

**Appendix D:
Biological Resources Supporting Information**

THIS PAGE INTENTIONALLY LEFT BLANK

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

29 matches found. [Click on scientific name for details](#)

Search Criteria

Found in Quads 3712178 and 3712168;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Androsace elongata ssp. acuta	California androsace	Primulaceae	annual herb	Mar-Jun	4.2	S3S4	G5? T3T4
Anomobryum julaceum	slender silver moss	Bryaceae	moss		4.2	S2	G5?
Arctostaphylos auriculata	Mt. Diablo manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	1B.3	S2	G2
Arctostaphylos manzanita ssp. laevigata	Contra Costa manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar(Apr)	1B.2	S2	G5T2
Calochortus pulchellus	Mt. Diablo fairy-lantern	Liliaceae	perennial bulbiferous herb	Apr-Jun	1B.2	S2	G2
Calochortus umbellatus	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	4.2	S3?	G3?
Campanula exigua	chaparral harebell	Campanulaceae	annual herb	May-Jun	1B.2	S2	G2
Centromadia parryi ssp. congdonii	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	1B.1	S1S2	G3T1T2
Clarkia concinna ssp. automixa	Santa Clara red ribbons	Onagraceae	annual herb	(Apr)May-Jun(Jul)	4.3	S3	G5?T3
Delphinium californicum ssp. interius	Hospital Canyon larkspur	Ranunculaceae	perennial herb	Apr-Jun	1B.2	S3	G3T3
Dirca occidentalis	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	1B.2	S2	G2
Eriogonum truncatum	Mt. Diablo buckwheat	Polygonaceae	annual herb	Apr-Sep(Nov-Dec)	1B.1	S1	G1
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	Apr-Aug	1B.2	S2?	G2?
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
Helianthella castanea	Diablo	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2

	helianthella						
Hesperolinon breweri	Brewer's western flax	Linaceae	annual herb	May-Jul	1B.2	S2	G2
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	4.2	S4?	G4?
Malacothamnus hallii	Hall's bush-mallow	Malvaceae	perennial evergreen shrub	(Apr)May-Sep(Oct)	1B.2	S2	G2
Monolopia gracilens	woodland woolythreads	Asteraceae	annual herb	(Feb)Mar-Jul	1B.2	S3	G3
Navarretia nigelliformis ssp. radians	shining navarretia	Polemoniaceae	annual herb	(Mar)Apr-Jul	1B.2	S2	G4T2
Phacelia phacelioides	Mt. Diablo phacelia	Hydrophyllaceae	annual herb	Apr-May	1B.2	S2	G2
Polemonium carneum	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	2B.2	S2	G3G4
Sanicula saxatilis	rock sanicle	Apiaceae	perennial herb	Apr-May	1B.2	S2	G2
Spergularia macrotheca var. longistyla	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May(Jun)	1B.2	S2	G5T2
Streptanthus hispidus	Mt. Diablo jewelflower	Brassicaceae	annual herb	Mar-Jun	1B.3	S2	G2
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Triquetrella californica	coastal triquetrella	Pottiaceae	moss		1B.2	S2	G2
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 25 October 2019].

Search the Inventory

[Simple Search](#)
[Advanced Search](#)
[Glossary](#)

Information

[About the Inventory](#)
[About the Rare Plant Program](#)
[CNPS Home Page](#)
[About CNPS](#)
[Join CNPS](#)

Contributors

[The Calflora Database](#)
[The California Lichen Society](#)
[California Natural Diversity Database](#)
[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)

Questions and Comments

rareplants@cnps.org



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Dublin (3712168) OR Diablo (3712178))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Anomobryum julaceum</i> slender silver moss	NBMUS80010	None	None	G5?	S2	4.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arctostaphylos auriculata</i> Mt. Diablo manzanita	PDERI04040	None	None	G2	S2	1B.3
<i>Arctostaphylos manzanita ssp. laevigata</i> Contra Costa manzanita	PDERI04273	None	None	G5T2	S2	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	PMLIL0D160	None	None	G2	S2	1B.2
<i>Campanula exigua</i> chaparral harebell	PDCAM020A0	None	None	G2	S2	1B.2
<i>Centromadia parryi ssp. congdonii</i> Congdon's tarplant	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Delphinium californicum ssp. interius</i> Hospital Canyon larkspur	PDRAN0B0A2	None	None	G3T3	S3	1B.2
<i>Dipodomys heermanni berkeleyensis</i> Berkeley kangaroo rat	AMAFD03061	None	None	G3G4T1	S1	
<i>Efferia antiochi</i> Antioch efferian robberfly	IIDIP07010	None	None	G1G2	S1S2	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eriogonum truncatum</i> Mt. Diablo buckwheat	PDPGN085Z0	None	None	G1	S1	1B.1
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	PDAP10Z130	None	None	G2	S2	1B.2
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<i>Helianthella castanea</i> Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
<i>Helminthoglypta nickliniana bridgesi</i> Bridges' coast range shoulderband	IMGASC2362	None	None	G3T1	S1S2	
<i>Hesperolinon breweri</i> Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Malacothamnus hallii</i> Hall's bush-mallow	PDMAL0Q0F0	None	None	G2	S2	1B.2
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
<i>Monolopia gracilens</i> woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Navarretia nigelliformis ssp. radians</i> shining navarretia	PDPLM0C0J2	None	None	G4T2	S2	1B.2
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	PDHYD0C3Q0	None	None	G2	S2	1B.2
<i>Polemonium carneum</i> Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<i>Streptanthus hispidus</i> Mt. Diablo jewelflower	PDBRA2G0M0	None	None	G2	S2	1B.3
<i>Stuckenia filiformis ssp. alpina</i> slender-leaved pondweed	PM POT03091	None	None	G5T5	S2S3	2B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Triquetrella californica</i> coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
<i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 45

THIS PAGE INTENTIONALLY LEFT BLANK

Special-status Plant Species Potentially Occurring within the Project

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Androsace elongata</i> ssp. <i>acuta</i> California androsace	—	—	4.2	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland. Mar. – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, woodland or grassland vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Anomobryum julaceum</i> slender silver moss	—	—	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest. Often found growing on damp rock and soil on outcrops, usually on roadcuts	Unlikely to Occur: no suitable habitat is present within the Project due to lack of forested habitat. No recorded occurrences are within 1 mile of the Project.	No
<i>Arctostaphylos auriculata</i> Mt. Diablo manzanita	—	—	1B.3	Chaparral (sandstone), Cismontane woodland. Jan. – Mar. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral or woodlands. No recorded occurrences are within 1 mile of the Project.	No
<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i> Contra Costa manzanita	—	—	1B.2	Chaparral (rocky). Jan. – April blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	—	—	1B.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland. April – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, woodland and grassland vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Calochortus umbellatus</i> Oakland star-tulip	—	—	4.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland. Prefers serpentinite soils. Mar. – May blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, grasslands, forests and serpentine soils. No recorded	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
					occurrences are within 1 mile of the Project.	
<i>Campanula exigua</i> chaparral harebell	—	—	1B.2	Chaparral (rocky), usually found where serpentinite soils occur. May – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral vegetation and serpentine soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	—	—	1B.1	Valley and foothill grassland with alkaline soils. May – Nov. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of grassland habitat. No recorded occurrences are within 1 mile of the Project.	No
<i>Clarkia concinna</i> ssp. <i>automixa</i> Santa Clara red ribbons	—	—	4.3	Chaparral, Cismontane woodland. April – July blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to chaparral or woodlands. No recorded occurrences are within 1 mile of the Project.	No
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	—	—	1B.2	Chaparral (openings), Cismontane woodland (mesic), Coastal scrub. April – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to chaparral or woodlands. No recorded occurrences are within 1 mile of the Project.	No
<i>Dirca occidentalis</i> western leatherwood	—	—	1B.2	Broadleafed upland forest, Closed-cone coniferous forest, Chaparral, Cismontane woodland, North Coast coniferous forest, Riparian forest, Riparian woodland. Jan. – April blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of conifer or riparian forests. No recorded occurrences are within 1 mile of the Project.	No
<i>Eriogonum truncatum</i> Mt. Diablo buckwheat	—	—	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland. Prefers sandy soils. April – Sept. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project chaparral, grasslands and sandy soils. No recorded	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
					occurrences are within 1 mile of the Project.	
<i>Eryngium jepsonii</i> Jepson's coyote thistle	—	—	1B.2	Valley and foothill grassland, Vernal pools. Prefers clay soils. April – Aug. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of grasslands, vernal pools and clay soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Extriplex joaquinana</i> San Joaquin spearscale	—	—	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland with alkaline soils. April – Oct. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of meadows, grasslands and alkaline soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Fritillaria liliacea</i> fragrant fritillary	—	—	1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland. Often occurs in serpentinite soils. Feb. – April blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of woodlands, grasslands and serpentinite soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Helianthella castanea</i> Diablo helianthella	—	—	1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland. Usually found in rocky, axonal soils, often in partial shade. Mar. – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, grasslands and woodlands and rock soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Hesperolinon breweri</i> Brewer's western flax	—	—	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. Often occurs in serpentinite soils. May – July blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, grassland and woodlands. No recorded occurrences are within 1 mile of the Project.	No
<i>Leptosiphon acicularis</i> bristly leptosiphon	—	—	1B.2	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland. April – July blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, grasslands and woodlands.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
					No recorded occurrences are within 1 mile of the Project.	
<i>Malacothamnus hallii</i> Hall's bushmallow	—	—	1B.2	Chaparral, Coastal scrub. April – Sept. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Monolopia gracilens</i> woodland woollythreads	—	—	1B.2	Broadleafed upland forest (openings), Chaparral (openings), Cismontane woodland, North Coast coniferous forest (openings), Valley and foothill grasslands with serpentinite soils. Feb. – July blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of forested or grassland habitat with serpentinite soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Navarretia nigelliformis</i> <i>ssp. radians</i> shining navarretia	—	—	1B.2	Cismontane woodland, Valley and foothill grassland, Vernal pools. Mar. – July blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of woodlands, grasslands or vernal pools. No recorded occurrences are within 1 mile of the Project.	No
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	—	—	1B.2	Chaparral, Cismontane woodland. Prefers rocky soils. April – May blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral or woodlands. No recorded occurrences are within 1 mile of the Project.	No
<i>Polemonium carneum</i> Oregon polemonium	—	—	2B.2	Coastal prairie, Coastal scrub, Lower montane coniferous forest. April – Sept. blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of coastal scrub or forested habitats. No recorded occurrences are within 1 mile of the Project.	No
<i>Sanicula saxatilis</i> rock sanicle	—	CR	1B.2	Broadleafed upland forest, Chaparral, Valley and foothill grassland. Often found growing in rocky, scree, talus substrate. April – May blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral, grasslands and woodlands. No recorded occurrences are within 1 mile of the Project.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sandspurrey	—	—	1B.2	Meadows and seeps, Marshes and swamps with alkaline soils. Feb – May blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of meadows or marshes with alkaline soils. No recorded occurrences are within 1 mile of the Project.	No
<i>Streptanthus hispidus</i> Mt. Diablo jewelflower	—	—	1B.3	Chaparral, Valley and foothill grassland with rocky soils. Mar. – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral or grasslands. No recorded occurrences are within 1 mile of the Project.	No
<i>Trifolium hydrophilum</i> saline clover	—	—	1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools. April – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of marshes, grasslands or vernal pool habitats. No recorded occurrences are within 1 mile of the Project.	No
<i>Triquetrella californica</i> coastal triquetrella	—	—	1B.2	Coastal bluff scrub, Coastal scrub.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of coastal scrub vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Viburnum ellipticum</i> oval-leaved viburnum	—	—	2B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest. May – June blooming period.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral or montane forest habitats. No recorded occurrences are within 1 mile of the Project.	No

Code Designations

¹ Federal Status: 2019 USFWS Listing	² State Status: 2019 CDFW Listing	³ CNPS: 2019 CNPS Listing
FE = Listed as endangered under the Endangered Species Act FT = Listed as threatened under the Endangered Species Act	SE = Listed as endangered under the California Endangered Species Act ST = Listed as threatened under the California Endangered Species Act	Rank 1A Plants presumed Extinct in California. Rank 1B Plants Rare, Threatened, or Endangered in California and elsewhere. Rank 2 Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
FC = Candidate for listing (threatened or endangered) under Endangered Species Act FD = Delisted in accordance with the Endangered Species Act — = Not federally listed	SSC = Species of Special Concern as identified by CDFW CFP = Listed as fully protected under FGC CR = Species identified as rare by CDFW — = Not state listed			Rank 3 Plants about which we need more information—A Review List. Rank 4 Plants of limited distribution—A Watch List. Blooming period: Months in parentheses are uncommon.		
⁴ Habitat description: Habitat description adapted from CNDDDB (CDFW 2019) and CNPS online inventory (CNPS 2019).						

Special-status Wildlife Species Potentially Occurring within the Project

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Invertebrates					
<i>Bombus crotchii</i> Crotch bumble bee	—	SC	Inhabits grassland and scrub habitats. Occurs at relatively warm and dry sites, including the inner Coast Range of California and even the margins of the Mojave Desert.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of grassland or scrub vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Bombus occidentalis</i> western bumble bee	—	SC	Found in a wide variety of habitats from southern Alaska and western Canada, and much of the western USA. Commonly found foraging in agricultural fields.	Unlikely to Occur: no suitable habitat is present within the Project due the lack of suitable plants for this species to forage. No recorded occurrences are within 1 mile of the Project.	No
Amphibians					
<i>Ambystoma californiense</i> California tiger salamander	FT	ST WL	Found in grassland, oak savanna, edges of mixed woodland and lower elevation coniferous forest.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of grassland, oak savanna or woodland vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Rana boylei</i> foothill yellow-legged frog	—	SC SSC	Inhabits lakes, ponds, meadow streams, isolated pools, sunny riverbanks in the Sierra Nevada foothills and Coast Ranges.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of natural streams or ponds. No recorded occurrences are within 1 mile of the Project.	No
<i>Rana draytonii</i> California red-legged frog	FT	SSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streambanks with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeds in water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of streams, lakes or wetlands with sufficient plant cover. No recorded occurrences are within 1 mile of the Project.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Reptiles					
<i>Emys marmorata</i> Western pond turtle	—	SSC	This species is a thoroughly aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation below 6000 feet elevation. Requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 km from water for egg-laying.	Unlikely to Occur: no suitable habitat is present within the Project due lack of ponds, rivers or wetlands with aquatic vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	FT	ST	Open areas in canyons, rocky hillsides, chaparral scrublands, open woodlands, pond edges, stream courses.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of chaparral or woodland vegetation. No recorded occurrences are within 1 mile of the Project.	No
Birds					
<i>Agelaius tricolor</i> Tricolored blackbird	— MBTA	SSC	Highly colonial species, most numerous in Central Valley and its vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey in the vicinity of the colony.	Unlikely to Occur: no suitable habitat is present within the Project to lack of wetlands and suitable foraging habitat. No recorded occurrences are within 1 mile of the Project.	No
<i>Athene cunicularia</i> Burrowing owl	— MBTA	SSC FGC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Potential to Occur: suitable habitat is present within a limited area the project site. Previous recorded occurrences have been documented near Iron Horse Regional Trail. Extensive ground squirrel burrows are present on BR 1A.	Yes
<i>Buteo swainsoni</i> Swainson’s hawk	— MBTA	ST FGC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of suitable nesting trees and foraging habitat. No recorded occurrences are within 1 mile of the Project.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Elanus leucurus</i> White-tailed kite	— MBTA	FP FGC	Found in rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Requires open grasslands, meadows, or marshes for foraging close to the isolated, dense-topped trees for nesting and perching.	Unlikely to Occur: no suitable habitat is present within the Project due to no river bottomlands or marshes present in the vicinity to support this species. One recorded occurrence within 1 mile of the Project.	No
<i>Eremophila alpestris actia</i> California horned lark	— MBTA	—	Occurs in coastal regions, primarily from Sonoma County to San Diego County, as well as the main part of the San Joaquin Valley and eastward to the foothills. Found in short-grass prairie, “bald” hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of open habitat with short vegetation. No recorded occurrences are within 1 mile of the Project.	No
<i>Falco mexicanus</i> prairie falcon	— MBTA	WL	Typically found in fairly dry open country, including Open hills, plains, prairies and desert. Also in open country above treeline in high mountains. In winter, often found in farmland and around lakes and reservoirs, and may regularly winter in some western cities. Avoids forested country, and usually scarce on the immediate coast.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of open habitat for this species to forage. No recorded occurrences are within 1 mile of the Project.	No
Mammals					
<i>Antrozous pallidus</i> Pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of suitable roosting locations and high level of disturbance from continuous human activity. No recorded occurrences are within 1 mile of the Project.	No
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	—	SSC	Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of suitable roosting locations and preferred plants for foraging. No recorded occurrences are within 1 mile of the Project.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Myotis yumanensis</i> Yuma myotis	—	—	Found in open forests and woodlands with sources of water for foraging. Distribution is closely tied to bodies of water. Maternity colonies roost in caves, mines, buildings, or crevices.	Unlikely to Occur: no suitable habitat is present within the Project due to lack of forest or woodland habitat near a water source. No recorded occurrences are within 1 mile of the Project.	No
<i>Taxidea taxus</i> American badger	—	SSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	Unlikely to Occur: no suitable habitat is present within the Project to lack of suitable soils for burrowing and or open habitat for foraging. No recorded occurrences are within 1 mile of the Project.	No
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE	ST	Historically inhabited grassland, scrubland, and wetland communities in the San Joaquin Valley and adjacent habitat. Today, the kit fox must often resort to living in and near agricultural and urban areas.	Unlikely to Occur: no suitable habitat is present within the Project due to the lack of suitable grassland or scrubland vegetation preferred by this species for foraging. No recorded occurrences are within 1 mile of the Project.	No

Code Designations

¹ Federal Status: 2019 USFWS Listing	² State Status: 2019 CDFW Listing
<p>ESU = Evolutionary Significant Unit is a distinctive population.</p> <p>FE = Listed as endangered under the FESA.</p> <p>FT = Listed as threatened under the FESA.</p> <p>FC = Candidate for listing (threatened or endangered) under FESA.</p> <p>FD = Delisted in accordance with the FESA.</p> <p>FPD = Federally Proposed to be Delisted.</p> <p>MBTA = protected by the Migratory Bird Treaty Act</p> <p>— = Not federally listed</p>	<p>SE = Listed as endangered under the CESA.</p> <p>ST = Listed as threatened under the CESA.</p> <p>SSC = Species of Special Concern as identified by the CDFW.</p> <p>FP = Listed as fully protected under FGC.</p> <p>CFG = FGC =protected by Fish and Game Code 3503.5</p> <p>SC = Candidate for listing (threatened or endangered) under CESA.</p> <p>WL = On CDFW watchlist.</p> <p>— = Not state listed</p>

³ **Habitat description:** Habitat description adapted from CNDDDB (CDFW 2019a).