### MOORE BIOLOGICAL CONSULTANTS

August 5, 2022

Mr. Sandeep Dhanda Imperial Real Estate, LLC 5453 Cosumnes Drive Stockton, CA 95219

Subject: "7599 STOCKTON BOULEVARD", SACRAMENTO COUNTY,

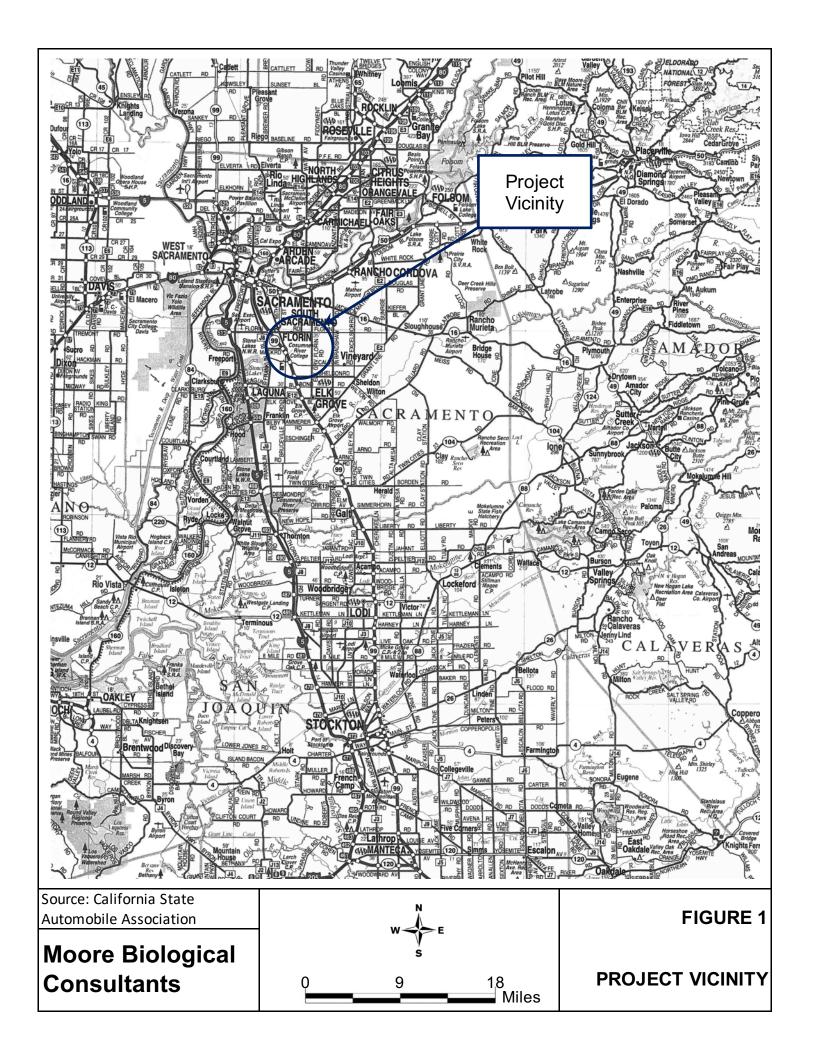
CALIFORNIA: BIOLOGICAL ASSESSMENT

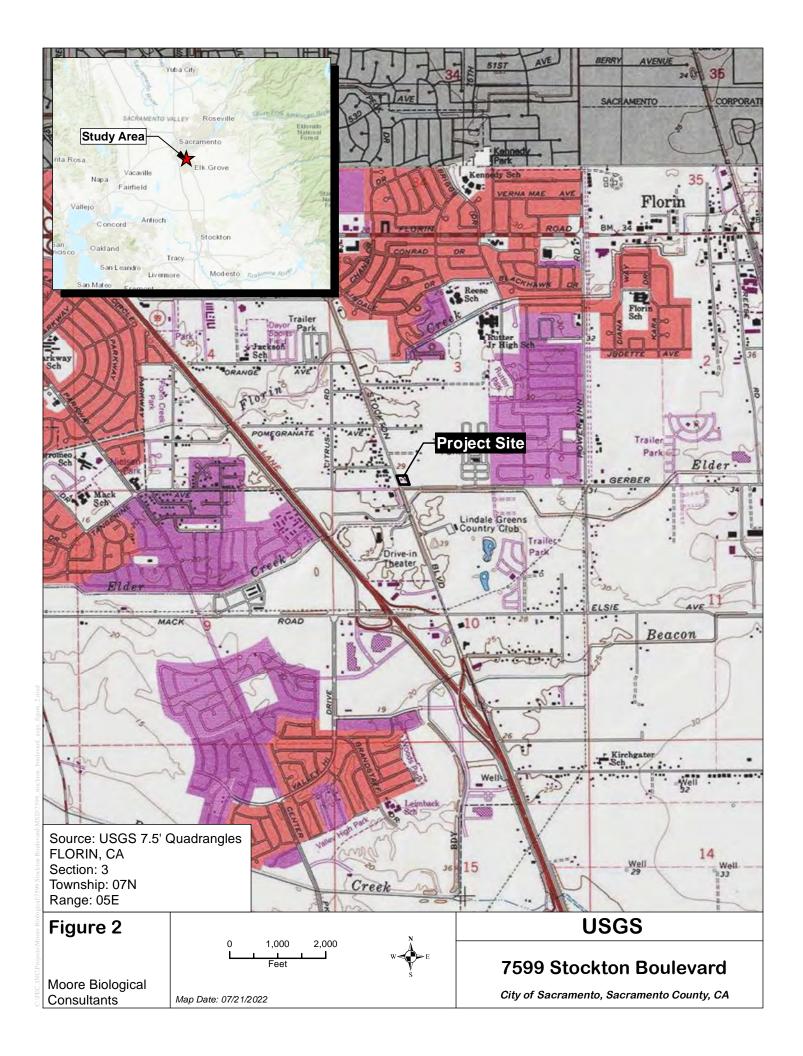
Dear Sandeep:

Thank you for asking Moore Biological Consultants to prepare a biological assessment for this 0.88+/- acre site in Sacramento County, California (Figures 1 and 2). The purpose of this assessment is to describe existing biological resources in the site, identify potentially significant impacts to biological resources from commercial development, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting a field survey to document vegetation communities, delineate potentially jurisdictional Waters of the U.S. and/or wetlands, and identify potentially suitable habitat for or presence of special-status species in the site. This report details the methodology and results of our investigation.

### **Project Overview**

The 0.88+/- acre parcel (i.e., the "project site") is an in-fill parcel within a heavily residential area. The site is envisioned for construction of a convenience store, gas station, and associated parking areas (see Site Plan in Attachment A).





### **Methods**

Prior to the field surveys, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2022). The CNDDB search was conducted on the USGS 7.5-minute Florin and Sacramento East topographic quadrangles, encompassing approximately 120+/-square miles surrounding the site (Attachment B). The United States Fish and Wildlife Service (USFWS) IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify special-status wildlife and plant species that have been previously documented in the vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts the locations of sensitive habitats. The USFWS on-line-maps of designated critical habitat in the area were also downloaded.

In addition to the database searches, we requested a map of "Land Cover Types", as defined in the South Sacramento Habitat Conservation Plan (SSHCP), from Sacramento County Office of Planning and Environmental Review, as well as a list of associated species. The County advised their mapping of the site was erroneous, as it was depicted as high density development rather than the open field that is present in the site (Attachment C). The County recommended ground-truthing to determine current land cover types. We concluded the site best falls under the "Valley Grassland" land cover type. All SSHCP covered species identified as having an association with the Valley Grassland land cover type in SSHCP Table 3-2 were included in our analysis.

A field survey was conducted by Moore Biological Consultants biologists Diane S. Moore, M.S. and Colleen A. Laskowski, M.S. on July 18, 2022. The survey consisted of walking throughout the small site making observations of habitat conditions and noting surrounding land uses, habitat types, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional

Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008) and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools). Trees near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The site was also searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy by burrowing owls.

#### Results

GENERAL SETTING: The 0.88+/-acre site is located is just north of Elk Grove, in Sacramento County, California (Figure 1). The site is within Section 3, in Township 7 North and Range 5 East of the USGS 7.5-minute Florin topographic quadrangle (Figure 2). The 0.88+/-acre site is level and is at an elevation of approximately 25 feet above mean sea level.

The site is a small infill parcel vegetated in ruderal grasses and weeds. There are several trees of varying sizes along the edges of the site (Figure 3 and photographs in Attachment D). The site has been subject to substantial human disturbance; portions have been recently burned and there is a high volume of trash within the site.

Surrounding land uses in this portion of Sacramento County are primarily residential and commercial. Gerber Roads borders the south edge of the site and Stockton Boulevard borders the west edge of the site. An apartment complex borders the north and east edges of the site.

VEGETATION: The project site has been subject to routine mowing and/or disking for weed abatement. Vegetation in the project site is comprised of primarily non-native annual grass and weed species. The "Valley Grassland" Landcover Type best describes the ruderal grassland vegetation in the site, encompassing 0.88 acres (Figure 4). Grasses including oats (*Avena* sp.), ripgut brome (*Bromus* 





diandrus), and foxtail barley (Hordeum murinum) are dominant grass species. Other grassland species such as field bindweed (Convolvulus arvensis), vetch (Vicia sp.), wild radish (Raphanus sativa), filaree (Erodium botrys), prickly lettuce (Lactuca serriola), and rose clover (Trifolium hirtum) are intermixed with the grasses. Table 1 is a list of plant species observed in the site.

There are several trees in the project site, all constrained to the edges of the site. There are several large pines (*Pinus sp.*) along the north and east edges of the site. There are also a few small ornamental trees and shrubs and a small live oak (*Quercus agrifolia*) in the southeast corner of the site. Trees along the west and south edges of the site include a small live oak and some ornamental varieties. Other trees in close proximity to the site are associated with residential subdivisions and road ways in the area; most of these trees are common species used for landscape purposes.

No blue elderberry (Sambucus nigra ssp. caerulea) shrubs were observed in or adjacent to the site.

WILDLIFE: Rock dove (*Columba livia*) and house sparrow (*Passer domesticus*) were the only birds observed in the site during the field survey. Other common bird species found in urban areas of Sacramento County likely occur in the site.

A very limited variety of mammals common to urban areas may occur in the project site and no mammals were observed in the site during the recent survey. Common species such as striped skunk (*Mephitis mephitis*), California ground squirrel (*Otospermophilus beecheyi*), black-tailed hare (*Lepus californicus*), raccoon (*Procyon lotor*), desert cottontail (*Sylvilagus audubonii*), and Virginia opossum (*Didelphis virginiana*) may occur in the site on occasion. However, the small size of the site in an infill setting completely surrounded by development, greatly reduces the likelihood that wildlife would wander on to the site due to barriers to movement, such as heavily trafficked roads.

TABLE 1
PLANT SPECIES OBSERVED IN THE PROJECT SITE

Avena fatua oat

Bromus diandrus ripgut brome
Bromus hordeaceus soft brome
Carduus pycnocephalus Italian thistle

Cichorium intybus common chicory
Convolvulus arvensis field bindweed
Cynodon dactylon Bermuda grass

Erodium botrys filaree

Hordeum murinum foxtail barley
Lactuca serriola prickly lettuce
Pinus sp. ornamental pine

Quercus agrifolia coast live oak
Raphanus sativa wild radish

Rubus armeniacus Himalayan blackberry

Trifolium hirtumrose cloverTriticum sp.bearded wheatVicia sativaspring vetch

Similarly, due to a lack of suitable habitat and the small size of the site surrounded by development, it is considered highly unlikely that amphibians or reptiles occur in the site. Common species such as western fence lizard (Sceloporus occidentalis) and western terrestrial garter snake (Thamnophis elegans) could conceivably occur in the site.

Most of the trees surrounding the site are suitable for nesting raptors or other protected migratory birds, including Swainson's hawk. There are also a few relatively large trees in close proximity to site that are potentially suitable. However, the site is extremely small and is in a heavily developed area, reducing the likelihood that any large raptor would nest or forage in the site. Smaller birds,

such as songbirds, could potentially nest within the grasslands in the body of the site and within small trees along the edges of the site.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Some jurisdictional waters of the U.S. also fall under the jurisdiction of CDFW and/or the California Regional Water Quality Control Board (RWQCB).

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as some of their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but may be regulated by RWQCB under the State Wetlands Program.

Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

No potentially jurisdictional Waters of the U.S. or wetlands were observed in the site. The site consists entirely of ruderal grassland vegetation that is highly disturbed. No other marshes, vernal pools, seasonal wetlands, ponds, creeks, lakes, or any other potentially jurisdictional Waters of the U.S. or wetlands were observed in the site.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The presence of species with legal protection under the Endangered Species Act often represents a constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2022). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is extremely low. Table 2 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Special-status plants identified in the CNDDB (2022) search include Peruvian dodder (*Cuscuta obtusiflora var. glandulosa*), dwarf downingia (*Downingia pusilla*), woolly rose mallow (*Hibiscus lasiocarpos var. occidentalis*), alkali-sink goldfields (*Lasthenia chrysantha*), legenere (*Legenere limosa*), Heckard's pepper-grass (*Lepidium latipes var. heckardii*), Sanford's arrowhead (*Sagittaria sanfordii*), and saline clover (*Trifolium hydrophilum*) (Table 2 and Attachment C).

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. The upland grasslands throughout the site are highly disturbed and do not provide suitable habitat for any of the plants in Table 2 or any other special-status plants.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is also very low. Special-status wildlife species that have been recorded in greater project vicinity in the CNDDB (2022) include Swainson's hawk, burrowing owl, tricolored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), ferruginous hawk (*Buteo regalis*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), song sparrow ("Modesto population") (*Melospiza melodia*), American badger (*Taxidea taxus*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), Central Valley steelhead (*Oncorhynchus mykiss*), Sacramento splittail

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
PLANTS							
Peruvian dodder	Cuscuta obtusiflora var. glandulosa	None	None	No	2	Freshwater marshes and swamps.	Unlikely: there is no marsh or swamp habitat in the site to support this species. The nearest occurrence of Peruvian dodder in the CNDDB (2022) search area is approximately 4.5 miles southwest of the site.
Dwarf downingia	Downingia pusilla	None	None	Yes	2	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of dwarf downingia in the CNDDB (2022) search area is approximately 5 miles southeast of the site. The site is not within the SSCHP Modeled Habitat of this species.
Woolly rose mallow	Hibiscus lasiocarpos var. occidentalis	None	None	No	2	Freshwater marshes and swamps.	Unlikely: there is no suitable marsh or swamp habitat in the site to support this species. The nearest occurrence of woolly rose mallow in the CNDDB (2022) search area is approximately 5.5 miles southwest of the site.
Alkali-sink goldfields	Lasthenia chrysantha	None	None	No	1B	Vernal pools.	Unlikely: there are no vernal pools in the site.  The nearest occurrence of alkali-sink goldfields in the CNDDB (2022) search area is approximately 8 miles southwest of the site.
Legenere	Legenere limosa	None	None	Yes	1B	Vernal pools.	Unlikely: there are no vernal pools in the site to support legenere. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 3.5 miles southeast of the project site. The site is not within the SSCHP Modeled Habitat of this species.

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SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
Heckard's pepper grass	Lepidium latipes var. heckardii	None	None	No	1B	Valley and foothill grassland, vernal pools; usually alkaline soils.	Unlikely: the on-site grasslands are highly disturbed and there are no vernal pools in the site. The nearest occurrence of Heckard's pepper-grass in the CNDDB (2022) search area is approximately 8 miles southwest of the site.
Sanford's arrowhead	Sagittaria sanfordii	None	None	Yes	1B	Standing or slow- moving freshwater ponds, marshes, and ditches.	Unlikely: there are no marshes, swamps, or ditches in the site. The nearest occurrence of this species in the CNDDB (2022) search area are a few records within ditches within a mile of the project site. The site is not within the SSCHP Modeled Habitat of this species.
Saline clover WILDLIFE	Trifolium hydrophilum	None	None	No	1B	Marshes and swamps, mesic (wet) areas in valley and foothill grassland, vernal pools.	Unlikely: the grasslands in the site are highly disturbed and there is no suitable aquatic habitat in the site. The nearest occurrence of saline clover in the CNDDB (2022) search area is approximately 6 miles southwest of the site.
Birds Western yellow- billed cuckoo	Coccyzus americanus occidentalis	Т	E	No	N/A	Nests in riparian forests along large river systems.	Unlikely: there is no suitable habitat in the site to support western yellow-billed cuckoo; there is no riparian forest habitat in or near the site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 7.5 miles southwest of the site.
Bank swallow	Riparia riparia	None	Т	No	N/A	Nests colonially in riparian habitats; requires vertical banks and cliffs with fine-textured soils.	Unlikely: there is no suitable habitat in the site to support bank swallow; there is no riparian habitat in or near the site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 7 miles northwest of the site.

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Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
Swainson's hawk	Buteo swainsoni	None	Т	Yes	N/A	Nesting: large trees, usually within riparian corridors. Foraging: agricultural fields and annual grasslands.	Unlikely: the site is small and surrounded by development, reducing the suitability of the site for Swainson's hawk nesting or foraging. No raptor stick nests were observed in trees in or adjacent to the site. The nearest occurrence of nesting Swainson's hawks in the CNDDB (2022) search area is approximately 1 mile west of the site. While the site is not within the SSCHP Modeled Habitat of this species, there is modeled habitat within 0.25 miles of the site.
Tricolored blackbird	Agelaius tricolor	None	Т	Yes	N/A	Requires open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: the site is small and surrounded by development, reducing the suitability of the site for tricolored blackbird. There is no nesting habitat for this species in the site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 2 miles southeast of the site. The site is not in or within 500 feet of the SSCHP Modeled Habitat of this species.
Greater sandhill crane	Grus canadensis tabida	None	Т	Yes	N/A	Associated with healthy wetland ecosystems; winters in Central Valley wetlands.	Unlikely: the site does not provide suitable habitat for this species. There are no occurrences of greater sandhill crane in the CNDDB (2022) search area and the site is not in or within 0.5 miles of the SSCHP Modeled Habitat of this species.
White-tailed kite	Elanus leucurus	None	FP	Yes	N/A	Herbaceous lowlands with variable tree growth and dense population of voles.	Unlikely: a few trees in the site and near the site may be suitable for nesting by white-tailed kite, but this raptor would not be expected to nest in a small site surrounded by development. The nearest occurrence of white-tailed kite in the CNDDB (2022) search area is approximately 2 miles southwest of the site. The site is not within the SSCHP Modeled Habitat of this species.

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
Burrowing owl	Athene cunicularia	None	SC	Yes	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: the site is small, surrounded by development, and did not contain burrow habitat. The nearest occurrence of nesting burrowing owls in the CNDDB (2022) search area is approximately 1.5 miles west of the site. The site is not within the SSCHP Modeled Habitat of this species.
Northern harrier	Circus cyaneus	None	SC	Yes	N/A	Nests in shrubby vegetation, usually at marsh edge; nests are built of a large mound of sticks in wet areas.	Unlikely: the grasslands in the site are highly disturbed and this species would likely not occur within a site surrounded by development; this species is also primarily found in marsh habitats in natural settings. There are no occurrences of northern harrier in the CNDDB (2022) search area. The site is not within the SSCHP Modeled Habitat of this species.
Loggerhead shrike	Lanius Iudovicianus	None	SC	Yes	N/A	Found in a variety of habitats; prefers open country for hunting with perches for scanning, and fairly dense shrubs and brush for nesting.	Unlikely: loggerhead shrike may fly over or forage in the site on occasion, but this species is likely not to nest or occur in such a small site surrounded by development. There are no occurrences of this species in the CNDDB (2022) search area. The site is not within the SSCHP Modeled Habitat of this species.
Yellow-headed blackbird	Xanthocephalus xanthocephaus	None	SC	No	N/A	Nests in freshwater emergent wetlands with dense vegetation and deep water; usually in lakes or ponds.	Unlikely: there is no nesting habitat for this species in or adjacent to the site. The nearest occurrence of yellow-headed blackbird in the CNDDB (2022) search area is approximately 5 miles southwest of the site.

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
Purple martin	Progne subia	None	SC	No	N/A	Woodlands, low- elevation coniferous forest.	Unlikely: there is no suitable habitat in the site to support purple martin; there is no woodland or forest habitat in or near the site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 5 miles northwest of the site.
Song sparrow ("Modesto" population)	Melospiza melodia	None	SC	No	N/A	Resident of brackish water marshes. Inhabits cattails, tules, and tangles bordering sloughs.	Unlikely: there is no suitable habitat in the site to support song sparrow. The nearest occurrence of song sparrow in the CNDDB (2022) search area is approximately 5 miles southwest of the site.
Ferruginous hawk	Buteo regalis	None	None	Yes	N/A	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	Unlikely: the grasslands in the site are highly disturbed and this species would likely not occur within a small site surrounded by development. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 3 miles southwest of the project site. The site is not within the SSCHP Modeled Habitat of this species.
<b>Mammals</b> Western red bat	Lasiurus blossevillii	None	SC	Yes	N/A	Roosts in forests and woodland areas from sea level up through mixed conifer forests; feeds over a wide variety of habitats including grasslands shrublands, open woodlands, forests and croplands.	Unlikely: there is no suitable roosting habitat in the site to support western red bat. This species may fly over or forage in the site on occasion. There are no occurrences of this species in the CNDDB (2022) search area. While the site is not within the SSCHP Modeled Habitat of this species, there is modeled habitat within 300 feet of the site.

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
American badger	Taxidea taxus	None	SC	Yes	N/A	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Unlikely: the site does not contain suitable habitat for American badger and no dens were observed in the site during the field surveys. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 3.5 miles northeast of the site. The site is not within the SSCHP Modeled Habitat of this species.
Reptiles & Am	phibians						
California tiger salamander	Ambystoma californiense	Т	Т	Yes	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) near grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable habitat in or near the site for California tiger salamander. This species is not recorded in the CNDDB (2022) within the search area and is not within designated critical habitat for California tiger salamander (USFWS, 2005b). The site is not within the SSCHP Modeled Habitat of this species.
Giant garter snake	Thamnophis gigas	Т	Т	Yes	N/A	Freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches.	Unlikely: the site does not contain suitable habitat for giant garter snake. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 3 miles southwest of the site. The site is not within the SSCHP Modeled Habitat of this species.
Western spadefoot	Spea hammondii	None	SC	Yes	N/A	Breeds and lays eggs in seasonal water bodies such as deep vernal pools and stock ponds.	Unlikely: there is no suitable habitat in the site to support this species; there are no aquatic features in or adjacent to the site. There are no occurrences of western spadefoot in the CNDDB (2022) search area. The site is not within the SSCHP Modeled Habitat of this species.

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site
Western pond turtle	Emys marmorata	None	SC	Yes	N/A	Ponds, marshes, streams, and ditches with adequate basking areas.	Unlikely: there is no aquatic habitat in or adjacent to the site. The nearest occurrence of this species in the CNDDB (2022) search area. The site is not within the SSCHP Modeled Habitat of this species.
Fish Central Valley steelhead	Oncorhynchus mykiss	Т	None	No	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: there is no aquatic habitat in the site. The nearest occurrence of Central Valley steelhead in the CNDDB (2022) search area is approximately 4.5 miles west of the site. The site is not within designated critical habitat for Central Valley steelhead (NOAA, 2005).
Delta smelt	Hypomesus transpacificus	Т	Т	No	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no aquatic habitat in the site. This species is not recorded in the CNDDB (2022) search area. The site is not in designated critical habitat for delta smelt (USFWS, 1994).
Green sturgeon	Acipenser medirostris	Т	None	No	N/A	Spawns in the large tributaries to the delta; delta important for rearing juveniles.	None: there is no aquatic habitat in the site. The nearest occurrence of green sturgeon in the CNDDB (2022) is approximately 4.5 miles southwest of the site. The site is not in designated critical habitat (NOAA, 2009).
Longfin smelt	Spirinchus thaleichthys	С	Т	No	N/A	Brackish estuarine habitats.	None: there is no aquatic habitat in the site to support longfin smelt. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 4.5 miles west of the project site.
Sacramento splittail	Pogonichthys macrolepidotus	None	SC	No	N/A	Lower Sacramento- San Joaquin Delta in low to moderate salinities.	None: there is no aquatic habitat in the site. The nearest occurrence of Sacramento splittail in the CNDDB (2022) search area is approximately 4.5 miles west of the site.

TABLE 2
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status <sup>1</sup>	State Status <sup>2</sup>	SSHCP Species <sup>3</sup>	CNPS List <sup>4</sup>	Habitat	Likelihood of Occurrence in the Site	
Invertebrates Vernal pool fairy shrimp	Branchinecta Iynchi	Т	None	Yes	N/A	Vernal pools.	None: there are no seasonal wetlands or vernal pools in the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDB (2022) search area is approximately 2.5 miles northwest of the site. The site is not in the SSCHP Modeled Habitat and is not in designated critical habitat for vernal pool fairy shrimp (USFWS 2005a).	
Vernal pool tadpole shrimp	Lepidurus packardi	Е	None	Yes	N/A	Vernal pools.	None: there are no vernal pools in the site. The nearest occurrence of this species in the CNDDB (2022) is approximately 1.5 mile east of the site. The site is not in the SSCHP Modeled Habitat and is not in designated critical habitat for vernal pool tadpole shrimp (USFWS 2005a).	
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus	Т	None	Yes	N/A	Elderberry shrubs, usually in Central Valley riparian habitats.	None: no blue elderberry shrubs were observed in or adjacent to the site. The nearest occurrence of valley elderberry longhorn beetle in the CNDDB (2022) search area is approximately 5.5 miles north of the site. The site is not within the SSCHP Modeled Habitat of this species.	
Monarch butterfly	Danaus plexippus	C	None	None	N/A	Variety of habitats in California; larvae dependent on milkweed.	Unlikely: monarch butterfly may fly over the site, but would not be expected to occur within the site. The grasslands in the site are highly disturbed and there are no milkweed plants in the site. There are no occurrences of this species in the CNDDB (2022) search area.	

<sup>&</sup>lt;sup>1</sup> T = Threatened; E = Endangered; C = Candidate for listing.

<sup>&</sup>lt;sup>2</sup> T = Threatened; E = Endangered; FP = Fully Protected; SC= State of California Species of Special Concern.

<sup>&</sup>lt;sup>3</sup> CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes species that are rare, threatened, or endangered in California, but more common elsewhere.

(Pogonichthys macrolepidotus), longfin smelt (Spirinchus thaleichthys), vernal pool fairy shrimp (Branchinecta lynchi), vernal pool tadpole shrimp (Lepidurus packardi), and valley elderberry longhorn beetle (Desmocerus californicus dimorphus). The USFWS IPaC Trust Report (Attachment C) includes several of the same species included in the CNDDB. Additionally, the USFWS IPaC Trust Resource Report includes California tiger salamander (Ambystoma californiense), delta smelt (Hypomesus transpacificus), and monarch butterfly (Danaus plexippus), which were added to Table 2.

Table 2 also includes a few wildlife species not identified in the CNDDB (2022) or in the IPaC Trust Resource Report. These additional species are identified as being associated with the Valley Grassland land cover type in the SSHCP (see Table 3-2 in Attachment E). The additional SSHCP "covered species" include northern harrier (*Circus cyaneus*), greater sandhill crane (*Grus canadensis tabida*), loggerhead shrike (*Lanius Iudovicianus*), western red bat (*Lasiurus blossevillii*), and western spadefoot (*Spea hammondii*).

While the project site may have provided habitat for one or more special-status wildlife species at some time in the past, development in this area has substantially modified natural habitats in the greater project vicinity, including those in the site. Due to the site being small and surrounded by heavily trafficked roads and development, the habitat quality in the site for special-status wildlife is minimal to none. None of the special-status wildlife species in Table 2 have much potential to occur in the site on more than a transitory or very occasional basis.

Special-status birds may fly over the area on occasion, but none would be expected to use on-site habitats on more than an occasional or transitory basis, primarily due to lack of habitat. The foraging value of the grasslands in the site is extremely poor due to its small size and high level of development surrounding the site. Special-status birds such as Swainson's hawk, white-tailed kite, and loggerhead shrike would likely not nest in the large trees in the site due to a lack of high-quality foraging habitat both in the site and nearby. Burrowing owls are

not expected to occur on-site due to an absence of nesting habitat; no ground squirrel burrows were observed in the site.

A majority of the other special-status birds identified including tricolored blackbird, Greater sandhill crane, northern harrier, yellow-headed blackbird, western yellow-billed cuckoo, bank swallow, and song sparrow are associated with riparian or aquatic habitats, not found within or immediately adjacent to the site. The remaining birds, purple martin and ferruginous hawk, are associated with specialized habitats such as woodlands and forested areas, not present within the site. A variety of common songbirds known to nest in urban environments may nest in the trees in the site on an occasional basis.

The site does not provide suitable denning habitat for American badger and there is no roosting habitat in the site to support western red bat. Western red bat and other common bat species may fly over or forage in the site on occasion. The site does not provide suitable aquatic habitat for any species of fish, California tiger salamander, giant garter snake, western pond turtle, or western spadefoot.

There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. There are no vernal pools in the project site to support vernal pool tadpole shrimp or vernal pool fairy shrimp. Monarch butterfly may fly over the site during its migration period, but would not be expected to utilize the site in a meaningful capacity; no milkweed plants were observed in the highly disturbed grassland in the site and this species is more associated with coastal environments.

CRITICAL HABITAT: The site is not within designated critical habitat for federally listed vernal pool shrimp or plants (USFWS, 2005a), California tiger salamander (USFWS, 2005b), delta smelt (USFWS, 1994), valley elderberry longhorn beetle (USFWS, 1980), Central Valley steelhead (NOAA, 2005), or any other federally listed species (Attachment F).

SSHCP AVOIDANCE AND MINIMIZATION MEASURES: Based on Landcover Types in the site, there are several SSHCP Avoidance and Minimization Measures (AMMs) applicable to the project (Attachment E). First, Therefore, standard SSHCP Construction Best Management Practices and General Covered Species Take AMMs appear applicable to the project. The site is not within the modeled habitat for any of the species identified in the SSHCP within the landcover type (Valley Grassland). However, the site is within 0.25 miles of Swainson's hawk modeled habitat and within 300 feet of modeled habitat for western red bat. Therefore, species-specific AMMs for Swainson's hawk, nesting raptors, and western red bat are also applicable for the site.

#### **Conclusions and Recommendations**

- The site is a small, open field supporting highly disturbed grassland vegetation that is biologically unremarkable. There are a few trees of varying sizes surrounding the site.
- No potential jurisdictional Waters of the U.S. or wetlands of any type were observed in the project site.
- Due to a lack of suitable habitat, no special-status plants are expected to occur in the site.
- Due to size of the site, surrounding land uses, and a lack of suitable habitat, no wildlife species are expected to occur in the body of the site on more than a very occasional or transitory basis. The site is small, surrounded by development, and highly disturbed from human presence (fire and trash). Common bird species may nest in the site on occasion, but no special-status birds are expected to nest in or immediately adjacent to the site.

- The site is not within designated critical habitat for any federally listed species.
- Standard SSHCP Construction Best Management Practices, and General Covered Species Take AMMs appear applicable to site.
   Species-species AMMs for Swainson's hawk, nesting raptors, and western red bat are also applicable to the project.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.

**Principal Biologist** 

### **References and Literature Consulted**

ACOE (U.S. Army Corps of Engineers). 1987. Technical Report Y87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MI.

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USFWS. 2006a. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for California Red-Legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities, Final Rule. Federal Register Vol. 71, No. 71, April 13.

Attachment A

Architectural Rendering &

Site Plan



M. HIGGINBOTHAM ARCHITECT LICENSE NO. C-36401 11584 FRANCIS DRIVE GRASS VALLEY, CA 95949 (530) 263-5899 MelH.Architect@gmail.com

A PROJECT FOR: IMPERIAL REAL ESTATE, LLC. 5453 COSUMNES DR STOCKTON, CA 95219

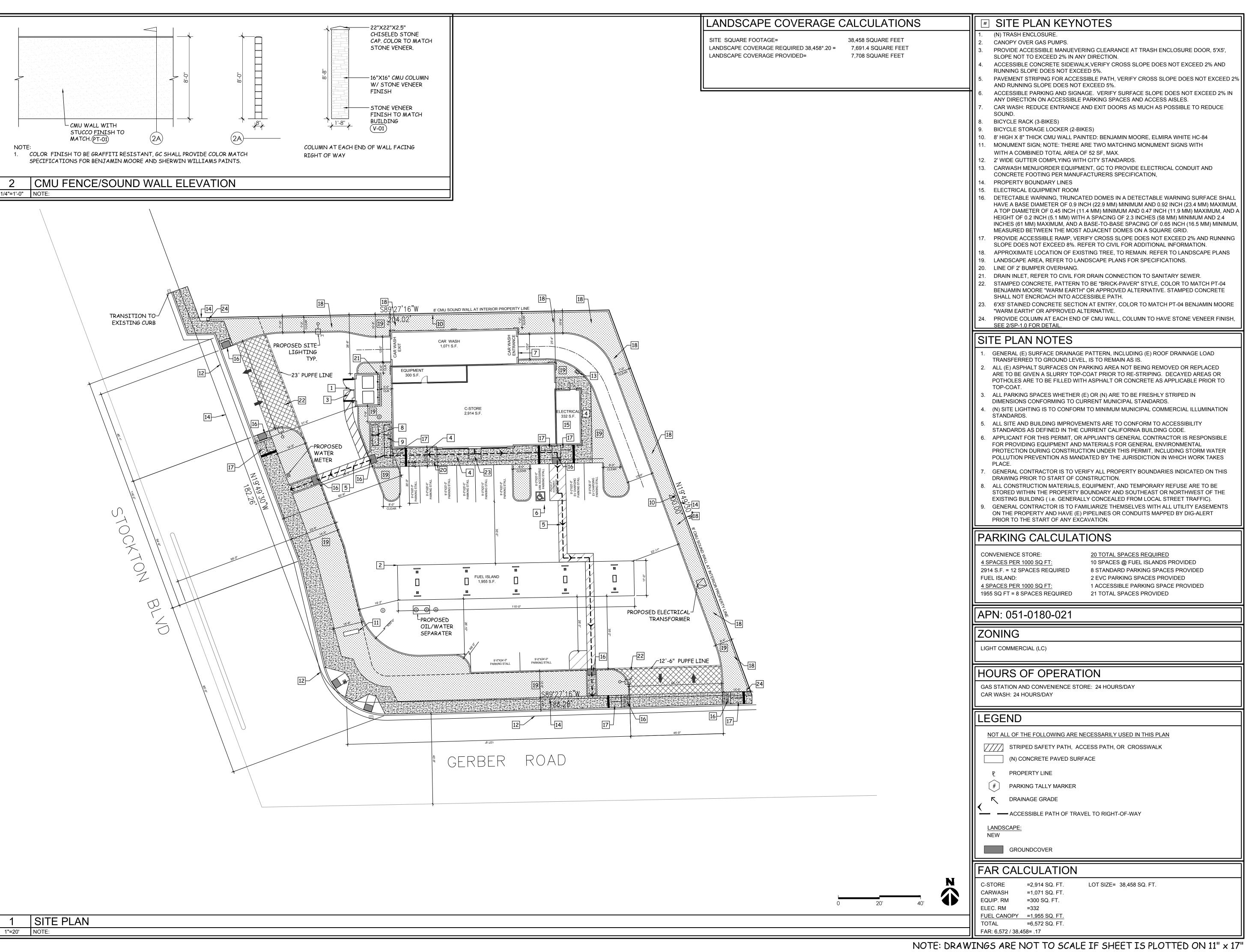
CONTACT: SANDEEP DHANDA PHONE: (209) 518-3496 EMAIL: sandeepdhanda@yahoo.com



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	ט כל		SCALE		DRAWN	CKD	APPN	) -
	DATE	03/23/22						
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COLOR RENDNG - SW BDSEYE PERSP ANGLE SW BIRDSEYE

T-2.3



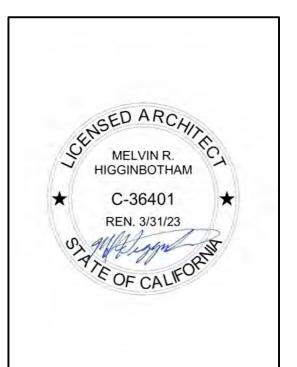
M. HIGGINBOTHAM ARCHITECT LICENSE NO. C-36401

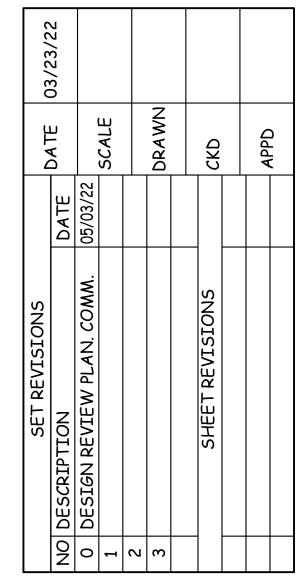
DESIGN SERVICES

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7599 STOCKTON BLVD. AT GERBER SACRAMENTO, CA	SITE PLAN	
7599 STC	SITE PLA	

SP-1.0

Attachment B

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Report



### **Selected Elements by Scientific Name**

# California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria: Quad<span style='color:Red'> IS </span>(Sacramento East (3812154)<span style='color:Red'> OR </span>Florin (3812144))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Species Accipiter cooperii	ABNKC12040	None	None	G5	State Kalik S4	WL
Cooper's hawk	7.BINITO 12040	140110	140110	<b>G</b> 0	04	***
Acipenser medirostris pop. 1	AFCAA01031	Threatened	None	G2T1	S1	
green sturgeon - southern DPS						
Agelaius tricolor	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
tricolored blackbird						
Ardea alba	ABNGA04040	None	None	G5	S4	
great egret						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Branchinecta mesovallensis	ICBRA03150	None	None	G2	S2S3	
midvalley fairy shrimp						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S3	
Swainson's hawk						
Coccyzus americanus occidentalis	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
western yellow-billed cuckoo						
Cuscuta obtusiflora var. glandulosa	PDCUS01111	None	None	G5T4?	SH	2B.2
Peruvian dodder						
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2T3	S3	
Downingia pusilla	PDCAM060C0	None	None	GU	S2	2B.2
dwarf downingia						
Elanus leucurus	ABNKC06010	None	None	G5	S3S4	FP
white-tailed kite						
Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Elderberry Savanna						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Falco columbarius	ABNKD06030	None	None	G5	S3S4	WL
merlin					0.00	
Gonidea angulata	IMBIV19010	None	None	G3	S1S2	
western ridged mussel	<b></b>			0.573	00	4D.C
Hibiscus lasiocarpos var. occidentalis	PDMAL0H0R3	None	None	G5T3	S3	1B.2
woolly rose-mallow						



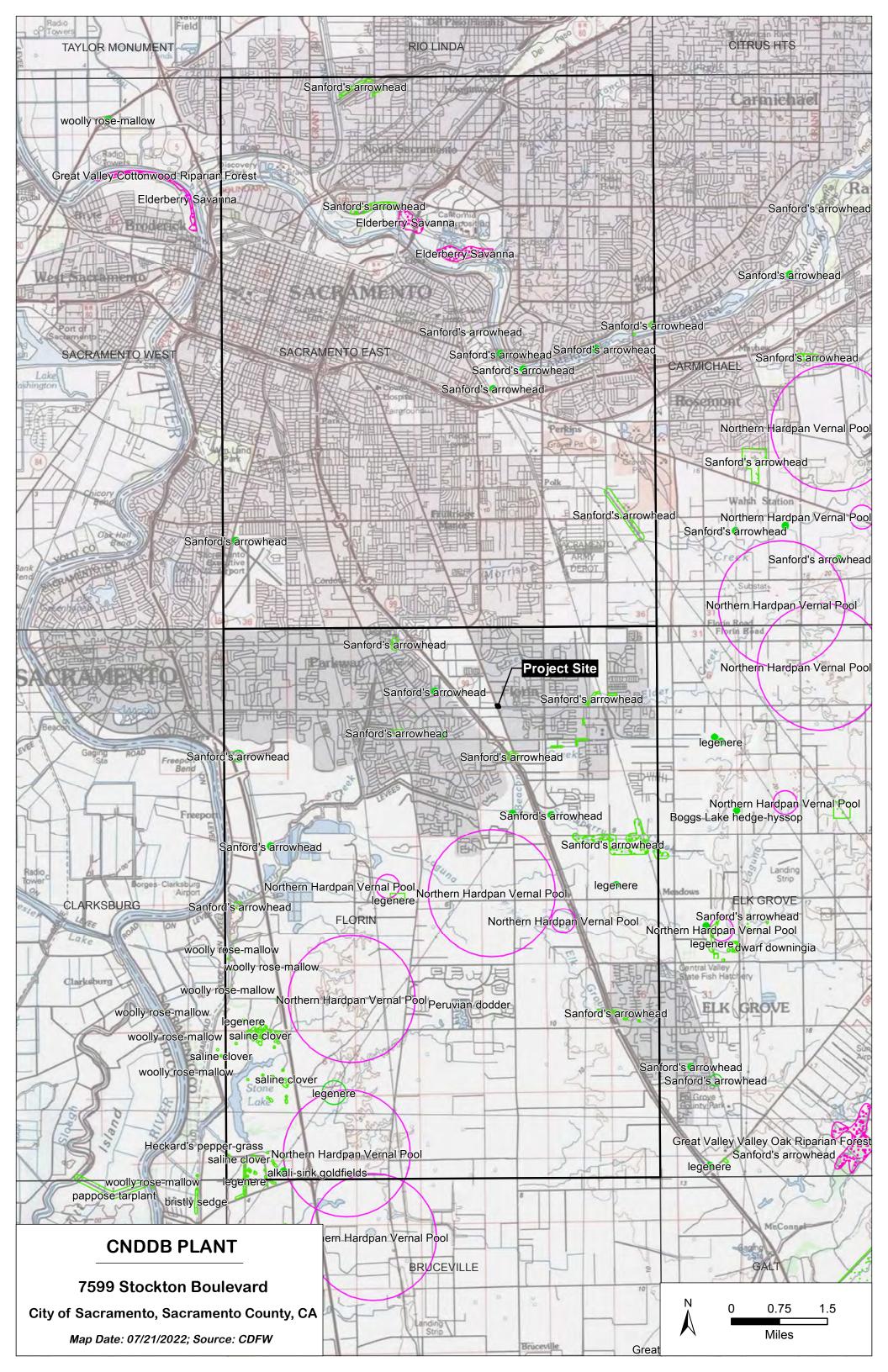
## **Selected Elements by Scientific Name**

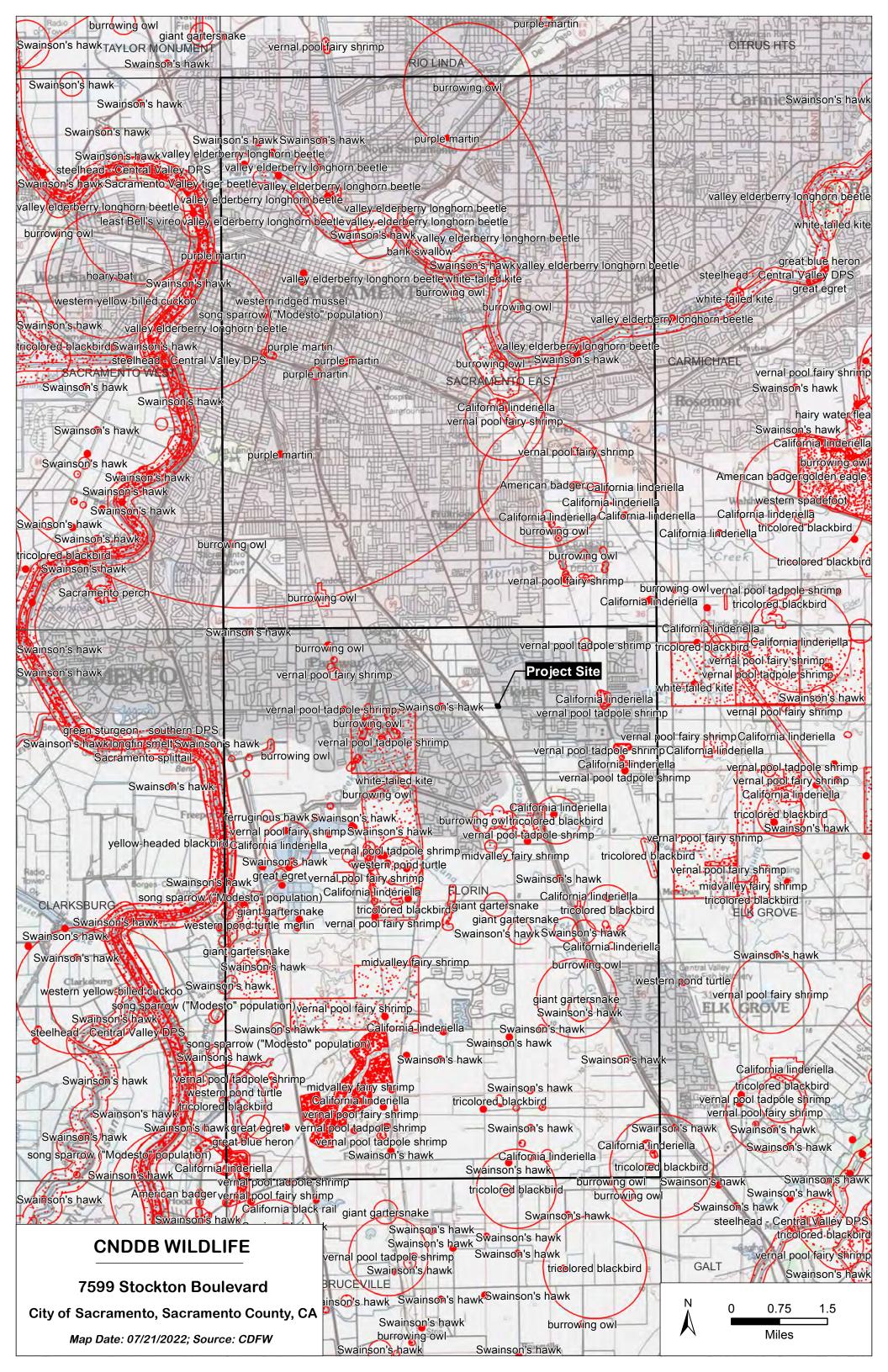
# California Department of Fish and Wildlife California Natural Diversity Database



Charica	Flamont Codo	Fodoval Status	State Status	Clahal Bank	State Denk	Rare Plant Rank/CDFW
Species Lasthenia chrysantha	PDAST5L030	None Federal Status	None	Global Rank G2	State Rank	1B.1
alkali-sink goldfields	1 0/10102000	None	None	02	02	10.1
Legenere limosa	PDCAM0C010	None	None	G2	S2	1B.1
legenere	1 20/11/100010	140110	140.10	<u> </u>	02	15.1
Lepidium latipes var. heckardii	PDBRA1M0K1	None	None	G4T1	S1	1B.2
Heckard's pepper-grass						
Lepidurus packardi	ICBRA10010	Endangered	None	G4	S3S4	
vernal pool tadpole shrimp		-				
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Melospiza melodia pop. 1	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
song sparrow ("Modesto" population)						
Nannopterum auritum	ABNFD01020	None	None	G5	S4	WL
double-crested cormorant						
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
Nycticorax nycticorax	ABNGA11010	None	None	G5	S4	
black-crowned night heron						
Oncorhynchus mykiss irideus pop. 11	AFCHA0209K	Threatened	None	G5T2Q	S2	
steelhead - Central Valley DPS						
Pogonichthys macrolepidotus	AFCJB34020	None	None	G3	S3	SSC
Sacramento splittail						
Progne subis	ABPAU01010	None	None	G5	S3	SSC
purple martin						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Sagittaria sanfordii	PMALI040Q0	None	None	G3	S3	1B.2
Sanford's arrowhead						
Spirinchus thaleichthys	AFCHB03010	Candidate	Threatened	G5	S1	
longfin smelt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Thamnophis gigas	ARADB36150	Threatened	Threatened	G2	S2	
giant gartersnake						
Trifolium hydrophilum	PDFAB400R5	None	None	G2	S2	1B.2
saline clover						
Xanthocephalus xanthocephalus	ABPBXB3010	None	None	G5	S3	SSC
yellow-headed blackbird						

Record Count: 39



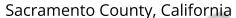


## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location





## Local office

Sacramento Fish And Wildlife Office

**(**916) 414-6600

**(916)** 414-6713

OT FOR CONSULTATION

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

## Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

# Reptiles

NAME STATUS

Giant Garter Snake Thamnophis gigas

**Threatened** 

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/4482

# **Amphibians**

NAME STATUS

California Tiger Salamander Ambystoma californiense

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/2076

**Threatened** 

## **Fishes**

NAME STATUS

Delta Smelt Hypomesus transpacificus

**Threatened** 

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

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

# Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/9743

Valley Elderberry Longhorn Beetle Desmocerus californicus

**Threatened** 

dimorphus

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/7850

# Crustaceans

NAME STATUS

Vernal Pool Fairy Shrimp Branchinecta lynchi

**Threatened** 

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi

**Endangered** 

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/2246

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <a href="https://www.fws.gov/program/migratory-birds/species">https://www.fws.gov/program/migratory-birds/species</a>
- Measures for avoiding and minimizing impacts to birds
   <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>
- Nationwide conservation measures for birds
   <u>https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</u>

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS
INDICATED FOR A BIRD ON
YOUR LIST, THE BIRD MAY
BREED IN YOUR PROJECT AREA
SOMETIME WITHIN THE
TIMEFRAME SPECIFIED, WHICH
IS A VERY LIBERAL ESTIMATE OF
THE DATES INSIDE WHICH THE
BIRD BREEDS ACROSS ITS
ENTIRE RANGE. "BREEDS
ELSEWHERE" INDICATES THAT
THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT
AREA.)

### Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Jan 1 to Aug 31

https://ecos.fws.gov/ecp/species/1626

### Black Tern Chlidonias niger

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093

Breeds May 15 to Aug 20

#### Clark's Grebe Aechmophorus clarkii

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

#### Common Yellowthroat Geothlypis trichas sinuosa

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a>

Breeds May 20 to Jul 31

#### Golden Eagle Aquila chrysaetos

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Jan 1 to Aug 31

#### Lawrence's Goldfinch Carduelis lawrencei

https://ecos.fws.gov/ecp/species/1680

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 20 to Sep 20

https://ecos.fws.gov/ecp/species/9464

#### Long-eared Owl asio otus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a>

Breeds Mar 1 to Jul 15

#### Marbled Godwit Limosa fedoa

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a>

Breeds elsewhere

### Nuttall's Woodpecker Picoides nuttallii

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a>

Breeds Apr 1 to Jul 20

#### Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a>

Breeds Mar 15 to Jul 15

### Olive-sided Flycatcher Contopus cooperi

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>

Breeds May 20 to Aug 31

#### Short-billed Dowitcher Limnodromus griseus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>

Breeds elsewhere

#### Tricolored Blackbird Agelaius tricolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3910">https://ecos.fws.gov/ecp/species/3910</a>

Breeds Mar 15 to Aug 10

#### Willet Tringa semipalmata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

#### Wrentit Chamaea fasciata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

#### Yellow-billed Magpie Pica nuttalli

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9726">https://ecos.fws.gov/ecp/species/9726</a>

Breeds Apr 1 to Jul 31

# **Probability of Presence Summary**

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and

understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

#### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (-)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

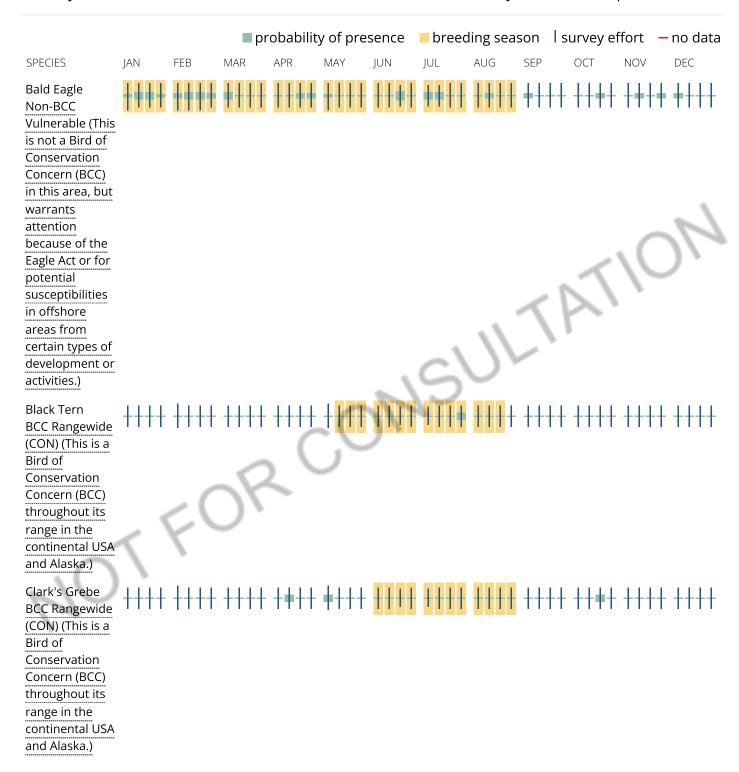
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

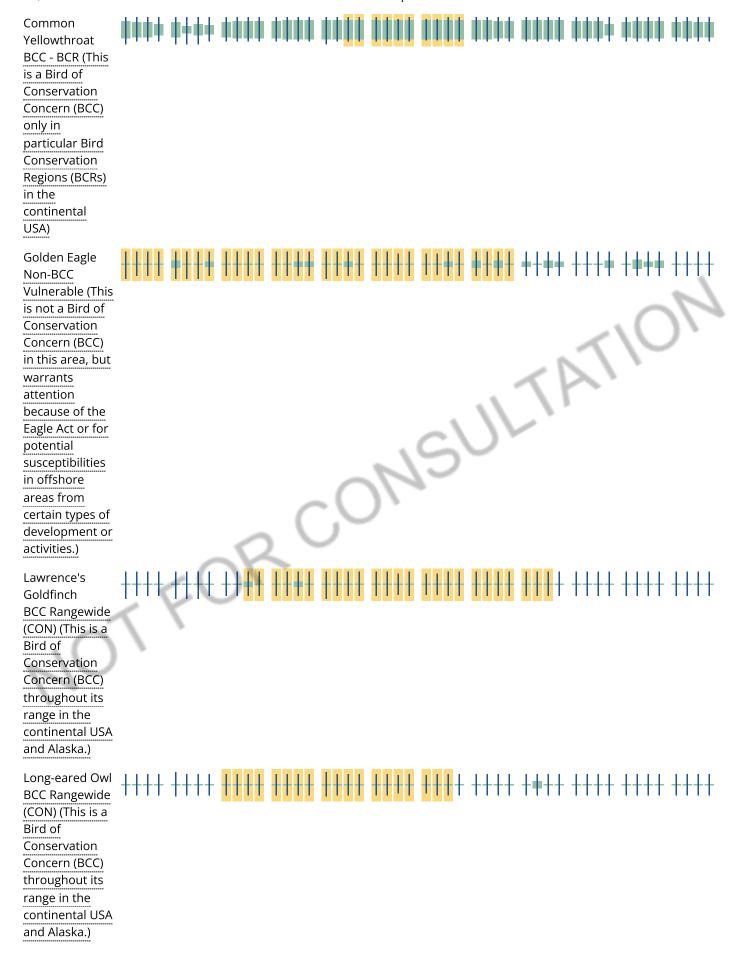
#### No Data (-)

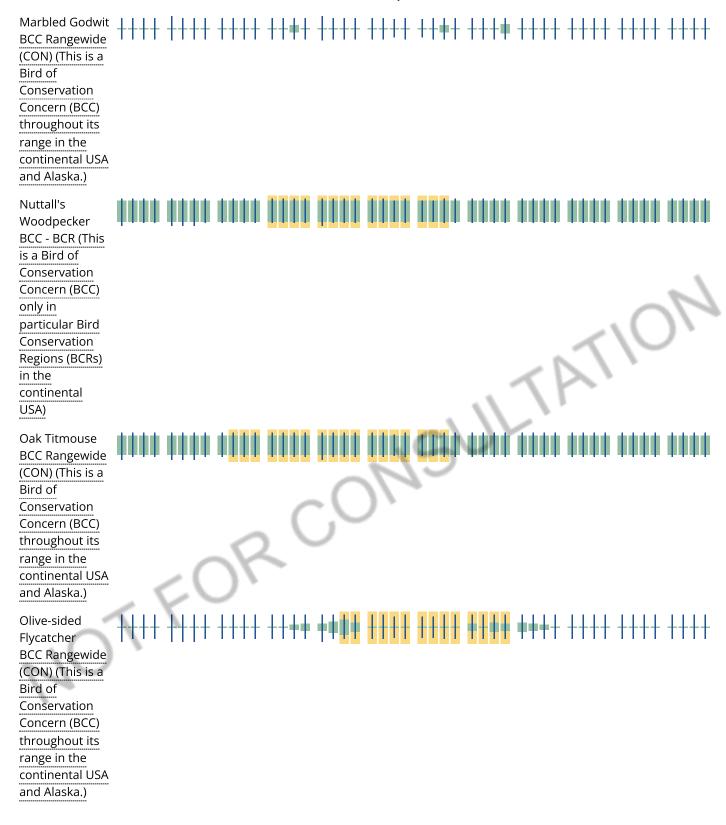
A week is marked as having no data if there were no survey events for that week.

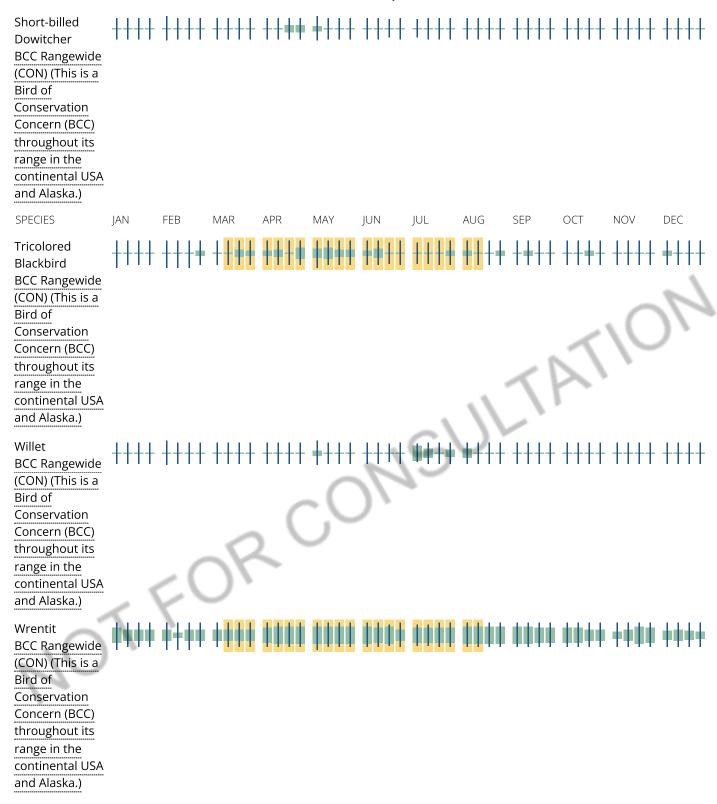
### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

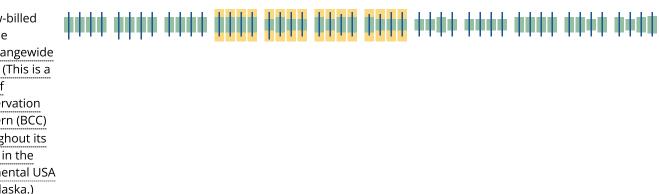












#### Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

#### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is gueried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local <a href="Ecological Services Field Office">Ecological Services Field Office</a> or visit the <a href="CBRA">CBRA</a>
Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

#### **Data limitations**

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the <u>official CBRS maps</u>. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <a href="https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation">https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation</a>

#### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

# **Facilities**

# National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

**RIVERINE** 

Riverine

A full description for each wetland code can be found at the <u>National Wetlands Inventory</u> website

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A

margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

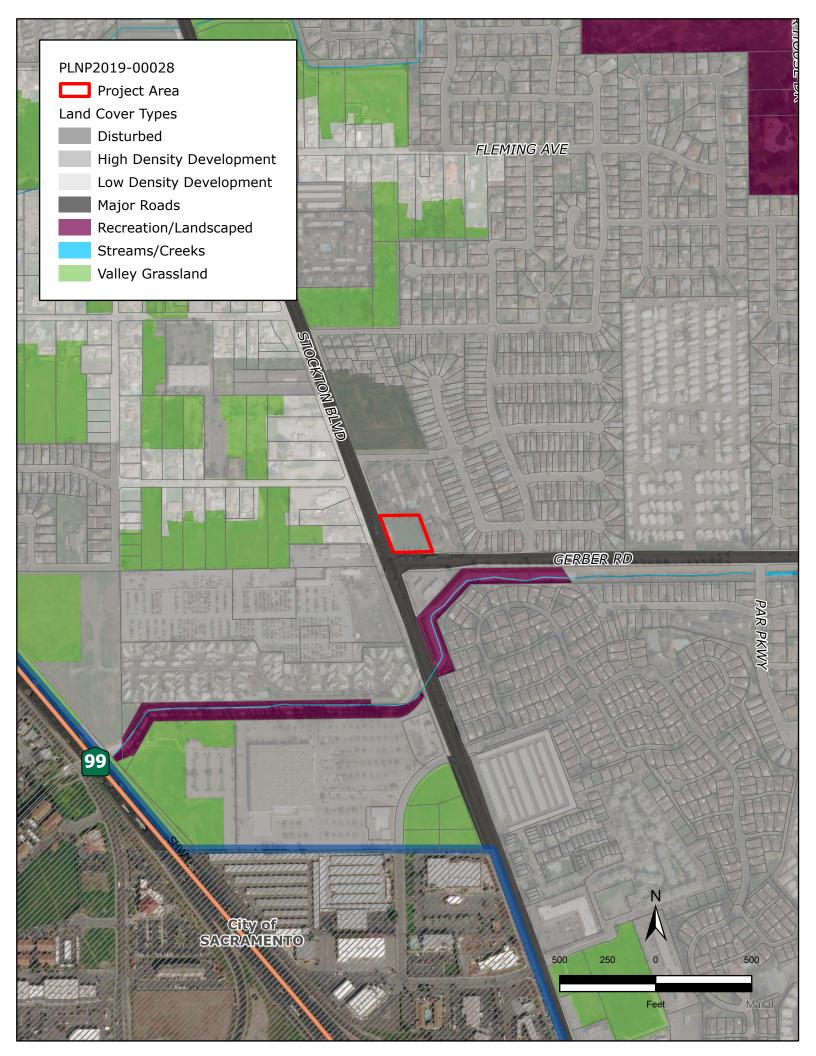
#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment C

South Sacramento HCP Land Cover

Type Maps





Independent verification of all data contained on this map product should be obtained by any user thereof. The County of Sacramento does not warrant the accuracy or completeness of this map product and therefore disclaims all liability for its fitness of use.

Attachment D

Photographs



Open grassland in the body of the site, looking southwest from the northeast corner of the site; 07/18/22. There was an apparent fire in the site recently.



Grassland in the body of the site, looking northeast from the southwest corner of the site; 07/18/22.



East edge of the site, looking north from the southeast corner of the site; 07/18/22. There are large pine trees along the east and north edge of the site.



Grassland in the body of the site, looking west from the east edge of the site; 07/18/22.



North edge of the site, looking west from the northeast corner of the site; 07/18/22. There are six large pine trees along the north edge of the site.



West edge of the site, looking south along Stockton Boulevard from the northwest corner of the site; 07/18/22.

Attachment E

South Sacramento HCP Land

Cover/Species Matrix &

Applicable South Sacramento HCP

**Avoidance and Minimization Measures** 

Table 3-2 SSHCP Covered Species/SSHCP Land Cover Relationships

				Terrestr	ial Land Cov	er Types			Aquatic Land Cover Types									
SSHCP Natural Land Covers								Irrigated	Mine Tailing	Mixed	Mixed							Stream/
		Valley	Blue Oak	Blue Oak				Pasture	Riparian	Riparian	Riparian		Seasonal		Freshwater	Open	Stream/	Creek
Covered Species	Habitat Use	Grassland	Woodland	Savanna	Cropland	Vineyard	Orchard	Grassland	Woodland	Woodland	Scrub	Vernal Pool	Wetland	Swale	Marsh	Water	Creek	(VPIH)
Ahart's Dwarf Rush	Entire Lifecycle <sup>1</sup>											Х		Х				
Boggs Lake Hedge-Hyssop	Entire Lifecycle <sup>2</sup>											Х	Х					
Dwarf Downingia	Entire Lifecycle <sup>3</sup>											Х		Х				
Legenere	Entire Lifecycle <sup>4,5</sup>											Xi	Xii					
Pincushion Navarretia	Entire Lifecycle <sup>6</sup>											Х		Х				
Sacramento Orcutt Grass	Entire Lifecycle <sup>7</sup>											Х						
Slender Orcutt Grass	Entire Lifecycle8											Х						
Sanford's Arrowhead	Entire Lifecycle9												Х		Х	Х	Х	
Mid-Valley Fairy Shrimp	Entire Lifecycle <sup>10</sup>											Х		Χ				
Ricksecker's Water Scavenger Beetle	Entire Lifecycle <sup>11</sup>											Х		Χ				
Valley Elderberry Longhorn Beetle	Entire Lifecycle <sup>12</sup>								Х	Χ	Х							
Vernal Pool Fairy Shrimp	Entire Lifecycle <sup>13</sup>											Х		Х				Х
Vernal Pool Tadpole Shrimp	Entire Lifecycle <sup>14</sup>											Х		Χ				Х
California Tiger Salamander	Aquatic <sup>15</sup>											Х	Х					
	Upland <sup>16</sup>	Х	Х	Х														
Western Spadefoot	Aquatic <sup>17</sup>											Х	Х	Х		Х	X <sup>iii</sup>	
	Upland <sup>18</sup>	Х	Х	Х														
Giant Gartersnake	Aquatic <sup>19</sup>				Xiv								Х		Х	Х	Х	
	Upland <sup>20</sup>	Х									Х							
Western Pond Turtle	Aquatic <sup>21</sup>														Х	Х	Х	
	Upland <sup>22</sup>	Χ	Х	Х					Х	Χ	Х							
Cooper's Hawk	Foraging <sup>23</sup>		Х	Х					Х	Χ	Х							
	Nesting <sup>24</sup>		Х						Х	Χ	Х							
Ferruginous Hawk	Foraging <sup>25</sup>	Χ						Х				Х	Х	Χ				
Greater Sandhill Crane	Foraging <sup>26</sup>	Χ			Х			Х					Х		Х			
	Roosting <sup>27</sup>											Х	Х		Х			
Loggerhead Shrike	Foraging <sup>28</sup>	Х			Х			Х				Х	Х	Х				
	Nesting <sup>29</sup>	Х							Х		Х							
Northern Harrier	Foraging <sup>30</sup>	Х			Х			Х				Х	Х	Х	Х			
	Nesting <sup>31</sup>	Х			Х			Х										
Swainson's Hawk	Foraging <sup>32</sup>	Х			Х			Х				Х	Х	Х				
	Nesting <sup>33</sup>									Х	Х							
Tricolored Blackbird	Foraging <sup>34</sup>	Х			Х			X				Х	Х	Х	Х	Х		
	Nesting <sup>35</sup>	Х			Х								Х		Х			
Western Burrowing Owl	Wintering <sup>36</sup>	Х		Х	Х			Х				Х	Х	Х				Х
	Nesting <sup>37</sup>				Х			Х										



Table 3-2 SSHCP Covered Species/SSHCP Land Cover Relationships

SSHCP Natural Land Covers		Terrestrial Land Cover Types							Aquatic Land Cover Types									
								Irrigated	Mine Tailing	Mixed	Mixed							Stream/
		Valley		Blue Oak				Pasture	Riparian	Riparian	Riparian		Seasonal		Freshwater	Open	Stream/	Creek
Covered Species	Habitat Use	Grassland	Woodland	Savanna	Cropland	Vineyard	Orchard	Grassland	Woodland	Woodland	Scrub	Vernal Pool	Wetland	Swale	Marsh	Water	Creek	(VPIH)
White-Tailed Kite	Foraging <sup>38</sup>	Χ		Х	Χ			Х			Х	X	Χ	Χ				
	Nesting <sup>39</sup>		Х						X	Х	Х							
American Badger	Entire Lifecycle <sup>40</sup>	Х		Х								Х	Х	Χ				
Western Red Bat	Foraging <sup>41</sup>	Х	Х	Х			Х		Х	Х	Х	Х	Х	Χ	Х	Х	Х	
	Roosting <sup>42</sup>		Х	Х			Х		Х	Х								

#### VPIH = Vernal Pool Invertebrate Habitat

- Ahart's Dwarf Rush Dittes & Guardino Consulting, as cited in SSHCP Appendix B
- Boggs Lake Hedge-Hyssop Dittes & Guardino Consulting, as cited in SSHCP Appendix B; CNPS 2001
- Dwarf Downingia Dittes & Guardino Consulting, as cited in SSHCP Appendix B; CDFG 2002
- Legenere Dittes & Guardino Consulting, as cited in SSHCP Appendix B; Holland 1986
- Legenere Dittes & Guardino Consulting, as cited in SSHCP Appendix B; CDFG 2002
- <sup>6</sup> Pincushion Navarretia Dittes & Guardino Consulting, as cited in SSHCP Appendix B
- Sacramento Orcutt Grass Dittes & Guardino Consulting, as cited in SSHCP Appendix B8 Slender Orcutt Grass Dittes & Guardino Consulting, as cited in SSHCP Appendix B
- Sanford's Arrowhead Dittes & Guardino Consulting, as cited in SSHCP Appendix B<sup>10</sup> Mid-Valley Fairy Shrimp D.C. Rodgers, as cited in SSHCP Appendix B
- Ricksecker's Hydrochara D.C. Rodgers, as cited in SSHCP Appendix B
- Valley Elderberry Longhorn Beetle D.C. Rogers, as cited in SSHCP Appendix B; Barr 1991; Collinge et al. 2001; Eng 1984; Linsley & Chemsak 1972, 1997; USFWS 1999a
- Vernal Pool Fairy Shrimp D.C. Rodgers, as cited in SSHCP Appendix B
- Vernal Pool Tadpole Shrimp D.C. Rodgers, as cited in SSHCP Appendix B15 California Tiger Salamander Jamison Watts, as cited in SSHCP Appendix B; Bobzien 2003; CNDDB 2003; Jennings and Hayes 1994; Petranka 1998; Shaffer et al. 1993; Stebbins 1989, 2003; USFWS 2004a
- California Tiger Salamander Jamison Watts, as cited in SSHCP Appendix B; Bobzien 2003; CNDDB 2003; Jennings and Hayes 1994; Petranka 1998; Shaffer et al. 1993; Stebbins 1989, 2003; USFWS 2004a
- Western Spadefoot Toad Jamison Watts, as cited in SSHCP Appendix B; CNDDB 2004
- Western Spadefoot Toad Jamison Watts, as cited in SSHCP Appendix B; Stebbins 2003
- 19 Giant Garter Snake Jamison Watts, as cited in SSHCP Appendix B; Hansen 1988; USFWS 1999b
- Hansen 1988: Rice fields provide suitable foraging habitat for giant gartersnake within the Plan Area.
- <sup>21</sup> Western Pond Turtle Jamison Watts, as cited in SSHCP Appendix B; Boyer 1965; Holland 1994; Reese and Welsh 1998a
- Western Pond Turtle Jamison Watts, as cited in SSHCP Appendix B; Holland 1994
- <sup>23</sup> Cooper's Hawk Steve Henderson, as cited in SSHCP Appendix B
- <sup>24</sup> Cooper's Hawk Steve Henderson, as cited in SSHCP Appendix B; Asay 1987
- <sup>25</sup> Ferruginous Hawk Todd Sloat, as cited in SSHCP Appendix B<sup>26</sup> Greater Sandhill Crane Todd Sloat, as cited in SSHCP Appendix B; Ivey and Herziger 2003; Littlefield and Ivey 2000
- <sup>27</sup> Greater Sandhill Crane Todd Sloat, as cited in SSHCP Appendix B; Littlefield and Ivey 2000
- 28 Loggerhead Shrike Steve Henderson, as cited in SSHCP Appendix B; Cade and Woods 1997; Yosef 1996
- 29 Loggerhead Shrike Steve Henderson, as cited in SSHCP Appendix B; Cade and Woods 1997; Yosef 1996
- Northern Harrier Steve Henderson, as cited in SSHCP Appendix B; California Partners in Flight 2000
- Northern Harrier Steve Henderson, as cited in SSHCP Appendix B; California Partners in Flight 2000
- Swainson's Hawk Waldo Holt, as cited in SSHCP Appendix B; Estep 1989; Swolgaard 2004
- 33 Swainson's Hawk Waldo Holt, as cited in SSHCP Appendix B; Bloom 1980; Schlorff and Bloom 1984; Estep 1989
- Tricolored Blackbird Todd Sloat, as cited in SSHCP Appendix B: Beedy and Hamilton 1997; DeHaven 2000
- Tricolored Blackbird Todd Sloat, as cited in SSHCP Appendix B; Beedy and Hamilton 1997, 1999; DeHaven et al. 1975; Hamilton et al. 1995; Neff 1937
- Western Burrowing Owl Steve Henderson, as cited in SSHCP Appendix B; Butts 1973; Coulombe 1971; Rosenberg et al. 1998
- western Burrowing Owl Steve Henderson, as cited in SSHCP Appendix B, Butts 1973, Coulombe 1971; Rosenberg et al. 1998

  Western Burrowing Owl Steve Henderson, as cited in SSHCP Appendix B; Butts 1973; Coulombe 1971; Rosenberg et al. 1998
- White-tailed Kite Todd Sloat, as cited in SSHCP Appendix B; Dunk 1995; Erichsen et al. 1994
- White-tailed Kite Todd Sloat, as cited in SSHCP Appendix B; CNDDB 2004; Dixon et al. 1957; Erichsen 1996; Hawbecker 1942; Pickwell 1930
- <sup>40</sup> American Badger Steve Henderson, as cited in SSHCP Appendix B; Williams 1986
- Western Red Bat Heather Johnson, as cited in SSHCP Appendix B; Pierson et al. 1999, 2002
- Western Red Bat Heather Johnson, as cited in SSHCP Appendix B; Harvey et al. 1999; Pierson et al. 1999; WBWG 1998



3-28 February 2018

#### Attachment E

# Applicable SSHCP Avoidance and Minimization Measures 7599 Stockton Boulevard

- **BMP-1** (Construction Fencing): Orange construction fencing will be installed to ensure that ground disturbance does not extend beyond the allowed construction footprint (i.e., the limit of project construction plus equipment staging areas and access roads). Plan Permittees and Third-Party Project Proponents implementing ground- disturbing Covered Activities will mark the outer boundary of any Preserve Setback or Stream Setback adjacent to or within the project site with orange construction fencing prior to ground disturbance. This fencing will remain in place until project completion, as identified by the Plan Permittee.
- BMP-2 (Erosion Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will install temporary control measures for sediment, stormwater, and pollutant runoff as required by the Plan Permittee to protect water quality and species habitat. Silt fencing or other appropriate sediment control device(s) will be installed downslope of any Covered Activity that disturbs soils. Fiber rolls and seed mixtures used for erosion control will be certified as free of viable noxious weed seed. As discussed in Section 5.4.2, Covered Species Take Avoidance and Minimization Measures, erosion controls installed in or adjacent to Plan Area modeled habitat for giant gartersnake (*Thamnophis gigas*), western pond turtle (*Actinemys marmorata*), California tiger salamander (*California tiger salamander*), or western spadefoot (see Chapter 3) must be of appropriate design and materials that will not entrap the species (e.g., not contain mesh netting). Regular monitoring and maintenance of the project's erosion control measures will be conducted until project completion to ensure effective operation of erosion control measures.
- BMP-3 (Equipment Storage and Fueling): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will ensure that equipment storage and staging will occur in the development footprint only (not sited in any existing onsite Preserve, planned on-site Preserve, Preserve Setback, Stream Setback, or aquatic land cover type). Fuel storage and equipment fueling will occur away from waterways, stream channels, stream banks, and other environmentally sensitive areas within the development footprint. However, certain equipment storage and fueling activities can be allowed on Preserves within habitat re-establishment/establishment sites (refer to Section 5.2.7) if no location outside of the site is available. If a Covered Activity results in a spill of fuel, hydraulic fluid, lubricants, or other petroleum products, the spill will be absorbed and waste disposed of in a manner to prevent pollutants from entering a waterway, Preserve, Preserve Setback, or Stream Setback.

- **BMP-4 (Erodible Materials):** Plan Permittees and Third-Party Project Proponents implementing Covered Activities must not deposit erodible materials into waterways. Vegetation clippings, brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. Erodible material must be disposed of such that it cannot enter a waterway, Preserve, Preserve Setback, Stream Setback, or aquatic land cover type. If water and sludge must be pumped from a subdrain or other structure, the material will be conveyed to a temporary settling basin to prevent sediment from entering a waterway.
- **BMP-5** (**Dust Control**): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will water active construction sites regularly, if warranted, to avoid or minimize impacts from construction dust on adjacent vegetation and wildlife habitats. No surface water will be used from aquatic land covers; water will be obtained from a municipal source or existing groundwater well.
- BMP-8 (Training of Construction Staff): A mandatory Worker Environmental Awareness Program will be conducted by an approved biologist for all construction workers, including contractors, prior to the commencement of construction activities. The training will include how to identify Covered Species that might enter the construction site, relevant life history information and habitats, SSHCP and statutory requirements and the consequences of non-compliance, the boundaries of the construction area and permitted disturbance zones, litter control training (SPECIES-2), and appropriate protocols if a Covered Species is encountered. Supporting materials containing training information will be prepared and distributed by the approved biologist. When necessary, training and supporting materials will also be provided in Spanish. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all of the Avoidance and Minimization Measures. Written documentation of the training must be submitted to the Implementing Entity within 30 days of completion of the training, and the Implementing Entity will provide this information to the Wildlife Agencies.
- **BMP-11 (Speed Limit):** Project-related vehicles will observe the posted speed limits on paved roads and a 10-mile-per-hour speed limit on unpaved roads and during travel in project areas. Construction crews will be given weekly tailgate instruction to travel only on designated and marked existing, cross-country, and project-only roads.
- **SPECIES-1** (Litter Removal Program): A litter control program will be instituted for the entire project site. All workers will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. All garbage will be removed from the project site at the end of each work day, and construction personnel will not feed or otherwise attract wildlife to the area where construction activities are taking place.

- **SPECIES-2** (No Pets in Construction Areas): To avoid harm and harassment of native species, workers and visitors will not bring pets onto a project site.
- SPECIES-3 (Take Report): If accidental injury or death of any Covered Species occurs, workers will immediately inform the approved biologist or on-site monitor and site supervisor. The approved biologist or on-site monitor will phone the appropriate contact person at the Implementing Entity. The Implementing Entity will immediately contact the Wildlife Agencies by telephone. A memorandum will be provided to the Implementing Entity and Wildlife Agencies within 1 working day of the incident. The report will provide the date and location of the incident, number of individuals taken, the circumstances resulting in the take, and any corrective measures taken to prevent additional take.
- SPECIES-4 (Post-Construction Compliance Report): A post-construction compliance report will be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report will detail the construction start and completion dates, any information about meeting or failing to meet species take Avoidance and Minimization Measures (AMM), effectiveness of each AMM that was applied at the project site, and any known project effects to Covered Species.
- SWHA-1 (Swainson's Hawk Surveys): If modeled habitat for Swainson's hawk (Figure 3-25) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a survey to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Nest sites are often associated with Riparian land cover, but also include lone trees in fields, trees along roadways, and trees around structures. Nest trees may include, but are not limited to, Fremont's cottonwood (*Populus fremontii*), oaks (*Quercus* spp.), willows (*Salix* spp.), walnuts (*Juglans* spp.), eucalyptus (*Eucalyptus* spp.), pines (*Pinus* spp.), and Deodar cedar (*Cedrus deodara*). The Third-Party Project Proponent will map all existing and potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.
- WHA-2 (Swainson's Hawk Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season

(March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

- **SWHA-3 (Swainson's Hawk Nest Buffer):** If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.
- SWHA-4 (Swainson's Hawk Nest Buffer Monitoring): If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).
- RAPTOR-1 (Raptor Surveys): If modeled habitat for a covered raptor species (Figures 3-20, 3-23, 3-24, or 3-28) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.
- **RAPTOR-2** (Raptor Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and

construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

- **RAPTOR-3 (Raptor Nest/Roost Buffer):** If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile temporary nest disturbance buffer around the active nest until the young have fledged.
- RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring): If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).
- BAT-1 (Winter Hibernaculum Surveys): If modeled habitat (Figure 3-30) for western red bat is present within 300 feet of a Covered Activity's project footprint, then an approved biologist will conduct a field investigation of the project footprint and adjacent areas within 300 feet of a project footprint to determine if a potential winter hibernaculum is present, and to identify and map potential hibernaculum sites. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If potential hibernaculum sites are found, the Third-Party Project Proponent will note their locations on project designs and will design the project to avoid all areas within a 300-foot buffer around the potential hibernaculum sites. Winter hibernaculum habitat is fully avoided if project-related activities do not impinge on a 300-foot buffer established by the approved biologist around an existing or potential

winter hibernaculum site. See Chapter 10 for the process to conduct and submit survey information.

- BAT-2 (Winter Hibernaculum Pre-Construction Surveys): If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a preconstruction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.
- **BAT-3 (Winter Hibernaculum Buffer):** If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur.
- **BAT-4** (**Bat Eviction Methods**): An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.

Attachment F

Designated Critical Habitat

