APPENDIX E

Special Status Wildlife Species
with the Potential to Occur at the Project Site

Special-Status Species Potential to Occur Table

TABLE E-1
SPECIAL STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITE

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Invertebrates				
Apodemia mormo langei	Lange's metalmark butterfly	FE/__	Stabilized sand dunes of the Antioch Dunes, closely associated with Antioch Dunes buckwheat (*Eriogonum nudum* var. *psychicola*).	**None.** The Lange's metalmark butterfly is endemic to the Antioch Dunes and is not known to occur outside of the Antioch Dunes National Wildlife Refuge. The Project site is located outside of the known range of this species.
Branchinecta lynchi	Vernal pool fairy shrimp	FT/--	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**None**. There is no suitable vernal pool habitat to support this species at the Project site. The nearest recorded occurrence (Occ #667; 2019) is located approximately 10.0 miles west of the Project area.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT/--	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus nigra* ssp. *caerulea*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**Moderate.** The Project site is within the known range of valley elderberry longhorn beetle (VELB) and several blue elderberry shrubs were identified within the Project study area and adjacent locations. The nearest recorded occurrence of VELB (Occ. #53; 1987) is located approximately 20.7 miles northeast of the Project area. MRHCP modeled habitat for the VELB occurs on the north bank of Three Mile Slough and in terrestrial areas south of Three Mile Slough at the Project location (ICF, 2020).
Lepidurus packardi	vernal pool tadpole shrimp	FE/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	**None.** There is no suitable vernal pool habitat to support this species at the Project site. The nearest recorded occurrence (Occ. #161; 2019) is located approximately 10.1 miles west of the Project area.
Fish				
Acipenser medirotris pop. 1	Green sturgeon – southern DPS	FT, CH/SSC	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium-sized sand, gravel, cobble, or boulder.	**Moderate.** The project site lacks the conditions needed for green sturgeon spawning to occur. However, adult green sturgeon can occur during upstream migration to spawning locations. The Project area is located within the vicinity of recorded occurrence #9 from 2019, where observations of green sturgeon have been recorded in the Delta consistently since 1963. In addition, juvenile green sturgeon have been captured annually between 2015 and 2019 at the Sherman Island sampling station, approximately 7.7 miles downstream from the Project area (CDFW, 2019). Juveniles can occur year-round while rearing and during their outmigration to the Delta. Critical habitat for this species occurs in the project site.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Acipenser transmontanus	White sturgeon	--/CT	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium-sized sand, gravel, cobble, or boulder. Primarily reside in the San Francisco Estuary.	**Moderate.** Adult white sturgeon could occur in the project area during upstream migration to spawning areas on the Sacramento River. Juveniles could occur while rearing and during their outmigration to the Delta.
Hypomesus transpacificus	Delta smelt	FT, CH/SE	Euryhaline (tolerant of a wide salinity range) species that is confined to the San Francisco Estuary, principally in the Delta and Suisun Bay. They occur in the Delta primarily below Isleton on the Sacramento River side and below Mossdale on the San Joaquin River side. They are found seasonally throughout Suisun Bay and in small numbers in larger sloughs of Suisun marsh. They move into sloughs and channels of the western Delta (e.g., Lindsey Slough) when spawning (mainly March-April). Can be washed into San Pablo Bay during high-outflow periods, but do not establish permanent populations there.	**Moderate.** Suitable habitat occurs at the Project area. Delta smelt were captured during 2022 surveys within 1 mile of the Project area (Bashevkin et al., 2024). The nearest recorded CNDDB occurrence (Occ. #7; 2019) is located approximately 0.6 miles west of the Project area, on the opposite side of Brannan Island in the Delta. Critical habitat for the species occurs in the project site.
Lampetra ayresii	River lamprey	--/SSC	Adults need clean, gravelly riffles in permanent streams to spawn successfully. Ammocoetes live in silty backwaters and eddies with muddy or sandy substrate into which they burrow.	**Moderate.** Can occur in lower Sacramento and San Joaquin rivers, however, the project site lacks suitable habitat needed for adult spawning and ammocoetes. May be present at the project site during migration periods.
Lampetra tridentatus	Pacific lamprey	--/SSC	Adults need clean, gravelly riffles in permanent streams to spawn successfully. Ammocoetes live in silty backwaters and eddies with muddy or sandy substrate into which they burrow.	**Moderate.** Can occur in lower Sacramento and San Joaquin rivers. Species occupies much of its native range, but at much smaller numbers than previously observed. In addition, the project site lacks suitable habitat needed for adult spawning and ammocoetes. May be present at the project site during migration periods.
Lavinia exilicauda exilicauda	Central California roach	--/SSC	Occurs in small, warm tributaries to larger streams that flow through open foothill woodlands of oak and foothill pine. Located in the foothills in much of the same region that contains the pikeminnow-hardhead-sucker assemblage.	**Low.** Has been observed in the lower Sacramento River but typically occurs upstream of large reservoirs or in tributary streams.
Lavinia symmetricus	Sacramento hitch	--/SSC	Sacramento hitch inhabit warm lowland waters including clear streams, turbid sloughs, lakes, and reservoirs.	**Low.** Historically found throughout the Sacramento and San Joaquin valleys, but the species is experiencing long-term decline. In the Sacramento River, hitch appear to be spread across much of their native range, however, populations are scattered and found in low numbers.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Mylopharodon conocephalus	Hardhead	--/SSC	Hardhead are often found at low to mid elevations in relatively undisturbed habitats of larger streams with high water quality (clear, cool).	**Low.** In the Sacramento River, they are common, however, populations are declining and becoming small and isolated.
Oncorhynchus mykiss irideus pop. 11	Steelhead – Central Valley DPS	FT, CH/SSC	This DPS enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin rivers, Delta, and San Pablo and San Francisco bays.	**Moderate**. Primarily present during in-migration (adults) and out-migration (juveniles) periods. Spawning occurs upstream of the project site, however, critical habitat for the species occurs in Three Mile Slough. The Project area is located within the vicinity of recorded CNDDB occurrence #27 from 2012, where observations of steelhead have been recorded in the Delta consistently since 1976.
Oncorhynchus tshawytscha pop. 7	Chinook salmon - Sacramento River winter-run ESU	FT/SE	Anadromous species using riverine, estuarine, and saltwater habitat. Adult migration occurs from January through May. Juvenile outmigration occurs from November through mid-March.	**Moderate**. Primarily present during in-migration (adults) and out-migration (juveniles) periods. Spawning occurs in tributaries of the upper Sacramento River.
Oncorhynchus tshawytscha pop. 11	Chinook salmon - Central Valley spring-run ESU	FT, CH/ST	Anadromous species using riverine, estuarine, and saltwater habitat. Adult migration occurs from March through May. Juvenile outmigration occurs from November through April.	**Moderate**. Primarily present during in-migration (adults) and out-migration (juveniles) periods. Spawning occurs in tributaries of the upper Sacramento River, however, critical habitat for the species occurs in the project site.
Oncorhynchus tshawytscha pop. 13	Chinook salmon – Central Valley fall-/ late fall-run ESU	--/SSC	Anadromous species using riverine, estuarine, and saltwater habitat. Adult migration occurs from June through December. Juvenile outmigration occurs from March through July.	**Moderate.** Primarily present during in-migration (adults) and out-migration (juveniles) periods. Spawning occurs upstream of the project site. CDFW spring Kodiak trawl surveys captured Central valley fall-run Chinook salmon at the confluence of the Sacramento River and Three Mile Slough approximately one mile downstream of the Project area in April 2023 (station 707)(IEP, 2024).
Pogonichthys macrolepidotus	Sacramento splittail	--/SSC	Splittail spawn in shallow water over flooded vegetated habitat with a detectable water flow. Splittail larvae and juveniles remain in riparian or annual vegetation along shallow edges on floodplains	**Moderate.** Historically, Sacramento splittail were found as far north as Redding, CA. However, they are now largely confined to the Delta, Suisun Bay, Suisun Marsh, and the Napa and Petaluma rivers. May occur in Three Mile Slough during in-migration (adults) and out-migration (juveniles) periods.
Spirinchus thaleichthys	longfin smelt – San Francisco Bay-Delta DPS	FE/ST	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt but can be found in completely freshwater to almost pure seawater.	**Moderate.** Suitable habitat occurs at the Project area. Individuals were routinely captured upstream and downstream of the Project area during the 2023 CDFW 20-millimeter (mm) survey (stations 705, 706, 707, 711) (IEP, 2024). The Project area also occurs in the vicinity of CNDDB recorded occurrence #17 from 2012 where observations of longfin smelt have been recorded consistently since 1946.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Amphibians				
Ambystoma californiense pop. 1	California tiger salamander – Central California DPS	FT/ST	Frequents grassland, oak savannah, and edges of mixed woodland and lower elevation coniferous forest. Spends much time underground in mammal burrows. Usually breeds in temporary ponds such as vernal pools, but may also breed in slower parts of streams and some permanent waters. Ponds with large populations of California tiger salamander larvae usually contain very few larvae of other amphibian species. Requires long-lasting vernal pools to complete larval development of a minimum of approximately 10 weeks. Adults can migrate up to 1.5 mi from breeding ponds in upland habitat.	**Low.** There is no suitable aquatic breeding habitat at the Project site or in the surrounding area to support this species. Due to the Project site's isolated location on two islands in the delta, California tiger salamander is unlikely to disperse into the study area from known occurrences. The nearest recorded occurrence (Occ. #849; 2007) is located approximately 9.4 miles northwest of the Project area in the Montezuma Hills west of the Sacramento River and there are no CNDDB occurrences of this species on Brannan Island or Sherman Island. Terrestrial areas north and south of Three Mile Slough are modeled as CTS potential upland habitat in PG&E's MRHCP (ICF, 2020). The terrestrial habitat north of Three Mile Slough within the state park supports small mammal burrows, which are important components of CTS upland habitat; however, the density of burrows within the study area was extremely low and suitable breeding habitat in the surrounding area and within Brannan Island is limited. Therefore, the probability of occurrence for CTS is considered low.
Rana draytonii	California red-legged frog	FT/--/SSC	Found in marshes, lakes, reservoirs, ponds, slow moving segments of streams, and other usually permanent water in lowlands, foothill woodlands, and grasslands. Requires aquatic habitat with extensive emergent vegetation.	**None.** There is no suitable aquatic habitat at the Project site to support this species. The nearest recorded occurrence (Occ. #531; 2002) is located approximately 12.1 miles south
Spea hammondii	western spadefoot Northern DPS	FPT/SSC	Occurs throughout the Central Valley and adjacent foothills primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying. Most of the year is spent in underground burrows up to 36 inches deep, which they construct themselves.	**None**. There is no suitable aquatic habitat at the Project site to support this species. The nearest recorded occurrence (Occ. #1,366) is located approximately 18.0 miles southeast of the Project location. However, this is a historical occurrence from 1922 and is likely extirpated. The nearest occurrences from the last 20 years is located approximately 30.3 miles from the Project site (Occ. #630 and #1497).

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Reptiles				
Actinemys marmorata	Northwestern pond turtle	FPT/SSC	Highly aquatic species found in a broad range of aquatic habitats including rivers and streams, permanent lakes, ponds, reservoirs, settling ponds, marshes, and other inundated wetlands. May use brackish, semi-permanent, or ephemeral features when inundated. Requires basking sites and loose soil in surrounding uplands suitable for nest excavation. Occurs throughout non-desert California from 0 to 6,700 feet.	**High.** Three Mile Slough provides suitable aquatic habitat to support this species, and suitable basking sites were observed within the study area during surveys. Potentially suitable nesting habitat is present along the north and south banks of Three Mile Slough, particularly in sandy substrate. The nearest recorded occurrence (Occ. #1,344; 2016) is located approximately 1.8 miles east of the Project location near Seven Mile Slough.
Thamnophis gigas	Giant garter snake	FT/ST	Freshwater marshes and streams. Has adapted to drainage canals and irrigation ditches with slow moving water, especially around rice fields. Prefers locations with vegetation close to the water for basking. Breeds in forests and streamside trees where it can hunt its prey by ambush in the dense cover. Has also been known to forage in residential areas.	**Moderate.** Potentially suitable aquatic habitat is present at the Project site on the north and south banks of Three Mile Slough. Emergent vegetation present within Three Mile Slough could provide suitable cover and foraging habitat for giant gartersnake (GGS). Suitable upland habitat occurs in adjacent terrestrial areas, particularly north of Three Mile Slough where small mammal burrows are present, though the density of small mammal burrows within the study area was low. The nearest recorded occurrence (Occ. #150; 1998) is located approximately 1.4 miles southwest of the Project location where an individual was observed on the water side of a levee along the Sacramento River. A more recent occurrence is located approximately 2.5 miles southeast of the Project area on the south side of Twitchell Island along the San Joaquin River where GGS were observed basking in 2016 (CNDDB Occ. #407). MRHCP modeled habitat for giant gartersnake upland and aquatic habitat occurs on Three Mile Slough and surrounding upland areas at the Project location (ICF, 2020).
Birds				
Aquila chrysaetos	Golden eagle	--/FP, WL	Forages on ground in cropland and grassland. Nests near or over freshwater. Prefers emergent marsh of dense cattails or tules for nesting, but also nests in thickets of willow, blackberry, wild rose, and tall herbs. Nesting area must be large enough to support a minimum colony of about 50 pairs. Occurs primarily in the Central Valley and in coastal areas south of Sonoma County.	**Low-Nesting/Moderate Foraging.** Although potentially suitable large trees are present in the vicinity of the study area, they are unlikely to support nesting of golden eagle due to their location in a public state recreational area with elevated levels of human disturbance. The nearest recorded occurrence (Occ. #342; 1984) is located approximately 3.9 miles northwest of the Project area where a nest was observed in a power pole. There are numerous eBird observations in the vicinity of the study area.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Athene cunicularia	burrowing owl	--/CE, SSC	Nests and forages in grasslands, agricultural fields, and low scrub habitats, especially where ground squirrel burrows are present; occasionally inhabits artificial structures and small patches of disturbed habitat.	**Moderate.** The Project area is located within the mapped limits of occurrence #486 from 1989 where one individual burrowing owl was observed at Brannan Island State Recreation Area. A more recent recorded occurrence (Occ. #2081; 2010) is located approximately 3.4 miles west of the Project area. There are numerous eBird observations in the vicinity of the study area.
Buteo swainsoni	Swainson's hawk	--/ST	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.	**High.** Suitable nesting habitat is present within the study area and suitable foraging habitat occurs onsite and in the surrounding area. One Swainson's hawk adult was observed soaring over Brannan Island during surveys conducted on August 15, 2024. The nearest recorded occurrence (Occ. #1,674; 2003) is located approximately 0.3 miles north of the Project area on Twitchell Island. There are numerous eBird observations in the vicinity of the study area.
Circus hudsonius	northern harrier	--/SSC	Occurs in annual grassland up to lodgepole pine and alpine meadow habitat as high as 10,000 feet. Breeds from sea level to 5,700 feet in the Central Valley and Sierra Nevada Mountains, and up to 3,600 feet in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetland, though seldom found in wooded areas. Uses tall grasses and forbs in wetlands, or at the wetland/field border, for cover. Roosts and nests on the ground in shrubby vegetation, usually at marsh edges. Mostly nests in emergent wetlands or along rivers or lakes, but may nest in grasslands, grain fields, or on sagebrush flats several miles from water.	**Low-Nesting/High-Foraging.** Suitable foraging habitat is present at the Project site. Nesting habitat is limited due to the high level of disturbance present in the upland portions of the study area. The nearest recorded occurrence (Occ. #91; 2007) is located approximately 4.0 miles southwest of the Project area. There are numerous eBird observations in the vicinity of the study area.
Elanus leucurus	white-tailed kite	--/FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate-Nesting/High-Foraging.** Suitable foraging habitat is present at the Project site. Potentially suitable nesting habitat is also present in the trees and shrubs surrounding the study area. The nearest recorded occurrence (Occ. #193; 2007) is located approximately 0.5 miles southwest of the Project area, just east of Three Mile Slough, where a breeding pair was observed hunting and courting in the company of one juvenile. Habitat in the vicinity of this occurrence consisted of grassland and pastureland with scattered trees. There are numerous eBird observations in the vicinity of the study area.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Falco peregrinus anatum	American peregrine falcon	FDL/SDL	Found in a variety of open habitats. Nests consists of a scrape or a depression or ledge in an open cliff sites, banks, dunes, mounds, or man-made structures near wetlands, lakes, rivers or other water.	**Low-Nesting/High-Foraging.** There is no suitable nesting habitat within one mile of the Project site although this species may be observed foraging within the study area. Occurrence #79 from 2018 is mapped to a non-specific area within the Jersey Island quadrangle which includes the Project site. This species is known to nest on bridges in the region. There are numerous eBird observations in the vicinity of the study area.
Melospiza melodia pop. 1	Song sparrow "Modesto" population	--/SSC	Emergent freshwater marshes dominated by tule (*Scirpus spp*., *Schoenoplectus spp*.) and cattail (*Typha spp.)* as well as riparian willow (*Salix spp*.) thickets. Also nest in riparian forests of valley oak (*Quercus lobata*) with a sufficient understory of blackberry (*Rubus spp*.), along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	**Moderate.** Suitable nesting and foraging habitat is present at the Project site. Song sparrows were observed during surveys conducted on August 15, 2024, although it is not clear if it was the Modesto population. The nearest recorded occurrence (Occ. #41; 2008) is located approximately 1.3 miles southwest of the study area. There are numerous eBird observations in the vicinity of the study area.
Rallus obsoletus obsoletus	California Ridgway's rail	FE/SE, FP	Require tidal sloughs that have direct tidal circulation, predominant cover of pickleweed with stands of California cordgrass (*Spartina foliosa*) at lower elevations, high marsh cover consisting of tall stands of pickleweed, gumplant, wrack, and abundant invertebrate populations for foraging.	**None.** There is no suitable saltmarsh habitat present at the Project site to support this species. The nearest recorded occurrence (Occ. #102; 1994) is located approximately 17.1 miles southwest of the Project area.
Riparia riparia	Bank swallow	--/ST	Can be found along rivers and streams near the steep eroded banks where they nest. Can also be found nesting in quarries and road cuts.	**Low-Nesting/High-Foraging.** There is no suitable nesting habitat within the study area to support this species due to a lack of step eroded banks where cavity nests could occur. There is, however, an occurrence (Occ. #201; 2000) located approximately 990 feet northeast of the Project area at the Brannan Island State Recreation Area on a sandy outcrop along Seven Mile Slough. This species has commonly been observed on Decker, Sherman, Twtichell, and Bradford Island in recent years and may forage in the Project area**.** There are several eBird observations in the vicinity of the study area.

Scientific Name	Common Name	Listing Status: Federal/State	Habitat Description	Potential for Occurrence within the Project Site
Mammals				
Lasiurus frantzii	western red bat	--/SSC	Tree bat associated with cottonwoods in riparian areas at elevations below 6,500 ft. Favors roosts where leaves form a dense canopy and branches do not obstruct their flyway. Known to roost in orchards, especially in the Sacramento Valley. Typically feeds along forest edges, in small clearings, and around streetlights where they hunt moths. Day roosts are typically in edge habitats adjacent to streams or open fields, in orchards, and sometimes urban areas. Occasionally uses caves.	**Moderate.** Potentially suitable roosting habitat is present in the riparian trees on Brannan Island and Sherman Island. The nearest recorded occurrence (Occ. #64; 1999) is located approximately 0.4 miles west of the Project area in cottonwood and sycamore trees on Brannan Island.

KEY:

Federal: (USFWS)
- *FDL = Federally Delisted*
- *FE = Listed as Endangered by the Federal Government*
- *FT = Listed as Threatened by the Federal Government*
- *FPT = Proposed for listing as Threatened by the Federal Government*
- *CH = Designated Critical Habitat occurs in a portion of the Study Area*

State: (CDFW)
- *SDL = State Delisted*
- *SE = Listed as Endangered by the State of California*
- *ST = Listed as Threatened by the State of California*
- *CE = Candidate for listing as Endangered by the State of California*
- *CT = Candidate for listing as Threatened by the State of California*
- *SSC = California Species of Special Concern*
- *FP = CDFW Fully Protected Species*

SOURCES: CDFW 2026a; CNPS, 2026; AND USFWS 2026

TABLE E-2
SPECIAL-STATUS PLANT SPECIES AND SENSITIVE NATURAL COMMUNITIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITE

Scientific Name	Common Name	Listing Status: Federal/State/CRPR	Habitat Description	Potential for Occurrence within the Project Site
Plants				
Carex comosa	bristly sedge	--/--/2B.1	Perennial rhizomatous herb found in wet areas in coastal prairie and valley and foothill grassland, and along lake margins from 0 to 2,050 feet. Known from the Klamath Ranges, Modoc Plateau and Warner Mountains, inner north coast ranges, high Cascade Range, Central Valley, Bay Area, central coast, and San Bernardino Mountains. Blooms May through September.	**Moderate.** Potentially suitable habitat is present at the Project site along Three Mile Slough. The nearest recorded historic occurrence (Occ. #4; 1988) is located approximately 3.9 miles southeast of the Project area. The nearest recent occurrence (Occ. #11; 2009) is located approximately 13.5 miles northeast of the Project area. Occurrences of this species are located in tidal marsh habitat along sloughs.
Chloropyron molle ssp. molle	Soft salty bird's-beak	FE/--/1B.2	Saltmarsh and coastal wetlands from 0 to 33 feet in elevation. Blooms from July to October.	**None**. There is no suitable salt marsh habitat present at the Project site to support this species. The nearest recorded historic occurrence (Occ. #18; 1972) is located approximately 6.5 miles southwest of the Project area. The nearest recent occurrence (Occ. #28; 2017) is located approximately 12.3 miles northwest of the Project area.
Extriplex joaquinana	San Joaquin spearscale	--/--/1B.2	Annual herb found in alkaline soils of chenopod scrub, meadows and seeps, playas, and valley and foothill grassland from 5 to 2,740 feet. Known from the inner north Coast Range, Great Valley, central coast, San Francisco Bay, and east slope of the inner south Coast Range. Blooms April through October.	**None.** There is no suitable habitat present at the Project site to support this species. The nearest recorded occurrence (Occ. #22) is located approximately 2.4 miles north of the Project area. However, this is a historical occurrence from 1891. The nearest recent occurrence (Occ. #132; 2015) is located approximately 12.6 miles southwest of the Project area.
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	--/--/1B.2	Emergent perennial rhizomatous herb found in freshwater marshes and swamps from 0 to 395 feet. Often occurs in riprap on sides of levees. Most occurrences are very small. Known from Butte, Colusa, Contra Costa, Glenn, Sacramento, San Joaquin, Solano, Sutter, and Yolo counties. Blooms June through September.	**Moderate.** Potentially suitable habitat is present along the north and south banks of Three Mile Slough. The nearest recorded occurrence (Occ. #36) is located approximately 2.1 miles north of the Project area. However, this is a historical observation from 1891. The nearest, recent occurrence (Occ. #197; 2012) is located approximately 4.1 miles southeast of the Project area on a small levee.

Scientific Name	Common Name	Listing Status: Federal/State/CRPR	Habitat Description	Potential for Occurrence within the Project Site
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	--/--/1B.2	Perennial herb found in freshwater and brackish marshes and swamps from 0 to 15 feet. Known from Contra Costa, Napa, Sacramento, San Joaquin, Solano, Sonoma, and Yolo counties. Most populations are small. Blooms May through July, sometimes August through September.	**Present.** Delta tule pea was observed within the Project area during surveys conducted on August 15, 2024. The plant was not blooming but was identifiable at the time of the surveys. The nearest recorded occurrence of this species (Occ. #145; 2009) is located approximately 1.4 miles south of the Project area on the banks of Three Mile Slough.
Lilaeopsis masonii	Mason's lilaeopsis	--/SR/1B.1	Perennial rhizomatous herb found in riparian scrub and in brackish or freshwater marshes and swamps from 0 to 35 feet. Typically occurs in tidal zones in muddy or silty soil formed through river deposition or riverbank erosion. Known from the Central Valley, Bay Area, and central coast. Blooms April through November.	**Moderate**. Suitable habitat is preset at the Project site, particularly along the south bank of Three Mile Slough, though suitable mudflat substrate is limited due to the presence of existing rip rap. Small areas of mud substrate are present in interstitial spaces between rocks observed in several locations on the south bank. Occurrences of this species, if present, would be limited to small populations or occurrences of individual plants. The nearest recorded occurrence (Occ. #37; 2009) is located approximately 390 feet east of the Project area and 556 feet west of the Project area, along Three Mile Slough within Brannan Island State Recreation Area.
Limosella australis	Delta mudwort	--/--/2B.1	Perennial stoloniferous herb typically found on mud banks of brackish and freshwater marshes and swamps, and in riparian scrub from 0 to 10 feet. In California, known only from the tidally influenced portions of the lower Sacramento-San Joaquin Delta in Contra Costa, Sacramento, San Joaquin, and Solano counties. Native status in California is debated. Treated as naturalized in the first and second editions of the Jepson Manual. Blooms May through August.	**Moderate.** Suitable habitat is preset at the Project site, particularly along the south bank of Three Mile Slough, though suitable mudflat substrate is limited due to the presence of existing rip rap. Small areas of mud substrate are present in interstitial spaces between rocks observed in several locations on the south bank. Occurrences of this species, if present, would be limited to small populations or occurrences of individual plants. The nearest recorded historic occurrence (Occ. #57; 1986) is located approximately 265 feet east of the Project area on the northeast side of Brannan Island State Recreation Area. The nearest, recent occurrence (Occ. #8; 2009) is located approximately 0.4 miles west of the Project area on the opposite side of Brannan Island.

Scientific Name	Common Name	Listing Status: Federal/State/CRPR	Habitat Description	Potential for Occurrence within the Project Site
Oenothera deltoides ssp. *howellii*	Antioch Dunes evening-primrose	FE/SE/1B.1	Inland dunes and remnant river bluffs at elevations ranging from sea level to approximately 100 feet. Blooms from March to September.	**Moderate**. Limited suitable habitat is present for this species within the study area on the north side of Three Mile Slough in areas with sandy substrate, though no sand dunes occur and sandy substrate within the study area occurs in areas of high disturbance. Occurrence #5 is partially mapped within the study area. This occurrence of Antioch Dunes evening-primrose has been observed consistently since 1980 on the remnants of native dune habitat and was observed during surveys conducted on August 15, 2024, approximately 200 feet east of the Project study area.
Plagiobothrys hystriculus	bearded popcornflower	--/--/1B.1	Annual herb found in mesic valley and foothill grassland and margins of vernal pools and vernal swales from 0 to 900 feet. Known from Napa, Solano, and Yolo counties. Blooms April through May.	**None.** There is no suitable vernal pool habitat to support this species at the Project site. The nearest recorded occurrence (Occ. #8; 2005) is located approximately 3.6 miles northwest of the Project area in a vernal swale.
Potamogeton zosteriformis	Eel-grass pondweed	--/--/2B.2	In freshwater marsh wetlands at elevations ranging from sea level to approximately 4,265 feet. Blooms from June to July.	**Low.** Aquatic habitats at the Project site are brackish and would not provide suitable habitat for eel-grass pondweed. The nearest recorded occurrence (Occ. #7) is located approximately 2.9 miles southeast of the Project area on Webb Island; however, this is a historical occurrence from 1949. All other recorded occurrences are located over 75.0 miles from the Project area and contemporary occurrences are in freshwater lakes and creeks, primarily in Shasta County, CA.
Sagittaria sanfordii	Sanford's arrowhead	--/--/1B.2	Emergent perennial rhizomatous herb found in standing or slow-moving water of shallow freshwater marshes, swamps, ponds, and ditches from 0 to 2,135 feet. Known from the Klamath Ranges, north and south coasts, Cascade Range foothills, and Central Valley. Blooms May through October, and sometimes into November.	**Moderate.** Potentially suitable habitat is present along Three Mile Slough at the Project site. The nearest recorded occurrence (Occ. #84; 2009) is located approximately 4.2 miles north of the Project location on an exposed sandy shoreline of the Sacramento River with similar site conditions to those present at the Project site.

Scientific Name	Common Name	Listing Status: Federal/State/CRPR	Habitat Description	Potential for Occurrence within the Project Site
Symphyotrichum lentum	Suisun Marsh aster	--/--/1B.2	Perennial rhizomatous herb found in freshwater or brackish marshes and swamps from 0 to 10 feet. Known from the Sacramento Valley, Bay Area, and central coast. Blooms from May to November, and sometimes as early as April.	**Moderate.** Suitable habitat is present along the banks of Three Mile Slough at the Project site. The Project area is located within the mapped limits of Occurrence #32 from 2009, where Suisun marsh aster was found on both sides of Three Mile Slough and along the southern portion of Brannan Island.
Sensitive Natural Communities				
Coastal and Valley Freshwater Marsh	--	--/S2.1/--	A permanently flooded freshwater marsh dominated by emergent perennial monocots 4-5m tall. Often lacks a significant current that allows deep, peaty soils to accumulate. Characteristic species include *Carex* sp., *Eleocharis* sp., *Scirpus* sp., *Schoenoplectus* sp., *Typha* sp., and *Verbena bonariensis*. Most extensive in the upper portion of the Sacramento-San Joaquin River Delta. Commonly occurs in the Sacramento and San Joaquin valleys in river oxbows and other flood plain areas.	**None.** This sensitive natural community does not occur in the project site.
Great Valley Mixed Riparian Forest	--	--/S2.2/--	Tall, dense, winter-deciduous, broadleafed riparian forest. Tree canopy is usually fairly well closed and moderately to densely stocked with several species. Soil is relatively fine-textured alluvium set back from active river channels. Flooding does occur, but erosion and physical battering is not too severe. Occurs on floodplains of low-gradient, depositional streams of the Great Valley, usually below 500 feet. Characteristic species include: *Acer negundo californica, Juglans hindsii, Platanus racemosa, Populus fremontii,* and *Salix* spp.	**None.** This sensitive natural community does not occur in the project site.
Great Valley Valley Oak Riparian Forest	--	--/S1.1/--	A closed-canopy deciduous riparian forest dominated by *Quercus lobata* with a scattered understory, including lianas, *Fraxinus latifolia*, *Juglans hindsii*, and *Platanus racemosa*. Occurs in the highest parts of river floodplains above the active river channels, in areas with silty alluvium deposits and subsurface water. Occurs in the San Joaquin watershed and on the floodplains of the Kings and Kaweah rivers.	**None.** This sensitive natural community does not occur in the project site.

Scientific Name	Common Name	Listing Status: Federal/State/CRPR	Habitat Description	Potential for Occurrence within the Project Site
Valley Oak Woodland	--	--/S2.1/--	On deep, well-drained alluvial soils, usually in valley bottoms, apparently with more moisture in summer than in blue oak woodland. Intergrades with valley oak riparian forest near rivers and with blue oak woodland on drier slopes. Also found on nonalluvial settings in the South Coast and Transverse ranges. Fire may have prevented some valley oak stands from succeeding to Ponderosa pine or Coulter pine forests before fire suppression. Typically consists of open stands with grassy savanna understory rather than a closed woodland. *Quercus lobata* is usually the only tree present. Most stands consist of open-canopy growth form trees and seldom exceed 30-40% absolute cover.	**None.** This sensitive natural community does not occur in the project site.

KEY:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government

State: (CDFW and NatureServe)
SE = Listed as Endangered by the State of California
SR = Listed as Rare by the State of California
S1 = Critically Imperiled
S2 = Imperiled

Note: NatureServe rankings contain a decimal threat rank defined as follows:
0.1 –Very threatened
0.2 – Moderately threatened

CRPR: (California Rare Plant Rank)
Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
Rank 2B = Plants rare, threatened, or endangered in California but more common elsewhere

Note: Ranks at each level also includes a threat rank (e.g., CRPR 2B.2) and are determined as follows:
0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

– NOT VERY THREATENED IN CALIFORNIA (LESS THAN 20% OF OCCURRENCES THREATENED / LOW DEGREE AND IMMEDIACY OF THREAT OR NO CURRENT THREATS KNOWN)

SOURCE: CDFW 2026a; CNPS, 2026; AND USFWS 2026

NMFS Species List

Outlook

Threemile Slough Pipeline Crossings Remediation and Decommissioning Project Official NMFS species list

From Tierra Groff <TGroff@esassoc.com>
Date Mon 2/2/2026 13:36
To NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

Hello,

Project Name: Threemile Slough Pipeline Crossings Remediation and Decommissioning Project

The Project is needed to ensure continued safe operation of PG&E's regional gas-transmission system and to comply with CSLC lease requirements, federal pipeline safety standards, and environmental protection mandates. Erosion and sediment transport within Threemile Slough have reduced pipeline cover since the 1990 abandonment and installation project, exposing sections of the pipelines. Exposed or shallow pipelines can be damaged by vessel anchors, debris, or high-velocity flow events, potentially resulting in gas leaks and service interruption. Additionally, the abandoned L-131 East and West pipelines no longer serve a functional purpose and represent unnecessary foreign material within the channel bed that could affect scour patterns and aquatic habitat. Removing these decommissioned facilities will eliminate potential interference with navigation and improve long-term environmental stewardship of the waterway. Key Project objectives include the following: 1. Restore active pipeline cover (L-131Y and L-131Z) to the 1990 as-built standard of 5 feet to ensure compliance with Lease 5438.1-E and applicable regulations and protect pipeline integrity. 2. Remove decommissioned pipelines (L-131 East and West lines) to reduce environmental and navigational hazards. 3. Minimize environmental impacts by employing best management practices (BMPs), mitigation measures, biological work windows, and controlling turbidity and water quality impacts. 4. Maintain safe navigation and coordinate activities with the U.S. Coast Guard and Delta boating community. 5. Restore the Project area to pre-Project environmental conditions through comprehensive site restoration and post-construction monitoring.

Quad Name Jersey Island
Quad Number 38121-A6
ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - X
SRWR Chinook Salmon ESU (E) - X
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - X
Eulachon (T) -
sDPS Green Sturgeon (T) - X
ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat - X
SRWR Chinook Salmon Critical Habitat - X
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - X
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - X
ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -
ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -
ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -
ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -
ESA Pinnipeds

Guadalupe Fur Seal (T) -
Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH - X
Coastal Pelagics EFH -
Highly Migratory Species EFH -
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult Monica DeAngelis
monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Tierra Groff, Certified Ecologist, M.S. *(she/her)*
Senior Wildlife Ecologist

ESA | Environmental Science Associates
Oakland, CA

(415) 342-1337 **cell**
415.962.8428 **direct**
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ESA partners with clients and communities to drive sustainable, resilient, and equitable solutions that shape a better world. Let's stay in touch: **Sign up for our newsletter.**

USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
Phone: (916) 930-5603 Fax: (916) 930-5654

In Reply Refer To: 02/02/2026 21:35:55 UTC
Project Code: 2026-0044191
Project Name: Threemile Slough Pipeline Crossings Remediation and Decommissioning Project

Subject: List of threatened and endangered species that may occur in your proposed project location 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, 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 U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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 (https://www.fws.gov/program/eagle-management/working-around-eagles). Additionally, wind energy projects should follow the wind energy guidelines (https://www.fws.gov/node/266177) 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:https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation; and http://www.towerkill.com.

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 Code 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:

San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
(916) 930-5603

PROJECT SUMMARY

Project Code: 2026-0044191

Project Name: Threemile Slough Pipeline Crossings Remediation and Decommissioning Project

Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground

Project Description: The Project is needed to ensure continued safe operation of PG&E's regional gas-transmission system and to comply with CSLC lease requirements, federal pipeline safety standards, and environmental protection mandates. Erosion and sediment transport within Threemile Slough have reduced pipeline cover since the 1990 abandonment and installation project, exposing sections of the pipelines. Exposed or shallow pipelines can be damaged by vessel anchors, debris, or high-velocity flow events, potentially resulting in gas leaks and service interruption.

Additionally, the abandoned L-131 East and West pipelines no longer serve a functional purpose and represent unnecessary foreign material within the channel bed that could affect scour patterns and aquatic habitat. Removing these decommissioned facilities will eliminate potential interference with navigation and improve long-term environmental stewardship of the waterway.

Key Project objectives include the following:

1. Restore active pipeline cover (L-131Y and L-131Z) to the 1990 as-built standard of 5 feet to ensure compliance with Lease 5438.1-E and applicable regulations and protect pipeline integrity.
2. Remove decommissioned pipelines (L-131 East and West lines) to reduce environmental and navigational hazards.
3. Minimize environmental impacts by employing best management practices (BMPs), mitigation measures, biological work windows, and controlling turbidity and water quality impacts.
4. Maintain safe navigation and coordinate activities with the U.S. Coast Guard and Delta boating community.
5. Restore the Project area to pre-Project environmental conditions through comprehensive site restoration and post-construction monitoring.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.114759899999996,-121.68628817612284,14z

Counties: Sacramento County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 13 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[1], 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.

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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.

BIRDS

NAME	STATUS
California Ridgway's Rail *Rallus obsoletus obsoletus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4240
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4482

Northwestern Pond Turtle *Actinemys marmorata*	Proposed Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1111
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2891
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

California Tiger Salamander *Ambystoma californiense*	Threatened

Population: U.S.A. (Central CA DPS)
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2076
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

Western Spadefoot *Spea hammondii*	Proposed Threatened

Population: Northern DPS
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/5425
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

FISHES

NAME STATUS

Delta Smelt *Hypomesus transpacificus* Threatened

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/321
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

Longfin Smelt *Spirinchus thaleichthys* Endangered

Population: San Francisco Bay-Delta DPS
There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/9011
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

Longfin Smelt *Spirinchus thaleichthys* Proposed Endangered

Population: San Francisco Bay-Delta DPS
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9011

INSECTS

NAME STATUS

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/7850

CRUSTACEANS

NAME STATUS

Vernal Pool Fairy Shrimp *Branchinecta lynchi* Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/498
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

Vernal Pool Tadpole Shrimp *Lepidurus packardi* Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2246
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/HIWYPCHH2JBTNAWXRNOWRTEBHU/documents/generated/11238.pdf

FLOWERING PLANTS

NAME	STATUS
Soft Bird's-beak *Cordylanthus mollis ssp. mollis*	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/8541

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Final

https://ecos.fws.gov/ecp/species/321#crithab

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Tierra Groff
Address: 180 Grand Ave, Suite 1050
City: Oakland
State: CA
Zip: 94612-3718
Email tgroff@esassoc.com
Phone: 4159628428

LEAD AGENCY CONTACT INFORMATION

Lead Agency: State of California