

# **APPENDIX D**

---

## **Biological Resources Technical Information**

This page intentionally left blank

**TABLE BIO-1  
SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE PROJECT AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Plants</b>				
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--/--/1B.2	Southern Sacramento Valley, northern San Joaquin Valley, east San Francisco Bay Area. Considered extirpated from Santa Clara County.	Alkali playas, on adobe clay in valley and foothill grassland, vernal pools on alkaline soils; below 60 meters above MSL. Blooms March - June	Low; grasslands and seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019). Non tidal salt marsh also provides marginal suitable habitat, but no Project activities would occur in this habitat. Nearest recent occurrence (2003, occurrence #7) is 3 miles away in a constructed vernal pool.
<i>Atriplex depressa</i> Brittlescale	--/--/1B.2	Western and eastern Central Valley and adjacent foothills on west side of Central Valley.	Alkaline clay soils in chenopod scrub, playas, valley and foothill grasslands, meadows and seeps and vernal pools on alkaline, clay soils; below 320 meters above MSL. Blooms April - October	Low; grasslands and seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019). Non tidal salt marsh also provides marginal suitable habitat, but no Project activities would occur in this habitat. Nearest recent occurrence from 2003 (occurrence #67) 3 miles away was determined to be <i>Atriplex minuscula</i> in 2010.
<i>Atriplex joaquiniana</i> San Joaquin sparscale	--/--/1B.2	West edge of Central Valley from Glenn County to Tulare County. Also reported from Monterey and San Luis Obispo Counties.	Alkaline soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland; below 835 meters above MSL. Blooms April - September	Low; grasslands and seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019). Non tidal salt marsh also provides marginal suitable habitat, but no Project activities would occur in this habitat.
<i>Atriplex minuscula</i> Lesser saltscale	--/--/1B.1	Sacramento and San Joaquin Valley, Butte County and from Merced County to Kern County. Also recorded from Don Edwards NWR in Alameda County.	Sandy alkaline soils in chenopod scrub, playas, valley and foothill grassland; 15-200 meters above MSL. Blooms May - October	Low; grasslands and seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019). Non tidal salt marsh also provides marginal suitable habitat, but no Project activities would occur in this habitat.

**TABLE D-1 (Continued)**  
**SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE STUDY AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Plants (cont.)</b>				
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	--/--/1B.1	East San Francisco Bay Area, Salinas Valley, Los Osos Valley.	Alkaline soils in annual grassland, on lower slopes, flats, and swales, sometimes on saline soils; below 230 meters above MSL. Blooms May - October	Moderate; the species is documented in alkali grassland west of the Project area. Reconnaissance surveys for this species conducted during the blooming period for the Iron Salts project and Headworks project, were negative. Since then, that area has been exposed to routine disturbance by Facility operations. ESA's Alternatives Constraints Analysis reconnaissance surveys for the Project for Congdon's tarplant in August 2016 and the Project's wetland delineation in August 2017 confirmed absence of the species.
<i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower	E/--/1B.1	Coastal central California, from San Mateo to Monterey County.	Coastal bluff scrub, coastal dunes openings in cismontane woodland, on sandy soil. Blooms April - September	Absent; there is no suitable habitat within the Project area.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> Point Reyes bird's-beak	--/--/1B.2	Coastal northern California, from Humboldt to Santa Clara County, though presumed extirpated from Santa Clara County.	Coastal salt marsh, tidal salt marsh; below 10 meters above MSL. Blooms June - October	Absent; Non tidal salt marsh provides marginal suitable habitat, but no Project activities would occur in this habitat.
<i>Eryngium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	--/--/1B.1	South San Francisco Bay area, South Coast Ranges in Alameda, San Benito, Santa Clara, and San Luis Obispo Counties, though presumed extirpated from Santa Clara County.	Vernal pools; 3-45 meters above MSL. Blooms June - August	Low; seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019).
<i>Lasthenia conjugens</i> Contra Costa goldfields	E/--/1B.1	Scattered occurrences in Coast Range valleys and southwest edge of Sacramento Valley, Alameda, Contra Costa, Monterey, Marin, Napa, Solano and Sonoma Counties. Presumed extirpated in Mendocino, Santa Barbara and Santa Clara Counties.	Wet areas in cismontane woodland, valley and foothill grassland, vernal pools, alkaline playas or saline vernal pools and swales; seasonal wetlands below 470 meters above MSL. Blooms March - June	Low; there is no suitable habitat within the Project area.
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	--/--/1B.2	Santa Clara, Santa Cruz, and San Mateo Counties.	Chaparral, between 15-355 meters above MSL. Blooms April - September	Absent; there is no suitable habitat within the Project area.

**TABLE D-1 (Continued)**  
**SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE STUDY AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Plants (cont.)</b>				
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	--/--/1B.1	Western San Joaquin Valley, interior South Coast Ranges, central South Coast, Peninsular Ranges: Alameda, Los Angeles, Merced, Monterey, Orange, Riverside, San Diego, and San Luis Obispo Counties.	Vernal pools and mesic areas in coastal scrub and alkali grasslands, seasonal wetlands in alkaline soils; between 15-700 meters above MSL. Blooms April - July	Low; seasonal wetlands provide marginal suitable habitat. Not observed during rare plant survey conducted for Headworks Project in 2019 (ESA 2019).
<i>Suaeda californica</i> California seablite	E/--/1B.1	Morro Bay, San Luis Obispo County, and San Francisco and Contra Costa Counties; historically found in the south San Francisco Bay.	Margins of tidal salt marsh; below 15 meters above MSL. Blooms June - October	Absent; there is no suitable habitat within the Project area.
<i>Trifolium hydrophilum</i> ( <i>T. depauperatum</i> var. <i>hydrophilum</i> ) Saline clover	--/--/1B.2	Sacramento Valley, central western California.	Salt marsh, mesic alkaline areas in Valley and foothill grasslands, vernal pools, marshes and swamps; below 300 meters above MSL. Blooms April - June	Low; Non tidal salt marsh provides marginal suitable habitat, but no Project activities would occur in this habitat. Nearest documented occurrence is in Alviso, ~ 1-mile away.
<b>Invertebrates</b>				
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	T/--	Disjunct occurrences in San Mateo and Santa Clara Counties.	Associated with specific host plants that typically grow on serpentine soils.	Absent; there is no suitable habitat for this species, as there are no serpentine soils in the Project area.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	E/--	Shasta County south to Merced County.	Vernal pools and ephemeral stock ponds.	Absent; there is no suitable habitat in the Project area.
<b>Amphibians</b>				
<i>Ambystoma californiense</i> California tiger salamander	T/T	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Sonoma County south to Santa Barbara County.	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.	Low; suitable breeding habitat and upland habitat are not known or described from the Project area; the nearest documented occurrence of this species is 4.5 miles away from the Project area near Albrae.
<i>Rana draytonii</i> California red-legged frog	T/SSC	Found along the coast and coastal mountain ranges of California from Mendocino County to San Diego County and in the Sierra Nevada from Butte County to Stanislaus County.	Permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may aestivate in rodent burrows or cracks during dry periods.	Low; there is no known breeding habitat in the Project area; with the nearest red-legged frog populations located east of the City of Fremont.

**TABLE D-1 (Continued)**  
**SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE STUDY AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Reptiles</b>				
<i>Emys marmorata</i> Western pond turtle	-/SSC	The western pond turtle is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries.	Occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests. Nests are typically constructed in upland habitat within 0.25 mile of aquatic habitat.	Moderate; may occur in the vicinity of the drainages of the Project area on a transient basis; however, there is no high-quality suitable breeding habitat in the project area; Project activities outside of suitable habitat.
<b>Mammals</b>				
<i>Reithrodontomys raviventris</i> Salt marsh harvest mouse	E/E	The San Francisco Bay Estuary and Suisun Marsh.	Saline to brackish salt marsh habitat. Pickleweed is primary habitat.	Moderate; known to use the salt marsh and salt panne habitats within the greater Facility grounds; Project activities outside of suitable habitat.
<i>Sorex vagrans halicoetes</i> Salt-marsh wandering shrew	-/SSC	Southern arm of the San Francisco Bay in San Mateo, Santa Clara, Alameda, and Contra Costa Counties.	Salt marshes from 6 to 9 feet above mean sea level (MSL).	Low; Project activities outside of suitable habitat.
<b>Birds</b>				
<i>Agelaius tricolor</i> Tricolored blackbird	-/SSC	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties.	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields. Habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony.	Low (foraging only); may occur over the Project area on a transient basis. There is no suitable nesting habitat in the Project area.
<i>Aquila chrysaetos</i> Golden eagle	-/CFP	Foothills and mountains throughout California. Uncommon non-breeding visitor to lowlands such as the Central Valley.	Nest on cliffs and escarpments or in tall trees overlooking open country. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals.	High; may forage over the Project area on a transient basis. Known nest approximately 1,000 feet south of Project area.
<i>Athene cunicularia hypugaea</i> Western burrowing owl	-/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast.	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.	High (foraging and breeding); western burrowing owl is known to forage and breed in the non-native grassland south and west of the Project area. Burrowing owls were observed during the Facility BUOW surveys in 2015 (ESA, 2015).

**TABLE D-1 (Continued)**  
**SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE STUDY AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Birds (cont.)</b>				
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	T/SSC	Population defined as those birds that nest adjacent to or near tidal waters, including all nests along the mainland coast, peninsulas, offshore islands, and adjacent bays and estuaries. Twenty breeding sites are known in California from Del Norte to Diego County.	Coastal beaches above the normal high tide limit in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent.	Low; no suitable nesting habitat present within the Project area. Project activities outside of suitable habitat. All CNDDDB observations in the vicinity are at salt evaporation ponds.
<i>Circus cyaneus</i> Northern harrier	--/SSC	Occurs throughout lowland California. Has been recorded in fall at high elevations.	Grasslands, meadows, marshes, and seasonal and agricultural wetlands.	Low (nesting); northern harrier foraging is documented in the annual non-native grassland areas immediately south and west of the Project area and they have the potential to forage in the Project area. Nest observed nearest Project area documented at mouth of Coyote Creek, over 5 miles north of Project area.
<i>Elanus leucurus</i> White-tailed kite	--/CFP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border.	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.	Moderate (foraging and nesting); white-tailed kite may forage in open grasslands within and adjacent to the Project area. Suitable nesting habitat is present in the mature trees bordering roads of the Project area.
<i>Geothlypis trichas sinuosa</i> Saltmarsh common yellowthroat	BCC/SSC	Found only in the San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties.	Freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover.	Low; may occur over the Project on a transient basis. There is no suitable nesting habitat in the Project area.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--/T	Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays.	Require dense cover of upland vegetation for protection. Needs water depths of ~1 inch that do not fluctuate during the year & dense vegetation for nesting.	Moderate; Known to occur in the tidal marsh habitat found at Coyote Creek and Alviso Slough confluence and could move through the Project area. Project activities would not occur in suitable habitat.
<i>Melospiza melodia pusillula</i> Alameda song sparrow	--/SSC	Found only in marshes along the southern portion of the San Francisco Bay.	Brackish marshes associated with pickleweed; may nest in tall vegetation or among the pickleweed.	Moderate; potentially suitable nesting habitat present within the vicinity of RSSM Road. Project activities outside of suitable habitat.

**TABLE D-1 (Continued)**  
**SPECIAL-STATUS PLANTS AND ANIMALS WITH POTENTIAL TO OCCUR IN THE STUDY AREA**

Scientific and Common Names	Status Federal/ State/ CRPR	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<b>Birds (cont.)</b>				
<i>Pelecanus occidentalis californicus</i> California brown pelican	DL/DL/CFP	The Pacific coast from Canada through Mexico.	Coastal areas. Nests on islands.	Absent (nesting); may occur over the Project on a transient basis. There is no suitable nesting or foraging habitat in the Project area.
<i>Rallus longirostris obsoletus</i> Ridgway's (=California clapper) rail	E/CFP	Found along the Pacific Coast in Monterey and San Luis Obispo Counties.	From tidal mudflats to tidal sloughs. Associated with abundance grow of pickleweed. Feeds on invertebrates from mud-bottom sloughs.	Absent; may occur over the Project on a transient basis. There is no suitable foraging or nesting habitat in the Project area.
<i>Sternula antillarum browni</i> California least tern	E/E/CFP	Found along the Pacific Coast of California from San Francisco to Baja California.	Nest on open beaches kept free of vegetation by natural scouring from tidal action.	Absent; there is no suitable foraging or nesting habitat in the Project area.

## NOTES:

**Potential Occurrence in the Project area:**

High = Species is expected to occur and habitat meets species requirements.  
 Moderate = Habitat is only marginally suitable or is suitable but not within species geographic range.  
 Low = Habitat does not meet species requirements as currently understood in the scientific community.

**California Rare Plant Rank (CRPR):**

Rank 1A = Plants presumed extirpated in California and either rare or extinct elsewhere.  
 Rank 1B = Plants rare, threatened, or endangered in California and elsewhere.  
 Rank 2A = Plants presumed extirpated in California, but more common elsewhere.  
 Rank 2B = Plants rare, threatened, or endangered in California, but more common elsewhere.  
 Rank 3 = Plants about which we need more information – a review list  
 Rank 4 = Plants of limited distribution – a watch list

An extension reflecting the level of threat to each species is appended to each rarity category as follows:

- .1 – Seriously endangered in California.
- .2 – Fairly endangered in California.
- .3 – Not very endangered in California.

SOURCE: USFWS, 2020, CNPS, 2020, and CDFW, 2020.

**Status Codes:****Federal**

E = listed as endangered under the ESA  
 T = listed as threatened under the ESA  
 BCC = United States Fish and Wildlife designated "birds of conservation concern"  
 DL = Delisted  
 -- = no listing

**State**

E = listed as endangered under CESA  
 T = listed as threatened under CESA  
 SSC = California Department of Fish and Wildlife designated "species of special concern"  
 CFP = California Department of Fish and Wildlife designated "fully protected"  
 DL = Delisted  
 -- = no listing



CALIFORNIA DEPARTMENT OF  
**FISH and WILDLIFE** *RareFind*

## Query Summary:

Quad **IS** (Mountain View (3712241)) **OR** Milpitas (3712148) **OR** Calaveras Reservoir (3712147) **OR** Niles (3712158) **OR** San Jose West (3712138) **OR** Newark (3712251))

Print

Close

## CNDDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
<i>Accipiter cooperii</i>	Cooper's hawk	Birds	ABNKC12040	118	4	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest
<i>Agelaius tricolor</i>	tricolored blackbird	Birds	ABPBXB0020	955	10	None	Threatened	G2G3	S1S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
<i>Ambystoma californiense</i>	California tiger salamander	Amphibians	AAAAA01180	1263	35	Threatened	Threatened	G2G3	S2S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
<i>Anniella pulchra</i>	northern California legless lizard	Reptiles	ARACC01020	375	1	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Chaparral, Coastal dunes, Coastal scrub
<i>Antrozous pallidus</i>	pallid bat	Mammals	AMACC10010	420	4	None	None	G5	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
<i>Aquila chrysaetos</i>	golden eagle	Birds	ABNKC22010	321	2	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland
<i>Ardea herodias</i>	great blue heron	Birds	ABNGA04010	156	4	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	Dicots	PDFAB0F8R1	65	5	None	None	G2T1	S1	1B.2	null	Alkali playa, Valley & foothill

												grassland, Vernal pool, Wetland
<i>Athene cunicularia</i>	burrowing owl	Birds	ABNSB10010	1989	56	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
<i>Atriplex depressa</i>	brittlescale	Dicots	PDCHE042L0	60	1	None	None	G2	S2	1B.2	null	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
<i>Atriplex minuscula</i>	lesser saltscale	Dicots	PDCHE042M0	52	1	None	None	G2	S2	1B.1	null	Alkali playa, Chenopod scrub, Valley & foothill grassland
<i>Bombus caliginosus</i>	obscure bumble bee	Insects	IIHYM24380	181	2	None	None	G4?	S1S2	null	IUCN_VU-Vulnerable	null
<i>Bombus crotchii</i>	Crotch bumble bee	Insects	IIHYM24480	276	1	None	Candidate Endangered	G3G4	S1S2	null	null	null
<i>Bombus occidentalis</i>	western bumble bee	Insects	IIHYM24250	279	5	None	Candidate Endangered	G2G3	S1	null	USFS_S-Sensitive	null
<i>Buteo swainsoni</i>	Swainson's hawk	Birds	ABNKC19070	2518	1	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
<i>Campanula exigua</i>	chaparral harebell	Dicots	PDCAM020A0	50	3	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Ultramafic
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	Dicots	PDAST4R0P1	98	14	None	None	G3T1T2	S1S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Valley & foothill grassland
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	Birds	ABNNB03031	138	6	Threatened	None	G3T3	S2S3	null	CDFW_SSC-Species of Special Concern, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Great Basin standing waters, Sand shore, Wetland
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Dicots	PDSCR0J0C3	76	4	None	None	G4?T2	S2	1B.2	BLM_S-Sensitive	Marsh & swamp, Salt marsh, Wetland
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower	Dicots	PDPGN040Q2	20	1	Endangered	None	G2T1	S1	1B.1	null	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal dunes
<i>Circus hudsonius</i>	northern harrier	Birds	ABNKC11011	53	5	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Coastal scrub, Great Basin grassland, Marsh & swamp, Riparian scrub, Valley & foothill grassland, Wetland
<i>Clarkia concinna</i> ssp. <i>automixa</i>	Santa Clara red ribbons	Dicots	PDONA050A1	20	3	None	None	G5?T3	S3	4.3	null	Chaparral, Cismontane woodland
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Mammals	AMACC08010	635	5	None	None	G3G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-	Broadleaved upland forest, Chaparral, Chenopod

												Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	6	None	None	G4	S1S2	null		CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	383	3	None	None	G4T2T3	S2S3	null		USFS_S-Sensitive	Closed-cone coniferous forest
Dipodomys heermanni berkeleyensis	Berkeley kangaroo rat	Mammals	AMAFD03061	8	1	None	None	G3G4T1	S1	null		null	Chaparral, Cismontane woodland
Egretta thula	snowy egret	Birds	ABNGA06030	20	1	None	None	G5	S4	null		IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	180	5	None	None	G5	S3S4	null		BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1385	20	None	None	G3G4	S3	null		BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eryngium aristulatum var. hooveri	Hoover's button-celery	Dicots	PDAPI0Z043	16	6	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Vernal pool, Wetland
Extriplex joaquinana	San Joaquin spearscale	Dicots	PDCHE041F3	127	3	None	None	G2	S2	1B.2		BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	56	1	Delisted	Delisted	G4T4	S3S4	null		CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern	null
Fritillaria liliacea	fragrant fritillary	Monocots	PMLIL0V0C0	82	1	None	None	G2	S2	1B.2		SB_CalBG/RSABG-California/Rancho	Cismontane woodland,

												Santa Ana Botanic Garden, USFS_S-Sensitive	Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	Birds	ABPBX1201A	112	17	None	None	G5T3	S3	null		CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Marsh & swamp
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	238	4	None	None	G5	S4	null		IUCN_LC-Least Concern, WBWG_M-Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasthenia conjugens	Contra Costa goldfields	Dicots	PDAST5L040	36	3	Endangered	None	G1	S1	1B.1		SB_UCBG-UC Botanical Garden at Berkeley	Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	303	16	None	Threatened	G3G4T1	S1	null		BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Lepidurus packardii	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	324	2	Endangered	None	G4	S3S4	null		IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Malacothamnus arcuatus	arcuate bush-mallow	Dicots	PDMAL0Q0E0	30	1	None	None	G2Q	S2	1B.2		SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland
Malacothamnus hallii	Hall's bush-mallow	Dicots	PDMAL0Q0F0	36	2	None	None	G2	S2	1B.2		BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub, Ultramafic
Masticophis lateralis euryxanthus	Alameda whipsnake	Reptiles	ARADB21031	167	10	Threatened	Threatened	G4T2	S2	null		null	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Melospiza melodia pusillula	Alameda song sparrow	Birds	ABPBXA301S	38	11	None	None	G5T2?	S2S3	null		CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Salt marsh
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	265	2	None	None	G5	S4	null		BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	61	2	None	None	G2	S2	1B.2		null	Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	Mammals	AMAFF08082	42	3	None	None	G5T2T3	S2S3	null		CDFW_SSC-Species of Special Concern	Chaparral, Redwood
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	Marsh	CTT52110CA	53	4	None	None	G3	S3.2	null		null	Marsh & swamp, Wetland
Oncorhynchus mykiss irideus pop. 8	steelhead - central California coast DPS	Fish	AFCHA0209G	44	2	Threatened	None	G5T2T3Q	S2S3	null		AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Plagiobothrys glaber	hairless popcornflower	Dicots	PDBOR0V0B0	9	2	None	None	GX	SX	1A		null	Marsh & swamp, Salt marsh,

													Vernal pool, Wetland
Puccinellia simplex	California alkali grass	Monocots	PMPOA53110	80	1	None	None	G3	S2	1B.2	BLM_S-Sensitive		Chenopod scrub, Meadow & seep, Valley & foothill grassland, Vernal pool
Rallus obsoletus obsoletus	California Ridgway's rail	Birds	ABNME05011	99	13	Endangered	Endangered	G5T1	S1	null	CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List		Brackish marsh, Marsh & swamp, Salt marsh, Wetland
Rana boylei	foothill yellow-legged frog	Amphibians	AAABH01050	2468	8	None	Endangered	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive		Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1543	23	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable		Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Reithrodontomys raviventris	salt-marsh harvest mouse	Mammals	AMAFF02040	144	36	Endangered	Endangered	G1G2	S1S2	null	CDFW_FP-Fully Protected, IUCN_EN-Endangered		Marsh & swamp, Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	298	1	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern		Riparian scrub, Riparian woodland
Rynchops niger	black skimmer	Birds	ABNNM14010	7	1	None	None	G5	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_YWL-Yellow Watch List, USFWS_BCC-Birds of Conservation Concern		Alkali playa, Sand shore
Senecio aphanactis	chaparral ragwort	Dicots	PDAST8H060	98	1	None	None	G3	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		Chaparral, Cismontane woodland, Coastal scrub
Sidalcea malachroides	maple-leaved checkerbloom	Dicots	PDMAL110E0	136	1	None	None	G3	S3	4.2	null		Broadleaved upland forest, Coastal prairie, Coastal scrub, North coast coniferous forest, Riparian forest
Sorex vagrans halicoetes	salt-marsh wandering shrew	Mammals	AMABA01071	12	4	None	None	G5T1	S1	null	CDFW_SSC-Species of Special Concern		Marsh & swamp, Wetland
Spergularia macrotheca var. longistyla	long-styled sand-spurrey	Dicots	PDCAR0W062	22	2	None	None	G5T2	S2	1B.2	null		Marsh & swamp, Meadow & seep
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	46	1	Candidate	Threatened	G5	S1	null	null		Aquatic, Estuary

<i>Sternula antillarum browni</i>	California least tern	Birds	ABNNM08103	75	4	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List	Alkali playa, Wetland
<i>Streptanthus albidus ssp. peramoenus</i>	most beautiful jewelflower	Dicots	PDBRA2G012	103	5	None	None	G2T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley, USFS_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
<i>Stuckenia filiformis ssp. alpina</i>	slender-leaved pondweed	Monocots	PMPOT03091	21	1	None	None	G5T5	S2S3	2B.2	null	Marsh & swamp, Wetland
<i>Suaeda californica</i>	California seablite	Dicots	PDCHE0P020	18	2	Endangered	None	G1	S1	1B.1	null	Freshwater marsh, Marsh & swamp, Wetland
<i>Trifolium hydrophilum</i>	saline clover	Dicots	PDFAB400R5	56	4	None	None	G2	S2	1B.2	null	Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland
<i>Tryonia imitator</i>	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	39	2	None	None	G2	S2	null	IUCN_DD-Data Deficient	Aquatic, Brackish marsh, Estuary, Lagoon, Marsh & swamp, Salt marsh, Wetland

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

## Plant List

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

### Search Criteria

Found in Quads 3712241, 3712148, 3712147, 3712158 3712138 and 3712251;

[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
<a href="#">Acanthomintha lanceolata</a>	Santa Clara thorn-mint	Lamiaceae	annual herb	Mar-Jun	4.2	S4	G4
<a href="#">Androsace elongata ssp. acuta</a>	California androsace	Primulaceae	annual herb	Mar-Jun	4.2	S3S4	G5?T3T4
<a href="#">Astragalus tener var. tener</a>	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S1	G2T1
<a href="#">Atriplex depressa</a>	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
<a href="#">Atriplex minuscula</a>	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
<a href="#">Campanula exigua</a>	chaparral harebell	Campanulaceae	annual herb	May-Jun	1B.2	S2	G2
<a href="#">Centromadia parryi ssp. congdonii</a>	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	1B.1	S1S2	G3T1T2
<a href="#">Chloropyron maritimum ssp. palustre</a>	Point Reyes bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	1B.2	S2	G4?T2
<a href="#">Chorizanthe robusta var. robusta</a>	robust spineflower	Polygonaceae	annual herb	Apr-Sep	1B.1	S1	G2T1
<a href="#">Clarkia concinna ssp. automixa</a>	Santa Clara red ribbons	Onagraceae	annual herb	(Apr)May-Jun(Jul)	4.3	S3	G5?T3
<a href="#">Clarkia lewisii</a>	Lewis' clarkia	Onagraceae	annual herb	May-Jul	4.3	S4	G4
<a href="#">Eriophyllum jepsonii</a>	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3
<a href="#">Eryngium aristulatum var. hooveri</a>	Hoover's button-celery	Apiaceae	annual / perennial herb	(Jun)Jul(Aug)	1B.1	S1	G5T1
<a href="#">Extriplex joaquinana</a>	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
<a href="#">Fritillaria liliacea</a>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
<a href="#">Lasthenia conjugens</a>	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G1

<a href="#">Leptosiphon acicularis</a>	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	4.2	S4?	G4?
<a href="#">Leptosiphon ambiguus</a>	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	4.2	S4	G4
<a href="#">Lessingia hololeuca</a>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	3	S2S3	G3?
<a href="#">Malacothamnus arcuatus</a>	arcuate bush-mallow	Malvaceae	perennial evergreen shrub	Apr-Sep	1B.2	S2	G2Q
<a href="#">Malacothamnus hallii</a>	Hall's bush-mallow	Malvaceae	perennial evergreen shrub	(Apr)May-Sep(Oct)	1B.2	S2	G2
<a href="#">Mielichhoferia elongata</a>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<a href="#">Monardella antonina ssp. antonina</a>	San Antonio Hills monardella	Lamiaceae	perennial rhizomatous herb	Jun-Aug	3	S1S3	G4T1T3Q
<a href="#">Navarretia paradoxiolara</a>	Patterson's navarretia	Polemoniaceae	annual herb	May-Jun(Jul)	1B.3	S2	G2
<a href="#">Navarretia prostrata</a>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
<a href="#">Plagiobothrys glaber</a>	hairless popcornflower	Boraginaceae	annual herb	Mar-May	1A	SH	GH
<a href="#">Puccinellia simplex</a>	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
<a href="#">Senecio aphanactis</a>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
<a href="#">Sidalcea malachroides</a>	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	4.2	S3	G3
<a href="#">Spergularia macrotheca var. longistyla</a>	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May(Jun)	1B.2	S2	G5T2
<a href="#">Streptanthus albidus ssp. peramoenus</a>	most beautiful jewelflower	Brassicaceae	annual herb	(Mar)Apr-Sep(Oct)	1B.2	S2	G2T2
<a href="#">Stuckenia filiformis ssp. alpina</a>	slender-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	2B.2	S2S3	G5T5
<a href="#">Suaeda californica</a>	California seablite	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	1B.1	S1	G1
<a href="#">Trifolium hydrophilum</a>	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2

### Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 16 July 2020].

#### 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](mailto:rareplants@cnps.org)



© Copyright 2010-2018 California Native Plant Society. All rights reserved.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

July 14, 2020

Consultation Code: 08ESMF00-2020-SLI-2351

Event Code: 08ESMF00-2020-E-07273

Project Name: Headworks Yard Piping and Roadway Improvements Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

---

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

---

## Project Summary

Consultation Code: 08ESMF00-2020-SLI-2351

Event Code: 08ESMF00-2020-E-07273

Project Name: Headworks Yard Piping and Roadway Improvements Project

Project Type: WASTEWATER FACILITY

**Project Description:** Potential environmental impacts of improvements to roadways and facilities were evaluated in the Plant Master Plan EIR. Pipelines are an existing and integral part of the operations of the RWF, connecting process flows to the infrastructure used to clean wastewater. Since completion of the Plant Master Plan EIR, the City has further refined necessary improvements to the Facility's pipelines and roadways as part of the Yard Piping and Roadways Improvements Project (Project), which will include improvements to pipelines and roadways. The project will commence in 2021.

**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.431384554199134N121.94767960630648W>



Counties: Santa Clara, CA

---

## Endangered Species Act Species

There is a total of 17 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Salt Marsh Harvest Mouse <i>Reithrodontomys raviventris</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/613">https://ecos.fws.gov/ecp/species/613</a>	Endangered
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2873">https://ecos.fws.gov/ecp/species/2873</a>	Endangered

---

## Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a>	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>proposed</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Reptiles

NAME	STATUS
Alameda Whipsnake (=striped Racer) <i>Masticophis lateralis euryxanthus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5524">https://ecos.fws.gov/ecp/species/5524</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened



## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Insects

NAME	STATUS
Bay Checkerspot Butterfly <i>Euphydryas editha bayensis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2320">https://ecos.fws.gov/ecp/species/2320</a>	Threatened
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3394">https://ecos.fws.gov/ecp/species/3394</a>	Endangered

## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## Flowering Plants

NAME	STATUS
California Seablite <i>Suaeda californica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6310">https://ecos.fws.gov/ecp/species/6310</a>	Endangered
Contra Costa Goldfields <i>Lasthenia conjugens</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7058">https://ecos.fws.gov/ecp/species/7058</a>	Endangered
Robust Spineflower <i>Chorizanthe robusta var. robusta</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9287">https://ecos.fws.gov/ecp/species/9287</a>	Endangered

## **Critical habitats**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

### Inventory of Trees Above Pipelines That May Be Replaced

#	TREE ID	Species	Circumference of Trees using Diameter at Breast Height (dbh)	Northing	Easting	Ordinance 38 in circ or more? Yes = 1 No = 0	Native Yes=1, Non-native=0
1	191	Casuarina	none taken, trunk like a stick	1983854.855	6141513.287	0	0
2	506	Italian Stone Pine	78.186	1983873.407	6141546.777	1	0
3	190	Casuarina	none taken, trunk like a stick	1983881.931	6141578.293	0	0
4	508	Pine	97.34	1983899.969	6141613.466	1	1
5	509	Italian Stone Pine	118.692	1983912.249	6141668.228	1	0
6	514	Italian Stone Pine	91.06	1983955.153	6141717.831	1	0
7	510	Italian Stone Pine	88.548	1983985.09	6141786.371	1	0
8	177	Junginger - Autumn Purple Ash	none taken, trunk like a stick	1983981.385	6141887.801	0	0
9	465	Purple Leaf Plum	49.298	1983979.663	6141924.28	1	0
10	205	Hackberry	15.386	1983377.872	6141684.042	0	0
11	204	Hackberry	21.038	1983404.135	6141671.958	0	0
12	203	Hackberry	14.13	1983433.153	6141656.294	0	0
13	199	Hackberry	27.946	1983530.419	6141606.37	0	0
14	198	Hackberry	26.69	1983561.129	6141593.107	0	0
15	197	Hackberry	34.54	1983582.291	6141583.717	0	0
16	403	Hackberry	40.82	1983625.395	6141554.824	1	0
17	402	Hackberry	47.728	1983637.972	6141537.198	1	0
18		Magnolia Grandiflora	56.206	37 deg 26' N	121 deg 56' 59" W	1	0
19	516	Eucalyptus	57.776	1983397.273	6140459.383	1	0
20	553	Eucalyptus	64.684			1	0
21	554	Eucalyptus	60.916			1	0
22	397	Flaxleaf Paperbark	23.864	1982498.194	6142893.245	0	0
23	396	Flaxleaf Paperbark	21.352	1982495.448	6142941.5	0	0
24	253	Hackberry	26.062	1982496.034	6143028.316	0	0
25	254	Hackberry	32.97	1982494.418	6143050.936	0	0
26	255	Hackberry	22.922	1982494.358	6143078.248	0	0
27	256	Hackberry	43.646	1982491.737	6143132.407	1	0
28	257	Hackberry	30.772	1982495.504	6143152.58	0	0
29	258	Italian Stone Pine	30.773	1982491.636	6143170.378	0	0
30	428	Hackberry	75.674	1982451.249	6143215.835	1	0
31	312	Purple Leaf Plum	63.114	1982492.629	6142194.049	1	0
32	311	Purple Leaf Plum	45.53	1982505.864	6142189.034	1	0
33	262	Olive	68.452	1982477.772	6142291.568	1	0
34	168	Hackberry	54.95	1982379.902	6142195.638	1	0
35	167	Hackberry	26.69	1982398.368	6142185.958	0	0
36	166	Hackberry	44.902	1982414.458	6142194.691	1	0
37	165	Hackberry	38.936	1982446.32	6142185.635	1	0
38	164	Hackberry	60.288	1982450.394	6142200.359	1	0
39	163	Hackberry	21.98	1982471.56	6142190.013	0	0
40	313	Purple Leaf Plum	20.096	1982489.134	6142208.086	0	0
41	64	Casuarina	26.062	1984040.73	6142598.351	0	0
42	63	Casuarina	62.486	1983933.67	6142872.502	1	0
43	48	Myoporum	47.414	1983639.515	6143073.232	1	0
44	47	Myoporum	54.008	1983607.719	6143075.969	1	0
45	46	Myoporum	75.36	1983574.439	6143084.129	1	0
46	45	Myoporum	54.636	1983547.79	6143083.226	1	0
47	44	Myoporum	57.776	1983518.714	6143087.712	1	0
48	43	Myoporum	62.486	1983490.917	6143092.374	1	0
49	42	Myoporum	63.114	1983460.953	6143094.417	1	0
50	41	Myoporum	54.322	1983429.003	6143097.066	1	0
51	40	Myoporum	42.076	1983398.624	6143100.288	1	0
52	39	Myoporum	50.24	1983370.69	6143102.995	1	0
53	38	Myoporum	45.844	1983338.615	6143105.997	1	0
54	37	Myoporum	73.476	1983309.777	6143110.654	1	0
55	36	Myoporum	70.022	1983279.278	6143113.836	1	0
56	35	Myoporum	63.742	1983251.915	6143116.875	1	0
57	34	Myoporum	47.1	1983222.384	6143119.641	1	0
58	33	Myoporum	92.002	1983192.101	6143123.519	1	0
59	15	Myoporum	52.438	1983164.405	6143127.247	1	0
60	14	Hackberry	37.052	1983137.371	6143129.391	0	0
61	13	Myoporum	60.602	1983108.576	6143132.335	1	0
62	12	Myoporum	45.844	1983079.351	6143135.864	1	0
63	11	Myoporum	28.574	1983047.374	6143140.961	0	0
64	10	Myoporum	64.37	1983017.244	6143149.209	1	0
65	9	Myoporum	79.442	1982990.154	6143147.734	1	0
66	7	Myoporum	61.23	1982930.583	6143153.059	1	0
67	6	Myoporum	48.67	1982901.472	6143152.277	1	0
68	5	Myoporum	43.96	1982870.046	6143158.801	1	0
69	4	Myoporum	72.22	1982812.107	6143165.974	1	0
70	3	Myoporum	72.22	1982780.81	6143169.096	1	0
71	2	Myoporum	59.66	1982749.007	6143171.701	1	0
72	162	Quercus suber	10.048	1982581.049	6142986.836	0	0
73	501	Hackberry	45.844	1981954.326	6141355.932	1	0
74	169	Purple Leaf Plum	26.062	1982321.338	6142210.807	0	0
75	170	Purple Leaf Plum	24.178	1982331.82	6142212.806	0	0
76	232	Hackberry	60	1982340.792	6141936.982	1	0
TOTAL						51	1