

Appendix D

Biological Resources Background Information

Table D-1. Special Status Wildlife and Plant Species in the Known Vicinity of the CHP Academy Drainage Channel Improvements Project Site

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
Plants			
<i>Astragalus pauperculus</i> depauperate milk vetch	-/-/4.3	Chaparral, cismontane woodland, valley and foothill grassland. Vernal mesic, volcanic. 60-1215 meters. Blooms March-June.	None. Suitable habitat is not present in the Project site.
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	-/-/1B.1	Meadows and seeps (vernally mesic). Valley and foothill grasslands (subalkaline flats). 2-75 meters. Blooms April-May.	None. Suitable habitat is not present in the Project site.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	-/-/1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 meters. Blooms March through June.	None. Suitable habitat is not present in the Project site.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	-/-/1B.2	Alkaline soils in alkaline flats, scalds, and alkali seasonal wetlands within chenopod scrub, valley and foothill grassland, and meadow habitats. 1-560 meters. Blooms April- October.	None. Suitable habitat is not present in the Project site.
<i>Atriplex depressa</i> brittlescale	-/-/1B.2	Chenopod scrub, meadows and seeps, playas, vernal pools, and valley and foothill grasslands. Alkaline, clay soils. 1-320 meters. Blooms April-October.	None. Suitable habitat is not present in the Project site.
<i>Brodiaea rosea</i> ssp. <i>vallicola</i> valley brodiaea	-/-/4.2	Old alluvial terraces, often in silty, sandy, and gravelly loam; valley and foothill grasslands and vernal pools. 10-335 meters. Blooms April-June.	None. Suitable habitat is not present in the Project site.
<i>Carex comosa</i> bristly sedge	-/-/2B.1	Coastal prairies, and marshes and swamps (lake margins). 0-625 meters. Blooms May-September.	None. Suitable habitat is not present in the Project site.
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	-/-/1B.2	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernal mesic, often alkaline sites. 2-420 meters. Blooms May through November.	None. Suitable habitat is not present in the Project site.
<i>Centromadia parryi</i> ssp. <i>rudis</i> Parry's rough tarplant	-/-/4.2	Valley and foothill grassland, edges of vernal pools and marshes; (mostly alkaline, vernal mesic, seeps). 0-100 meters. Blooms June-October.	None. Suitable habitat is not present in the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	FE/SE/1B.2	Chenopod scrub and valley and foothill grassland; alkaline. 5-155 meters. Blooms May-October.	None. Suitable habitat is not present in the Project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	-/-/2B.2	Freshwater marshes and swamps. 15-280 meters. Blooms July-October.	None. Suitable habitat is not present in the Project site.
<i>Downingia pusilla</i> dwarf downingia	-/-/2B.2	Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 1-490 meters. Blooms March through May.	None. Suitable habitat is not present in the Project site.
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	-/-/1B.2	Vernal pools, valley and foothill grassland. Clay. 3-305 meters. Blooms April through August.	None. Suitable habitat is not present in the Project site.
<i>Extriplex joaquinana</i> San Joaquin spearscale	-/-/1B.2	Chenopod scrub, alkali meadow, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. 1-835 meters. Blooms April through October.	None. Suitable habitat is not present in the Project site.
<i>Fritillaria agrestis</i> stinkbells	-/-/4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland. Clay, sometimes on serpentinite. 10-1555 meters. Blooms March-June.	None. Suitable habitat is not present in the Project site.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	-/SE/1B.2	Marshes, swamps, and vernal pools; sometimes along the margins of lakes. 10-2375 meters. Blooms April-August.	None. Suitable habitat is not present in the Project site.
<i>Hesperervax caulescens</i> hogwallow starfish	-/-/4.2	Valley and foothill grassland (mesic, clay) and vernal pools; sometimes alkaline. 0-505 meters. Blooms March-June.	None. Suitable habitat is not present in the Project site.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	-/-/1B.2	Freshwater wetlands, marshes, and swamps; often in riprap along levees. 0-120 meters. Blooms June-September.	Not expected. Marginally suitable habitat is present in the Project site. There is one CNDDDB occurrence within a 5-mile radius of the Project site.
<i>Juglans hindsii</i> Northern California black walnut	-/-/1B.1	Riparian forest, riparian woodland. Few extant native stands remain; widely naturalized. Deep alluvial soil, associated with a creek or stream. 0-640 meters. Blooms April through May.	Not expected. Marginally suitable habitat is present in the Project site.

Species	Listing status* (Federal/State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Legenere limosa</i> legenere	-/-/1B.1	In beds of vernal pools. 1-880 meters. Blooms April through June.	None. Suitable habitat is not present in the Project site.
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	-/-/1B.2	Valley and foothill grassland (alkaline flats). 2-200 meters. Blooms March-May.	None. Suitable habitat is not present in the Project site.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	-/SR/1B.1	Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. 0-10 meters. Blooms April through November.	None. Suitable habitat is not present in the Project site.
<i>Myosurus minimus</i> ssp. <i>apus</i> little mousetail	-/-/3.1	Valley and foothill grassland; vernal pools (alkaline). 20-640 meters. Blooms March-June.	None. Suitable habitat is not present in the Project site.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	-/-/1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 3-1680 meters. Blooms April-July.	None. Suitable habitat is not present in the Project site.
<i>Neostapfia colusana</i> Colusa grass	FT/SE/1B.1	Usually in large, or deep vernal pool bottoms; adobe soils. 5-125 meters. Blooms May to August.	None. Suitable habitat is not present in the Project site.
<i>Plagiobothrys hystriculus</i> bearded popcornflower	-/-/1B.1	Vernal pools, valley and foothill grassland. Wet sites. 1-275 meters. Blooms April-May.	None. Suitable habitat is not present in the Project site.
<i>Puccinellia simplex</i> California alkali grass	-/-/1B.2	Chenopod scrub, meadows and seeps, valley and foothill grasslands, vernal pools; alkaline vernal mesic. Sometimes found in sinks, flats, and lake margins. 2-930 meters. Blooms March-May.	None. Suitable habitat is not present in the Project site.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	-/-/1B.2	Shallow freshwater marshes and swamps. 0-650 meters. Blooms May-November.	Not expected. Marginally suitable habitat is present in the Project site. There are two CNDDDB occurrences within a 5-mile radius of the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Symphotrichum lentum</i> Suisun Marsh aster	-/-/1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with Phragmites, Scirpus, blackberry, Typha, etc. 0-15 meters. Blooms April through November.	Not expected. Marginally suitable habitat is present in the Project site. There is one CNDDDB occurrence within a 5-mile radius of the Project site.
<i>Trifolium hydrophilum</i> saline clover	-/-/1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 meters. Blooms April through June.	None. Suitable habitat is not present in the Project site.
<i>Tuctoria mucronate</i> Crampton's tuctoria (Solano grass)	FE/SE/1B.1	Valley and foothill grassland (mesic), vernal pools. 5-10 meters. Blooms April-August.	None. Suitable habitat is not present in the Project site.
Invertebrates			
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE/-	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	None. Suitable habitat is not present in the Project site.
<i>Branchinecta lynchi</i> 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. Suitable habitat is not present in the Project site.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT/-	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Possible. An elderberry shrub is located in the vicinity of the Project site, which suggests that valley elderberry longhorn beetle have potential to occur.
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	FE/-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	None. Suitable habitat is not present in the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
Amphibians and Reptiles			
<i>Ambystoma californiense</i> California tiger salamander	FT/ST, WL	Need underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	None. Suitable habitat is not present in the Project site.
<i>Emys marmorata</i> western pond turtle	-/-, SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected. Marginal emergent wetland and upland habitat are present in the Project site. No CNDDDB occurrences within a 5-mile radius of the Project site.
<i>Rana draytonii</i> California red-legged frog	FT/-, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	None. The Project site is outside of the species' current known range. This species is believed to be extirpated from the valley floor.
<i>Thamnophis gigas</i> giant garter snake	FT/ST	This is the most aquatic of the garter snakes in CA. Prefers freshwater marsh and low gradient streams, but has adapted to drainage canals and irrigation ditches. Habitat consists of (1) adequate water during the snake's active season, (2) emergent herbaceous wetland vegetation for escape and foraging habitat, (3) grassy banks and openings in waterside vegetation for basking, and (4) higher elevation upland habitat for cover and refuge from flooding (USFWS 2012).	Not Expected. Marginal emergent wetland and upland habitat is present in the Project site; however, a suitable prey base is not present. There are 27 CNDDDB occurrences within a 5-mile radius of the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
Fish			
<i>Archoplites interruptus</i> Sacramento perch	-/-, SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
<i>Hypomesus transpacificus</i> Delta smelt	FT/SE	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
<i>Oncorhynchus mykiss irideus</i> steelhead – Central Valley DPS	FT/-	Populations spawn in the Sacramento & San Joaquin rivers and their tributaries. The distribution of steelhead in the Central Valley has been significantly reduced in recent years. Require beds of loose, silt-free, coarse gravel for spawning and also need cover, cool water & sufficient dissolved oxygen.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
<i>Oncorhynchus tshawytscha</i> Chinook salmon – Central Valley spring run ESU	FT/ST	The San Joaquin River Basin is considered Essential Fish Habitat (EFH) for this species. Beds of loose, silt-free, coarse gravel are required for spawning. The species also needs cover, cool water & high dissolved oxygen.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
<i>Oncorhynchus tshawytscha</i> Chinook salmon – Sacramento River winter-run ESU	FE/SE	Populations spawn in the mainstem Sacramento River below Keswick Dam. Distribution of winter-run Chinook Salmon in the Sacramento River has been significantly reduced due to major dams. Beds of loose, silt-free, coarse gravel are required for spawning. The species also needs cover, cool water & high dissolved oxygen.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	-/-, SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
<i>Spirinchus thaleichthys</i> longfin smelt	FC/ST, SSC	Euryhaline, nektonic and 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.	None. A series of levees separate Drainage Channel CH2 from the Sacramento River and do not allow for fish movement between the two water bodies.
Birds			
<i>Accipiter cooperii</i> Cooper's hawk	-/-, WL	Residents of forest and woodlands habitats; also inhabit suburbs with adequate nesting habitat. Nests in oaks, pines, spruces, Douglas-firs along flat ground with dense wooded areas. Nests can be found amongst a horizontal branch 25-50 feet high.	Not Expected. Marginal nesting and foraging habitat exists within the Project site. Nests documented within a 5-mile radius of the Project site.
<i>Agelaius tricolor</i> tricolored blackbird	-/ST, SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony. Nests in dense thickets of cattails (<i>Typha</i> spp.), bulrush (<i>Schoenoplectus</i> spp.), willow (<i>Salix</i> spp.), blackberry (<i>Rubus</i> spp.), wild rose (<i>Rosa californica</i>), and other tall vegetation near fresh water.	Not expected. The Project site lacks suitable breeding habitat for this species. Marginally suitable nesting habitat is present in the Project site; however, existing vegetation is not extensive or dense enough to support a breeding colony.
<i>Ammodramus savannarum</i> grasshopper sparrow	-/-, SSC	Forages and nests in open grasslands, hayfields, and prairies that have little to no scrub cover. Nests on the ground, at the base of grass stands or tall sedges.	Not expected. Suitable habitat is not present in the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Ardea alba</i> great egret	-/-	Inhabits freshwater, brackish, and marine wetlands. Colonial breeders of lakes, marshes, ponds, estuaries and forage in similar habitat.	Not expected. Suitable nesting habitat is not present in the Project, but this species may nest nearby.
<i>Ardea herodias</i> great blue heron	-/-	Freshwater, brackish, and marine wetlands, as well forage in flooded agricultural fields. Nests in colonies in trees located adjacent to waterbodies, rivers, estuaries, and marshes.	Not Expected. Suitable nesting habitat is absent, and marginal foraging habitat exists in the Project site. No CNDDDB occurrence records are known from within a 5-mile radius of the Project site.
<i>Athene cunicularia</i> burrowing owl	-/-, SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not expected. Suitable habitat is absent from the Project site, as substantial burrow complexes are absent from the Project site and potential predator perches are present.
<i>Buteo regalis</i> ferruginous hawk	-/-, WL	Breeds in cliffs, outcrops, and tree groves within open grasslands, sagebrush, and saltbush-greasewood shrublands at low to moderate elevations.	None. Suitable breeding habitat is not present in the Project site.
<i>Buteo swainsoni</i> 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.	Possible. Suitable foraging and nesting habitat in vicinity to the Project site (Sacramento Bypass Wildlife Area; Sacramento River). Nests documented within a 5-mile radius of the Project site (CNDDDB 2019).

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	FT/-, SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	None. Suitable habitat is not present in the Project site.
<i>Charadrius montanus</i> mountain plover	-/-, SSC	Breeds in open plains. Winters in plowed fields, sandy deserts, and short-grass plains.	None. Suitable habitat is not present in the Project site.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE	Inhabits large riparian forest habitat, specifically deciduous trees and shrubs; other associated vegetation includes willow, cottonwood, and blackberry.	Not expected. The Project site lacks suitable breeding habitat for this species. Marginally suitable nesting habitat is present in the Project site; however, existing vegetation is not extensive or dense enough to support a breeding colony.
<i>Elanus leucurus</i> white-tailed kite	-/-, FP	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.	Possible. Suitable foraging and nesting habitat in vicinity to the Project site (Sacramento Bypass Wildlife Area; Sacramento River). Two nests documented within a 5-mile radius of the Project site (CNDDDB 2019).
<i>Falco columbarius</i> merlin	-/-, WL	Near forested openings, rivers, and lakes. Nests in abandoned crow or hawk nests of deciduous or conifer trees in semi-open habitat.	Not expected. Suitable nesting habitat is not present in the Project site, but this species may nest nearby.
<i>Laterallus jamaicensis coturniculus</i> California black rail	-/ST, FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None. The Project site is outside of the species' current known range.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	-/-, SSC	Inhabits freshwater marshes with emergent vegetation (<i>Typha</i> sp. and <i>Scirpus</i> sp.), riparian willow habitat, levees and canals.	Not expected. Marginally suitable habitat is present in the Project site.
<i>Phalacrocorax auratus</i> double-crested cormorant	-/-, WL	Colonial nester of large aquatic water bodies and sometimes breed in colonies on smaller ponds or lagoons. Require high perching areas and nest on the ground on rocks with no vegetation, or atop of trees.	None. Suitable habitat is not present in the Project site.
<i>Plegadis chihi</i> white-faced ibis	-/-, WL	Found in freshwater marshes and irrigated fields. Breeds in colonies in dense marsh habitat (<i>Typha</i> sp.).	Not expected. Suitable nesting habitat is not present in the Project site, but this species may nest nearby.
<i>Progne subis</i> purple martin	-/-, SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Not expected. Suitable nesting habitat is not present in the Project site, but this species may nest nearby.
<i>Riparia riparia</i> bank swallow	-/ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not expected. The Project site lacks suitable breeding habitat for this species. Marginally suitable nesting habitat is present in the Project site; however, existing vegetation is not extensive or dense enough to support a breeding colony.
<i>Vireo bellii puillus</i> least Bell's vireo	FE/SE	Forages and nests about one meter above ground in dense shrubs and small trees along rivers and streams.	Not expected. Marginally suitable habitat is present in the Project site.

Species	Listing status* (Federal/ State/CNPS)	Habitat and Flowering Period	Potential to Occur in Vicinity of Project Site
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	-/-, SSC	Breeds in prairie wetlands, mountain meadows, and shallow marshes, ponds, and rivers. Nesting occurs in bulrushes, cattails, and willows.	Not expected. Marginally suitable nesting habitat is present in the Project site; however, existing vegetation is not extensive or dense enough to support a breeding colony.
Mammals			
<i>Antrozous pallidus</i> pallid bat	-/-, SSC, WBWG: high	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Possible. Suitable roosting and foraging habitat are present in the Project site.
<i>Lasionycteris noctivagans</i> silver-haired bat	-/-, WBWG: medium	Roost in colonies within trees, primarily under loose bark, natural hollows, or bird cavities. Hibernate in hollow trees, rock crevices, or under piles or logs/leaves. Forages in riparian habitat or open meadows.	Possible. Suitable roosting and foraging habitat are present in the Project site.
<i>Lasiurus cinereus</i> hoary bat	-/-, WBWG: medium	Solitary bats that roost in foliage of deciduous and coniferous trees, near the ends of branches. Roosts typically at the end of clearings. Forage late in the evening.	Possible. Suitable roosting and foraging habitat are present in the Project site.
<i>Taxidea taxus</i> American badger	-/-, SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	None. Suitable habitat is not present in the Project. Project site bounded by cultivated and developed lands.

U.S. Fish and Wildlife Service (USFWS) Federal Listing Categories:

FE	Federally Listed as Endangered
FT	Federally listed as Threatened
--	No Listing

California Department of Fish and Wildlife (CDFW) State Listing Categories:

CE	State listed as Endangered
CT	State listed as Threatened
CR	State listed as Rare
SSC	California Species of Special Concern
FP	Fully Protected Species
CC	State Candidate for Listing
WL	California Watch List
WBWG	Western Bat Working Group (ranked as “High” or “Moderate” priority species)
--	No Listing

California Native Plant Society (CNPS) Listing Categories

1A	Presumed extirpated or extinct in California
1B.1	Rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.1	Rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
2B.2	Rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California
2B.3	Rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California
3.2	Plants about which we need more information, fairly threatened in California
3.3	Plants about which we need more information, not very threatened in California
4.2	Plants of limited distribution; fairly threatened in California

Special-status Species Potential to Occur Criteria

None	Indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
Not Expected	Indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
Possible	Indicates the presence of suitable habitat or key habitat elements that potentially support the species.
Present	Indicates that either the target species was observed directly or its presence was confirmed by diagnostic signs during field investigations or in previous studies in the area.

CNDDDB Query Results



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Sacramento East (3812154) OR Sacramento West (3812155) OR Grays Bend (3812166) OR Taylor Monument (3812165) OR Rio Linda (3812164) OR Davis (3812156) OR Saxon (3812146) OR Clarksburg (3812145) OR Florin (3812144))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Archoplites interruptus</i> Sacramento perch	AFCQB07010	None	None	G2G3	S1	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
<i>Atriplex depressa</i> brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	None	G2G3	S1	
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesoallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<i>Centromadia parryi ssp. parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
<i>Charadrius montanus</i> mountain plover	ABNNB03100	None	None	G3	S2S3	SSC
<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Cuscuta obtusiflora var. glandulosa</i> Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elderberry Savanna</i> Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	PDAP10Z130	None	None	G2	S2	1B.2
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fritillaria agrestis</i> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<i>Great Valley Cottonwood Riparian Forest</i> Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Juglans hindsii</i> Northern California black walnut	PDJUG02040	None	None	G5	S5	CBR
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030	None	Rare	G2	S2	1B.1
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Myrmosula pacifica</i> Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Neostapfia colusana</i> Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus</i> pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Oncorhynchus tshawytscha</i> pop. 6 chinook salmon - Central Valley spring-run ESU	AFCHA0205A	Threatened	Threatened	G5	S1	
<i>Oncorhynchus tshawytscha</i> pop. 7 chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	G5	S1	
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Plagiobothrys hystriculus</i> bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
<i>Plegadis chihi</i> white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
<i>Progne subis</i> purple martin	ABPAU01010	None	None	G5	S3	SSC
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
<i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Tuctoria mucronata</i> Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 75

CNPS Rare and Endangered Plant Inventory

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

Plant List

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

Search Criteria

Found in Quads 3812166, 3812165, 3812164, 3812156, 3812155, 3812154, 3812146 3812145 and 3812144;

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[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Astragalus pauperculus	depauperate milk-vetch	Fabaceae	annual herb	Mar-Jun	4.3	S4	G4
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	1B.1	S1	G2T1
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S1	G2T1
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Brodiaea rosea ssp. vallicola	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	4.2	S3	G5T3
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1	S2	G5
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	1B.1	S1	G1
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	Apr-Aug	1B.2	S2?	G2?
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	4.2	S3	G3
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	4.2	S3	G3

<u>Hesperervax caulescens</u>							
<u>Hibiscus lasiocarpus var. occidentalis</u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2	S3	G5T3
<u>Juglans hindsii</u>	Northern California black walnut	Juglandaceae	perennial deciduous tree	Apr-May	1B.1	S1	G1
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
<u>Lepidium latipes var. heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	1B.2	S1	G4T1
<u>Lilaeopsis masonii</u>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	1B.1	S2	G2
<u>Myosurus minimus ssp. apus</u>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1	S2	G5T2Q
<u>Navarretia leucocephala ssp. bakeri</u>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
<u>Neostapfia colusana</u>	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
<u>Plagiobothrys hystriculus</u>	bearded popcornflower	Boraginaceae	annual herb	Apr-May	1B.1	S2	G2
<u>Puccinellia simplex</u>	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
<u>Symphyotrichum lentum</u>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	1B.2	S2	G2
<u>Trifolium hydrophilum</u>	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
<u>Tuctoria mucronata</u>	Crampton's tuctoria or Solano grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1

Suggested Citation

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Questions and Comments

rareplants@cnps.org

National Wetlands Inventory



U.S. Fish and Wildlife Service

National Wetlands Inventory

CHP Academy Drainage Channel CH2



August 6, 2019

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

USFWS IPAC Resource 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
[http://kim_squires@fws.gov](mailto:kim_squires@fws.gov)



In Reply Refer To:

July 15, 2019

Consultation Code: 08FBDT00-2019-SLI-0255

Event Code: 08FBDT00-2019-E-00564

Project Name: CHP Canine Facility

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, 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 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). 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:

San Francisco Bay-Delta Fish And Wildlife

650 Capitol Mall

Suite 8-300

Sacramento, CA 95814

(916) 930-5603

Project Summary

Consultation Code: 08FBDT00-2019-SLI-0255

Event Code: 08FBDT00-2019-E-00564

Project Name: CHP Canine Facility

Project Type: ** OTHER **

Project Description: drainage channel improvements

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.5960818883776N121.56122782512543W>



Counties: Yolo, CA

Endangered Species Act Species

There is a total of 8 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 Fisheries¹, 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.

Birds

NAME	STATUS
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

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

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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