
3.4 - Biological Resources

3.4.1 - Introduction

This section describes the existing biological setting and potential direct and indirect effects of the proposed project on sensitive biological resources on the SOIA Area and its surrounding area. Descriptions and analyses in this section are based on a site reconnaissance performed by MBA Biologist/Regulatory Specialist Dale Hameister on October 11, 2010, with respect to the current regulatory framework. Although the proposed project does not involve any development activities, this environmental analysis is based on the land use assumptions developed by Local Agency Formation Commission (LAFCo) for the purposes of understanding the possible environmental effects of the proposed project. Since no physical development is associated with the proposed project, a general biological resources assessment was conducted to document existing conditions. Additional information regarding the methodology used to conduct the analysis of the proposed project's impacts on Biological Resources can be found in Section 3.4.4, Methodology.

3.4.2 - Environmental Setting

The Sphere of Influence Amendment Area (SOIA Area) consists primarily of flat agricultural lands. Other land uses includes the recently closed Sunset Sky Ranch Airport, the developed areas of Old Town Franklin, the Franklin Cemetery, and low-density residential (Exhibit 2-4). Agricultural areas include row crops and grazing areas for livestock. The SOIA Area contains drainage canals, irrigation ditches, agricultural ponds, and other aquatic resources (Table 3.4-1, Exhibit 3.4-1, and Exhibit 3.9-2). There is very little riparian habitat within the project area. Riparian areas are generally found in small patches along drainage ditches within agricultural areas. There are significant areas of riparian habitat within the vicinity of the project area within the Stone Lakes National Wildlife Preserve; in areas west of the SOIA Area; and along the Cosumnes River, south and east of the project area.

The project area does not contain any areas defined as woodlands. However, there are many large trees within the SOIA Area that are generally associated with rural residential areas. Trees and shrubs within the SOIA Area may provide nesting habitat for a variety of migratory bird species.

Agricultural Cropland

Agricultural cropland is the predominant land within the SOIA Area. Because this habitat is intensively and routinely managed, vegetation is limited to cultivated crops; predominately grains, orchards, and vineyards, with ruderal (weedy) vegetation along the margins.

Agricultural cropland generally provides low-quality breeding habitat for wildlife species due to the high level and frequency of disturbance; however, it provides cover and foraging habitat for many species. Typical avian species that forage in this habitat type include the Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), redtail hawk (*Buteo jamaicensis*), greater sandhill

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crane (*Grus canadensis tabida*), tricolored blackbird (*Agelaius tricolor*), western burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*).

Irrigation Ditches

Irrigation ditches flow through several portions of the SOIA Area. These ditches are predominantly devoid of vegetation; however, the associated beds and banks may support hydrophytic (water loving) vegetation. Predominant hydrophytic plant species associated with this habitat include bulrush (*Scirpus microcarpus*), curly dock (*Rumex crispus*), narrow-leaved cattail (*Typha angustifolia*), and smartweed (*Polygonum* sp.). Hydrophytic riparian woodland vegetation associated with the ditches could include arroyo willow (*Salix lasiolepis*), Fremont's cottonwood (*Populus fremontii*), and valley oak (*Quercus lobata*).

Irrigation ditches provide suitable cover, and foraging habitat for a variety of wildlife species. Belted kingfisher (*Ceryle alcyon*) and great egret (*Ardea alba*) have been observed foraging in this habitat. Vegetation associated with ditches can provide nesting habitat for Marsh wren (*Cistothorus palustris*), red-wing blackbird (*Agelaius phoeniceus*), and other bird species.

Irrigated Pastures

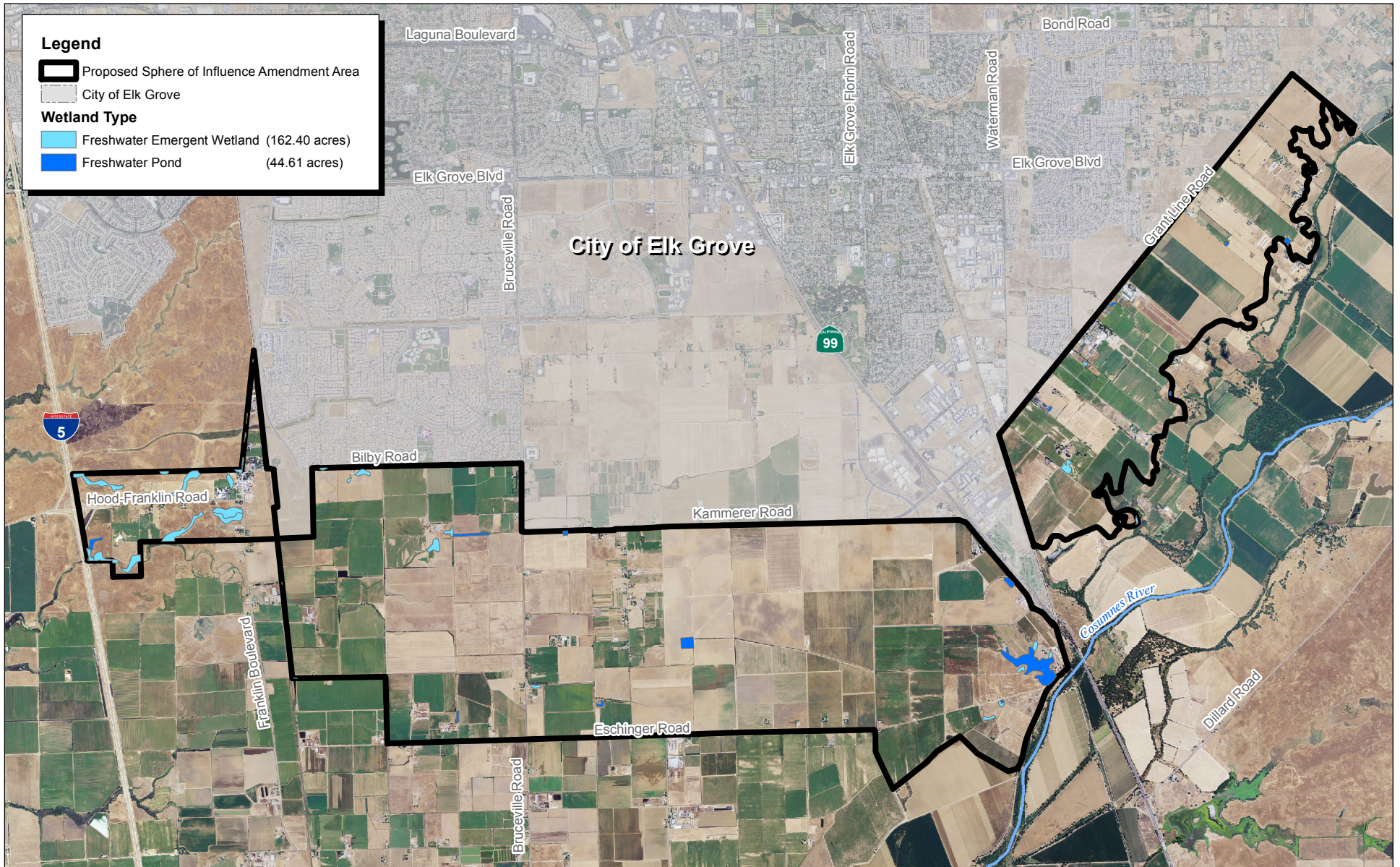
Irrigated pastures lie within the SOIA Area, particularly on rural residential parcels at the eastern portion of the SOIA Area, as well as the central portion of the SOIA Area. These pastures are used for livestock grazing. Grass and herbaceous species tolerant of year-round wet conditions are associated with this habitat. The frequent irrigation of these areas has resulted in the establishment of areas of seasonal and perennial wetland conditions in some pastures.

Irrigated pastures support foraging habitat for a variety of avian and small mammal species, and the wetlands areas interspersed throughout this habitat likely support a variety of wildlife species.

Typical avian species that forage within this habitat type include redtail hawk, northern harrier, Swainson's hawk, western burrowing owl, and white-tailed kite.

Wetlands

A jurisdictional delineation was not conducted for the project area because most of the SOIA Area is in private ownership; however, existing databases were used to assess the potential presence of sensitive aquatic habitats within the SOIA Area. The South Sacramento Habitat Conservation Plan (SSHCP) landcover database was used to approximate the amount of wetlands within the SOIA Area (Table 3.4-1) and to assess the potential indirect impacts of any future development within the SOIA Area. The data set represents the extent, approximate location, and type of wetlands in south Sacramento County.



Source: Sacramento County NAIP, 2009, U.S. Fish and Wildlife Service (NWI).

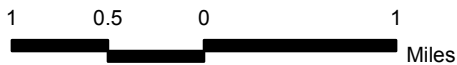


Exhibit 3.4-1 Wetlands Within The Proposed Sphere of Influence Amendment Area

Table 3.4-1: Summary of Wetland and other Waters present in the SOIA Area

Type	Acreage
Freshwater Marsh	21.1
Mixed Riparian Scrub	4.6
Mixed Riparian Woodland	8.1
Open Water	3.3
Seasonal Impoundment	48.4
Seasonal Wetlands	12.5
Streams/Creeks	36.9
Swale	7.2
Vernal Impoundment	2.5
Vernal Pool	5.9
Vernal Swale	0.1

Areas mapped as wetlands also do not confirm the jurisdictional status of the features for U.S. Army Corps of Engineers (USACE), the State Water Resources Control Board, or California Department of Fish and Wildlife (CDFW) jurisdictional status. Based on the SSHCP landcover database there are approximately 150.6 areas of wetland, ponds and riparian areas within the SOIA Area (Table 3.4-1 and Exhibit 3.4-1). The majority of the pond and wetland areas appear to be associated with agricultural activities, including water storage and irrigation runoff. The freshwater emergent wetlands in the southern portion of the SOIA Area that is west of Franklin Boulevard comprises a natural drainage that drains Watershed C in the City of Elk Grove and eventually flows in to the South Stone Lakes and the Stone Lakes National Wildlife Refuge.

Species expected to roost, nest or breed in this habitat include western spadefoot toad (*Spea hammondi*), western pond turtle (*Actinemys marmorata*), greater sandhill crane (*Grus canadensis tabida*), and tricolored blackbird (*Agelaius tricolor*).

Species expected to forage in this habitat include western spadefoot toad, western pond turtle, greater sandhill crane, northern harrier, tricolored blackbird, and western red bat (*Lasiurus blossevillii*).

Surrounding Land Uses

West. Stone Lakes National Wildlife Refuge forms the western boundary of the project site. The refuge contains extensive wetlands and riparian areas that support a number of sensitive species. Land uses within the Refuge include pastures and agricultural uses. Agricultural uses within the Refuge occupy the area immediately next to the proposed SOIA Area's boundary. In addition, grazing land within the Stone Lakes National Wildlife Refuge boundary between Franklin Boulevard and Interstate 5 is under permanent conservation easement. County of Sacramento land use

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designations west of the project site include Agricultural Cropland, Recreation, and Resource Conservation.

North. The project site is bounded by the City of Elk Grove to the north. Land uses immediately north of the SOIA Area predominantly consists of suburban residential uses and vacant land.

East. Rural residential and agricultural uses exist immediately east of the project boundary. Land in this area also lies within the FEMA 100-year floodplain. County of Sacramento land use designations east of the project site include Agricultural Cropland, Natural Preserve, and Resource Conservation. The Cosumnes River east of the project area contains riparian habitat that is known to support sensitive species. The Cosumnes River Preserve, encompassing more than 46,000 acres, is located along the Cosumnes River east and south of the project area.

South. Land uses in this area are similar to the adjacent agricultural land uses within the project site. County of Sacramento land use designations south of the project site include Agricultural Cropland. In addition, land within the legislative boundary of the Stone Lakes National Wildlife Refuge known as the 'Cooperative Wildlife Management Area', but not under conservation easement, is located south of the project between Franklin Boulevard and Interstate 5. The Cooperative Wildlife Management Area is where the US Fish and Wildlife Service first seeks to enter into agreements and memoranda of understanding with landowners or purchase conservation easements.

Special-Status Species – Plants and Wildlife

Sensitive species are native species that have been accorded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Special-Status Species

- Endangered Species Act (50 Code of Federal Regulations 17.11): Animals listed or proposed for listing as threatened or endangered
- Endangered Species Act (50 Code of Federal Regulations 17.12): Plants listed or proposed for listing as threatened or endangered
- Endangered Species Act (70 Federal Register 24870): Species identified as candidates for future listing as threatened or endangered

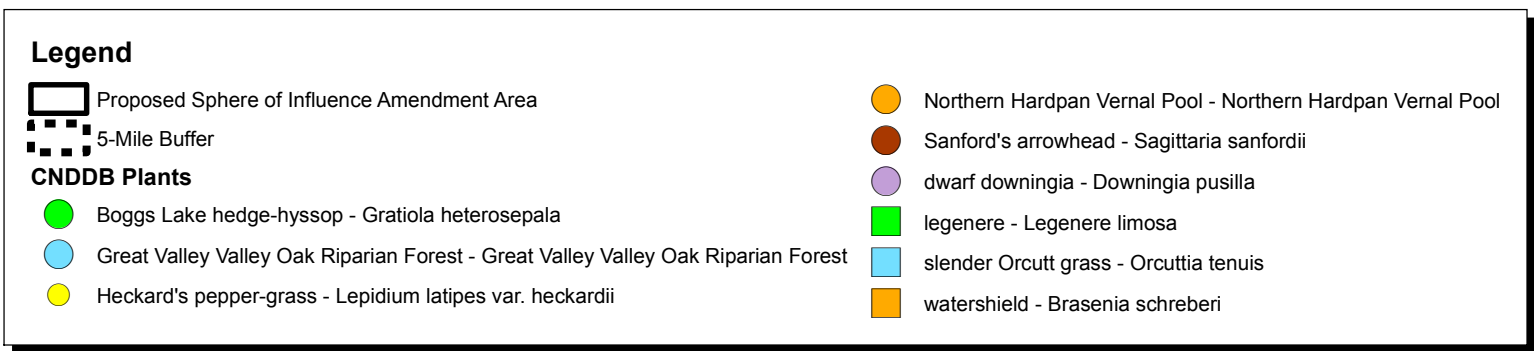
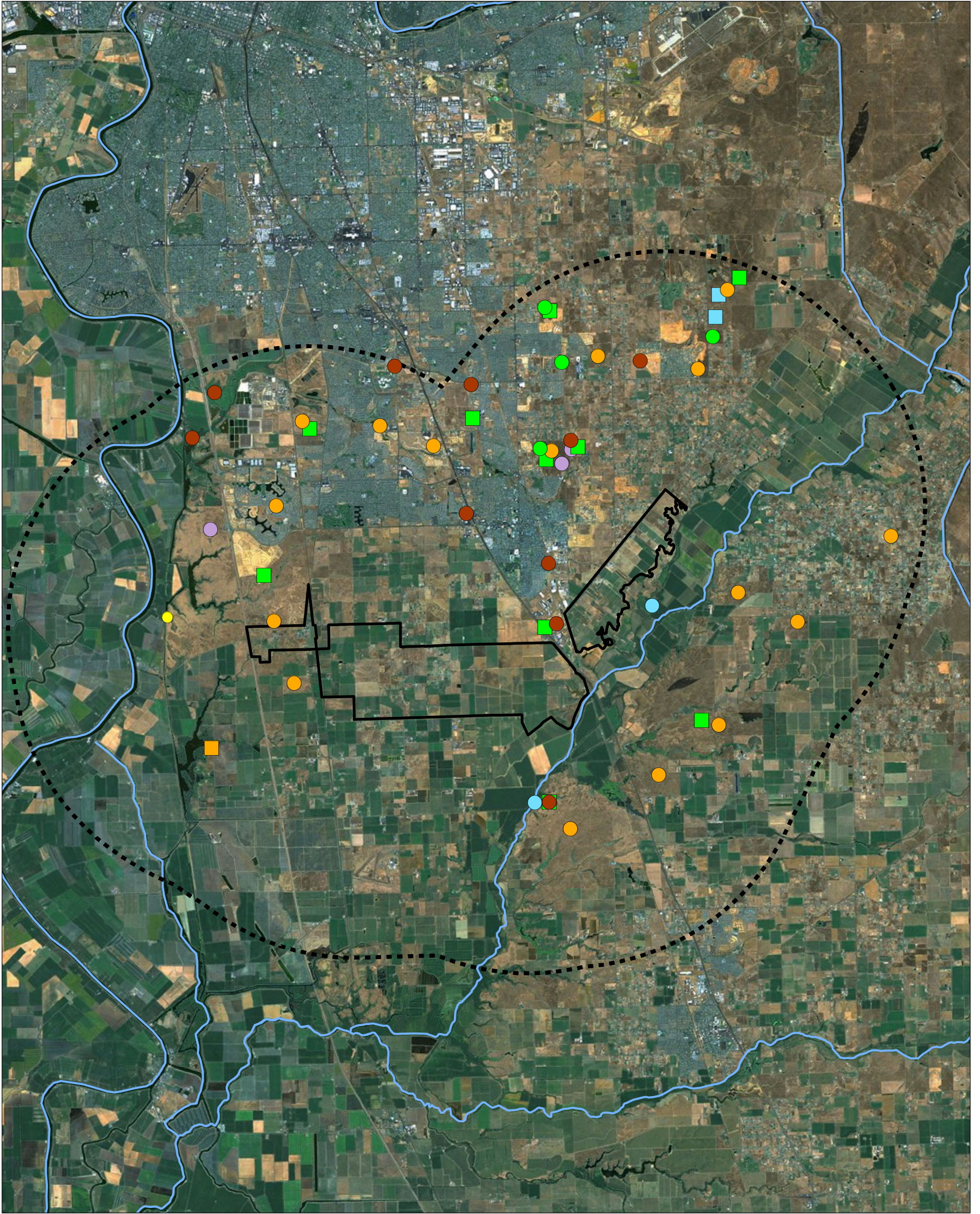
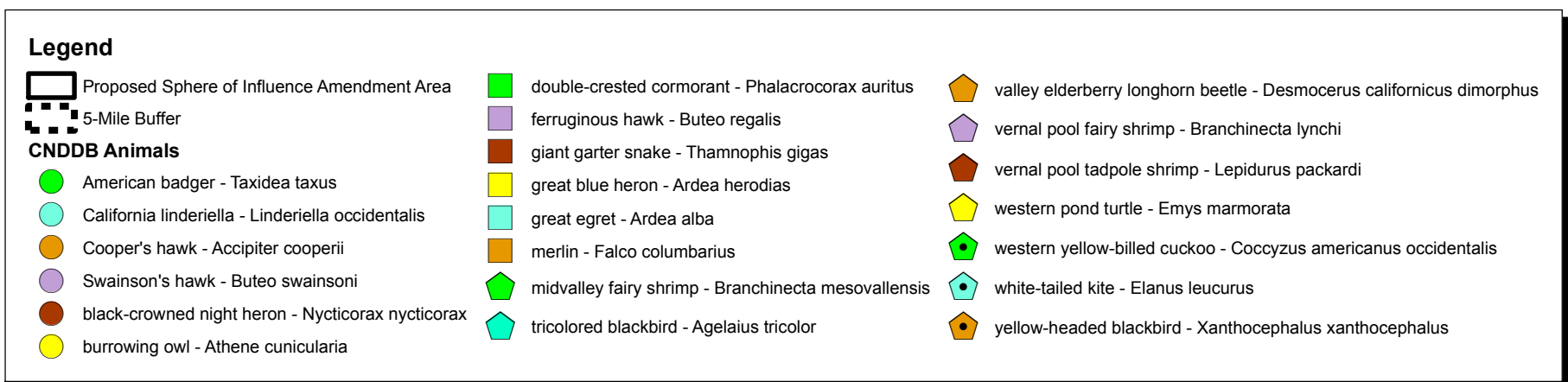
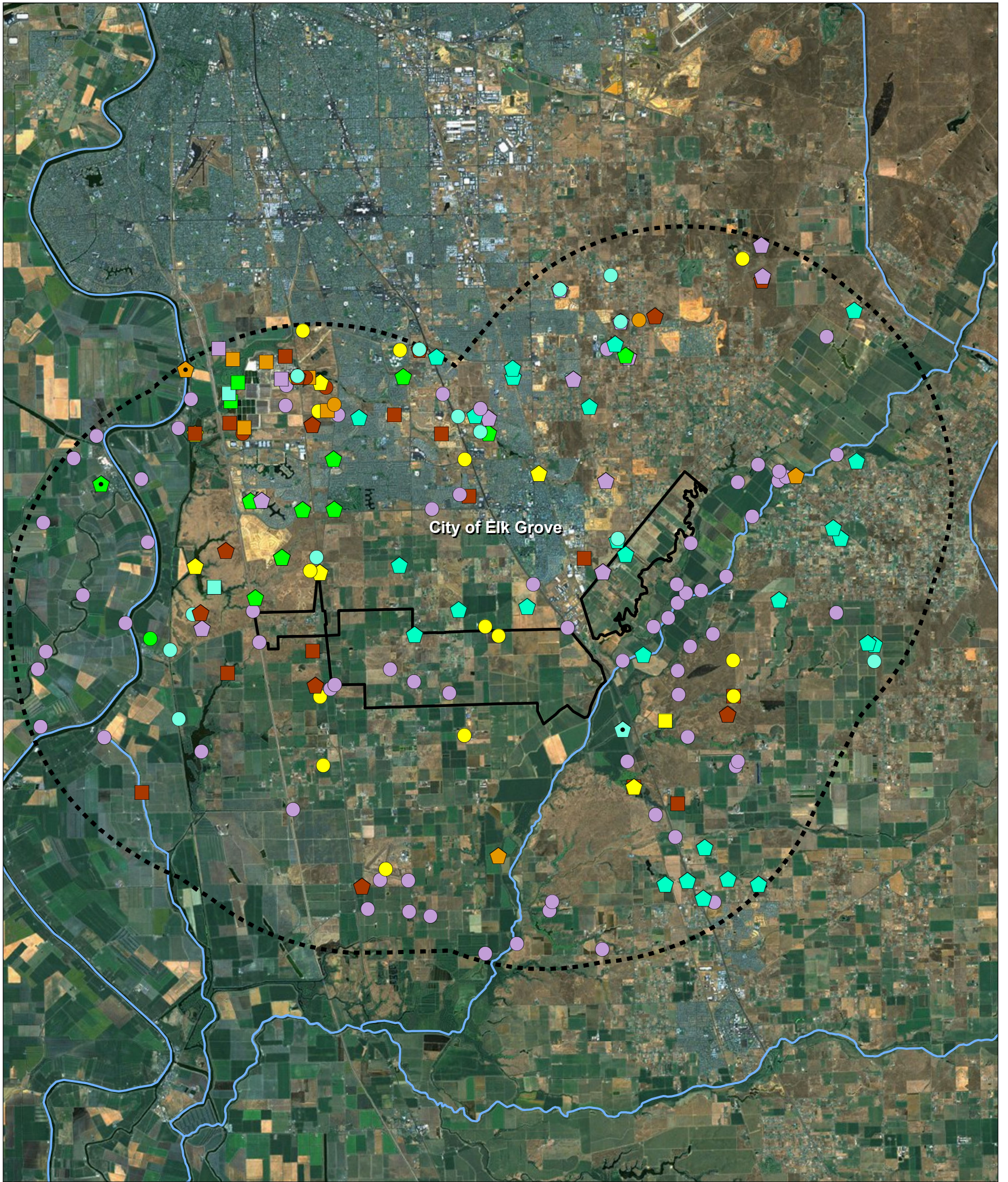


Exhibit 3.4-2a
 CNDDDB-Recorded Occurrences of
 Special Status Plants



State and Local Special-Status Species

- California Endangered Species Act (14 California Code of Regulations 670.5): Species listed or proposed for listing as threatened or endangered by the State of California
- California Department of Fish and Wildlife (Fish & Wildlife Code Section 1900 et seq.): Plants listed as rare
- California Department of Fish and Wildlife (Fish & Wildlife Code Section 3511): Fully protected birds
- California Department of Fish and Wildlife (Fish & Wildlife Code Section 4700): Fully protected mammals
- California Department of Fish and Wildlife (Fish & Wildlife Code Section 5050): Fully protected reptiles and amphibians
- California Department of Fish and Wildlife (Fish & Wildlife Code Section 5515): Fully protected fish
- California Department of Fish and Wildlife (CDFW): Animal species of special concern to CDFW—birds (Remsen, 1978), mammals (Williams, 1986), amphibians and reptiles (Jennings and Hayes 1994)
- California Native Plant Society (lists 1B and 2): Plants listed by CNPS as “rare, threatened, or endangered” in California
- CEQA (Public Resources Code Section 15380): Species meeting the definition of rare or endangered under CEQA

Based on the California Natural Diversity Database (CNDDDB), no special-status plant species have been recorded within the SOIA Area (Exhibit 3.4-2a). There are three special-status wildlife species that have been recorded within the SOIA Area within the CNDDDB. These species are state threatened Swainson’s hawk, California Species of Concern tricolored blackbird, and burrowing owl. In addition, the working draft South Sacramento Habitat Conservation Plan identifies 30 species of plants and wildlife, including 10 that are listed as threatened or endangered under the Federal ESA, CESA, or both that occur within the 350,000 acre HCP Area encompassing most of the southern portion of the County. Some of these species may occur in the SOIA Area. While there is no specific policy regarding the tricolored blackbird itself, its colonies are considered sensitive. No detailed surveys were conducted; however, Swainson’s hawks were observed during MBA’s reconnaissance survey of the project area. Swainson’s hawk is listed as threatened by CDFW, but it can be locally common in agricultural areas of the central valley with suitable foraging habitat and tall trees along riparian areas, which is its preferred nesting habitat. Exhibit 3.4-2b shows the concentration of Swainson’s hawk occurrences along the Cosumnes River south and east of the SOIA Area.

A summary of potential special-status plant species identified within the CNDDDB is provided in Table 3.4-2. A summary of potential special-status wildlife species identified within the CNDDDB is provided in Table 3.4-3

Table 3.4-2: Summary of Special-Status Plant Species Review

Scientific Name Common Name	Listing Status* USFWS/ CDFW/CNPS	General Habitat Description	Potential for Presence**	Period of Identification
<i>California macrophylla</i> Round-leaved filaree	—/—/1B.1	Cismontane woodland and valley and foothill grassland habitats. 15 to 1,200 meters in elevation.	None. There are no suitable natural habitats within the SOIA Area; currently, the SOIA Area is primarily used for agricultural operations. There are no recorded occurrences of this species within 5 miles of the project area.	March–May
<i>Carex comosa</i> Bristly sedge	—/—/2.1	Coastal prairie and valley and foothill grassland habitats in clay soils. 0 to 625 meters in elevation.	None. There are no suitable natural habitats within the SOIA Area; currently, the SOIA Area is primarily used for agricultural operations. There are no recorded occurrences of this species within 5 miles of the project area.	May–September
<i>Cirsium crassicaule</i> Slough thistle	—/—/1B.1	Chenopod scrub, marshes and swamps, and riparian scrub habitats. 3 to 100 meters in elevation.	None. There are no natural habitats within the SOIA Area; currently, the SOIA Area is primarily used for agricultural operations. There are no recorded occurrences of this species within 5 miles of the project area.	May–August
<i>Eryngium racemosum</i> Delta button-celery	—/CE/1B.1	Riparian scrub in vernal mesic clay depressions. 3 to 30 meters in elevation.	None. There are no suitable natural habitats within the SOIA Area; currently, the SOIA Area is primarily used for agricultural operations. There are no recorded occurrences of this species within 5 miles of the project area.	June–October

Table 3.4-2 (cont.): Summary of Special-Status Plant Species Review

Scientific Name Common Name	Listing Status* USFWS/ CDFW/CNPS	General Habitat Description	Potential for Presence**	Period of Identification
<i>Eschscholzia rhombipetala</i> Diamond-petaled California poppy	—/—/1B.1	Valley and foothill grassland habitat in alkali, clay soils.	None. There are no suitable natural habitats within the SOIA Area. The SOIA Area is currently primarily used for agricultural operations. There are no recorded occurrences of this species within 5 miles of the project area.	March–April
<i>Hibiscus lasiocarpus</i> Woolly rose-mallow	—/—/2.2	Freshwater marshes and swamps. 0 to 120 meters in elevation.	Moderate. There may be suitable habitat within brackish marshes or ditches in the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	June–September
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	—/—/1B.2	Freshwater and brackish marshes and swamps. 0 to 4 meters in elevation.	Moderate. There may be suitable habitat within brackish marshes or ditches in the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	May–July
<i>Sagittaria sanfordii</i> Sanford’s arrowhead	—/—/1B.2	Assorted shallow freshwater marshes and swamps. 0 to 2,132 feet in elevation.	Moderate. There may be suitable habitat within freshwater marshes or ditches in the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	May–October

Table 3.4-2 (cont.): Summary of Special-Status Plant Species Review

Scientific Name Common Name	Listing Status* USFWS/ CDFW/CNPS	General Habitat Description	Potential for Presence**	Period of Identification
*Status Codes:				
Federal FE = Federally Endangered FT = Federally Threatened FD = Federally Delisted	State CE = State Endangered CT = State Threatened SSC = State Species of Special Concern	CNPS 1A = Presumed extinct in California 1B.X = Rare, threatened, or endangered in California and elsewhere 2.X = Rare, threatened, or endangered in California, but more common elsewhere Threat rank: 0.1 = Seriously threatened in California 0.2 = Fairly threatened in California 0.3 = Not very threatened in California		
**Potential for Presence				
High = Species was observed, or suitable habitat is present and the species has been recorded recently within or adjacent to the project area. Moderate = Species is locally common and suitable habitat is present. Low = Habitat is marginal, or suitable habitat is present but species is rare or locally uncommon. Very Low = Habitat is poor or absent, or species is very rare and has not been recorded within 5 miles of the project area. None = Habitat is absent and/or site is not within range of this species. Source: California Natural Diversity Database, 2012.				

Table 3.4-3: Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/—/—	Vernal pools, seasonally ponded swales, and ephemeral freshwater habitats.	Moderate. There may be suitable vernal pool habitat within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT/—/—	Elderberry shrubs (<i>Sambucus mexicana</i>).	Moderate. There may be elderberry plant habitat within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE/—/—	Vernal pools and ephemeral freshwater habitats.	Moderate. There may be suitable vernal pool habitat within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	Year-round
Fishes				
<i>Acipenser medirostris</i> Green sturgeon	FT/SSC/—	Anadromous species; large portions of life history are spent in the ocean. Migrations by adults into freshwater occur between late February and late July, with a spawning period generally ranging from March to July. Spawning takes place in deep, fast-moving water with temperatures between 46.5 and 57°F. Preferred spawning substrate is likely large cobble, but can range from clean sand to bedrock. Juveniles typically migrate out to sea before the end of their second year, primarily during summer and fall.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area.	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Hypomesus transpacificus</i> Delta smelt	FT/CT/—	Sacramento-San Joaquin Delta.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area. Critical Habitat for this species is west of the SOIA Area.	Year-round
<i>Mylopharodon conocephalus</i> Hardhead	—/SSC/—	Sacramento-San Joaquin Delta.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area.	Year-round
<i>Oncorhynchus mykiss</i> Central Valley steelhead	FT/—/—	Sacramento and San Joaquin rivers and their tributaries.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area.	Year-round
<i>Anchorhynchus tshawytscha</i> Central Valley spring-run chinook	FT/CT/—	Sacramento and San Joaquin rivers and their tributaries.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area.	Year-round
<i>Anchorhynchus tshawytscha</i> Central Valley winter-run chinook	FE/CE/—	Sacramento and San Joaquin rivers and their tributaries.	None. Irrigation channels and drainage ditches within the SOIA Area do not provide suitable habitat. There are no recorded occurrences of this species within 5 miles of the SOIA Area.	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
Amphibians				
<i>LERana boylei</i> Foothill yellow-legged frog	—/CSC/—	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	None. There is no suitable shaded stream habitat with riffles or rocky substrate within the SOIA Area. There are no recorded occurrences of this species within 5 miles of the project area.	April–July (breeding season survey)
<i>Rana draytonii</i> California red-legged frog	FT/CSC/—	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent vegetation.	None. There is no suitable habitat consisting of dense emergent riparian vegetation and still or slow-moving water bodies that could serve as breeding sites within the SOIA Area. There are no recorded occurrences of this species within 5 miles of the project area.	January through February (breeding season survey)
<i>Spea hammondi</i> Western spadefoot toad	—/CSC/—	Grasslands with temporary pools.	Low. The SOIA Area and surrounding lands are active agricultural fields and orchards with the possibility of pooling and grassland habitat for this species. There are no recorded occurrences of this species within 5 miles of the site.	January–May (adult visual survey)
Reptiles				
<i>Actinemys marmorata</i> Western pond turtle	—/CSC/—	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg laying. May move overland up to 325 feet for egg laying.	Moderate. There may be suitable aquatic habitat with potential basking sites within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Masticophis flagellum ruddocki</i> San Joaquin whipsnake	—/SSC/—	Grassland, savanna, chaparral, and woodland.	None. The project area and surrounding lands are active agricultural fields and orchards and does not provide adequate chaparral, grassland, or savanna habitat suitable for this species. There are no recorded occurrences of this species within 5 miles of the site.	Year-round
<i>Phrynosoma coronatum</i> California horned lizard	—/SSC/—	Common in lowlands along sandy washes with scattered low shrubs to provide cover and open areas for basking and loose soils in which they can bury themselves.	None. Because of the active agricultural operations within the SOIA Area, there are no habitats suitable for this species. There are no recorded occurrences of this species within 5 miles of the site.	April to September
<i>Thamnophis gigas</i> Giant garter snake	FT/CT/—	Marshes, sloughs, irrigation channels, and occasionally in slow-moving streams. Requires emergent vegetation for cover.	Moderate. There may be suitable habitat within the SOIA Area along irrigation canals and drainages. There are recorded occurrences of this species within 5 miles of the project area.	Mid-March to October
Birds				
<i>Accipiter striatus</i> Sharp-shinned hawk	—/CSC/—	Winter resident throughout much of the state; permanent at higher elevations. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers but is not restricted to riparian habitats.	Low. This species does not nest within the region, although the site may be used for foraging. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Agelaius tricolor</i> Tricolored blackbird	—/CSC/—	Largely endemic to California, most numerous in the Central Valley and nearby vicinity. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats.	Moderate. There may be suitable habitat within the SOIA Area where there is freshwater emergent wetlands with adequate nesting habitat. There are recorded occurrences of this species within 5 miles of the project area.	April–July
<i>Aquila chrysaetos</i> Golden eagle	—/CFP/—	Breeds on cliffs or in large trees or electrical towers, forages in open habitats.	Low. The SOIA Area is an agricultural region that does not provide suitable nesting habitat for this species. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Athene cunicularia</i> Western burrowing owl	—/CSC/—	Open, dry annual or perennial grasslands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals.	High. There is likely suitable habitat within the SOIA Area in small mammal burrows, though populations of burrowing owls are fairly sporadic throughout the County. There are CNDDDB-recorded and consolidated species occurrences of this species within 5 miles of the project area. ¹	December 1 to January 31 and April 15 to July 15
<i>Buteo swainsoni</i> Swainson’s hawk	—/CT/—	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Breeds in open stands in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands, grain or alfalfa fields, or livestock pastures.	High - Present. Suitable foraging habitat is present in agricultural fields, and trees associated with residences or in the southwest corner of the project area may be used for nesting. The species was observed in the SOIA Area.	March to September

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Buteo regalis</i> Ferruginous hawk	—/CSC/—	Forages in grasslands and occasionally in other open habitats during migration and winter.	Low. This species does not breed in California, although the area is suitable for foraging. There are no recorded occurrences of this species within 5 miles of the project area.	September to April
<i>Circus cyaneus</i> Northern harrier	—/CSC/—	Winter resident throughout most of the state; year-round in the Central Valley and Coast Range. Forages in marshes, grasslands, and ruderal habitats; nests in extensive marshes and wet fields or grasslands.	Moderate. Suitable foraging habitat is present within the SOIA Area within grasslands and ruderal habitats. There are no recorded occurrences of this species within 5 miles of the project area.	April to September (breeding)
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	FC/CE/—	Uncommon to rare summer resident of valley foothill and desert riparian habitats. Inhabits extensive deciduous riparian thickets or forests with dense, low-level, or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow is almost always a dominant component of the vegetation. In Sacramento Valley, also utilizes adjacent orchards, especially walnut.	None. There is no suitable riparian habitat for this species within the SOIA Area. There are no recorded occurrences of this species within 5 miles of the project area. May be found in the Stone Lakes Wildlife Preserve to the west of the SOIA Area.	April to September
<i>Dendroica petechia</i> Yellow warbler	—/CSC/—	Requires riparian thickets of willow and other brushy tangles near watercourses for cover. Nests in dense shrubs along streams or rivers.	Low. There is no suitable riparian thicket habitat for this species within the SOIA Area. There are no recorded occurrences of this species within 5 miles of the project area.	April–September
<i>Elanus leucurus</i> White-tailed kite	—/CFP/—	Year-round resident. Nests or roosts in dense, broad-leafed deciduous trees. Forages in herbaceous lowlands with	Low. Agricultural fields within the SOIA Area are suitable for foraging, and trees	January to August (breeding)

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
		variable tree growth and dense populations of voles.	associated with residences and agricultural areas may be suitable for nesting. There are no recorded occurrences of this species within 5 miles of the area.	
<i>Falco columbarius</i> Merlin	—/CSC/—	Uncommon winter migrant. Seldom found in heavily wooded areas or open deserts. Frequents open habitats at low elevations near water and tree stands. Favors coastlines, lakeshores, and wetlands. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats.	Low. This species does not breed in California, although suitable foraging habitat is present in agricultural fields. There are no recorded occurrences of this species within 5 miles of the project area.	September to May
<i>Falco mexicanus</i> Prairie falcon	—/CSC/—	Year-round resident throughout much of the state; winters in the Central Valley and along the coast. Occurs in open habitats such as grasslands, desert scrub, rangelands, and croplands. Nests in a scrape on a sheltered ledge of a cliff overlooking a large, open area.	Low. This species does not breed in the region, although suitable foraging habitat is present in agricultural fields. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/CE/—	Forages in marshes and grasslands. Nesting habitat includes high, protected cliffs and ledges, also utilizes human-made structures. Winters at lower elevations; year-round resident through much of the state.	None. The project area contains no habitat suitable for nesting or for foraging by this species. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Grus canadensis tabida</i> Greater sandhill crane	—/CFP/—	Found in open, fresh water wetlands, particularly habitats that contain open sedge meadows in wetlands that are adjacent to short vegetation uplands.	Moderate. There may be suitable sedge meadow/wetlands habitat within the SOIA Area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project area. However, there are consolidated species occurrences within 5 miles of the project area. 1 The project area contains suitable winter upland foraging habitat for this species.	Year-round
<i>Haliaeetus leucocephalus</i> Bald eagle	FT/CFP/—	Year-round at ocean shorelines, lake margins, and river courses. Nests in large, old-growth, or dominant live trees with open branchwork, especially ponderosa pine.	None. The project area contains no habitat suitable for nesting or for foraging by this species. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Icteria virens</i> Yellow-breasted chat	—/CSC/—	Breeds in riparian habitats having dense understory vegetation, such as willow and blackberry.	Moderate. There may be suitable nesting habitat within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	April–July
<i>Progne subis</i> Purple martin	—/CSC/—	An uncommon to rare summer resident in a variety of wooded, low-elevation habitats; a rare migrant in spring and fall, absent in winter. Breeding habitat includes old-growth, multi-layered, open forest, and woodland with snags; forages over riparian areas, forest, and woodlands. Drain holes in bridges and overpasses now commonly used for nesting in urban habitats.	Low. There is no suitable nesting habitat for this species within the SOIA Area. There are no recorded occurrences of this species within 5 miles of the project area.	April–September

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	—/CSC/—	Breeds commonly east of Cascade Range and Sierra Nevada, in Imperial and Colorado River valleys, in the Central Valley, and at selected locations in the coast ranges. Nests in fresh emergent wetland with dense vegetation and deep water, often along borders of lakes or ponds. Forages in emergent wetland and moist, open areas, especially cropland and muddy shores of lacustrine habitat.	Moderate. There may be suitable emergent wetland habitat within the SOIA Area. There are recorded occurrences of this species within 5 miles of the project area.	April–July (breeding)
Mammals				
<i>Antrozous pallidus</i> Pallid bat	—/CSC/High	Occurs in a variety of habitats throughout the state to 6,000 feet in elevation. It is most abundant in xeric ecosystems. Pallid bats roost alone, and in both large and small groups. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees, and human structures such as bridges, barns, porches, bat boxes, and buildings. This species also has been found roosting on or near the ground under stone piles, rags, and baseboards. Pallid bat is a gregarious species and often roost in colonies of 20 to several hundred individuals. Non-migratory. Hibernates during winter, with very little activity.	Low. The project area contains limited roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area.	April to October

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	—/CSC/High	Occurs throughout the State to 11,000 feet in elevation. Distribution correlated with availability of caves and cave-like roosting habitat. Roosts in colonies in caves, mines, tunnels, or buildings in mesic habitats. The species forages along habitat edges, gleaning insects from bushes and trees. Seasonal movement patterns not well understood. There may be local migration along altitudinal gradients. Hibernates during winter, with very little activity.	Low. The project area contains limited roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area.	Consult agency
<i>Euderma maculata</i> Spotted bat	—/CSC/High	Distribution is extremely patchy and is correlated closely with prominent rock features. Non-migratory, although there may be local migration along altitudinal gradients. Depends upon rock-faced cliff roosting habitat. Thought to roost singly during the day. Forages throughout the night, so it does not utilize night roosts.	Low. The project area contains no roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Eumops perotis californicus</i> Greater western mastiff bat	—/CSC/High	Roosts in rock crevices of vertical cliffs and less commonly in buildings. Does not migrate or hibernate.	None. The project area contains no roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area.	Year-round
<i>Lasiurus blossevillii</i> Western red bat	—/CSC/High	Western red bat is a solitary, foliage-roosting species. Day roosts in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. Closely associated with riparian habitats; cottonwood stands are	Low. The project area contains limited roosting habitat. There are no recorded occurrences of this species within 5 miles of the project area.	April to October

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBVG	General Habitat Description	Potential for Presence	Period of Identification
		preferred roost areas. Roosts behind foliage and hidden from sight. Females do not form maternity colonies, but give birth singly in trees. Migrates south in the winter, and returns north for breeding.		
<i>Myotis thysanodes</i> Fringed myotis	—/—/High	Widely distributed throughout California in all habitat types. Known to migrate, but very little information available regarding migration patterns. Most abundant in xeric woodlands, such as oak and pinyon-juniper forests. Roosts in caves, buildings, underground mines, rock crevices in cliff faces, and bridges in groups ranging from 10 to 2,000. Hibernates in buildings or underground mines	Low. The project area contains limited roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area	Year-round
<i>Myotis volans</i> Long-legged myotis	—/—/High	Found primarily in forested areas, especially blue oak-foothill pine, montane hardwood-conifer, ponderosa pine, and Sierran mixed conifer. Migrates short distances to hibernation areas. Roosts in abandoned buildings, cracks in the ground, bridges, cliff crevices, exfoliating tree bark, and hollows within snags. Females form large maternity colonies of hundreds of individuals. Hibernates in winter in caves and mines.	Low. The project area contains limited roosting habitat, and this species is not commonly associated with agricultural areas. There are no recorded occurrences of this species within 5 miles of the project area	Year-round
<i>Taxidea taxus</i> American badger	—/SSC/—	Herbaceous, shrub, and open stages of most habitats with dry, friable soils.	Moderate. There may be suitable habitat within the SOIA Area. There are recorded	Year-round

Table 3.4-3 (cont.): Summary of Special-Status Wildlife Species Review

Scientific Name Common name	Listing Status USFWS/ CDFW/WBWWG	General Habitat Description	Potential for Presence	Period of Identification
			occurrences of this species within 5 miles of the project area.	
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE/CT/—	Occur in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub with loose-textured, sandy, and loamy soils.	None. There is no suitable habitat for this species within the project area, due to the site's active agricultural fields and orchards. However, this species may disperse across the site. There are no recorded occurrences of this species within 5 miles of the project.	Year-round
Status Codes				
Federal FE = Federally Endangered FT = Federally Threatened FD = Federally Delisted		State CE = State Endangered CT = State Threatened CSC = State Species of Special Concern CC = State Candidate	Western Bat Working Group - WBWG High = Species imperiled or at high risk of imperilment. Medium = Lack of information prevents assessment of status and should be considered a threat.	
**Potential for Presence				
High = Species was observed, or suitable habitat is present and the species has been recorded recently within or adjacent to the project area. Moderate = Species is locally common and suitable habitat is present. Low = Habitat is marginal, or suitable habitat is present but species is rare or locally uncommon. Very Low = Habitat is poor or absent, or species is very rare and has not been recorded within 5 miles of the project area. None = Habitat is absent and/or site is not within the range of this species. ¹ Consolidated species occurrences data includes data from numerous sources including data from studies conducted specifically for the SSHCP, project-level studies, professional expertise, and unconfirmed sightings. Source: California Natural Diversity Database, 2010. County of Sacramento, et. al. 2010.				

Designated Critical Habitat

No designated critical habitat occurs within the project area.

3.4.3 - Regulatory Framework

Federal

Federal Endangered Species Act (FESA)

The purposes of this Act are to provide a means to conserve the ecosystems that endangered and threatened species depend on and to provide a program for conservation and recovery of these species. The Federal Endangered Species Act (FESA) defines species as “endangered” and “threatened” and provides regulatory protection for any species so designated. Section 9 of the FESA prohibits the take of species listed by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered. As defined in the FESA, take means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.” Harm is defined by the USFWS to encompass “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 Code of Federal Regulations Section 17.3). Thus, some instances of habitat modification can constitute prohibited “take” if it can be shown that such modification can be expected to result in injury or death to one or more individuals of a listed species.

In recognition that take cannot always be avoided, Section 10(a) of the FESA includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Section 10 (a)(1)(B) permits (incidental take permits) may be issued if taking is incidental and will not appreciably reduce the likelihood of survival and recovery of the species in the wild.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union. As with the FESA, the MBTA authorizes the Secretary of the Interior to issue permits for incidental take.

Federal Clean Water Act: Sections 404 and 401

Section 404 of the Federal Clean Water Act, which is administered by the United States Army Corps of Engineers (USACE), regulates the discharge of dredge and fill material into waters of the United States (U.S.). The definition of “Waters of the U.S.” is set forth in the Title 33 Code of Federal Regulations (CFR) 328.3. The term “waters of the United States” means (1) navigable waters, (2) interstate waters, (3) intrastate waters with an interstate commerce nexus, (4) impoundments of the these waters, (5) non-navigable tributaries, including non-relatively permanent waters (intermittent,

ephemeral streams) that exhibit a significant chemical, physical or biological nexus to downstream jurisdictional waters, (6) territorial seas, and (7) wetlands adjacent to otherwise jurisdictional waters.

With respect to adjacent wetlands, the USACE defines “adjacent” to mean “bordering, contiguous or neighboring.” Typically, wetlands within the floodplain of jurisdictional features (lakes, rivers, tributaries, etc.) will be considered “adjacent.” According to the USACE, wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions (33 CFR 328.3(b)). Wetlands generally include swamps, marshes, bogs, and similar areas.

Any project impacting jurisdictional waters/wetlands must obtain a dredge/fill (404) permit from the USACE prior to commencement of activities affecting those resources.

In connection with notification to the USACE under Section 404 of the Clean Water Act (CWA), pursuant to 33 CFR Part 330, a written request for Section 401 water quality certification must be submitted to the Regional Water Quality Control Board (RWQCB) to ensure that no degradation of water quality will result from the proposed project. Subject to CWA section 401(a)(1), the USACE cannot issue a section 404 dredge/fill permit until such time as a CWA section 401 Water Quality Certification has been approved by the applicable RWQCB. In the nationwide permitting program, compliance with the Section 401 is set forth in general condition (GC 21).

In order to meet the requirements of the RWQCB for issuance of a 401-water quality certification, the project proponent must provide assurances that the project will not adversely affect the water quality of receiving water bodies. A written request for 401 water quality certification must be prepared and submitted to the RWQCB for review. The request will include a detailed project description, a description of proposed impacts, identification and discussion of beneficial uses of affected receiving waters (as described within the appropriate Basin Plan), a water quality plan identifying project-specific Best Management practices (BMPs), discussion of other approvals and certifications being obtained, a conceptual restoration plan, and a completed notification form.

State

California Endangered Species Act (CESA)

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. The State considers a threatened species as one present in such small numbers throughout its range that it is considered likely to become an endangered species in the near future in the absence of special protection or management. A rare species is considered as present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation “rare species” applies only to California native plants. State threatened and endangered species include both plants and wildlife (not including invertebrates) and are legally protected against “take” as this term is defined in the California Fish and Wildlife Code

(California Fish & Wildlife Code Section 2050, et seq.). “Species of Special Concern” is an informal designation used by the CDFW for some declining wildlife species that are not officially listed as endangered, threatened, or rare. This designation does not provide legal protection, but it signifies that these species are recognized as vulnerable by CDFW.

Sections 1600–1603 of the State Fish and Wildlife Code

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the CDFW pursuant to Sections 1600 through 1603 of the California Code, requiring preparation of a Streambed Alteration Agreement. Under the Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or have supported riparian vegetation. CDFW also has jurisdiction within altered or artificial waterways based on the value of those waterways to fish and wildlife and has jurisdiction over dry washes that carry water ephemerally during storm events.

Sections 2080 and 2081 of the State Fish and Wildlife Code

Section 2080 of the State Fish and Wildlife Code states that no person shall import into this state (California), export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission [State Fish and Wildlife Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act, or the California Desert Native Plants Act. Under Section 2081 of the Code, the CDFW may authorize individuals or public agencies to import, export, take, or possess, any state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding if (1) the take is incidental to an otherwise lawful activity, (2) impacts of the authorized take are minimized and fully mitigated, (3) the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and (4) the applicant ensures adequate funding to implement the measures required by CDFW. CDFW shall make this determination based on the best scientific and other information that is reasonably available and shall include consideration of the species’ capability to survive and reproduce.

Section 3503 of the State Fish and Wildlife Code

Section 3503 of the State Fish and Wildlife Code states, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.”

Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The definition of “rare and endangered” differs from those contained in CESA. However, the list of native plants afforded protection pursuant to this act includes those listed

as rare and endangered under the CESA. The Native Plant Protection Act provides limitations on take as follows: “No person shall import into this state, or take, possess, or sell within this state” any rare or endangered native plant, except in compliance with provisions of the act (CDFW Code Section 1908), et seq.). Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

California Native Plant Society

The California Native Plant Society (CNPS) is a statewide resource conservation organization that has developed an inventory of California’s special-status plant species. This inventory is a summary of information on the distribution, rarity, and endangerment of California’s vascular plants. This rare plant inventory consists of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plants as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species on lists 1A, 1B, and 2 meet CDFW criteria for endangered, threatened, or rare listing. Plant species for which CNPS requires additional information in order to properly evaluate their status are included on List 3. List 4 plant species are those of limited distribution in California whose susceptibility to threat is considered low at the current time.

Local

City of Elk Grove

The City of Elk Grove General Plan establishes goals and policies to guide both present and future development within the City’s jurisdiction. The City of Elk Grove’s General Plan policies related to biological resources that may apply to potential future development in the SOIA Area are provided below.

- **Policy CAQ-6:** Within the Primary Zone of the Legal Delta (as defined by the State of California in the State Water Code, Section 12220), the City’s land use and other policies shall conform with the “Land Use and Resource Management Plan for the Primary Zone of the Delta” developed by the Delta Protection Commission.
- **CAQ-6-Action 1:** Coordinate with the Delta Protection Commission by providing updates on the status of any requests by the City to include any lands in the Primary Zone in the City’s sphere of influence or incorporated boundaries.
- **CAQ-6-Action 2:** Prior to the annexation of any land in the Primary Zone of the Legal Delta, ensure that this General Plan is consistent with the Delta Protection Commission’s Act and Plan as it affects the area within the Primary Zone.
- **Policy CAQ-7:** Encourage development clustering where clustering would facilitate onsite protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. Onsite resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

This policy shall not apply in the Rural Residential area east of State Route 99, where clustering of development is not permitted.

- **Policy CAQ-8:** Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures.

If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees, which were removed.

Trees that cannot be protected shall be replaced either onsite or offsite as required by the City.

- **CAQ-8-Action 1:** When reviewing native or non-native trees for preservation, considering the following criteria:
 - Aesthetic value
 - Biological value
 - Shade
 - Water quality benefits
 - Runoff reduction
 - Air quality (pollutant reduction)
 - Health of the tree(s)
 - Suitability for preservation in place
 - Safety hazards posed by the tree(s)
- **CAQ-8-Action 2:** Develop a list of trees which shall be considered generally exempt from preservation. These may include trees, which pose a threat to public safety, to native trees, or to natural habitat.
- **CAQ-8-Action 3:** Develop a list of trees which may be used when providing replacement trees for the loss of native and non-native trees.
- **CAQ-8-Action 4:** Implement the City's Tree Preservation Ordinance.
- **CAQ-8-Action 5:** Amend the City's Tree Preservation Ordinance to conform with the policies of this General Plan and to expand protection to non-native trees.

- **CAQ-8-Action 6:** Develop a list of trees that should not be planted due to their invasive nature (that is, their ability to escape cultivation or to dominate natural areas) and provide this information to the public and the development community.
- **CAQ-8-Action 7:** Retain the services of a qualified arborist(s) under contract to the City to provide information to decision-makers and staff on the suitability of trees for preservation.
- **CAQ-8-Action 8:** Consider the use of revised standard roadway cross-sections which do not require the removal of trees in order to provide additional roadway capacity.
- **CAQ-8-Action 9:** Provide funds for education, programs, and materials emphasizing the value and importance of trees. Support private foundations with local funds for their tree planting efforts. Encourage the harvesting of native seeds and plants prior to the clearing of project sites.
- **Policy CAQ-9:** Wetlands, vernal pools, marshland and riparian (streamside) areas are considered to be important resources. Impacts to these resources shall be avoided unless shown to be technically infeasible. The City shall seek to ensure that no net loss of wetland areas occurs, which may be accomplished by avoidance, re-vegetation and restoration onsite or creation of riparian habitat corridors.
- **CAQ-9-Action 1:** As part of the development review process, ensure that all potentially affected wetland areas are identified, and provide mitigation to ensure that no net loss occurs. Mitigation should occur within the same watershed as the impact, where feasible.
- **CAQ-9-Action 2:** Coordinate with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service in the review of development projects.
- **Policy CAQ-10:** Consider the adoption of habitat conservation plans for rare, threatened, or endangered species.
- **CAQ-10-Action 1:** As appropriate, work with the County of Sacramento and other agencies on a Habitat Conservation Plan or other mechanism to implement this policy.
- **Policy CAQ 11:** The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occurring based on City biological resource mapping and data provided in the General Plan EIR or other technical material that may be adversely affected by public or private development projects. Where preservation is not possible, appropriate mitigation shall be included in the public or private project. “Special-status” species are generally defined as species considered to be rare, threatened, endangered, or otherwise protected under local, state, and/or federal policies, regulations or laws.
- **CAQ-11 Action 1:** The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons

for proper identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Wildlife and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following:

- For special-status plant species: On- or offsite preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.
- For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or offsite, relocation of the species to another suitable habitat area, payment of mitigation credit fees.
- Participation in a habitat conservation plan.
- **Policy CAQ-19:** Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.
- **CAQ-19-Action 1:** Re-vegetation using native plant species shall be encouraged; use of non-native species shall be discouraged. Use of invasive species shall be prohibited.
- **CAQ-19-Action 2:** The City shall permit stream channel realignment only:
 - When necessary to eliminate flood hazards, after alternatives to provide flood capacity while protecting the natural alignment have been shown to be infeasible; or
 - To protect and preserve natural features and vegetation which would otherwise be removed; or
 - If the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.
- **CAQ-19-Action 3:** The City shall require, to the maximum extent practical, retention of topographic diversity and variation when channels are realigned or modified, including:
 - “Self-sustaining” meander characteristics,
 - Berms,
 - Naturalized side slope, and
 - Varied channel bottom elevation, consistent with the characteristics of the watershed, public safety, and other site-specific considerations.
- **CAQ-19-Action 4:** Where existing streams support riparian vegetation, evaluate options for constructing secondary flood control channels or other facilities for flood control and water quality purposes.
- **CAQ-19-Action 5:** Channel lowering of existing natural streams shall occur only after consideration of alternatives (including surface drainage systems which do not require channel

lowering) and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate floodflows under existing bridge structures.

- **CAQ-19-Action 6:** All storm drainage improvements on natural streams shall be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.
- **CAQ-19-Action 7:** Improvements in watercourses shall be designed for low maintenance, and to accommodate peak flows with vegetation (including mitigation plantings) in the channel. Channel modifications shall retain marsh and riparian vegetation whenever possible.
- **CAQ-19-Action 9:** Trails along stream corridors shall be located to minimize wildlife impacts and shall be restricted to non-motorized traffic.
- **CAQ-19-Action 10:** Except where approved by the City as part of the development of a public or private development project, no grading, clearing, tree cutting, debris disposal or any other similar action shall be allowed in stream corridors except for normal channel maintenance.
- **Policy CAQ-20:** Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City.

No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

- **Policy CAQ-21:** Development adjacent to a natural stream(s) shall provide a “stream buffer zone” along the stream.

“Natural streams” shall be generally considered to consist of the following, subject to site-specific review by the City:

- Deer Creek
- Elk Grove Creek
- Laguna Creek and its tributaries
- Morrison Creek
- Strawberry Creek
- White House Creek

The following are examples of desired features for this transition zone; the specific design for each transition zone shall be approved on a case-by-case basis by the City.

Stream buffer zones should generally measure at least 50 (fifty) feet from the stream centerline (total width of 100) feet or more, depending on the characteristics of the stream, and shall include:

1. Sufficient width for a mowed firebreak (where necessary), access for channel maintenance and flood control, and for planned passive recreation uses.
2. Sufficient width to provide for:
 - a. Quality and quantity of existing and created habitat,
 - b. Presence of species as well as species sensitive to human disturbance,
 - c. Areas for regeneration of vegetation,

- d. Vegetative filtration for water quality,
 - e. Corridor for wildlife habitat linkage,
 - f. Protection from runoff and other impacts of urban uses adjacent to the corridor,
 - g. Trails and greenbelts.
3. The stream buffer zone should not include above ground water quality treatment structures designed to meet pollutant discharge requirements.
- **Policy CAQ-22:** Stream crossings shall be minimized and be aesthetically compatible with the natural appearance of the stream channel. The use of bridges and other stream crossings with natural (unpaved) bottoms shall be encouraged to minimize impacts to natural habitat.
 - **Policy CAQ-23:** Uses in the stream corridors shall be limited to recreation and agricultural uses compatible with resource protection and flood control measures. Roads, parking, and associated fill slopes shall be located outside of the stream corridor, except at stream crossings.
 - **Policy CAQ-24:** Open space lands within a stream corridor shall be required to be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.
 - **Policy LU-16:** The areas designated in the Planning Area as “Urban Study Areas” are envisioned as areas in which urbanization to some extent could occur, generally in compliance with the following criteria:
 - Development should be limited to areas outside of the 100-year floodplain.
 - Development should take place in compliance with the goals and policies of this General Plan.
 - Any study of potential land uses in these areas should be accomplished in cooperation with the County of Sacramento, the Sacramento Local Agency Formation Commission, and other agencies and parties with ownership or jurisdiction of lands in and near the study area.
 - Any study of land uses in these areas should be accompanied by an environmental evaluation of the potential impacts of development.
 - Prior to the completion of land use studies, the City’s policy is that County of Sacramento land use designations in effect as of December 31, 2002, are retained.
 - **LU-16-Action 1:** Work with the County of Sacramento to establish and implement a program to study the potential for these areas to support urban development.
 - **Policy LU-39:** The City shall coordinate with regional planning agencies setting land use and environmental policies and programs and cooperate in the implementation of programs consistent with General Plan policy.

The City of Elk Grove has adopted Municipal Code Chapter 16.130, Swainson’s Hawk Impact Mitigation Fees, which was developed in consultation with CDFW, to mitigate for the loss of suitable Swainson’s hawk foraging habitat by way of direct preservation, in perpetuity, of equal suitable foraging habitat on an acre-per-acre ratio. Generally, the City has determined that habitat that is

below sea level may not be an acceptable location for mitigation for Swainson's hawk foraging habitat due to flooding concerns and the ordinance's requirement that mitigation land be preserved as suitable foraging habitat in perpetuity (T. Echiburu, 2012). The conditions of Municipal Code Chapter 16.130 states, "The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City and to the California Department of Fish and Wildlife."

The City of Elk Grove has also adopted Municipal Code Chapter 19.12 (the Tree Preservation and Protection Code). This Code is intended to preserve the existing trees within the City whenever reasonably possible, and to preserve the historic and aesthetic character of the community as described in the General Plan, of which older trees are a critical component. In doing so, the City established regulations as a way to protect the health and integrity of the City's existing urban forest while providing for an optimal level of species and age diversity. Further, the City recognizes that trees provide numerous benefits to the community, including improving water quality, providing shade for buildings, providing shelter for animals and other plants, and reducing pollution, thereby positively impacting the health and welfare of the community. Older, more mature trees are often the most effective types of trees for achieving these objectives. Provisions in the Tree Preservation and Protection Code are intended to complement and strengthen zoning, subdivision, and land use standards and regulations, while at the same time recognizing the rights of individual property owners. It is, therefore, the objective of these provisions to preserve existing trees through both the development review process and subsequent activities such as work within the canopy or within the critical root zone of trees and provide a process for replacement in instances where preservation is not reasonably possible.

South Sacramento Habitat Conservation Plan

The South Sacramento Habitat Conservation Plan (SSHCP) is in the process of development and environmental review. The SSHCP is a regional approach to addressing issues related to urban development, habitat conservation, and agricultural protection. The SSHCP is intended to consolidate environmental efforts to protect and enhance wetlands and upland habitats to provide ecologically viable conservation areas. It will streamline the permitting process for development projects. The SSHCP will cover 30 different species of plants and wildlife, including 10 that are state or federally listed as threatened or endangered. The SSHCP will be an agreement between state/federal wildlife and wetland regulators and local jurisdictions, which will allow land owners to engage in the "incidental take" of covered species (i.e., to destroy or degrade habitat) in return for conservation commitments from local jurisdictions. The SSHCP study area includes the City of Elk Grove and the proposed SOI project area. SSHCP Goals and Objectives:

- Ensure long-term viability of covered species in the Plan Area by protecting an adequate quality and quantity of habitat in an integrated manner and by otherwise contributing to their recovery.

- Accommodate development in sites consistent with land use agency plans (Sacramento County and the cities of Galt, Rancho Cordova, and Elk Grove) and with an equitable fee structure.
- Promote the long-term viability of agricultural uses consistent with the Plan, and ensure that agricultural lands and operations are not unduly impacted by the SSHCP's implementation.
- Create a streamlined, predictable, fair, and standardized permitting process.
- Rely solely on willing sellers for the purchase of land and easements.
- Provide a comprehensive framework for land use by linking plant and animal conservation with local land use programs, consistent with land use agencies' goals and policies.

3.4.4 - Methodology

Literature Review

The literature review provided a baseline from which to evaluate biological resources potentially occurring within the SOIA Area, as well as the surrounding area. As a part of the literature review, MBA examined existing environmental documentation for the project site and local vicinity. This documentation included biological studies for the area, literature pertaining to habitat requirements of special status species potentially occurring near the site, as well as California Natural Diversity Database (CNDDDB) listings, and species data provided by the USFWS and CDFW.

As part of the literature review, MBA reviewed the existing draft of the SSHCP, which applies to the SOIA Area. The SSHCP establishes a multi-species conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming.

MBA reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations. Aerial photographs provide an aerial perspective of the most current site conditions with regard to onsite and offsite land use, plant community locations, and potential locations of wildlife movement corridors. In addition, historical aerial photographs from the last ten years were reviewed to provide a greater understanding of the proposed project's land use, plant community locations, and potential locations of wildlife movement corridors as these elements transitioned over time.

MBA compiled a list of threatened, endangered, and otherwise sensitive species previously recorded to occur near the project site. The list was based on a search of the CDFW's California Natural Diversity Database (CNDDDB) and consolidated species occurrences as documented in the SSHCP. Consolidated species occurrences data includes data from numerous sources including data from studies conducted specifically for the SSHCP, project-level studies, professional expertise, and unconfirmed sightings. The CNDDDB is a sensitive species and plant community account database and the CNPS's Electronic Inventory of Rare and Endangered Vascular Plants of California database

for the USGS 7.5-minute topographic quadrangle maps containing the project site and immediate vicinity. The CNDDDB GIS database along with ArcGIS software was used to determine the distance between known recorded occurrences of sensitive species and the project site.

Reconnaissance Level Survey

The proposed project does not result in any physical development or changes in land use; therefore, no protocol-level or specific surveys were conducted to assess potential impacts as existing land uses would remain in place. A reconnaissance level survey was conducted by MBA biologist/regulatory specialist Dale Hameister on October 11, 2010 during daylight hours. The survey was limited to all areas of the SOIA Area that were accessible via the public right-of-way and no private properties were accessed during the survey. The survey was intended to identify the general biological resources within the project area, characterize the land use and habitat types, and to photograph-document the current existing conditions within the project area.

Riparian areas were not mapped during the site visit. The amount of riparian areas was determined from a combination of the National Wetlands Inventory, and the review of existing aerial photographs. Any drainages observed within the SOIA Area during the site visit were noted to contain very little mature riparian vegetation. Mature riparian woodlands were primarily observed within the adjacent areas along the Cosumnes River, the Cosumnes River Preserve, and within the Stone Lakes National Wildlife Refuge. Swainson's hawks were observed in open agricultural areas, mostly in the western portion of the SOIA Area.

The impacts related to biological resources from implementation of the 2003 Elk Grove General Plan were evaluated in the General Plan Environmental Impact Report (EIR). All mitigation measures identified for impacts in the Elk Grove General Plan EIR and adopted by the City continue to remain the responsibility of the City as part of implementation of its General Plan. Consequently, upon approval of any future annexation request for the SOIA Area, those General Plan policies and EIR mitigation measures are assumed to apply to development within the SOIA Area.

3.4.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, biological resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.4.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Special-Status Species

Impact BIO-1: **The project may have a substantial adverse effect, either directly or through habitat modifications, on special-status wildlife species.**

Impact Analysis

Implementation of the SOIA could indirectly result in impacts to wildlife habitat within the SOIA Area through the potential for future urbanization of the SOIA Area. It is reasonably foreseeable that future development of the SOIA Area could change the rural, open space, agricultural character of the area to that of an urbanized environment, thus resulting in potentially significant impacts to special-status wildlife species. One special-status species, the state threatened Swainson's hawk, was observed during the reconnaissance survey of the project area.

No USFWS designated critical habitat occurs within the project area. However, the onsite drainage canals connect directly to drainages to the west, which includes designated critical habitat for the Delta smelt.

State fully protected greater sandhill crane and state threatened Swainson's hawk potentially occur within the project area. County of Sacramento methodology for determining foraging habitat impacts in unincorporated Sacramento County recognizes that Swainson's hawk foraging habitat value is greater in large expansive open spaces and agricultural areas than in areas that have been fragmented by agricultural-residential or urban development. The concept is that impact to foraging habitat

occurs as properties develop to increasingly more intensive uses on smaller minimum parcel sizes. Therefore, foraging habitat impacts are assessed when agricultural and agricultural-residential parcels are rezoned to smaller minimum parcel sizes. The level of impact is calculated in acres and is based on the starting habitat value and ending habitat value. As a baseline, Department of Environmental Review and Assessment (DERA) assumes that properties zoned AG-40 and larger have 100 percent habitat value, AG-20 properties have 75 percent habitat value, and AR-10 properties have 25 percent habitat value. More than 90 percent of the SOIA Area is zoned as AG-40 and larger and, therefore, would have 100 percent foraging value.

The LAFCo acknowledges that approval of the SOIA Area could result in urbanization of the SOIA Area at an undetermined future time. The City's Swainson's hawk mitigation program requires that project applicants protect existing habitat through either purchase and transfer of conservation easements or payment of mitigation fees. Future development within the SOIA Area would be subject to its own CEQA review and would comply with the City's conditions as well as follow the recommendation developed by the Swainson's Hawk Technical Advisory Committee (TAC) (2000) to maximize the potential for locating nesting Swainson's hawks, and thus reducing the potential for nest failures as a result of project activities/disturbances. California Department of Fish and Wildlife's (CDFW) recommends that surveys should be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation is required. In general, the TAC recommends this approach as well. However, since future urbanization activities could impact more than 7,000 acres of land zoned as AG-40 and higher, impacts to Swainson's hawk's foraging habitat are identified to be potentially significant.

Burrowing owl, a California Species of Concern, has a high potential to occur within the project area. Burrowing owls prefer open habitats such as grasslands, deserts, golf courses, and agricultural areas where suitable burrows are present. Burrowing owls prefer California ground squirrel burrows, but will also use fox, coyote, and rabbit burrows, as well as manmade culverts and debris piles. Indirect impacts to burrowing owls could be significant. Future development within the SOIA Area should follow the recommendation by the Burrowing Owl Consortium, which has developed survey protocol approved by CDFW.

Indirect impacts due to future development could have potentially significant impacts. Future development within the SOIA Area would be subject to its own CEQA review and comply with existing regulations including FESA, CESA, MBTA, and CDFW Code. The following mitigation measure would minimize effects of the buildout of the SOIA Area on special-status wildlife species, but residual impacts to special-status wildlife species would be significant and unavoidable.

Level of Significance before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a At the time of submittal of any application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will demonstrate to LAFCo compliance with all following measures:

- A. A reconnaissance-level biological survey of the area to be annexed shall be performed by a professional biologist approved by the lead agency to identify habitats and individuals of special-status species defined in this Recirculated EIR. This will permit the lead agency to track impacts to special-status species on a regional basis rather than on project-by-project basis, when feasible.
- B. Avoidance of special-status species and their habitats shall be addressed during project design. If avoidance is infeasible, mitigation of special-status species shall occur pursuant to measure C, below.
- C. The City of Elk Grove shall participate in the South Sacramento County Habitat Conservation Plan or shall require the preparation and implementation of a Habitat Conservation Management Plan (HCMP) for all affected special status species and habitats. The HCMP shall include assessment, disclosure and mitigation for nesting and foraging habitat impacts to protected species, as discussed further in Mitigation Measure BIO-1b and BIO-1c. The HCMP shall be developed in consultation with California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) for listed species under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The City of Elk Grove shall consult with Sacramento County during development of the HCMP, in the County's capacity as the lead of the South Sacramento Habitat Conservation Plan (SSHCP), and provide proof of consultation with the County to LAFCo.
- D. If an HCMP is prepared, it shall incorporate mitigation guidelines of these agencies for listed species. For non-listed but sensitive species as defined by this Recirculated EIR, the HCMP shall include provisions including, but not limited to the following:
 - Require clustering of urban development to retain non-disturbed open space areas.
 - Require comprehensive site development standards to minimize removal of existing vegetation and to require installation and long-term maintenance of landscaping in setback and buffer areas. Landscaping in buffer areas adjacent of preserved habitat areas should be of native and non-invasive plant materials, and non-irrigated.

- Require appropriate buffers between development and Right to Farm Ordinance lands, Nature Conservancy Lands, and Stone Lakes National Wildlife Refuge.
 - Require buffers between development and drainage canals that serve as habitat and ultimately drain into Stone Lakes National Wildlife Preserve, Nature Conservancy lands, and/or Farmland Preservation Zones; buffers shall be a minimum of 150 feet on either side of said drainage canals.
 - Minimize impacts to movement corridors to ensure movement of wildlife.
 - Provide for the integrity and continuity of wildlife and plant habitat.
 - Support the acquisition, development, maintenance, and restoration of habitat lands for wildlife and plant enhancement.
- E. The special-status species referred to herein are those identified under the applicable federal and state laws listed in Table 3.4-2 and -3.

MM BIO-1b To mitigate impacts on nesting for Swainson’s hawk and other raptors (including burrowing owl), prior to the submittal of any application to annex all or part of the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove shall demonstrate to LAFCo, through policy or adopted planning documents, that the following requirements shall be applied to development proposals within the SOIA Area, and required actions will be completed prior to development activity:

- A qualified biologist will be retained by the applicant to conduct preconstruction surveys and to identify active nests on and within 0.5 mile of the proposed development and active burrows on the development site if accessible. The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction for all project phases. To the extent feasible, guidelines provided in Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley shall be followed for surveys for Swainson’s hawk, and the guidelines provided in the California Department of Fish and Wildlife’s (CDFW) Burrowing Owl Survey Protocol and Mitigation Guidelines shall be followed for burrowing owls.
- If no nests are found, no further nesting mitigation is required.
- If active nests are found, impacts on nesting Swainson’s hawks and other raptors shall be avoided by establishing appropriate buffers around the nests, and impacts to burrowing owls shall be avoided by establishing appropriate buffers around the nests. No project activity shall commence within the buffer area until the young have fledged, the nest is no longer active, or until a

qualified biologist has determined, in consultation with CDFW, that reducing the buffer would not result in nest abandonment. CDFW guidelines recommend implementation of 0.25- or 0.5-mile-wide buffers, but the size of the buffer may be adjusted if a qualified biologist and the City, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities will be required if the activity has potential to adversely affect the nest.

MM BIO-1c To mitigate impacts on foraging habitat for Swainson's hawk, other raptors (including burrowing owl), and greater sandhill cranes, the City of Elk Grove shall demonstrate to LAFCo prior to annexation of all or part of the Sphere of Influence Amendment (SOIA) Area, through policy or adopted planning documents, that conservation easements or other instruments to acquire and preserve suitable foraging habitat for Swainson's hawk and greater sandhill crane are identified and will be implemented, as determined by the California Department of Fish and Wildlife (CDFW). Foraging impacts mitigation shall be required for the following planning actions that would occur within the SOIA Area:

- A. Any request to change land use zoning or general plan designation from agricultural to a non-agricultural land use,
- B. Any request to subdivide five (5) acres or more of contiguous land zoned AR-1 or AR-2,
- C. Any request for land use entitlement for a nonagricultural use of land zoned with an agricultural designation,
- D. Any request for a land use entitlement for a nonagricultural use of land five (5) acres or more in size that is zoned AR-1 or AR-2, or
- E. Any public improvement project proposed by any department or agency of the City of Elk Grove on land with agricultural designation.

The project shall acquire conservation easements or other instruments to preserve suitable foraging habitat. In deciding whether to approve the land for proposed preservation, the City shall consider the benefits of preserving lands in proximity to other protected lands. The preservation should occur prior to the onset of any development activities that would cause the impact (i.e., land clearing or site grading) or the issuance of permits for grading, building or other site improvements, whichever occurs first.

- **Swainson's hawk.** The location and suitability of mitigation parcels, as well as the conservation instruments protecting them shall be acceptable to the City

and to the CDFW. The amount of land shall be governed by a one-to-one (1:1) mitigation ratio for each acre developed. The land to be preserved shall be deemed suitable Swainson's hawk foraging habitat by the City in consultation with CDFW.

- **Greater sandhill crane.** The location and suitability of mitigation parcels, as well as the conservation instruments protecting them shall be acceptable to the City and to the CDFW. The amount of land preserved shall be governed at a 1:1 mitigation ratio for each acre developed. The land to be preserved shall be deemed suitable greater sandhill crane foraging habitat by the City in consultation with CDFW.

Where impacts for these species overlap (lands that support foraging for both species) mitigation can occur at 1:1 if mitigation sites support both species.

The City of Elk Grove shall require minimum conservation easement content standards to be implemented to the satisfaction of LAFCo. Minimum conservation easement contents must include, but are not limited to: documentation and recorded encumbrances on the land, prohibition of activity which substantially impairs or diminishes the land's capacity as suitable foraging habitat, water rights protections, and requirements for the mitigation land to be held in trust in perpetuity.

This mitigation measure may be implemented in combination with Mitigation Measure AG-1, which requires the preservation of agricultural land, as long as the agricultural land is determined by the City in consultation with CDFW to be suitable habitat pursuant to the conditions and requirements listed above. In addition, this mitigation measure may allow the joint use of land for both Swainson's hawk and greater sandhill crane foraging habitat mitigation, as long as the land is determined by the City in consultation with CDFW to be suitable habitat pursuant to the conditions and requirements listed above. In the event that it is infeasible to acquire the necessary easements prior to annexation and development, the City will apply its impact mitigation fee program, used to acquire available land with suitable foraging habitat values at the ratios and conditions specified above.

Level of Significance after Mitigation

Though MM BIO-1a through 1c will result in the minimization of impacts to nesting birds and conservation of lands for nesting and foraging of special status wildlife species, the SOIA will indirectly (through possible future annexation and build out) result in a net loss of habitat. Implementation of the MM BIO-1a, including finalizing and implementing the SSHCP, will ensure that special status wildlife species that potentially occur in the SOIA Area are conserved through the

cumulative actions of all covered activities in the South County, including build out of the SOIA Area. Since neither the City of Elk Grove nor LAFCo are the lead agencies for SSHCP, they cannot ensure its completion or implementation. MM BIO-1a also identifies that the City (prior to annexation) can create its own HCMP in consultation with CDFW and USFWS for listed species under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The HCMP should result in mitigation of impacts to less than significant levels though the details of the HCMP have not been developed to the degree necessary to draw conclusion. Because of this, even with mitigation, the impact is considered significant and unavoidable.

Significant and unavoidable impact.

Riparian Habitat and Sensitive Natural Communities

Impact BIO-2: **The project may have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**

Impact Analysis

Based on the SSHCP land cover database and a review of SOIA Area maps and aerial photographs, the SOIA Area may contain approximately 150.6 acres of wetlands, ponds and riparian areas. Riparian areas, which provide suitable habitat for the giant garter snake, also include drainage ditches within agricultural areas. There are significant areas of riparian habitat within the vicinity of the project area within Stone Lakes National Wildlife Preserve west of the project area and along the Cosumnes River and Deer Creek south and east of the project area. In addition, riparian habitat may be found along drainage ditches within the agricultural lands within the SOIA Area.

The project could lead to future urbanization of the project area; indirect impacts of future development on existing riparian areas would potentially be significant due to the riparian habitat within the project area. Implementation of the SOIA could lead to the development of hundreds of new buildings and the rural, open space, agricultural character of the area could reasonably be foreseen to change to that of an urbanized environment, thus resulting in potentially significant impacts to sensitive natural communities. Future development within the SOIA Area will be subject to its own CEQA review and evaluate specific development projects in compliance with federal, state, and local regulations pertaining to the protection of riparian habitat consistent with Mitigation Measure BIO-2 below, including requirements to obtain permits and fully mitigate any potential impacts. Therefore, the impact would be less than significant after implementation of Mitigation Measure BIO-2.

Level of Significance before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-2 Prior to annexation of any or part of the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove shall demonstrate to LAFCo that the City shall require the following actions from all future development within the SOIA Area:

- Prior to the approval of grading or improvement plans, and before any groundbreaking activity associated with future projects, the City shall require project applicant(s) of all projects that would include fill of wetlands or other waters of the U.S. or waters of the state to complete site-specific wetland delineations and obtain all necessary permits under sections 401 and 404 of the Clean Water Act or the state's Porter-Cologne Act and a CDFW Streambed Alteration Agreement for the respective phase. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction as determined during the Section 401 and Section 404 permitting processes but will result in not less than 1 acre created/ enhanced/ restored to each acre impacted. Wetland mitigation should occur within the same watershed as the impact, where feasible.

Level of Significance after Mitigation

Should proposed build out of the SOIA occur, implementation of MM Bio-2 will ensure that there is no net loss of wetlands after mitigation. Therefore, the SOIA will result in a less than significant impact to riparian habitat and other wetlands.

Less than significant impact.

Wetlands

Impact BIO-3: The project may have a substantial adverse effect on wetlands.

Impact Analysis

Based on the SSHCP landcover database, the SOIA Area may contain approximately 150.6 acres of wetlands, ponds and riparian areas. As mentioned above in Impact BIO-1, implementation of the SOIA could indirectly result in biological resource impacts within the SOIA Area through the build out of the SOIA Area. Implementation of Mitigation Measure BIO-1a requires development of a Habitat Conservation Management Plan for the SOIA Area that includes buffers between development and drainage canals that ultimately drain into Stone Lakes National Wildlife Preserve, with a minimum setback of 150 feet on either side of said drainage canals.

City of Elk Grove General Plan Policy CAQ-21 requires "stream buffer zone" adjacent to natural streams and creeks. The City's General Plan states that the stream buffer zones should generally

measure at least 50 feet from the stream centerline (total width of 100) feet or more, depending on the characteristics of the stream zone. The City would approve design of the stream zone on a case-by-case basis. These policies as well as implementation of the Mitigation Measure BIO-2 would preserve wetlands within the SOIA Area and ensure there is no net loss of wetlands from any future development. Therefore, the impact would be less than significant after implementation of Mitigation Measure BIO-2.

Level of Significance before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure BIO-2.

Level of Significance after Mitigation

Should proposed build out of the SOIA Area occur, implementation of MM Bio-2 would ensure that there is no net loss of wetlands after mitigation; therefore, the SOIA will result in a less than significant impact to riparian habitat and other wetlands.

Less than significant impact.

Wildlife or Fish Movement

Impact BIO-4: **The project may interfere substantially with the movement of any native resident or migratory fish or wildlife species.**

Impact Analysis

The SOIA Area primarily consists of agricultural areas with open space that do not constrict wildlife movement, however the SOIA Area as well as other agricultural areas in the south county can be used as a wintering resting place for migrants of the Pacific Fly-way. City of Elk Grove General Plan Policy CAQ-7 is intended to encourage development clustering in a manner in which the clustering of development would facilitate onsite protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space. This policy will help to preserve movement of wildlife within the SOIA Area.

As mentioned above in Impact BIO-1, implementation of the SOIA could indirectly result in impacts within the SOIA Area. Implementation of the SOIA could lead to the build out of the SOIA Area into an urbanized environment, thus resulting in potentially significant impacts to wildlife or fish movement and wetlands. Implementation of Mitigation Measure BIO-1a requires development of a Habitat Conservation Management Plan for the SOIA Area. In addition, any future development within the SOIA Area will be subject to its own CEQA review and seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities. As aforementioned above, site plan and project design for future projects could potentially reduce impacts on wetlands.

Biological Resources

City of Elk Grove General Plan Policy CAQ-21 requires “stream buffer zone” adjacent to natural streams and creeks. The City’s General Plan states that the stream buffer zones should generally measure at least 50 feet from the stream centerline (total width of 100) feet or more, depending on the characteristics of the stream zone. This, in addition to Mitigation Measure Bio-2 above, would minimize impacts to a level of less than significant.

Level of Significance before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measures BIO-1a and BIO-2.

Level of Significance after Mitigation

Mitigation Measure BIO-1a will result in designation of open space within the SOIA. Mitigation Measure BIO-2 will result in projects completing site-specific wetland delineations and obtaining all necessary permits under sections 401 and 404 of the Clean Water Act or the state’s Porter-Cologne Act and a CDFW Streambed Alteration Agreement. In addition, the SOIA Area sits within a context of hundreds of thousands of acres of open space. Both the open space within the SOIA Area and the surrounding agricultural lands will provide ample nesting habitat for wintering migrants as well as space for movement for wildlife. This impact, therefore, is less than significant.

Less than significant impact.

Conflicts with Local Biological Policies or Ordinances

Impact BIO-5: **The project may conflict with local biological policies or ordinances, including tree preservation policies.**

Impact Analysis

While implementation of the SOIA could indirectly result in conflicts with Local Biological Policies or Ordinances within the SOIA Area—and while it is likely that implementation of the SOIA could lead to build out of the SOIA Area to an urbanized environment, thus resulting in potentially significant impacts—any development will be subject to existing federal and state regulations pertaining to biological resources. The County of Sacramento General Plan and the City of Elk Grove General Plan have policies on biological resources. Both have goals and policies dedicated to the protection of sensitive species as well as the preservation of open space and the protection and enhancement of riparian and wetland habitats (refer to Impact BIO-4).

The project area does not contain any areas defined as woodlands. However, there are many large trees within the SOIA Area that are generally associated with rural residential areas and may qualify for tree preservation, pursuant to the City’s Tree Preservation and Protection Code Chapter 19.12. Development of the SOIA Area may result in the removal of such trees. The following mitigation measure is recommended to ensure that impacts would be less than significant.

Level of Significance before Mitigation

Potentially significant impact.

Mitigation Measures

- MM BIO-5** At the time of submittal of an application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will demonstrate that tree protection will be consistent with either: (1) the City's current tree preservation standards under Municipal Code Chapter 19.12 or (2) the following mitigation measure.
- A. Reconnaissance-level tree survey of the SOIA Area should be performed by a certified arborist to identify native tree resources, particularly those that may be designated as landmark or heritage trees. This will enable the lead agency to track impacts to native trees on a regional basis rather than a project-by-project basis, when feasible.
 - B. Minimization of impacts to protected tree species shall be undertaken during project design. If avoidance is infeasible, mitigation of native trees pursuant to measures D through F below shall be conducted.
 - C. In addition to native oak trees, all native tree species should be protected under the City of Elk Grove's Tree Preservation and Protection Code Chapter 19.12. The mitigation rate would be the same as those in the Ordinance current at the time of this document, unless future versions require a higher mitigation rate, but it would also require obtaining replacement trees from local genetic stock.
 - D. A five-year monitoring plan shall be completed for all mitigation plantings. The monitoring plan would include appropriate irrigation schedules, as well as criteria for success and reestablishment during the 5-year period. A success rate of not less than 80 percent at the end of the 5-year monitoring period is recommended.
 - E. Individual trees or groups of trees preserved shall be fully protected during construction. A temporary protective fence shall be established at a minimum of 10 feet beyond the drip line of the retained native trees. The fence shall be in place prior to beginning construction activities, including grading. Within this protective buffer, no grading, trenching, fill, or vegetation alteration shall be allowed.
 - F. Mitigation shall target large tracts or contiguous native tree habitat. Connectivity between native tree woodland preserves as well as adequate buffering from development is important to promote native tree recruitment, the long-term viability of the habitat, and wildlife use of the area.

Level of Significance after Mitigation

Compliance with Mitigation Measure MM BIO-5 promotes protection in place, or, if trees are required to be removed, mitigation plantings are required to be monitored and meet a minimum success rate. Preserved trees must also be protected during project construction. This measure would preserve existing or replace any removed trees such that this would be a less than significant impact.

Conservation Plan

Impact BIO-6: The project would not conflict with local adopted habitat conservation plans.

Impact Analysis

As mentioned above in Impact BIO-1, implementation of the SOIA could indirectly result in impacts within the SOIA Area. Implementation of the SOIA could lead to build out of the SOIA Area to an urbanized environment. The SSHCP is being developed but has not yet been implemented. The City of Elk Grove and Sacramento County are participating partners in the SSHCP. Build out of the SOIA Area has been included in the working draft SSHCP as a foreseeable project. The Conservation Strategy reflects the SOIA Area build out. The SSHCP has not been finalized or adopted; therefore, the SOIA will not result in any impact to an adopted plan. If the SSHCP is adopted by the City, future development activities within the SOIA Area will be subject to the SSHCP. If the SSHCP is adopted but the City is not a participant, all future actions within the SOIA Area would need to be evaluated for consistency with the SSHCP in future project-level CEQA reviews; any annexation applications would be required to adhere to and be consistent with SSHCP requirements prior to approval. There would be no impact.

Level of Significance before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

No impact.