marshes; distributed among semi-continuous estuarine habitats along coast (4).	No	Not expected to occur.	The project area lacks suitable habitat for this species. Species not detected in vicinity (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
			Fish			
Cyprinodon macularius	Desert pupfish	FE/SE/ Group 2, AFS:EN	Desert springs, outflow marshes, river-edge marshes, backwaters, saline pools, streams, water less than 3.2 feet in depth. Tolerates low oxygen levels, high temperatures, high salinity; can live in salinities from fresh water to 68 parts per thousand (ppt)., can withstand temperatures from 9°–45° Celsius (°C) and dissolved oxygen (DO) levels down to 0.1 ppm. Found from San Felipe Creek, San Sebastian Marsh, Salt Creek, and Salton Sea (4).	No	Not expected to occur.	The project area lacks suitable aquatic habitat for this species. Closest occurrence located 42 miles east of site near Anza-Borrego State Park (CDFW 2014).
Eucyclogobius newberryi	Tidewater goby	FE/SSC/ Group 1/ AFS:EN	Coastal lagoons, upper ends of lagoons created by small coastal streams, fresh to brackish water in lower sections of coastal streams; occurs in water 9.8–39 inches deep and prefers mud substrates and areas of high dissolved oxygen. Found with sparse distribution along coast of California south of Del Norte County to San Diego County (4).	No	Not expected to occur.	The project area lacks suitable aquatic habitat for this species. Closest occurrence located 11 miles west of site (CDFW 2014).
Gasterosteus aculeatus williamsoni	Unarmored threespine stickleback	FE/SE, FP/ Group 2 / AFS:EN	Clear, cool, slow-flowing streams with sand or mud substrate, weedy pools, backwaters, among emergent vegetation at stream edge, in abundant aquatic vegetation in Santa Clara River drainage (4).	No	Not expected to occur.	The project area lacks suitable aquatic habitat for this species. Closest occurrence located 39 miles east of site (CDFW 2014).

Wildlife Species with Low Potential or Not Expected to Occur

Scientific Name	Common Name	Status (Federal/ State/ County/ Other)[1]	Primary Habitat Associations	Verified on Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
Gila orcuttii	Arroyo chub	None/SSC/ Group 1/ AFS:VU	Permanent, small to moderate sized, moderate to high gradient streams with flow; headwaters, creeks, small to medium rivers, intermittent streams. Prefer slow moving sections with sand or mud substrate. Found in Southern California watersheds (4).	No	Not expected to occur.	The project area lacks suitable aquatic habitat for this species. Closest occurrence located 12 miles northwest of site (CDFW 2014).
Oncorhynchus mykiss irideus	Southern steelhead - Southern California DPS	FE/None/ Group 1/ AFS:EN	*Oncorhynchus mykiss* ssp. *irideus*: Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County); Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions. Ocean, rivers, creeks, large inland lakes, juveniles spend time in ocean before returning to natal stream to spawn; prefer summer temperatures 10°–15°C. Migration requires deep (9.8 feet) pools with cover along river course (4).	No	Not expected to occur.	The project area lacks suitable aquatic habitat for this species. Closest occurrence located 25 miles northwest of site (CDFW 2014).

[1] **Status Designations:**

Federal

FC	Candidate for federal listing as threatened or endangered
(FD)	Federally delisted; monitored for 5 years
FE	Federally listed Endangered
FT	Federally listed as Threatened

State Designations:

SSC	California Special Concern Species
FP	California Department of Fish and Game Fully Protected Species
WL	California Department of Fish and Game Watch List Species
SE	State listed as Endangered
ST	State listed as Threatened

County Designations:

Group 1 County of San Diego Sensitive Animal List
Group 2 County of San Diego Sensitive Animal List

Other Designations:

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

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APPENDIX H

San Diego Fairy Shrimp Potential on the Newland Sierra Project Site Memo

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

MEMORANDUM

To: Ashley Smith, County of San Diego
From: Brock Ortega, Dudek
Subject: San Diego Fairy Shrimp Potential on the Newland Sierra Project Site
Date: March 28, 2017
cc: Brian Grover, Dudek
Attachment(s): Attachment A: FWS Email Dated January 18, 2017
Attachment B: Figures 1 through 18, Plus Index Map

The purpose of this memorandum is to summarize recently detected ponding on the Sierra project site and resulting survey efforts associated with it.

BACKGROUND

On January 18, 2017, Dudek received an email (Attachment A) from Susan Wynn of the U.S. Fish and Wildlife Service (FWS), indicating that there was ponding on the Newland Sierra project site. The email stated that an individual had reported to the FWS that there was ponding within the project site and that fairy shrimp (*Branchinecta* sp.) had been detected. Further, the email recommended that a focused survey be completed. Follow-up emails from the California Department of Fish and Wildlife (CDFW) also requested that the project applicant, and by extension Dudek, collect data on the distribution of western spadefoot (*Spea hammondi*). Dudek notified the FWS that same day that we would be performing focused surveys as requested.

Previously, Dudek identified a puddle associated with the old mine area in the northwestern portion of the site, but no fairy shrimp were identified. Additionally, based on the known range and distribution of the listed San Diego fairy shrimp (*Branchinecta sandiegoensis*; SDFS), existing severe topography on the site, and general vegetative cover on the site, Dudek concluded that there was a very low potential for SDFS to occur on the project site.

Surveys included locating the pools that had been identified, then searching other areas of the project site (both open space and proposed development areas) for ponding and listed fairy shrimp. Once initiated, surveys proceeded on a weekly basis for a total of four surveys.

RESULTS

Surveys were initiated on January 31, 2017 and concluded on February 24, 2017. Dudek located 45 puddles on the site, with 17 occurring within the proposed development area. The non-listed versatile fairy shrimp (*Branchinecta lindahli*) were identified by permitted biologist Paul Lemons from nine (9) of the puddles. Three of which (23, 35, and 36) occurred within the development footprint – two from the vicinity of the southeastern area near the northern cul-de-sac at Mesa Rock Road, and the other one from the central portion of the site. No other puddles or fairy shrimp species were identified. Puddles 20, 44, and 45 were found to support western spadefoot also – all of these puddles are in open space in the northwestern portion of the property. Puddle 20 is located near the old landing strip, while puddles 44 and 45 occur in the old mine area. Puddle 44 was also found to support western spadefoot during Dudek's field work in 2014/2015.

All of the puddles were located on existing hard-packed dirt roads and none were naturally occurring.

The 2016/2017 winter has supported near record-levels of rainfall. Data gathered from the MesoWest portal (http://mesowest.utah.edu/cgi-bin/droman/download_api2.cgi?stn=E3309&hour1=19&min1=45&timetype=LOCAL&unit=0&graph=0) outlines the rain events to date (Location 85 – Hidden Meadows):

Rainfall Data for Winter 2016/2017 (September 7, 2016 – March 7, 2017)

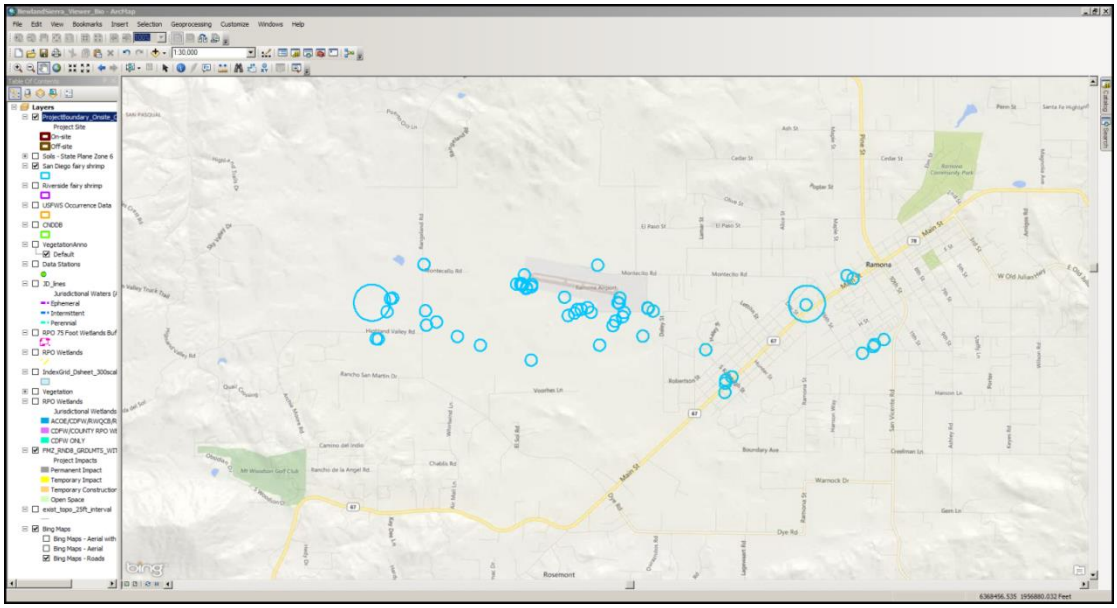
Date	Storm Total	Running Total
September 7 – 8, 2016	0.02	0.02
September 20 – 24, 2016	0.61	0.63
October 4 – 7, 2016	0.04	0.67
October 12 – 14, 2016	0.03	0.70
October 17 – 19, 2016	0.04	0.74
October 24-25, 2016	0.10	0.84
October 30 – November 3, 2016	0.05	0.89
November 20 – 30, 2016	2.45	3.34
December 7 – 17, 2016	2.52	5.86
December 21 – 25, 2016	2.89	8.75
December 30, 2016 – January 24, 2017	8.7	17.45
February 5 – 12, 2017	0.97	18.42
February 17 – March 1, 2017	6.99	25.41
March 5 – 7, 2017	0.17	25.58

DISCUSSION

Previously, Dudek determined that there was a low potential for listed fairy shrimp because of poor soils, topography, and distance from known population areas. As indicated, focused surveys for listed fairy shrimp were not conducted until the FWS received notice that there were puddles occupied by fairy shrimp. Upon review of the puddles, Dudek determined that none of the puddles were occupied by listed fairy shrimp. Instead the common fairy shrimp was found. Based on the following rationale, we reiterate our conclusion that listed fairy shrimp have a low potential to occur on the project site:

Distribution

While San Diego fairy shrimp are known from the coastal slope of San Diego and Orange Counties, they are all associated with costal slope mesas and bluffs. The northern-most Orange County data point is from a swale near Highway 241 and Irvine Lake (Orange). Other locations in Orange County include Newport Beach/Costa Mesa and Laguna Nigel/San Juan Capistrano – all are in gently rolling to flat terrain. Heading south, well known populations exist on coastal bluffs and mesas in San Clemente and Camp Pendleton, then Oceanside and Carlsbad. The closest population to the project site is in San Marcos on flat lowlands with very typical mima-mound topography and vernal pools. San Diego fairy shrimp populations are also known from Carlsbad, Del Mar Mesa, MCAS Miramar, various mesas in the City of San Diego, Spring Valley, Jamul, and Chula Vista – all of these occur on relatively flat topography with existing or historical mima-mounds and vernal pools. The most inland sites in San Diego occur in Santee and Poway, and Ramona on relatively flat terrain with current or historical vernal pools (Exhibit 1). None of these known locations look like the project site from a geographical or geological perspective.



Topography

All known San Diego fairy shrimp populations are associated with mima-mound topography and vernal pools, or on compacted disturbances in nearby proximity to mima-mound topography and natural vernal pools. As indicated, none of the puddles on site occur in natural depressions. Instead, they are all found on hard-packed dirt roads. The topography of the site is mostly very steep, with intermittent rolling slopes. The only potential level substrate lies within roadways or heavily impacted areas that have been topographically modified by mining, grading, or other activities. Further, constant trespass by off-road vehicles further exacerbates the condition. There are no mima-mound or natural vernal pool topography present on the site and therefore no natural host population.

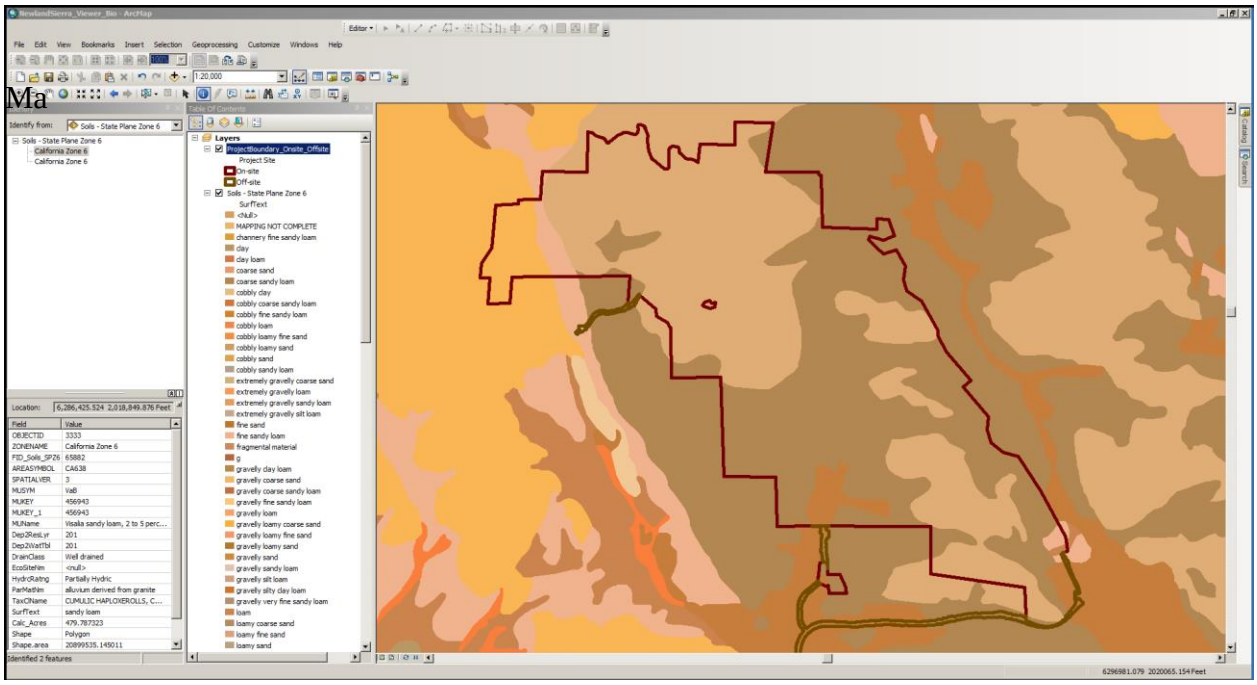
Rainfall and Survey Effort

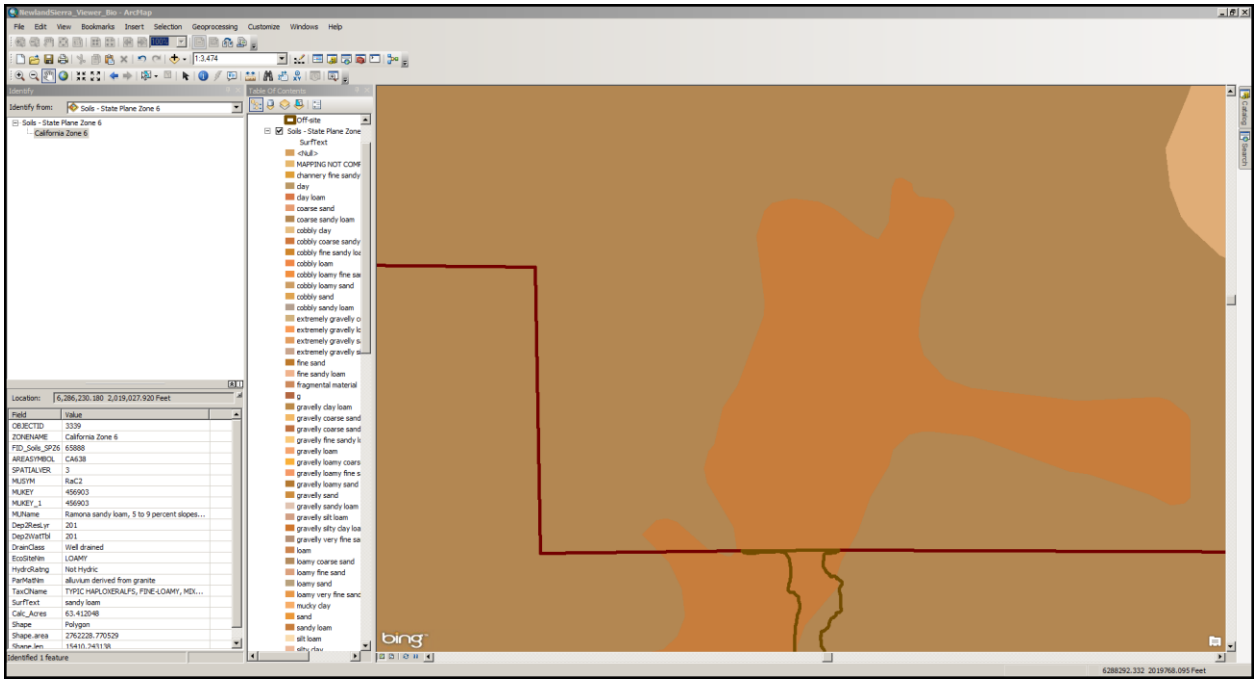
While surveys did not proceed until puddles were brought to our attention, Dudek had reviewed the project site over the last three years during the rainy season and never detected any standing water within the development area. Further, this season, Dudek visited the site on a number of occasions until the end of November. Ponding was not observed then either. It was not until the region started receiving near record rainfall that puddles started to form. Based on the amount of rainfall received, it is reasonable to assume that all puddles that could form, did form. Further, it is expected that puddles would not have dried up due to the amount of constant rainfall and relatively mild temperatures. Since Dudek surveyed the site immediately after the notification in January, it is unlikely that listed species had time to hatch and die off to the point that detection would not have been possible.

Soils

The project site does not contain typical "vernal pool" clay soils such as: Chesterton, Huerhuero, Olivenhain, Placentia, Redding, and Stockpen. As shown in Exhibit 2, the project is dominated by Cieneba very rocky coarse sandy loam/Cieneba-Fallbrook rocky sandy loam (darker brown color) and Acid igneous rock land (lighter tan color). Smaller inclusions of Las Posas fine sandy loam, Wyman loam, and Fallbrook sandy loam occur in the southeastern-most corner, Visalia sandy loam and Ramona sandy loam occur in the southcentral portion of the site, and Friant rocky fine sandy loam and Las Posas stony fine sandy loam occurs in the northwestern portion of the project site. The only mildly potential soil is a sub-category of Las Posas fine sandy loam (LpC2), which is due to the lack of permability (Exhibit 3). This type is only situated in a small strip in the south-central portion of the site and there were no puddles identified in that area.

Ma





CONCLUSION

For the reasons outlined above – atypical soils, topography and geography; lack of mima-mounds or vernal pools; record rainfall; and, identification of only the common fairy shrimp species - Dudek believes that the project site has only low potential to support listed fairy shimp and San Diego fairy shrimp is not expected to occur.

ATTACHMENT A

FWS Email Dated January 18, 2017

From:	Wynn, Susan
To:	Brian Grover; Brock Ortega; Michael McCollum; Rita Brandin; Shanti SPL Santulli; michelle.r.lynch@usace.army.mil; Vipul Joshi
Cc:	Doreen Statdlander; Karen Goebel; Mendel Stewart; David Mayer
Subject:	Newland Sierra
Date:	Wednesday, January 18, 2017 3:05:08 PM
Attachments:	NS shrimp.zip

Hello all - We received a call from a concerned citizen regarding potential vernal pools on the Newland Sierra project site. I've attached a map and a couple of the photos that were sent over - As you can see from the close up photo of one of the ponded areas, there appears to be fairy shrimp. I can not identify which species this is from a photograph - I'm guessing it is either the un-listed versatile fairy shrimp (Branchinect lindahli) or the federally endangered San Diego fairy shrimp (B. sandiegonensis) based on what has been observed to date in other areas, but this would need to be confirmed by a permitted biologist in the field. I do not recall any mention of potential vernal pools in the previous documents and have not had time to pull the file to check. I also do not recall whether any ponding was mapped as part of a wetland delineation for the Corps. I will continue to pass on any info I receive - given that fairy shrimp are out and there appears to be ponding on the site, we recommend that you have a permitted biologist survey the site for fairy shrimp. I am not sure which staff at the County is working on this project so please coordinate with them as appropriate.
Susan

Susan Wynn
Fish and Wildlife Biologist
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008
(760) 431-9440 ext 216


01.14.2017 21:41


E Farra St
Lawrence Meik Ct

ATTACHMENT B

Figures 1 through 16, Plus Index Map

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 1 - Puddles

Newland Sierra

Document Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 2 - Puddles

Newland Sierra

Document Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 3 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 4 - Puddles

Newland Sierra

Document Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 5 - Puddles

Newland Sierra

Document Path: Z:\Projects\j7608001\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 6 - Puddles

Newland Sierra

Document Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 7 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 8 - Puddles

Newland Sierra

Document Path: Z:\Projects\j7608001\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 9 - Puddles

Newland Sierra

Document Path: Z:\Projects\j\760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

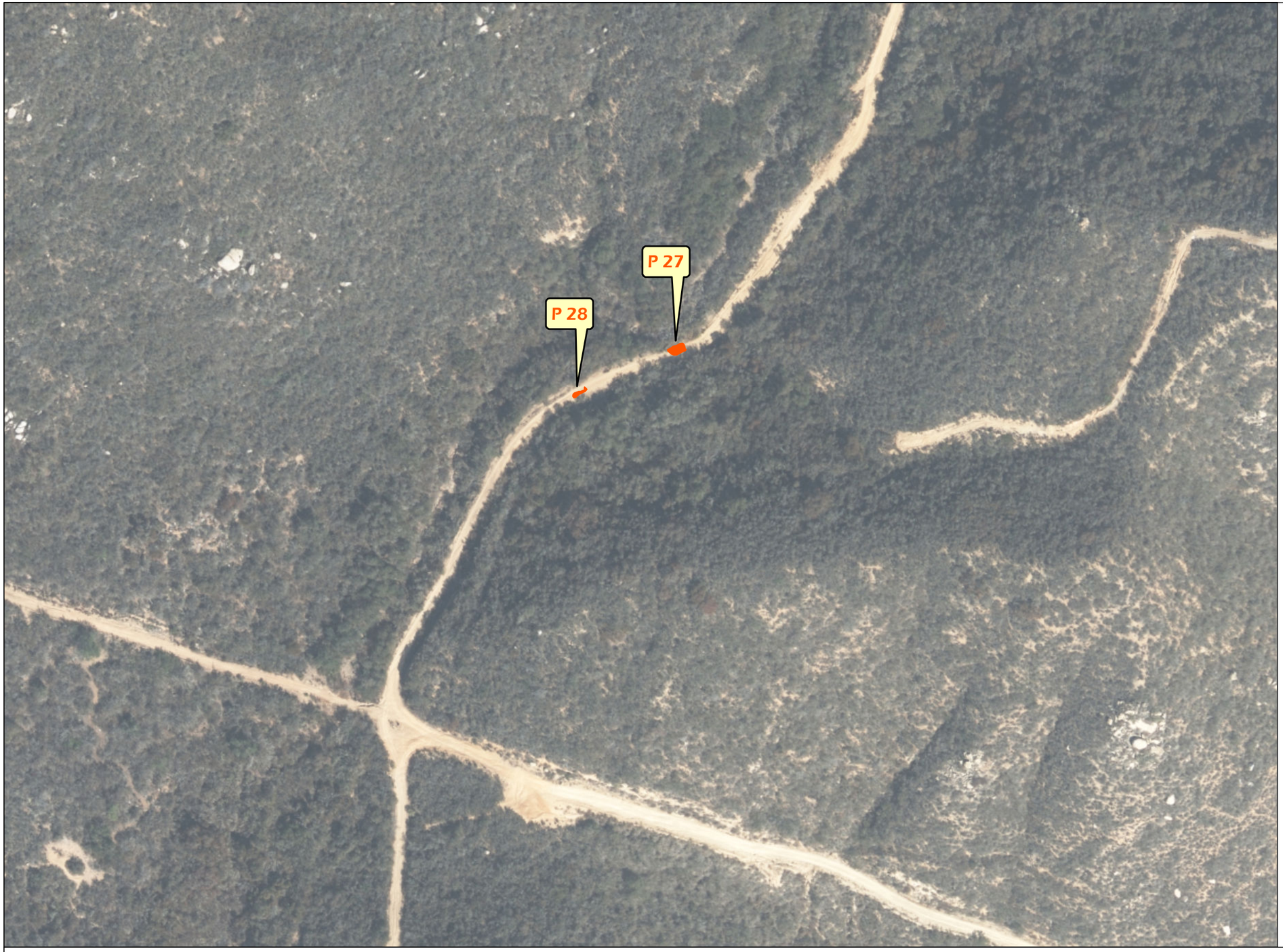
DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 10 - Puddles

Newland Sierra

Document Path: Z:\Projects\j7608001\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd



Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 11 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 12 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 13 - Puddles
Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 14 - Puddles

Newland Sierra

Document Path: Z:\Projects\j7608001\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 15 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

Puddles (2017)
On-site Project Boundary
Development Limits

N
0 50 100 150 200 Feet

DUDEK

AERIAL SOURCE: SANDAG IMAGERY 2014

FIGURE 16 - Puddles

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Figure1-16 Sierra Pools 2017 Mapbook 100sc.mxd

DUDEK

SOURCES: AERIAL-BING MAPPING SERVICE; SAN DIEGO FAIRY SHIMP-USFW

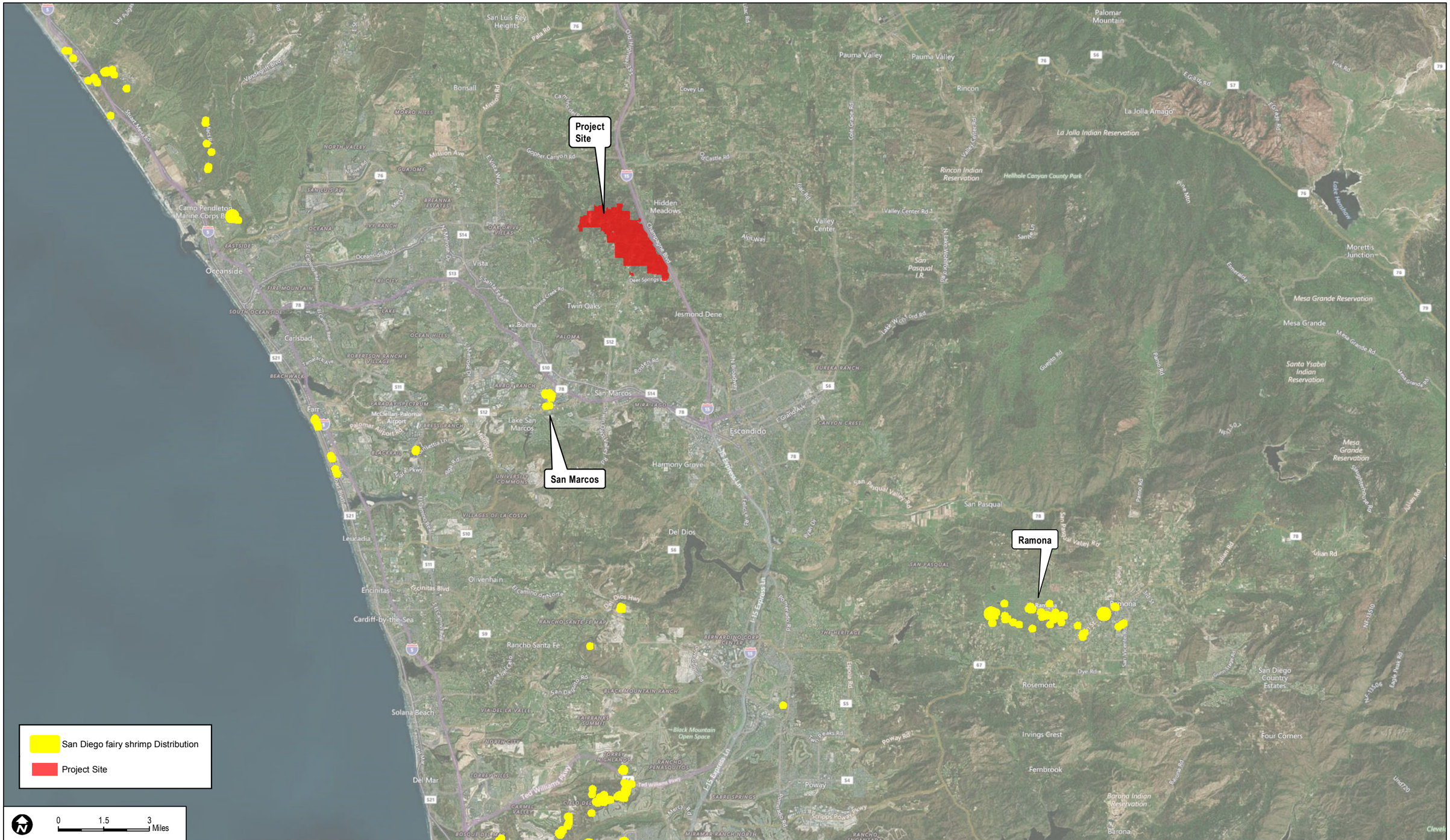
FIGURE 17

San Diego Fairy Shrimp Regional Context Map

7608-01

San Diego Fairy Shrimp Potential on the Sierra Project Site

San Diego Fairy Shrimp Distribution



DUDEK

7608-01

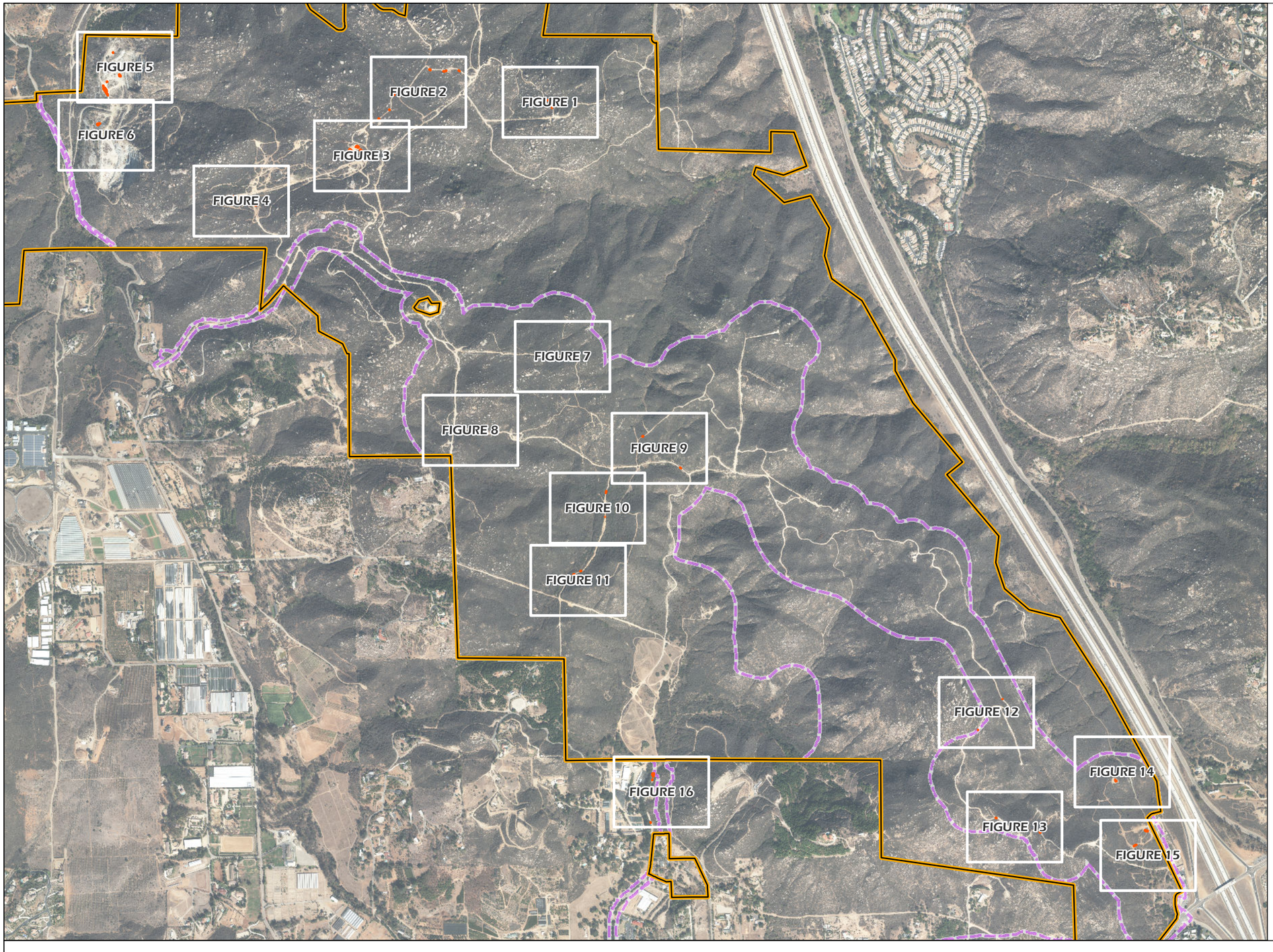
SOURCES: AERIAL-BING MAPPING SERVICE; SAN DIEGO FAIRY SHIMP-USFW

FIGURE 18

San Diego Fairy Shrimp San Marcos and Ramona Locations Map

San Diego Fairy Shrimp Potential on the Sierra Project Site

San Diego Fairy Shrimp Distribution



DUDEK

Puddles (2017)

Newland Sierra

Document Path: Z:\Projects\j760801\MAPDOC\MAPS\Tech Reports\Sierra Pool Memo\Pools 2017 Index.mxd

APPENDIX I

Data Station Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Newland Sierra | City/County: San Marcos/San Diego | Sampling Date: 05/10/13

Applicant/Owner: | State: CA | Sampling Point: 1

Investigator(s): K. Muri, T. Liddicoat | Section, Township, Range:

Landform (hillslope, terrace, etc.): drainage | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: | Long: | Datum:

Soil Map Unit Name: Cieneba very rocky coarse sandy loam, 30 to 75 % slopes | NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Data pit within ephemeral creek channel bed beneath riparian canopy over

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *none in plot*			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1. *Toxicodendron diversilobum*	1	Yes	
2.			
3.			
4.			
5.			
Total Cover:	1 %		
Herb Stratum			
1. *Bromus diandrus*	1	Yes	Not Listed
2. *Bromus madritensis*	1	Yes	Not Listed
3. *Anagallis arvensis*	1	Yes	Not Listed
4.			
5.			
6.			
7.			
8.			
Total Cover:	3 %		
Woody Vine Stratum			
1. *none in plot*			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum >95% % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species	3	x 5 =	15
Column Totals:	3 (A)		15 (B)

Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:

- (●) Dominance Test is >50%
- (●) Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: Mostly leaf litter from Oak trees (Quercus sp.)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-4	7.5 YR 5/4	100	None	-			Sand	
4-18	7.5 YR 5/4	100	None	-			Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[4]:

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☒ Sediment Deposits (B2) (**Nonriverine**)
- ☒ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☒ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Sandy ephemeral channel, approximately 6 feet wide with terracing (one terrace 1-foot above and second terrace 2 feet above). Data station within low flow channel and below OHWM of defined bed/bank.