

Appendix B

Regionally Occurring Species Table

Table 1: List of Regionally Occurring Special-Status Plant and Animal Species.

Scientific Name/ Common Name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Invertebrates				
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE/--/--	Conservancy fairy shrimp inhabit rather large, cool-water vernal pools with moderately turbid water (USFWS 2005).	A	There are no vernal pools or other ephemeral wetland habitats in the project area.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/--/--	The vernal pool fairy shrimp occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools (USFWS 2005).	A	There are no vernal pools or other ephemeral wetland habitats in the project area.
<i>Branchinecta mesovallensis</i> <i>Midvalley fairy shrimp</i>	--/CSC/--	Shallow ephemeral pools, vernal swales, and various artificial ephemeral wetland habitats.	A	There are no vernal pools or other ephemeral wetland habitats in the project area.
<i>Desmoceris californicus</i> <i>dimorphus</i> Valley elderberry longhorn beetle	FT/--/--	Valley elderberry longhorn beetle is endemic to the riparian habitats in the Sacramento and San Joaquin Valleys where it resides on elderberry (<i>Sambucus</i> spp.) plants. The beetle's current distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield (USFWS 1984).	P	Elderberry shrubs occur in the vicinity of the project site.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE/--/--	This animal inhabits vernal pools containing clear to highly turbid water, ranging in size from 54 square feet in the former Mather Air Force Base area of Sacramento County, to the 89-acre Olcott Lake at Jepson Prairie (USFWS 2005).	A	There are no vernal pools or other ephemeral wetland habitats in the project area.
<i>Lindieriella occidentalis</i> California linderiella	--/--/--	Shallow ephemeral pools, vernal pools and swales, and various artificial ephemeral wetland habitats.	A	There are no vernal pools or other ephemeral wetland habitats in the project area.

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Fish <i>Acipenser medirostris</i> Green sturgeon	FT/CSC/--	Green sturgeon is a long-lived, slow-growing fish and the most marine-oriented of the sturgeon species. Green sturgeon are believed to spend the majority of their lives in nearshore oceanic waters, bays, and estuaries. Early life-history stages reside in fresh water, with adults returning to freshwater to spawn. Today green sturgeon are believed to spawn primarily in the Rogue River, Klamath River Basin, and the Sacramento River. Spawning appears to rarely occur in the Umpqua River, South Fork Trinity River, and Eel River (NOAA Fisheries 2007).	A	This species is not known to occur in the American River.
<i>Hypomesus transpacificus</i> Delta smelt	FT/ST/--	Delta smelt are tolerant of a wide salinity range. They have been collected from estuarine waters up to 14 ppt (parts per thousand) salinity. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface), where the salinity is approximately 2 ppt. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edgewaters. Although spawning has not been observed in the wild, the eggs are thought to attach to	A	This species is not known to occur in the American River.

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<i>Oncorhynchus mykiss</i> Central Valley Steelhead Distinct Population Segment (DPS)	FT/--/--	<p>substrates such as cattails, tules, tree roots and submerged branches. Delta smelt are found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties (USFWS 1995).</p> <p>Steelhead spawn in rivers and streams with cool, clear, water and suitable substrate. The Central Valley Steelhead distinct population segment includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (NOAA Fisheries 2006).</p>	P	The project site is located within Critical Habitat and this species is known to occur in the American River from the River upstream to Nimbus Dam.
<i>Oncorhynchus tshawytscha</i> Winter-run Chinook salmon	FE/--/--	<p>Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Sacramento winter-run Chinook ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (59 FR 440; January 1, 1994), as well as two artificial propagation programs: Winter-run Chinook from the Livingston Stone National Fish Hatchery (NFH), and winter run Chinook in a captive broodstock program maintained at</p>	P	This species may wander into the lower American River but is not known to utilize the American River for migration, rearing, or spawning.

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<i>Oncorhynchus tshawytscha</i> Central Valley spring-run Chinook salmon	FT/--	Livingston Stone NFH and the University of California Bodega Marine Laboratory (NOAA Fisheries 2005). Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Central Valley spring-run Chinook ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River (64 FR 50394; September 16, 1999). One artificial propagation program is considered part of the ESU: The Feather River Hatchery spring run Chinook program (NOAA Fisheries 2005).	A	This species may wander into the lower American River but is not known to utilize the American River for migration, rearing, or spawning. Critical habitat for this species is designated in the lower American River from the confluence of the Sacramento River upstream to the Watt Avenue bridge, which is several miles south of the project area.
<i>Oncorhynchus tshawytscha</i> Central Valley Fall/ Late Fall Run Chinook Salmon	FSC/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The ESU includes all naturally spawned populations of fall-run Chinook salmon in the Sacramento and San Joaquin River Basins and their tributaries, east of Carquinez Strait, California.	P	This species is known to occur in the American River. The American River is designated Essential Fish Habitat for this ESU from the confluence with the Sacramento River upstream to Nimbus Dam.
<i>Pogonichthys macrolepidotus</i> Splittail	-/SSC/-	Reside in floodplains and backwater areas with flooded vegetation for spawning and rearing. Spawns on submerged vegetation. Spawning occurs in the lower reaches of rivers, bypasses used for flood management, and various sloughs.	P	This species is known to occur in the lower American River.
Amphibians <i>Ambystoma californiense</i> California tiger salamander	FT/SSC/--	California tiger salamanders are generally restricted to vernal pools and seasonal ponds,	A	There are no suitable ephemeral wetland habitats in the project

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		including many constructed stockponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California (USFWS 2007).		area.
<i>Rana aurora draytonii</i> California red-legged frog	FT/SSC/--	The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (<i>Salix</i> spp.) and an intermixed fringe of cattails (<i>Typha latifolia</i>). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter (USFWS 2002).	A	The American River does not provide suitable habitat for this species.
<i>Spea hammondi</i> Western spadefoot	--/CSC/--	Western spadefoot require temporary rain pools that last at least three weeks in order to metamorphose successfully. These pools must also lack non-native predators such as fishes, bullfrogs, and crayfishes in order for spadefoot to successfully reproduce.	A	There are no suitable ephemeral wetland habitats in the project area.
Reptiles				
<i>Actinemys marmorata</i> Western pond turtle	--/CSC/--	Ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms vegetated with watercress, cattails, waterlilies, or other aquatic vegetation in woodlands, grasslands, and open forests	A	While this species is known to occur in the American River corridor, there is no habitat for this species in the project area.

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<i>Thamnophis gigas</i> Giant Garter Snake	FT/ST/--	Primarily found in marshes and sloughs. May be found in slow-moving creeks but are absent from large rivers. They are generally aquatic but often bask on emergent vegetation such as cattails and tules.	A	The American River does not provide suitable habitat for this species.
Mammals				
<i>Taxidea taxus</i> American badger	--/CSC/--	In California, Badgers occupy a diversity of habitats. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, and mountain meadows near timberline are preferred.	A	There is no suitable habitat for this species in the project area. No mammal burrows were observed in the project area.
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	--/CSC/--	Cooper's hawks nest in deciduous trees or conifers in crotches or cavities that are usually 20 to 50 feet off the ground. The nest is a stick platform lined with bark. Nests are usually placed in second growth coniferous stands or in the deciduous riparian areas that are closest to streams.	P	Large trees along the American River provide potential nesting habitat for this species.
<i>Agelaius tricolor</i> Tri-colored blackbird	--/SSC/--	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation, specifically cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds.	A	There is no emergent wetland habitat for this species in the project area.
<i>Ardea alba</i>	--/--/--	Nest in large trees in riparian areas and along	A	Large trees along the American

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Great egret		lakes, usually in areas that lack a high level of human disturbance.		River provide potential nesting habitat for this species but the project area has a high level of human disturbance.
<i>Ardea herodias</i> Great blue heron	--/--/--	Nest in large trees in riparian areas and along lakes, usually in areas that lack a high level of human disturbance.	A	Large trees along the American River provide potential nesting habitat for this species but the project area has a high level of human disturbance.
<i>Athene cunicularia</i> Burrowing owl	--/SSC/--	Resides in open, dry annual or perennial grasslands, deserts, and scrublands with low growing vegetation. This species nests underground in existing burrows created by a number of burrowing mammals, most often ground squirrels.	A	There is no suitable habitat for this species in the project area. No mammal burrows were observed along the Mayhew Drain or adjacent levees.
<i>Buteo regalis</i> Ferruginous hawk	--/SSC/--	Ferruginous hawks are found in open habitats, such as grasslands, shrubsteppes, sagebrush, deserts, saltbush-greasewood shrublands, and outer edges of pinyon-pine and other forests. Generally, they avoid high elevations, narrow canyons, and interior regions of forests. Trees, utility poles and towers, fence posts, rocky outcrops, cliffs, and the ground are perching substrates used by ferruginous hawks.	A	There is no suitable habitat for this species in the project area.
<i>Buteo swainsoni</i> Swainson's hawk	--/ST/--	Forages in grasslands, suitable grain or alfalfa fields, or livestock pastures adjacent to nesting habitat. Nests on large trees in open areas.	P	Large trees along the American River provide potential nesting habitat for this species. The closest record is approximately 5.5 east of the project area near

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<i>Elanus leucurus</i> White-tailed kite	--/FP/--	Occurs primarily in rolling foothills and valley margins with scattered oaks as well as river bottomlands or marshes next to deciduous woodland. Uses isolated, dense topped, trees in open areas for nesting and perching and forages in a variety of habitats including grassland, marshes, and agricultural fields. Feeds on rodents, snakes, and insects.	P	White Rock Road. Large trees along the American River provide potential nesting habitat for this species.
<i>Riparia riparia</i> Bank swallow	--/ST/--	The species nests in colonies and creates nests by burrowing into vertical banks consisting of fine-texture soils. Bank swallows breed in California from April to August and spend the winter months in South America. Currently, bank swallows are locally common only in restricted portions of California where sandy, vertical bluffs or riverbanks are available for the birds to dig their burrows and nest in colonies. Most of California's remaining populations nest along the upper Sacramento River where it still meanders in a somewhat natural manner. In this alluvial plain, the river system provides suitable soil types and erosion needed for prime nesting habitat.	A	There are no vertical banks with fine textured soils in the project area. The closest recorded occurrence of this species is approximately five miles northeast of the project site in the American River Parkway.
Plants				
<i>Gratiola heterosepala</i> Boggs Lake hedge hyssop	--/SE/1B	This species is found in shallow waters or moist clay soils of vernal pools and lake margins in scattered sites from Modoc County south to Fresno County.	A	There are no vernal pools or other suitable wetland habitats in the project area.
<i>Juncus leiospermis</i> var.	--/--/1B	This species is found in mesic habitats in valley	A	There are no vernal pools or other

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<i>Ahartia</i> Ahart's dwarf rush		and foothill grassland; such as vernal pools, swales, and seasonal wetlands from 30 to 100 meters in elevation. Known to occur in Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties. Blooms March to May (CNPS 2007).		suitable wetland habitats in the project area.
<i>Legenere limosa</i> Legenere	--/--/IB	This species is found in vernal pools from an elevation of 1 to 880 meters. Known to occur in Alameda, Lake, Napa, Placer, Sacramento, Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties. Blooms April to June (CNPS 2007).	A	There are no vernal pools or other suitable wetland habitats in the project area.
<i>Orcuttia tenuis</i> Slender Orcutt grass	FT/SE/IB	Found in vernal pools from an elevation of 35 to 1,760 meters. Known to occur in Butte, Lake, Lassen, Modoc, Plumas, Sacramento, Shasta, Siskiyou, and Tehama counties. Blooms May to October (CNPS 2007).	A	There are no vernal pools or other suitable wetland habitats in the project area.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE/SE/IB	Found in vernal pools from an elevation of 30 to 100 meters. This species is only known from seven occurrences, all in Sacramento County. Blooms April to July (CNPS 2007).	A	There are no vernal pools or other suitable wetland habitats in the project area.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--/--/IB	A rhizomatous emergent herb found in assorted, shallow, freshwater, marshes and swamps including sloughs and drainage ditches from 0 to 650 meters in elevation. Currently known to occur in Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties. Blooms May to October (CNPS 2007).	A	There are no suitable aquatic habitats for this species in the project area.

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Natural Communities Northern hardpan vernal pool	--/--/--	Shallow ephemeral water bodies found in depressions with indurated clay or cemented hardpan. Found in grasslands and open woodlands.	A	This community does not occur in the project area.

Absent [A] - no habitat present in the Action Area and no further work needed. Habitat Present [HP] -habitat is, or may be present in the Action Area. The species may be present. Present [P] - the species is present in the Action Area. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc.

CNPS:

- 1A = Plants presumed extinct in California.
- 1B = Rare, threatened, or endangered in California and elsewhere.
- 2 = Rare, threatened, or endangered in California but more common elsewhere.

Source of list:

CNDDDB search for “Carmichael” 7.5 Minute USGS Quadrangle.

USFWS online list of federal endangered and threatened species that occur in or may be affected by projects in the Carmichael and Sacramento East 7.5 Minute USGS Quadrangles.