

APPENDIX B

N/A Potential Sensitive Biological Resources

Scour Hole N/A Wildlife - Potential for Special-Status Wildlife Species to Occur in the Study Area

Invertebrates

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
Branchinecta conservatio	Conservancy fairy shrimp	FE	N/A	N/A	Vernal pool associate.	Absent. No vernal pool habitats in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
Branchinecta lynchi	vernal pool fairy shrimp	FT	N/A	N/A	Vernal pool associate.	Absent. No vernal pool habitats in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
Danaus plexippus	monarch butterfly	FX-C	N/A	N/A	Adults typically overwinter in sheltered coastal California wooded groves from Oct-March, then disperse inland in the spring. Larval, pupal, and adult stages are largely dependent on milkweed (Asclepias spp.).	Low. Not reported by the CNDDDB within the buffered Study Area.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	N/A	N/A	Obligate relationship with Sambucus spp.	High. Elderberry plants common in riparian community of Study Area.
Lepidurus packardi	vernal pool tadpole shrimp	FE	N/A	N/A	Vernal pool associate.	Absent. No vernal pool habitats in the Study Area. Not reported by the CNDDDB within the buffered Study Area.

Fish

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
Hypomesus transpacificus	Delta smelt	FT	CE	N/A	Known from low salinity (2-7 ppt) zones of designated Critical Habitat (see below) in the SJR below Mossdale.	Low. Functionally extinct in the Delta. Not reported by the CNDDDB within the buffered Study Area. Larval delta smelt last observed in the SJR near the Port of Stockton in 2004.
N/A	Delta smelt Critical Habitat	CH	N/A	N/A	Suisun Bay; Goodyear, Suisun, Cutoff, First Mallard, and Montezuma sloughs; legally described Delta waters. "Shallow Water Habitat" for Delta smelt defined between MHW elevation and -10 ft MLLW elevation.	Occurs. The Study Area intersects designated Critical Habitat for Delta smelt, which extends up the SJR to the Stanislaus River confluence (about 10 miles upriver from the Paradise Cut headworks on the SJR).
Spirinchus thaleichthys	longfin smelt	FX-C	CT	N/A	Anadromous. Spawn in relatively fresh water of the lower SJR below Medford Island in Feb-April. Rear in brackish areas (2-17 ppt salinity), and adults prefer more saline areas (15-30 ppt).	Low. Two young of year LFS were collected by the USFWS in 2012 in the SJR mainstem from Old River upstream (south) to Mossdale oxbow during low-water year.
Sacramento splittail	(Pogonichthys macrolepidotus)	N/A	N/A	SSC	San Francisco Bay estuary and Central Valley lakes and rivers. Spawns in upstream floodplains and backwater sloughs.	Occurs. Known to occur in the lower reaches of the San Joaquin River up to the Tuolumne River confluence.
Mylopharodon conocephalus	hardhead	N/A	N/A	SSC	Occurs in SJR tributaries but largely absent from the SJR mainstem.	Low. Not known from the SJR mainstem. Not reported by the CNDDDB within the buffered Study Area.
Oncorhynchus mykiss irideus	steelhead - CCV DPS	FT	N/A	v	Fast-flowing, well-oxygenated rivers and streams	Occurs. Known to occur in the Study Area, which provides migratory habitat for adults and juveniles.
N/A	CCV steelhead Critical Habitat	CH	N/A	N/A	SJR mainstem from outlet upstream to Merced River confluence.	Occurs. The Study Area intersects designated Critical Habitat for CCV steelhead.
Oncorhynchus tshawytscha	Chinook salmon - CV spring-run ESU	FT	CT	N/A	Undammed rivers, streams, creeks.	Occurs. Known to occur in the Study Area, which provides migratory habitat for adults and juveniles. Largely extirpated from the SJR but BOR's SJRRP is reintroducing SRC salmon now.
N/A	SRC salmon Critical Habitat	CH	N/A	N/A	Sacramento River mainstem and select tributaries.	Absent. The Study Area does not intersect designated Critical Habitat for SRC salmon.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Oncorhynchus tshawytscha</i>	Chinook salmon - CV fall-run ESU	N/A	N/A	SSC	Undammed rivers, streams, creeks.	Occurs. Known to occur in the Study Area which provides migratory habitat for adults and juveniles.
N/A	Chinook salmon EFH	N/A	N/A	EFH	SJR mainstem from outlet upstream to above Friant Dam.	Occurs. EFH for Chinook salmon is designated in the Study Area.
<i>Acipenser medirostris</i>	green sturgeon – southern DPS	FT	N/A	N/A	Spawns in the fast, clear, gravel-bottomed waters of the upper reaches of the lower Sacramento River below Keswick Dam.	Low. Not expected to spawn or occur regularly in the SJR due to degraded habitat conditions. Two detections to date have been recorded near the Study Area: One adult in the SJR near the Merced River in 2020, and a second adult in the Stanislaus River in 2017.
N/A	sDPS green sturgeon Critical Habitat	CH	N/A	N/A	SJR mainstem from outlet upriver to Stanislaus River confluence.	Occurs. The Study Area intersects designated Critical Habitat for sDPS green sturgeon.
<i>Acipenser transmontanus</i>	White sturgeon	N/A	N/A	SSC	Anadromous; undammed cold-water rivers having relatively deep pools with large substrates.	Low. Spawn primarily in the Sacramento River; however, angler catches and USFWS surveys indicate that spawning has occurred in the SJR as recently as 2016.
<i>Archoplites interruptus</i>	Sacramento perch	N/A	N/A	SSC	Ponds, rivers, backwaters, reservoirs, and lakes in the Central Valley.	Absent. Once abundant in the SJR and Delta, the species is believed to be extirpated from its native range.
<i>Lavinia exilicauda exilicauda</i>	Sacramento hitch	N/A	N/A	SSC	Hitch are most often found in slow warm water, including lakes and quiet stretches of rivers. Hitch are sometimes found in cool and clear, low-gradient streams, hiding among aquatic vegetation in sandy runs or pools. They are the most heat tolerant of the native Central Valley fishes and can withstand water temperatures greater than 30°C under some conditions. They have also been found living in brackish water with salinities as high as 9 ppt.	Absent. Once abundant in the San Joaquin Valley, the species is believed to be extirpated from the lower SJR.
(<i>Lampetra ayresii</i>)	River lamprey	N/A	N/A	SSC	Spawning adults in clear gravel riffles of streams; feeding adults in estuaries and ocean. Ammocoetes in sandy and muddy pools of spawning streams.	Low. Small numbers of river lamprey spawn in the SJR watershed upstream of the Study Area in some years.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
(Lampetra tridentata)	Pacific lamprey	N/A	N/A	SSC	Anadromous; undammed streams rivers, streams, and creeks with gravel spawning substrates.	Occurs. Spawns in the SJR below Friant Dam and in most major tributaries to the SJR.

Amphibians

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
Ambystoma californiense	California tiger salamander	FT	CT	N/A	Vernal pools, wetlands (breeding), and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	Low. No vernal pool habitats in the Study Area but reported by NDDDB in 1974 from 1.3 miles east of the Study Area, near Hwy 120 berm abutting ag lands.
Rana boylei	foothill yellow-legged frog	N/A	CE	SSC	Foothill yellow-legged frogs can be active all year in warmer locations but may become inactive or hibernate in colder climates. At lower elevations, foothill yellow-legged frogs likely spend most of the year in or near streams. Adult frogs, primarily males, will gather along main-stem rivers during spring to breed.	Absent. No suitable habitat is present in or near the Study Area. Not reported by the CNDDDB within the buffered Study Area.
Rana draytonii	California red-legged frog	FT	N/A	SSC	Lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Adults must have aestivation habitat to endure summer dry down	Absent. No suitable habitat is present in or near the Study Area. Not reported by the CNDDDB within the buffered Study Area.
Spea hammondi	western spadefoot	N/A	N/A	SSC	California endemic species of vernal pools, swales, wetlands, and adjacent grasslands throughout the Central Valley	Absent. No vernal pool habitats in the Study Area. Not reported by the CNDDDB within the buffered Study Area.

Reptiles

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Arizona elegans occidentalis</i>	California glossy snake	N/A	N/A	SSC	Occurs from the eastern part of the San Francisco Bay Area south to northwestern Baja California. Inhabits arid scrub, rocky washes, grasslands, and chaparral	Low. Suitable habitat does not occur in the Assessment Area. Not reported by the CNDDDB within 5-miles of the Study Area.
<i>Emys marmorata</i>	western pond turtle	N/A	N/A	SSC	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	Occurs. Suitable habitat is present at several adjacent wetlands and floodplain benches in the Study Area. Observed during site recon effort.
<i>Masticophis flagellum ruddocki</i>	San Joaquin coachwhip	N/A	N/A	SSC	Occurs in open, dry, usually flat habitats in Valley Grassland and Saltbush Scrub with little to no shrub cover in the San Joaquin Valley. A dietary generalist.	Low. Suitable habitat does not occur in the Assessment Area. Not reported by the CNDDDB within 5-miles of the Study Area.
<i>Phrynosoma blainvillii</i>	coast horned lizard	N/A	N/A	SSC	Requires open areas for basking, but with bushes or grass clumps for cover, patches of loamy soil or sand for burrowing and an abundance of ants	Low. Not reported by the CNDDDB within the buffered Study Area.
<i>Thamnophis gigas</i>	giant gartersnake	FT	CT	N/A	Freshwater ditches, sloughs, and marshes in the Central Valley. Almost extirpated from the southern parts of its range.	Low. Suitable habitat may occur in Study Area near agricultural lands. Not reported by the CNDDDB within the buffered Study Area.

Birds

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Agelaius tricolor</i>	tricolored blackbird	N/A	CT	SSC	Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	High. Several recent observations reported by CNDDDB near the Study Area.
<i>Antigone canadensis tabida</i>	greater sandhill crane	N/A	CT	CFP	Migratory. Winters in California's Central Valley and breeds in NE California, Nevada, Oregon, Washington, and BC, Canada. In winter, they forage in burned grasslands, pastures, and feed on waste grain in a variety of agricultural settings (corn, wheat, milo, rice, oats, and barley), tilled fields, recently planted fields, alfalfa fields, row crops and burned rice fields.	Low. Marginally suitable winter foraging habitat (agricultural lands) is present in the Assessment Area. No detections reported to the CNDDDB in or near the AA.
<i>Athene cunicularia</i>	burrowing owl	N/A	N/A	SSC	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g., prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	High. Suitable habitat present in the Study Area. Several recent observations reported by CNDDDB near the Study Area.
<i>Buteo swainsoni</i>	Swainson's hawk	N/A	CT	N/A	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures	Occurs. Suitable nesting and foraging habitat occur in Study Area. Many recent CNDDDB detections in the Study Area. Particularly within trees at the riparian fringe of the SJR.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Circus hudsonius</i>	northern harrier	N/A	N/A	SSC	Nests (March-Aug) broadly throughout California, including the Central Valley and Delta region, in emergent wetland/marsh, open grasslands, or savannah communities. Forages within a variety of open environments such as marshes, agricultural fields, and grasslands.	Low. Marginally suitable foraging and nesting habitat is present in the Assessment Area. No detections reported to the CNDDDB in or near the AA.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT	CE	N/A	In California, cuckoos nest along the upper Sacramento River and the South Fork Kern River from Isabella Reservoir to Canebrake Ecological Reserve. Other known nesting locations include Feather River (Butte, Yuba, Sutter counties), Prado Flood Control Basin (San Bernardino and Riverside County), Amargosa River and Owens Valley (Inyo County), Santa Clara River (Los Angeles County), Mojave River and Colorado River (San Bernardino County). Nests in riparian woodland. Winters in South America.	Low. Marginally suitable habitat is present in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Elanus leucurus</i>	white-tailed kite	N/A	N/A	CFP	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	High. Suitable nesting and foraging habitat occur in Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Lanius ludovicianus</i>	loggerhead shrike	N/A	N/A	SSC	Found throughout California in open country with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	Low. Marginally suitable habitat is present in the Study Area. CNDDDB observation in 2016 near Lathrop.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	N/A	CT	CFP	Salt marsh, shallow freshwater marsh, wet meadows, and flooded grassy vegetation. In California, primarily found in coastal and Bay-Delta communities, but also in Sierran foothills (Butte, Yuba, Nevada, Placer, El Dorado counties)	Low. Suitable habitat rare in the Study Area. Not reported by the CNDDDB within the buffered Study Area.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
Melospiza melodia	song sparrow (Modesto pop.)	N/A	N/A	SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	High. Suitable habitat is present in the Study Area. Several historic and current CNDDDB reports in the Study Area.
Vireo bellii pusillus	least Bell's vireo	FE	CE	N/A	Nesting habitat includes dense, low shrubby vegetation in riparian areas, brushy fields, young second-growth woodland, scrub oak, coastal chaparral, and mesquite brushland. Winters in southern Baja California Sur.	Low. Suitable habitat rare in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
Xanthocephalus xanthocephalus	yellow-headed blackbird	N/A	N/A	SSC	In California, breeds in the Great Basin region, along Colorado River south to Baja California, Salton Sea, Kern, Ventura, Riverside, San Diego, and possibly Orange and Lake counties, and locally in the Central Valley. Nests are constructed over deep water in emergent vegetation of prairie wetlands, quaking aspen parklands, mountain meadows, forest edges, large lakes.	Low. One very old (1894) observation reported by CNDDDB near the Study Area.

Mammals

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
Antrozous pallidus	pallid bat	N/A	N/A	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and occupied or vacant buildings	Low. Suitable roosting tree habitat is present in the Study Area. Not reported by the CNDDDB within the buffered Study Area.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	N/A	N/A	SSC	Caves, mines, buildings, rock crevices, trees.	Low. Suitable roosting tree habitat is present in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Eumops perotis californicus</i>	western mastiff bat	N/A	N/A	SSC	Primarily a cliff-dwelling species, found in similar crevices in large boulders and buildings	Low. No suitable roosting habitat present in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Neotoma fuscipes riparia</i>	riparian woodrat	FE	N/A	SSC	The riparian woodrat occurs in riparian woodland with an overstory canopy of trees and moderate to dense shrub understory, with abundant dead branches and downed woody material. Currently, a single population is known to exist along the Stanislaus River in and immediately adjacent to Caswell Memorial State Park.	Low. Suitable habitat is present in the Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Sylvilagus bachmani riparius</i>	riparian brush rabbit	FE	CE	N/A	Inhabits dense, brushy areas of valley riparian forests marked by extensive thickets of California wild rose (<i>Rosa californica</i>), California blackberries (<i>Rubus ursinus</i>), and willows (<i>Salix</i> spp.). Thriving mats of low-growing vines and shrubs serve as ideal living sites where they build tunnels under and through the vegetation.	High. Suitable habitat exists throughout Study Area. Multiple early 2000s detections in and near the Study Area. Several detections along Paradise Cut, Tom Paine Slough, along the railroad right-of-way at Mossdale, in the Mossdale oxbox, and along the SJR downflow of Old River.
<i>Taxidea taxus</i>	American badger	N/A	N/A	SSC	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Low. Suitable habitat (rangeland) does not occur in Study Area. Not reported by the CNDDDB within the buffered Study Area.
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE	CT	N/A	Found in grasslands, sagebrush scrub.	Absent. Out of range. Not reported by CNDDDB within the buffered Study Area.

Scour Hole N/A Plants - Potential for Special-Status Plants to Occur in the Study Area

Plants

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Amsinckia grandiflora</i>	large-flowered fiddleneck	FE	CE	CRPR 1B.1	Annual herb found in cismontane woodland and valley and foothill grasslands at elevations of 270N/A550m asl. Blooms March-May.	Low. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	N/A	N/A	CRPR 1B.2	Annual herb found in Alkaline soils in playas, valley and foothill grasslands (adobe clay), and vernal pools at 1-60m asl. Blooms Mar-June	Low. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Atriplex cordulata</i> var. <i>cordulata</i>	heartscale	N/A	N/A	CRPR 1B.2	Annual herb found in alkaline or saline valley and foothill grasslands, meadows and seeps, and chenopod scrub communities at 0-560m asl. Blooms Apr-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Atriplex coronata</i> var. <i>coronata</i>	crownscale	N/A	N/A	CRPR 2B.3	Perennial rhizomatous herb found in marshes and swamps at 0-2200m asl. Blooms June-Sept.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Atriplex minuscula</i>	lesser saltscale	N/A	N/A	CRPR 1B.1	Annual herb found in Alkaline, sandy soils in chenopod scrub, playas, and valley and foothill grassland at 15-200m asl. Booms May-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Blepharizonia plumosa</i> ssp. <i>plumosa</i>	big tarplant	N/A	N/A	CRPR 1B.1	Annual herb found in valley and foothill grasslands at 30-505m asl. Blooms July-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Brasenia schreberi</i>	watershield	N/A	N/A	CRPR 2B.3	Perennial rhizomatous herb found in freshwater marshes and swamps at 0-2200m asl. Blooms June-Sept.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Carex comosa</i>	bristly sedge	N/A	N/A	CRPR 2B.1	Perennial rhizomatous herb found in mesic valley and foothill grassland, coastal prairie, and lake margins of marshes and swamps at 0-625m asl. Blooms May-Sept.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	N/A	N/A	CRPR 4.2	Annual herb found in Alkaline, vernal mesic areas, and seeps in valley and foothill grassland and vernal pools, sometimes found on roadsides at 0-100m asl. Blooms May-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Chloropyron palmatum</i>	palmate-bracted bird's-beak	FE	CE	CRPR 1B.1	Annual herb found in alkaline soils of chenopod scrub and valley and foothill grassland communities at 5-155m asl. Blooms May-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Cirsium crassicaule</i>	slough thistle	N/A	N/A	CRPR 1B.1	Annual/perennial herb found in chenopod scrub, sloughs in marshes and swamps, and riparian scrub at 3-100m asl. Blooms May-Aug.	Low. Historic (1933) detection in the Study Area at the Old River/SJR confluence (poss. Extirpated). Detected in 1974 approx. 4 miles up the SJR from the Study Area (poss. extant) near Durham Ferry.
<i>Delphinium recurvatum</i>	recurved larkspur	N/A	N/A	CRPR 1B.2	Perennial herb found in chenopod scrub, cismontane woodland, and valley and foothill grasslands at 3-790m asl. Blooms Mar-June.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Eryngium racemosum</i>	Delta button-celery	N/A	CE	CRPR 1B.1	Annual/perennial herb found in vernal mesic clay depressions in riparian scrub communities at 3-30m asl. Blooms June-Oct.	Low. Detected in 1974 east of and adjacent to the Study Area near what is now Mossdale Crossing Regional Park (poss. extirpated).
<i>Eschscholzia rhombipetala</i>	diamond-petaled California poppy	N/A	N/A	CRPR 1B.1	Annual herb found in valley and foothill grassland in alkaline and clay soils at 0-975m asl. Blooms Mar-Apr.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Extriplex joaquinana</i>	San Joaquin spearscale	N/A	N/A	CRPR 1B.2	Annual herb found in alkaline soils in chenopod scrub, meadows seeps, playas, and valley and foothill grassland at 1-835m asl. Blooms Apr-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Hesperevax calescens</i>	hogwallow starfish	N/A	N/A	CRPR 4.2	Annual herb found in (sometimes alkaline) mesic areas with clay soil within valley and foothill grassland and shallow vernal pools at 0-505m asl. Blooms Mar-June.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	N/A	N/A	CRPR 1B.2	Perennial rhizomatous herb found in marshes and freshwater swamps. Often in riprap on sides of levees at 0-120m asl. Blooms June-Sept.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Lasthenia chrysantha</i>	alkali-sink goldfields	N/A	N/A	CRPR 1B.1	Annual herb found in alkaline vernal pools at 0-200m asl. Blooms Feb-Apr.	Absent. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Lasthenia ferrisiae</i>	Ferris' goldfields	N/A	N/A	CRPR 4.2	Annual herb found in vernal pools at 20-700m asl. Blooms Feb-May.	Absent. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	N/A	N/A	CRPR 1B.2	Perennial herb found in freshwater and brackish marshes and swamps 0-5m asl. Blooms May-July.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	N/A	CR	CRPR 1B.1	Perennial rhizomatous herb found in brackish or freshwater marshes or swamps and riparian scrub at 0-10m asl. Blooms April-Nov.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Limosella australis</i>	Delta mudwort	N/A	N/A	CRPR 2B.1	Perennial stoloniferous herb found in mud banks in freshwater or brackish marshes and swamps and riparian scrub at 0-3m asl. Blooms May-Aug.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Madia radiata</i>	showy golden madia	N/A	N/A	CRPR 1B.1	Annual herb found in cismontane woodland and valley and foothill grassland at 25-1215m asl. Blooms Mar-May.	Low. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Puccinellia simplex</i>	California alkali grass	N/A	N/A	CRPR 1B.2	Annual herb found in alkaline, vernal mesic areas and sinks, flats and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools at 2-930m asl. Blooms Mar-May.	Low. Suitable habitat is not present in the Assessment Area. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	N/A	N/A	CRPR 1B.2	Perennial rhizomatous (emergent) herb found in shallow marshes and freshwater swamps at 0-650m asl. Blooms May-Oct.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.

Scientific Name	Common Name	Status FESA	Status CESA	Status Other	Habitat and Species Description	Potential to Occur in Study Area
<i>Symphotrichum lentum</i>	Suisun marsh aster	N/A	N/A	CRPR 1B.2	Perennial rhizomatous herb found in brackish and freshwater marshes and swamps 0-3m asl. Blooms May-Nov.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Wright's trichocoronis	N/A	N/A	CRPR 2B.1	Annual herb found in alkaline soils of meadows and seeps, marshes and swamps, riparian forest, and vernal pools at 5-435m asl. Blooms May-Sept.	Low. Historic detections in the Study Area from 1892-1914 near the Interstate 5 bridge over the SJR and near what is now Mossdale Crossing Regional Park.
<i>Trifolium hydrophilum</i>	saline clover	N/A	N/A	CRPR 1B.2	Annual herb found in marshes and swamps, mesic and alkaline areas in valley and foothill grassland, and vernal pools at 0-300m asl. Blooms Apr-June.	Low. This species has not been reported to the CNDDDB within 5-miles of the Assessment Area.
<i>Tropidocarpum capparideum</i>	caper-fruited tropidocarpum	N/A	N/A	CRPR 1B.1	Annual herb found in alkaline hills of valley and foothill grasslands at 1-455m asl. Blooms Mar-Apr.	Low. Historic (1881) detection ~1 mi east of the Study Area (near Lathrop) in 1881 (poss. extirpated).