SPECIAL-STATUS SPECIES, THEIR STATUS, AND POTENTIAL OCCURRENCE IN THE SAN JOAQUIN RIVER CORRIDOR
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Name	Status*	Habitat	Potential for Occurrence in Study Area		
Federal or State Endangere	Federal or State Endangered or Threatened Species				
Boggs Lake hedge-hyssop ( <i>Gratiola heterosepala</i> )	SE CNPS 1B.2	Vernal pools and freshwater marshes and swamps on clay soils, sometimes on lake margins.	May be Present. Suitable habitat is not present in the Plan Area but may be present within the larger study area (i.e., on the margins of Millerton Lake). Suitable habitat may also be present immediately adjacent to the study area on the bluffs above the river corridor).		
Valley elderberry longhorn beetle ( <i>Desmocerus californicus</i> <i>dimorphus</i> )	FT	Elderberry shrubs associated with riparian forests that occur along rivers and streams.	<b>Present</b> . These beetles and their exit holes have been confirmed on at least two sites in the study area (CNDDB, 2012).		
California tiger salamander ( <i>Ambystoma californiense</i> )	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	May be Present. Suitable temporary pools may be present within the Plan Area and suitable vernal pools may be present immediately adjacent to the study area (i.e., if vernal pools occur within the grasslands on the bluffs above the river corridor). In addition, vegetation communities within the Plan Area provide suitable upland dispersal and refugial habitat for the species. Critical habitat borders the study area north of the Hwy 41 bridge in Madera County and is very near the study area on the east side of Friant Road from Friant Dam wrapping around the town of Friant . There are CNDDB records within 0.5-mile of the study area.		
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	SE (nesting and wintering )	Requires large bodies of water, or free-flowing rivers with abundant fish and adjacent snags and large trees for perching and nesting.	Absent as Breeder. Bald eagles winter throughout the study area. They are most common where waterfowl, especially American coots, congregate on open water such as the larger gravel ponds.		
Swainson's hawk ( <i>Buteo swainsoni</i> )	ST	Breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannah; forages in adjacent livestock pasture, grassland, or grain fields.	Absent as Breeder. Has been observed in migration and the nearest confirmed nest is just within 5 miles to the northeast along Highway 41 near Road 208.		
California Species of Speci	al Concern				
Kern brook lamprey ( <i>Lampetra hubbsi</i> )	CSSC	Rivers, canals, and sloughs in the Kern and San Joaquin River drainages.	May be Present. There appears to be suitable habitat in the study area; however, surveys in reaches of the San Joaquin River below Friant Dam have not detected the adult form of Kern Brook lamprey.		

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San Joaquin roach ( <i>Lavinia symmetricus ssp.</i> )	CSSC	Small warm intermittent streams and isolated pools in tributaries of the San Joaquin River from the Consumnes River south.	May be Present. It is known from tributaries above Friant Dam and could potentially occur below the dam. It is unlikely, though, to be a regular part of the fish community in the study area.
Hardhead ( <i>Mylopharodon</i> <i>conocephalus</i> )	CSSC	Sacramento-San Joaquin and Russian River drainages.	May be Present. Sampled in very low numbers in 1981, though now thought to be absent from the Valley reaches of the San Joaquin River (Moyle, 2002).
Western spadefoot ( <i>Scaphiopus hammondil</i> )	CSSC	Grasslands and occasionally valley-foothill hardwood woodlands; vernal pools or similar ephemeral pools required for breeding.	May be Present. Suitable habitat may be present if seasonal pools occur within the grasslands in the study area. There are CNDDB records within 0.5-mile of the study area.
Silvery legless lizard ( <i>Anniella pulchra pulchra</i> )	CSSC	Areas with sandy or loose loamy soils under the sparse vegetation of beaches, chaparral, or pine-oak woodland; or sycamores, cottonwoods, or oaks that grow on stream terraces.	May be present. Appropriate habitat is present in the study area and it is known from other reaches of the San Joaquin.
Western pond turtle ( <i>Actinemys marmorata</i> )	CSSC	Slow water aquatic habitat with available basking sites. Hatchlings require shallow water with dense submergent or short emergent vegetation. Requires an upland oviposition site in the vicinity of the aquatic site.	<b>Present.</b> Have been observed in gravel ponds and other backwaters within the study area.
Northern harrier ( <i>Circus cyaneus</i> )	CSSC (nesting)	Forages in marshes, grasslands, and ruderal habitats; nests in extensive marshes and wet fields.	Absent as Breeder. Northern harriers have been confirmed in the winter though nesting has never been confirmed.
Burrowing owl ( <i>Athene cunicularia</i> )	CSSC	Grasslands and ruderal habitats.	May be Present. There is suitable habitat for burrowing owls in the grassland portions of the study area.
Long-eared owl ( <i>Asio otus</i> )	CSSC (nesting)	Riparian bottomlands with tall, dense willows and cottonwood stands (also dense live oak and California Bay along upland streams); forages primarily in adjacent open areas.	<b>Present.</b> Long-eared owls have been confirmed in the winter though nesting has never been confirmed, though there is suitable nesting habitat in the study area.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	CSSC (nesting)	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	Present. Has been observed nesting on the study area.

Name	Status*	Habitat	Potential for Occurrence in Study Area
Yellow warbler ( <i>Setophaga petechia</i> )	CSSC (nesting)	Breeds in riparian woodlands, particularly those dominated by willows and cottonwoods.	Absent as Breeder. The quality of the riparian habitat and more importantly the prevalence of brown-headed cowbirds in the study area eliminate yellow warblers as potential nesters, though they are quite common in spring and fall migrations.
Yellow-breasted chat (Icteria virens)	CSSC (nesting)	Breeds in riparian habitats having dense understory vegetation, such as willow and blackberry.	Absent as Breeder. The quality of the riparian habitat and, more importantly, the prevalence of brown-headed cowbirds ( <i>Molothrus ater</i> ) in the study area eliminate yellow warblers as potential nesters, though they are quite common during spring and fall migrations.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	CSSC (nesting colony)	Breeds near fresh water in dense emergent vegetation.	Present. Nesting colonies have been confirmed in reclaimed gravel ponds.
Yellow-headed blackbird (Xanthocephalus xanthocephalus)	CSSC (nesting)	Nests in freshwater marshes.	<b>Present</b> . Has been observed in nesting season in marsh habitat on gravel company property.
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	CSSC (nesting)	Can occur in a variety of grassland habitats, but generally prefers short to middle-height, moderately open grasslands with scattered shrubs. Grasshopper sparrows are sparsely distributed in the Sierra Nevada Foothills and typically do not use the same site year to year.	May be Present. There is marginally suitable habitat in the grassland habitats of the study area.
Western red bat ( <i>Lasiurus blossevillii</i> )	CSSC	Prefers sites with a mosaic of habitats that includes trees for roosting and open areas for foraging. Strongly associated with riparian habitats.	May be Present. There appears to be suitable habitat in the riparian habitats of the study area.
Spotted bat ( <i>Euderma maculatum</i> )	CSSC	Ponderosa pine region of the western highlands. Prefers cracks/crevices of high cliffs and canyons for roosting.	May be Present. Habitat in the study area appears to be marginal for this bat, though there is a CNDDB (2012) record from 1970 of an individual with rabies collected at the San Joaquin fish hatchery.

Name	Status*	Habitat	Potential for Occurrence in Study Area
Townsend's western big- eared bat ( <i>Corynorhinus townsendil</i> )	CSSC	Roosts in colonies in caves, mines, tunnels, or buildings in mesic habitats. The species forages along habitat edges, gleaning insects from bushes and trees. Habitat must include appropriate roosting, maternity and hibernacula sites free from disturbance by humans.	May be Present. The study area is marginal for this bat, as appropriate breeding sites appear to be rare, though this bat is likely to at least occasionally forage on the study area.
Pallid bat ( <i>Antrozous pallidus</i> )	CSSC	Forages over many habitats; roosts in buildings, large oaks or redwoods, rocky outcrops and rocky crevices in mines and caves.	May be Present. The study area is marginal for this bat, as appropriate breeding sites appear to be rare, though this bat is likely to forage at least occasionally in the study area.
Western mastiff bat ( <i>Eumops perotis</i> )	CSSC	Found in central and south coastal California. Roosts primarily in cliffs or high buildings.	Absent as Breeder. The study area is marginal for this bat as appropriate breeding sites appear to be absent, though this bat is likely to at least occasionally forage in the study area.
American badger ( <i>Taxidea taxus</i> )	CSSC	Herbaceous, shrub, and open stages of most habitats with dry, friable soils.	<b>Present.</b> There is suitable habitat for badgers, particularly in the grassland portions of the study area and they have been observed along Hwy 99 within the study area.
State Protected Species, CE	QA Rare Sp	pecies, and CNPS Species	
Ewan's larkspur ( <i>Delphinium hansenii</i> ssp. <i>ewanianum</i> )	CNPS 4.2	Rocky soils in cismontane woodland and valley and foothill grassland.	May be Present. Grasslands in the study area may provide suitable habitat.
Hoover's eriastrum ( <i>Eriastrum hooveri</i> )	CNPS 4.2	Chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland.	May be Present. Grasslands in the study area may provide suitable habitat.
Spiny-sepaled button-celery ( <i>Eryngium spinosepalum</i> )	CNPS 1B.2	Vernal pools within valley and foothill grassland some sites on granitic clay soils.	Absent. Suitable habitat is not present in the study area but may be present immediately adjacent (i.e., on the bluffs above the river corridor).
Golden goodmania ( <i>Goodmania luteola</i> )	CNPS 4.2	Mojavean desert scrub, meadows and seeps, playas, and valley and foothill grassland on alkaline or clay soils.	Absent. Suitable habitat is not present in the study area.
Hogwallow starfish ( <i>Hesperevax caulescens</i> )	CNPS 4.2	Mesic, clay sites or shallow vernal pools in valley and foothill grassland.	May be Present. Grasslands within the study area may provide suitable habitat.

Name	Status*	Habitat	Potential for Occurrence in Study Area
California satintail ( <i>Imperata brevifolia</i> )	CNPS 2.1	Mesic sites, alkali seeps, and riparian areas in coastal scrub, chaparral, riparian scrub, Mojavean scrub, and meadows and seeps.	May be Present. The riparian scrub in the study area may provide suitable habitat for this species.
Forked hare-leaf ( <i>Lagophylla dichotoma</i> )	CNPS 1B.1	On gravelly roadsides, loam soil, and dry clay in openings in valley and foothill grassland and cismontane woodland.	May be Present. Grasslands within the study area may provide suitable habitat for this species.
Bristly leptosiphon ( <i>Leptosiphon acicularis</i> )	CNPS4. 2	Chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland.	May be Present. Grasslands within the study area may provide suitable habitat.
Madera leptosiphon ( <i>Leptosiphon serrulatus</i> )	CNPS 1B.2	Dry slopes, often on decomposed granite in cismontane woodland and lower montane coniferous forest.	May be Present. Suitable habitat is not present in the Plan Area but may be present within the larger study area adjacent to Millerton Lake.
Orange lupine ( <i>Lupinus citrinus</i> var. <i>citrinus</i> )	CNPS 1B.2	Rocky, decomposed granitic outcrops, usually open areas, on flat to rolling terrain in chaparral, cismontane woodland, and lower montane coniferous forest.	May be Present. Suitable granitic habitat is not present in the Plan Area but may be present in the larger study area along the eastern edge of Millerton Lake.
Sanford's arrowhead (Sagittaria sanfordii)	CNPS 1B.2	Standing or slow-moving freshwater ponds, marshes, and ditches; generally in marshes and swamps.	May be Present. Wetlands within the study area provide suitable habitat for the species.
Sylvan microseris ( <i>Microseris sylvatica</i> )	CNPS 4.2	Chaparral, cismontane woodland, Great Basin scrub, pinyon and juniper woodland, and valley and foothill grassland (sometimes on serpentinite).	May be Present. Grasslands within the study area may provide suitable habitat.
Sierra monardella ( <i>Monardella candicans</i> )	CNPS 4.3	Sandy or gravelly soils in chaparral, cismontane woodland, and lower montane coniferous forest.	May be Present. Suitable habitat is not present in the Plan Area but may be present in the larger study area along the eastern edge of Millerton Lake.
Sierra sweet bay ( <i>Myrica hartwegil</i> )	CNPS 4.3	Usually on streamsides in cismontane woodland, lower montane coniferous forest, and riparian forest.	May be Present. Suitable habitat may be present in the study area.
Adobe navarretia ( <i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i> )	CNPS 4.2	Vernally mesic clay or sometimes serpentine soils in valley and foothill grassland habitats (sometimes in vernal pools).	May be Present. Suitable habitat may be present in the study area.

Name	Status*	Habitat	Potential for Occurrence in Study Area
Fragile pentachaeta ( <i>Pentachaeta fragilis</i> )	CNPS 4.3	Often in openings in chaparral and lower montane coniferous forests with sandy soils.	May be Present. Suitable habitat may be present in the study area.
Michael's rein orchid ( <i>Piperia michaelii</i> )	CNPS 4.2	Generally dry sites on mudstone and humus in coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest.	May be Present. Suitable habitat may be present in the study area.
San Joaquin bluecurls ( <i>Trichostema ovaturn</i> )	CNPS 4.2	Sandy alluvial soil in chenopod scrub and valley and foothill grassland	May be Present. Grasslands in the study are may provide suitable habitat.
White-tailed kite ( <i>Elanus leucurus</i> )	SP	Nests in tall shrubs and trees, forages in grasslands, agricultural fields, and marshes.	<b>Present</b> . Has been observed nesting in the study area.
Golden eagle ( <i>Aquila chrysaetos</i> )	SP	Breeds on cliffs or in large trees (rarely on electrical towers), forages in open areas.	Absent as Breeder. Although some of the valley oak, cottonwood, and eucalyptus trees in the study area are large enough to support golden eagle nests, there is not enough open foraging habitat nearby to support nesting golden eagles. However, golden eagles have occasionally been observed in the study area outside the nesting season.
American peregrine falcon ( <i>Falco peregrinus anatum</i> )	SP	Forages in many habitats; nests on cliffs and tall bridges and buildings.	Absent as Breeder. Peregrine falcons have frequently been observed in the study area, especially during winter. Appropriate nesting substrates are lacking.
Ringtail ( <i>Bassariscus astutus</i> )	SP	Riparian habitats and in brush stands of most forest and shrub habitats. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows or woodrat nests.	May be Present. The riparian habitats of the study area are suitable habitat for the ringtail, though this species is more likely to occur upstream of the study area.

\*Status Codes

Federally listed Endangered FE =

FT =

Federally listed Threatened Federal Candidate. Sufficient biological information to support a proposal to list the species as Endangered or Threatened FC =

SE = ST = State listed Endangered State listed Threatened

California Species of Special Concern State Protected Species CSSC =

SP =

 $\label{eq:CNPS} CNPS \ List \ 1B = Plants \ rare, \ threatened, \ or \ endangered \ in \ California \ and \ elsewhere \ CNPS \ List \ 4 = Plants \ of \ limited \ distribution-a \ watch \ list$ 

.1 = seriously endangered in California .2 = fairly endangered in California