

## 3.4 BIOLOGICAL RESOURCES

This section describes the presence or potential presence of common and sensitive biological resources on the project site and identifies potential effects of the Folsom Corporation Yard SOIA/annexation project on those resources. Mitigation measures are recommended to reduce potential impacts, as appropriate. The data reviewed in preparation of this analysis included:

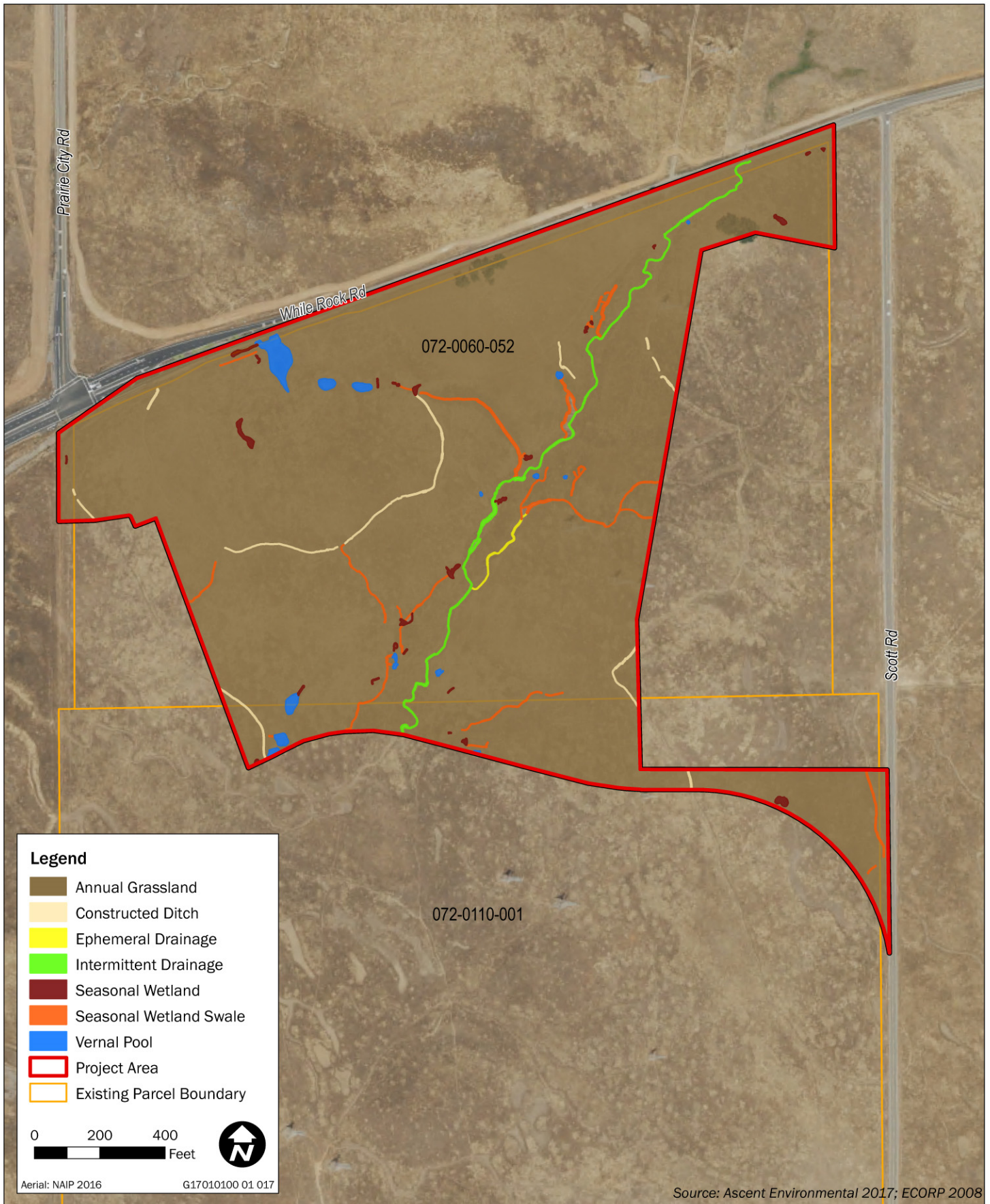
- ▲ Special-status Plant Survey for Scott Road (GenCorp Realty Investments, LLC. 2008);
- ▲ Wet Season Survey for Federally Listed Branchiopods for Scott Road Property (GenCorp Realty Investments, LLC 2009);
- ▲ records search and GIS query of the California Natural Diversity Database (CNDDDB) (2017);
- ▲ Calflora online database of plants in California (Calflora 2017);
- ▲ California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2017);
- ▲ eBird online database of bird observations (eBird 2017); and
- ▲ reconnaissance-level survey of project site on November 9, 2017.

Comments received on the notice of preparation regarding biological resources included comments received from the California State Parks and California Department of Fish and Wildlife (CDFW) regarding biological resources of concern that could be adversely affected by the project. Comments generally pertained to impacts to sensitive wildlife species, vernal pools, wetlands, and streams.

### 3.4.1 Environmental Setting

The project site is currently located within unincorporated Sacramento County south of the City of Folsom (Exhibit 2-1). The project site is bordered on the north by White Rock Road and on the east by Scott Road. The western edge of the project site is adjacent to a portion of the Prairie City Off Highway Vehicle Park and is separated by a fence. The southern portion of the project site is within APN 072-0110-001, owned by Aerojet Rocketdyne Inc., and includes the same types of habitat as the project site. APN 072-0110-001 also contains an approximately 1.5-acre stock pond surrounded by Fremont cottonwood trees (*Populus fremontii*) and willows (*Salix* sp.). The stock pond and cottonwood trees are not located within the project site.

The project site contains primarily grazed annual grassland habitat with isolated trees and several different aquatic features including vernal pools, seasonal wetlands, intermittent drainages, and constructed ditches (Exhibit 3.4-1, Table 3.4-1).



**Exhibit 3.4-1**

**Land Cover and Aquatic Features**



**Table 3.4-1 Habitat Types within the Project Site**

Habitat Type	Size (acres)
Annual Grassland	56.71
Constructed Ditch	0.08
Ephemeral Drainage	0.02
Intermittent Drainage	0.17
Seasonal Wetland	0.14
Seasonal Wetland Swale	0.25
Vernal Pool	0.35

Source: Data compiled by Ascent Environmental in 2017

### Annual Grassland

The project site contains approximately 56.7 acres of annual grassland habitat consisting of native and nonnative grasses and forbs such as brome (*Bromus* sp.), rattlesnake grass (*Briza maxima*), oat (*Avena* sp.), and sticky tarweed (*Holocarpha virgata*; Table 3.4-1). Approximately 41.5 acres of the grassland habitat within the project site is associated with development of the proposed Folsom Corporation Yard site and the Scott Road realignment, and the remaining 15.2 acres are associated with the Capitol SouthEast Connector right-of-way. The grassland has been grazed by cattle and the terrain is uneven due to the grazing and historic mining activity.

### Vernal Pools and Wetlands

The project site contains 14 vernal pools with a combined area of approximately 0.35 acre of habitat (Table 3.4-1). Additionally, the project site contains approximately 0.14 acre of seasonal wetland habitat, 0.25 acre of seasonal wetland swale, 0.19 acre of ephemeral and intermittent drainage, and 0.08 acre of constructed ditches (Table 3.4-1). During the November 2017 reconnaissance survey, the dominant vegetation within vernal pool and wetland habitat was coyote thistle (*Eryngium vaseyi*). However, several other vernal pool plant species have been observed within the project site during wet season surveys, including Fremont's goldfields (*Lasthenia fremontii*), white headed navarretia (*Navarretia leucocephala*), and bristled downingia (*Downingia bicornuta*).

### Trees

The only trees within the project site are located along the northern edge of the site adjacent to White Rock Road. Trees include a small grove of nonnative black locust (*Robinia pseudoacacia*) and common fig (*Ficus carica*) approximately 0.25 mile east of the intersection of White Rock Road and Prairie City Road. Two valley oak (*Quercus lobata*) trees are present approximately 0.10 mile west of the intersection of White Rock Road and Scott Road. One of the valley oaks is dead and, upon review of historic aerial imagery, appears to have fallen sometime during the spring or summer of 2017. The second valley oak is healthy and between 36 and 40 inches diameter at breast height (DBH).

### COMMON WILDLIFE SPECIES

During the November 2017 reconnaissance survey, several common species were observed, including American crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), red-tailed hawk (*Buteo jamaicensis*), western bluebird (*Sialia mexicana*), and western meadowlark (*Sturnella neglecta*) which is commonly associated with grasslands. Many small rodent burrows, trails, and droppings were observed during the survey, likely associated with voles (*Microtus* sp.) and deer mice (*Peromyscus maniculatus*). The project site also contains five large transmission towers that are likely used by raptors, including owls, for roosting and foraging.

## SENSITIVE BIOLOGICAL RESOURCES

### Special-Status Species

Special-status species are plants and animals that are legally protected under California Endangered Species Act (CESA) (Fish and Game Code, Section 2050 et seq.), the federal, or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. For this EIR, special-status species are defined as:

- ▲ species listed or proposed for listing as threatened or endangered under ESA (50 Code Fed. Regs., Section 17.12) for listed plants, (50 Code Fed. Regs., Section 17.11) for listed animals, and various notices in the Federal Register for proposed species;
- ▲ species that are candidates for possible future listing as threatened or endangered under ESA (75 Code Fed. Regs., Section 69222);
- ▲ species that are listed or proposed for listing by the State of California as threatened or endangered under CESA of 1984 (14 Cal. Code Regs., Section 670.5);
- ▲ plants considered by CDFW to be “rare, threatened, or endangered in California” (Rare Plant Ranks 1A, 1B, 2A, and 2B; CNDDDB 2017; CNPS 2017);
- ▲ species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) Guidelines, Section 15380;
- ▲ animals fully protected in California (Fish and Game Code, Section 3511 for birds, Section 4700 for mammals, and Section 5050 for reptiles and amphibians); or
- ▲ animal species of special concern to CDFW.

### Special-Status Plants

Table 3.4-2 provides a list of the special-status plant species that have been documented on the project site or the CNDDDB 5-mile search area, and describes their regulatory status, habitat, and potential for occurrence in the project site. A total of eight special-status plant species have potential to occur within the project site. These species include dwarf downingia (*Downingia pusilla*), Bogg’s Lake hedge-hyssop (*Gratiola heterosepala*), Ahart’s dwarf rush (*Juncus leiospermus* var. *ahartii*), legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii* ssp. *myersii*), slender Orcutt grass (*Orcuttia tenuis*), Sacramento Orcutt grass (*Orcuttia viscida*), and Sanford’s arrowhead (*Sagittaria sanfordii*).

**Table 3.4-2 Special-Status Plant Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site**

Species	Listing Status <sup>1</sup>			Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State	CRPR		
Dwarf downingia <i>Downingia pusilla</i>			2B.2	Wetland. Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 3 to 1,608 ft in elevation. Blooms March-May.	May occur. The nearest known occurrence of this species is approximately 4.5 miles northwest of the project site (CNDDDB 2017). While dwarf downingia was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable vernal pool and seasonal wetland habitat for this species.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>		SE	1B.2	Wetland. Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 33	Likely to occur. This species was observed within a vernal pool adjacent to the project site during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008). The project site contains potentially suitable seasonal wetland and vernal pool habitat for this species.

**Table 3.4-2 Special-Status Plant Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site**

Species	Listing Status <sup>1</sup>			Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State	CRPR		
				to 7,792 ft in elevation. Blooms April-August.	
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>			1B.2	Valley and foothill grassland. Restricted to the edges of vernal pools in grassland. 98 to 328 ft in elevation. Blooms March-May.	May occur. The nearest known occurrence of this species is approximately 8 miles southwest of the project site near Mather Airport (Calflora 2017, CNPS 2017). While Ahart's dwarf rush was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable grassland, vernal pool, and seasonal wetland habitat for this species.
Legenere <i>Legenere limosa</i>			1B.1	Vernal pools, wetland. In beds of vernal pools. 3 to 2,887 ft in elevation. Blooms April-June.	Likely to occur. Legenere was observed during 2008 rare plant surveys approximately 0.25 mile south of the project site on the edge of the stock pond (GenCorp Realty Investments, LLC. 2008). Potentially suitable vernal pool and seasonal wetland habitat is present within the project site.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>			1B.1	Vernal pools, wetland. Clay soils within non-native grassland. 148 to 328 ft in elevation. Blooms April-May.	May occur. The nearest known occurrence of this species is approximately 4.5 miles northwest of the project site (CNDDDB 2017). While pincushion navarretia was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable vernal pool and seasonal wetland habitat for this species.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT	SE	1B.1	Vernal pools, wetland. Often in gravelly substrate. 82 to 5,758 ft in elevation. Blooms May-October.	May occur. The nearest known occurrence of this species is approximately 5.2 miles west of the project site (Calflora 2017, CNPS 2017). While slender Orcutt grass was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable vernal pool and seasonal wetland habitat for this species.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE	SE	1B.1	Vernal pools, wetland. 49 to 279 ft in elevation. Blooms April-September.	May occur. The nearest known occurrence of this species is approximately 3.3 miles southwest of the project site (CNDDDB 2017). While Sacramento Orcutt grass was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable vernal pool and seasonal wetland habitat for this species.
Sanford's arrowhead <i>Sagittaria sanfordii</i>			1B.2	Wetland. Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0 to 2,133 ft in elevation. Blooms May-November.	May occur. The nearest known occurrence of this species is approximately 3 miles east of the project site (CNDDDB 2017). While Sanford's arrowhead was not observed during 2008 rare plant surveys (GenCorp Realty Investments, LLC. 2008), the project site contains potentially suitable seasonal wetland habitat for this species.

Notes: USFWS = CRPR = California Rare Plant Rank; CNDDDB = California Natural Diversity Database

<sup>1</sup> Legal Status Definitions

<b>Federal:</b>	<b>California Rare Plant Ranks:</b>
E Endangered (legally protected by ESA)	1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
T Threatened (legally protected by ESA)	2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
<b>State:</b>	<b>Threat Ranks</b>
E Endangered (legally protected by CESA)	0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
R Rare (legally protected by CNPPA)	0.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

<sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present on the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available at the project site; however, there are little to no other indicators that the species might be present.

Likely to occur: The species, or evidence of its presence, was observed at the project site during reconnaissance surveys, or was reported by others.

Sources: CNDDDB 2017; Calflora 2017, CNPS 2017

**Special-Status Wildlife**

Table 3.4-3 provides a list of the special-status wildlife species that have been documented on the project site or the CNDDB 5-mile search area, and describes their regulatory status, habitat, and potential for occurrence in the project site. A total of nine special-status wildlife species have potential to occur within the project site (Table 3.4-3). These species include western spadefoot (*Spea hammondi*), burrowing owl (*Athene cunicularia*), golden eagle (*Aquila chrysaetos*), Swainson’s hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), and American badger (*Taxidea taxus*).

The project site does not contain federally designated critical habitat for listed species.

**Table 3.4-3 Special-Status Animal Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site**

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State		
<b>Reptiles</b>				
Western pond turtle <i>Actinemys marmorata</i>		SSC	Aquatic, artificial flowing waters, Klamath/north coast flowing waters, Klamath/north coast standing waters, marsh and swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing and standing waters. A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected to occur. The nearest known occurrence of this species is approximately 3 miles north of the project site within a human-made ditch (CNDDB 2017). All known occurrences of western pond turtle within 5 miles of the project site are associated with permanent flowing water bodies (CNDDB 2017). The project site contains vernal pool, seasonal wetland, and intermittent drainage habitat. However, the project site does not contain suitable permanent aquatic habitat for this species.
Western spadefoot <i>Spea hammondi</i>		SSC	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pool, and wetlands. Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	May occur. The nearest known occurrence of this species is approximately 4.5 miles northwest of the project site in similar habitat (CNDDB 2017). The project site contains potentially suitable grassland, seasonal wetland, and vernal pool habitat for this species.
<b>Birds</b>				
Burrowing owl <i>Athene cunicularia</i>		SSC	Coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	May occur. The nearest known occurrence of this species is approximately 1.5 miles east of the project site (CNDDB 2017). While suitable burrows and evidence of ground squirrel activity were not observed during the November 2017 reconnaissance survey, the project site contains potentially suitable grassland habitat with friable soils for this species.
Golden eagle <i>Aquila chrysaetos</i>		FP	Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forest, and valley and foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	May occur. The nearest known occurrence of this species is approximately 4.3 miles northeast of the project site in the City of Folsom (CNDDB 2017). The project site contains potentially suitable nesting habitat within a large valley oak tree on the project site. While no nests were observed in the tree during the November 2017 reconnaissance survey, it is possible that a golden eagle could establish a nest in the future or forage on the project site.
Northern harrier <i>Circus cyaneus</i>		SSC	Coastal scrub, Great Basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland, and wetlands. Coastal salt and fresh-water marsh.	May occur. The project site contains potentially suitable grassland and wetland nesting habitat for this species. While there are no known nesting

**Table 3.4-3 Special-Status Animal Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site**

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State		
			Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	occurrences of northern harrier within 5 miles of the project site. There have been several observations of the species within and adjacent to the project site (eBird 2017).
Swainson's hawk <i>Buteo swainsoni</i>		ST	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	May occur. The nearest known occurrence of this species is approximately 0.8 mile west of the project site (CNDDDB 2017). The project site contains potentially suitable nesting habitat within a large valley oak tree. South of the site, suitable nest trees are present in the Fremont cottonwood trees adjacent to the stock pond. A large nest likely belonging to a raptor was observed within a cottonwood tree during the November 2017 reconnaissance survey.
Tricolored blackbird <i>Agelaius tricolor</i>		CE SSC	Freshwater marsh, marsh and swamp, swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Not expected to occur. The nearest known occurrence of this species is approximately 1.3 miles southwest of the project site (CNDDDB 2017). The project site does not contain suitable nesting habitat for this species such as blackberries ( <i>Rubus</i> sp.) or tule ( <i>Schoenoplectus acutus</i> ). Additionally, the offsite stock pond also does not contain suitable nesting substrate because the area surrounding the pond has been trampled and denuded by cattle.
White-tailed kite <i>Elanus leucurus</i>		FP	Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	May occur. The nearest known nesting occurrence of this species is approximately 1 mile southeast of the project site. The project site contains potentially suitable nesting habitat within a large valley oak tree. Offsite nesting habitat is present in Fremont cottonwood trees adjacent to the stock pond. A large nest likely belonging to a raptor was observed within a cottonwood tree during the November 2017 reconnaissance survey.
<b>Fish</b>				
Steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	FT		Aquatic, Sacramento/San Joaquin flowing waters. Populations in the Sacramento and San Joaquin rivers and their tributaries.	Not expected to occur. The nearest known occurrence of this species is approximately 3 miles north of the project site within the American River (CNDDDB 2017). The project site does not contain suitable flowing aquatic habitat for this species.
<b>Invertebrates</b>				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT		Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus nigra</i> ssp. <i>caerulea</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Not expected to occur. The nearest known occurrence of this species is approximately 4.6 miles northwest of the project site (CNDDDB 2017). The project site contains mostly grassland habitat and does not contain any elderberry shrubs.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT		Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small,	Likely occur. There are multiple known occurrences of this species within approximately 0.5 mile of the project site (CNDDDB 2017). While the species was not observed during branchiopod surveys, suitable

**Table 3.4-3 Special-Status Animal Species Known to Occur in the Project Region and their Potential for Occurrence on the Project Site**

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State		
			clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	habitat is present within the project site (GenCorp Realty Investments, LLC. 2009).
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE		Valley and foothill grassland, vernal pool, wetland. Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Likely to occur. This species was observed within vernal pools on the project site during wet season branchiopod surveys (GenCorp Realty Investments, LLC. 2009).

**Mammals**

American badger <i>Taxidea taxus</i>		SSC	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broadleaved upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	May occur. The nearest known occurrence of this species is approximately 6 miles southwest of the project site (CNDDB 2017). The project site contains suitable grassland habitat for this species.
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Note: CNDDB = California Natural Diversity Database

**1 Legal Status Definitions**

**Federal:**

E Endangered (legally protected)  
 T Threatened (legally protected)  
 D Delisted  
 PT Proposed Threatened

**State:**

D Delisted  
 FP Fully protected (legally protected)  
 SC Species of special concern (no formal protection other than CEQA consideration)  
 E Endangered (legally protected)  
 T Threatened (legally protected)  
 CT Candidate Threatened

**2 Potential for Occurrence Definitions**

Not expected to occur: Species is unlikely to be present in the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the project site; however, there are little to no other indicators that the species might be present.

Likely to occur: The species, or evidence of its presence, was observed in the project site during reconnaissance surveys, or was reported by others.

Source: CNDDB 2017, eBird 2017

**Sensitive Natural Communities**

Sensitive natural communities include those that are of special concern to resource agencies or are afforded specific consideration through CEQA or other federal or State laws. Sensitive natural communities may be of special concern to regulatory agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species. Many of these communities are tracked in CDFW’s CNDDB. There are no sensitive natural communities within or adjacent to the project site.

**Valley Needlegrass Grassland**

Valley needlegrass grassland is associated with two needlegrass species: purple needle grass (*Stipa pulchra*) and nodding needle grass (*Stipa cernua*). There is one occurrence of valley needlegrass grassland approximately 3.5 miles north of the project site in the City of Folsom near Humbug Creek (CNDDB 2017). This site is the only known occurrence of this sensitive natural community in Sacramento County (CNDDB 2017).



### **Northern Hardpan Vernal Pool**

Northern hardpan vernal pools are shallow, ephemeral waterbodies found in depressions among grasslands and open woodlands in the northern Central Valley of California. These vernal pools are formed on alluvial terraces with silicate-cement soil layers. These pool types are on acidic soils and exhibit well-developed mima mound topography found on the eastern margins of the California Central Valley. The project site contains northern hardpan vernal pool habitat and there are several other occurrences within a 5-mile radius of the project site (CNDDDB 2017).

### **Essential Habitat Connectivity Areas**

The California Essential Habitat Connectivity Project is an effort to identify large remaining blocks of intact habitat or natural landscape blocks in California, and to model linkages between them; primarily for wildlife movement (Spencer et al. 2010). The project site is located within a natural landscape block due to the relatively contiguous grassland habitat to the east and southeast (Exhibit 3.4-2). However, developed land and White Rock Road north of the project site are not included within the natural landscape block. Potential wildlife movement corridors, or essential connectivity areas, have been modeled south and northeast of the project site (Exhibit 3.4-2).

## **3.4.2 Regulatory Framework**

### **FEDERAL**

#### **Federal Endangered Species Act**

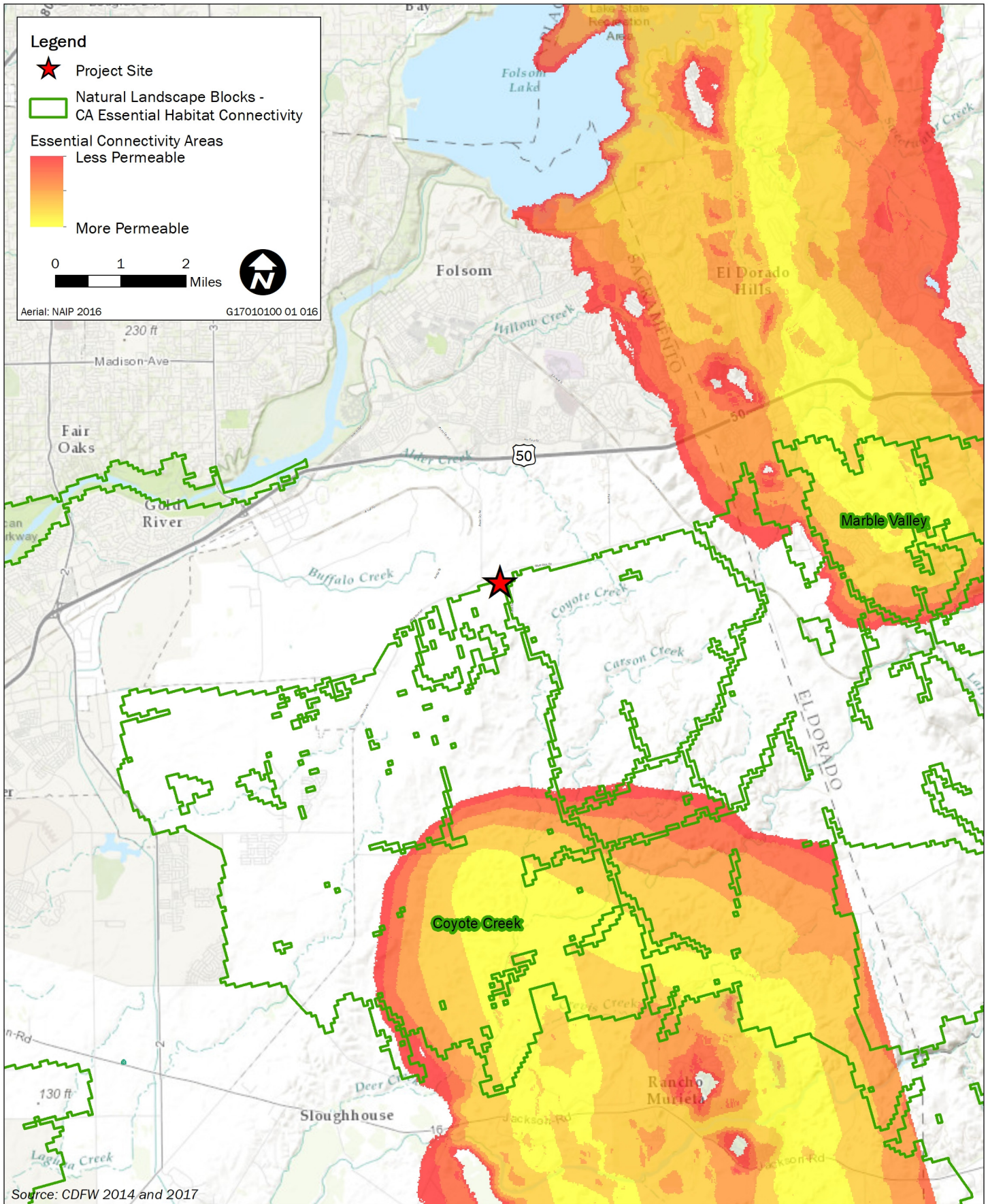
The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) regulate the taking of terrestrial and inland species, and anadromous and marine species, respectively, listed as threatened or endangered under the ESA. In general, persons subject to ESA (including private parties) are prohibited from “taking” endangered or threatened fish and wildlife species on private property, and from “taking” endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take. If a project would result in take of a federally-listed species, either the project applicant must acquire an incidental-take permit, under Section 10(a) of ESA, or if a federal discretionary action is involved, the federal action agency must consult with USFWS or NMFS under Section 7 of the ESA.

#### **Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations (CFR), Section 10.13 (50 CFR 10.13). The list includes nearly all migratory birds native to the United States.

#### **Bald and Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act declares it is illegal to take bald eagles, including their parts, nests, or eggs unless authorized. “Take” is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause injury to an eagle, or a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or nest abandonment. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.



**Exhibit 3.4-2**

**Essential Connectivity Areas and Natural Landscape Blocks**



## Section 404 of the Clean Water Act

Section 404 of the federal Clean Water Act (CWA) requires a project applicant to obtain a permit before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land; or changing the bottom elevation of any portion of a water of the United States. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; relatively permanent tributaries to any of these waters, and wetlands adjacent to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of CWA pending U.S. Army Corps of Engineers (USACE) verification.

## Section 401 Water Quality Certification

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the regional water quality control boards (RWQCB).

## STATE

### California Endangered Species Act

The CESA prohibits the taking of state-listed endangered or threatened species, as well as candidate species being considered for listing. Project proponents may obtain a Section 2081 incidental take permit if the impacts of the take are minimized and fully mitigated, and the take would not jeopardize the continued existence of the species. A "take" of a species, under CESA, is defined as an activity that would directly or indirectly kill an individual of a species. The CESA definition of take does not include "harm" or "harass" as is included in the federal ESA. As a result, the threshold for a take under CESA may be higher than under ESA.

### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act requires that each of the nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater, and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes waters of the United States, as well as areas that meet the definition of "waters of the state." Waters of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 404 of the CWA provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.

### Fully Protected Species

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. CDFW has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species unless the take is covered under a Natural Community Conservation Plan that is approved by CDFW.

## Protection for Bird Nests and Raptors

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, and falcons), including their nests or eggs. Section 3513 of the California Fish and Game Code codifies the federal MBTA.

## LOCAL

The project site lies within the jurisdictional boundaries of Sacramento County; therefore, the County's policies, as well as Sacramento LAFCo's policies, would apply. Furthermore, if the SOIA and annexation are approved, the project site would be in the jurisdiction of the City of Folsom. Thus, applicable policies of the City of Folsom's General Plan are described below.

### Sacramento County General Plan

The following policies of the Sacramento County 2030 General Plan (Sacramento County 2011) are applicable to the project:

- ▲ **Policy CO-58:** Ensure no net loss of wetlands, riparian woodlands, and oak woodlands.
- ▲ **Policy CO-59:** Ensure mitigation occurs for any loss of or modification to the following types of acreage and habitat function:
  - vernal pools,
  - wetlands,
  - riparian,
  - native vegetative habitat, and
  - special-status species habitat.
- ▲ **Policy CO-60:** Mitigation should be directed to lands identified on the Open Space Vision Diagram and associated component maps (please refer to the Open Space Element of the 2030 General Plan).
- ▲ **Policy CO-62:** Permanently protect land required as mitigation.
- ▲ **Policy CO-66:** Mitigation sites shall have a monitoring and management program, including an adaptive management component, and an established funding mechanism. The programs shall be consistent with Habitat Conservation Plans that have been adopted or are in draft format.
- ▲ **Policy CO-138.** Protect and preserve non-oak native trees along riparian areas if used by Swainson's hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.
- ▲ **Policy CO-139:** Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.
- ▲ **Policy CO-140:** For projects involving native oak woodlands, oak savannah or mixed riparian areas, ensure mitigation through either of the following methods:
  - An adopted habitat conservation plan.
  - Ensure no net loss of canopy area through a combination of the following: (1) preserving the main, central portions of consolidated and isolated groves constituting the existing canopy and (2) provide an area on site to mitigate any canopy lost. Native oak mitigation area must be a contiguous area on

site which is equal to the size of canopy area lost and shall be adjacent to existing oak canopy to ensure opportunities for regeneration.

- Removal of native oaks shall be compensated with native oak species with a minimum of a one to one DBH replacement.
- A provision for a comparable onsite area for the propagation of oak trees may substitute for replacement tree planting requirements at the discretion of the County Tree Coordinator when removal of a mature oak tree is necessary.
- ▲ **Policy CO-141:** In 15 years, the native oak canopy within onsite mitigation areas shall be 50 percent canopy coverage for valley oak and 30 percent canopy coverage for blue oak and other native oaks.
- ▲ **Policy CO-145:** Removal of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the 15-year shade cover values for tree species.

### **Sacramento County Swainson's Hawk Ordinance**

Chapter 16.130 of Title 16 of the Sacramento County Code addresses the reduction in Swainson's hawk foraging habitat within unincorporated Sacramento County. Participating in the County's Swainson's Hawk Mitigation Program, which is voluntary, is one option for mitigating the loss of foraging habitat within unincorporated areas of the County. Under this program, mitigation for impacts less than 40 acres can be achieved by paying a mitigation fee or providing replacement habitat (title or easement to suitable Swainson's hawk mitigation lands on a per-acre basis); mitigation for impacts of 40 acres or greater can be achieved only by providing replacement habitat under this program. Other mitigation options usually involve working on an individual basis with CDFW. For example, participation in a CDFW-approved conservation bank with available credits for Swainson's hawk foraging habitat could meet mitigation requirements.

### **Sacramento County Tree Preservation Ordinance**

The Sacramento County Tree Preservation Ordinance provides protection for trees within the designated urban area of the unincorporated area of Sacramento County. The Tree Preservation Ordinance applies only to the designated urban area, except for projects that require a discretionary land use entitlement, such as a parcel map. The project site is not within this designated urban area.

### **South Sacramento Habitat Conservation Plan**

The draft South Sacramento Habitat Conservation Plan (SSHCP) is a regional, comprehensive plan that establishes a framework for Permit Applicants to comply with state and federal endangered species regulations and with aquatic resource regulations, while accommodating future land use and development included in the general plans of Sacramento County, Galt, and Rancho Cordova.

The SSHCP identifies "Covered Activities," which are specific types of projects and activities within the Planning Area that may result in the take of SSHCP Covered Species or loss of aquatic resources. SSHCP Covered Activities implemented within the "Preserve System" would include conservation actions necessary to achieve the SSHCP conservation strategy.

The Permit Applicants are requesting ESA and CESA incidental take permits with 50-year permit terms. Under the Proposed Action/Proposed Project Alternative, federal and state incidental take permits would be issued to the Permit Applicants by the USFWS and CDFW, and the USACE would develop and approve a multilevel CWA 404 permit strategy for the Permit applicants.

A public draft of the SSHCP and its Draft EIS/EIR have been released. The project site is within the SSHCP plan area, in a preserve planning unit, but not a designated preserve.

## City of Folsom General Plan

The following policies of the City of Folsom General Plan (1993) are applicable to the project:

**Goal 23:** To preserve existing heritage trees through a City Ordinance.

- ▲ **Policy 23.1:** The City shall continue to enforce the Tree Preservation/Landscape Ordinance and identify heritage trees to be preserved. Site designs shall consider buildings and parking configurations which will preserve as many heritage trees as possible.
- ▲ **Policy 23.2:** Replacement trees shall be required whenever existing trees are removed.

**Goal 25:** Wherever feasible, to preserve, acquire, rehabilitate, enhance, and maintain the identified resources for the use and enjoyment of present and future generations. The identified resources include, but are not limited to:

1. Northern hardpan vernal pools and associated sensitive flora;
2. Valley bunch grasslands and associated sensitive flora;
3. Freshwater marshlands and associated sensitive flora;
4. Riparian forests and woodlands and associated sensitive flora;
5. Oak savannah and woodlands and associated sensitive flora;
6. Permanent and seasonal wetlands and associated sensitive flora;
7. American River corridor;
8. Humbug Creek;
9. Blue Ravine Creek;
10. Hinkle Creek;
11. Willow Creek;
12. Lake Natoma;
13. Folsom Lake;
14. Willow Hill Reservoir, if feasible;
15. Tricolored blackbird;
16. Swainson's hawk;
17. Tiger salamander;
18. Valley elderberry longhorn beetle;
19. Folsom Boulevard scenic corridor, from Highway 50 to Sutter Street;
20. Greenback Lane scenic corridor, from the Folsom city limits to Riley Street;
21. East Natoma Street scenic corridor, from Oak Avenue Parkway to the El Dorado County Line; and
22. Folsom-Auburn Road scenic corridor, from the Folsom city limits to Greenback Lane.

- ▲ **Policy 25.2:** The City may obtain fee title or protective easements of identified resources.
- ▲ **Policy 25.3:** Sensitive habitats and open space shall have their borders defined by public access ways, and/or shall have views from adjacent buildings oriented toward the areas.
- ▲ **Policy 25.4:** The City shall require that a qualified biologist conduct a vegetative/wildlife field survey, and analysis prior to consideration of development applications for project within or adjacent to sensitive habitat areas and potential habitats for sensitive wildlife and floral species.
- ▲ **Policy 25.5:** The City shall adopt standards for the designation, enhancement, and maintenance of identified sensitive habitat areas.
- ▲ **Policy 25.6:** The City shall establish a vegetation preservation ordinance which:
  1. Specifies native or "naturalized" vegetation which should be given highest priority for preservation.
  2. Requires an applicant to show the approximate location of existing priority vegetation.

3. Consideration of the development of interpretive centers or trails within parkways.

▲ **Policy 25.7:** Trees or other vegetation comprising riparian or other special habitats targeted for preservation should be preserved regardless of whether they are heritage trees. City of Folsom Tree Preservation Ordinance:

- All tree removal shall comply with the City's tree preservation ordinance (Folsom 12:16, Tree Preservation). As described in the ordinance the applicant shall prepare and implement a tree mitigation and preservation plan. At minimum, the following actions are required:
  - A site map shall be prepared showing the location of all trees on the site;
  - All protected trees on the site shall be identified, including "Heritage trees" which are defined as native oak trees over 19 inches in diameter at breast height or a multitrunked native oak tree having an aggregate diameter of 38 inches or more at breast height;
  - The extent of protected zones for all protected trees (drip line plus one foot) shall be identified; and
  - A preservation plan shall be prepared that provides for fencing around the protected zone for protected trees during construction; and restrictions on equipment and vehicle parking in protected zones.

Mitigation plans shall include provisions for planting the same species of the regulated tree, temporary or permanent irrigation, and monitoring for a 2-year period. Mitigation tree planting and tree preservation replacement ratios shall be in accordance with the City's tree preservation ordinance (Appendix C, Table C-2).

- ▲ Onsite mitigation. The onsite mitigation plan shall include, but is not limited to, the following:
  - A site plan depicting all living protected trees to remain and all living protected trees to be removed, utilizing clear and concise graphics.
  - A table indicating each protected tree to be removed by tree number, DBH, condition, and any other information pertinent to the trees being removed.
  - The plan shall include tree planting locations, size and species of trees to be planted, and planting and irrigation methods.
- ▲ If offsite mitigation is desired, the applicant must request approval for one or more of the following methods:
  - Payment of an inch-for-diameter-inch replacement in-lieu fee, as set by city council resolution, to cover the cost of purchasing, planting and initial care of the offsite tree plantings;
  - Dedication of property for the purpose of planting trees (1 diameter inch = .004 acres of land); or
  - Planting of trees on either public property, property with a conservation easement, or on property with an irrevocable offer of dedication to the city.

### 3.4.3 Environmental Impacts and Mitigation Measures

#### METHODOLOGY

While approval of the SOIA and annexation, along with changes to land use and zoning designations, would not result in physical changes to the site, approval of the SOIA/annexation would remove barriers to the development of a future corporation yard at this site. Therefore, this analysis considers the potential environmental impacts of the development of a future corporation yard.

The analysis of potential impacts to biological resources resulting from project implementation is based on review of existing databases and reports regarding natural resources in the project site described previously in Section 3.4.2, “Environmental Setting.”

#### THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact to terrestrial biological resources is considered significant if implementation of the project would do any of the following:

- ▲ have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- ▲ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- ▲ have a substantial adverse effect on federally protected waters of the United States, including wetlands, as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means;
- ▲ interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- ▲ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- ▲ conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan; or
- ▲ substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

#### ISSUES NOT DISCUSSED FURTHER

As described in Chapter 2, *Project Description*, the project has three potential access options. The evaluation of biological resources would not be affected by these options. Therefore, this is not discussed further in this section.

#### Certain Sensitive Natural Communities

The only known occurrence of valley needlegrass grassland is approximately 3.5 miles north of the project site in the City of Folsom near Humbug Creek (CNDDDB 2017). The project site does not contain either species of needlegrass associated with this community. This issue is not discussed further. Additionally, the project site does not contain riparian habitat or oak woodlands; therefore, project implementation would



have no impact on these sensitive natural communities. This issue is not discussed further. The project site does contain northern hardpan vernal pool habitat, which is considered a sensitive natural community and is analyzed in this EIR.

### Consistency with SSHCP

The SOIA/annexation area is within the proposed SSHCP area. A public draft of the SSHCP and its Draft EIS/EIR have been released, however, the SSHCP has not yet been adopted. The SSHCP includes a multi-jurisdictional group of partners, including Sacramento County, the cities of Rancho Cordova and Galt, the Sacramento County Water Agency, and the Southeast Connector Joint Powers Authority. The project site is currently within PPU1, where only select Covered Activities associated with SSHCP conservation strategies are permissible. Proposed development plans would not qualify as covered activities, and incidental take of covered species would not be permitted under the SSHCP. The City of Folsom is not participating in the SSHCP, and upon annexation into the City of Folsom, the project site would not be included in the SSHCP area and future development related to the proposed SOIA would not be subject to the SSHCP provisions. Because the SSHCP is not an approved plan no conflicts with adopted plans would occur and, there would be no impact and this is not analyzed further in this EIR.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Impact 3.4-1: Disturbance to or loss of special-status plant species and habitat

Future development of the SOIA/annexation area could result in the disturbance or loss of several special-status plant species. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a **potentially significant** impact.

Eight special-status plant species were determined to have potential to occur within the project site, including dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, legenere, pincushion navarretia, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. Suitable habitat for all species includes wetlands and vernal pools, which are present within the project site.

Land use changes associated with development plans of the SOIA/annexation area include construction of roads for the Scott Road realignment, as well as construction of buildings and parking areas for the future corporation yard. Construction activities such as ground disturbance and vegetation removal, and conversion of wetlands and vernal pools to urban uses could result in disturbance or removal of special-status plants and their habitat if they are present. The loss of special-status plants and their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species. Therefore, project-related loss of special-status plant species would be a **potentially significant** impact.

### Mitigation Measure 3.4-1: Protection and mitigation of special-status plants.

Prior to breaking ground within the SOIA/annexation area, the City of Folsom shall impose the following conditions:

- ▲ Prior to construction and during the blooming period for the special-status plant species with potential to occur in the project site, a qualified botanist shall conduct protocol-level surveys for special-status plants in areas where potentially suitable habitat would be removed or disturbed by project activities. Table 3.4-4 summarizes the normal blooming periods for special-status plant species with potential to occur on the project site, which generally indicates the optimal survey periods when the species are most identifiable.
- ▲ If no special-status plants are found, the botanist shall document the findings in a letter report to USFWS, CDFW, and the project applicant and no further mitigation shall be required.

**Table 3.4-4 Normal Blooming Period for Special-Status Plants with Potential to Occur on the Project Site**

Species	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
dwarf downingia <i>Downingia pusilla</i>									
Bogg's Lake hedge-hyssop <i>Gratiola heterosepala</i>									
Ahart's dwarf rush <i>Juncus leiospermus var. ahartii</i>									
legenere <i>Legenere limosa</i>									
pincushion navarretia <i>Navarretia myersii ssp. myersii</i>									
slender Orcutt grass <i>Orcuttia tenuis</i>									
Sacramento Orcutt grass <i>Orcuttia viscida</i>									
Sanford's arrowhead <i>Sagittaria sanfordii</i>									

Source: Data compiled by Ascent Environmental in 2017

- ▲ If special-status plant species are found on the project site and are located outside of the permanent footprint of any proposed structures/site features and can be avoided, the project applicant will establish and maintain a 40-foot protective buffer around special-status plants to be retained.
- ▲ If special-status plant species are found that cannot be avoided during construction, the applicant shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur because of project construction and shall implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of offsite populations on mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. A mitigation and monitoring plan shall be developed describing how unavoidable losses of special-status plants will be compensated.
- ▲ If relocation efforts are part of the mitigation plan, the plan shall include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements.
- ▲ Success criteria for preserved and compensatory populations shall include:

  - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat.
  - Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when:
 
    - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and

- reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
- If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

### **Significance Conclusion**

Implementation of Mitigation Measure 3.4-1 would reduce significant impacts on special-status plants to a **less-than-significant** level because it would require identification and avoidance of special-status plants or provide compensation for loss of special-status plants through enhancement of existing populations, creation and management of offsite populations, conservation easements, or other appropriate measures.

### **Impact 3.4-2: Disturbance to or loss of special-status wildlife species and habitat**

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Future development of the proposed SOIA/annexation area could adversely affect several special-status wildlife species, including amphibians, nesting birds, mammals, and invertebrates. Future development activities such as ground disturbance and vegetation removal, as well as overall conversion of habitat to urban uses, could result in the disturbance or loss of individuals and reduced breeding productivity of these species. Special-status wildlife species are protected under ESA, CESA, California Fish and Game Code, CEQA, or other regulations. The loss of special-status wildlife species and their habitat would be a **potentially significant** impact.

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Nine special-status wildlife species have potential to occur within the project site, including western spadefoot, burrowing owl, golden eagle, Swainson's hawk, northern harrier, white-tailed kite, American badger, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Land use changes associated with development plans of the SOIA/annexation area include construction of roads for the Capitol SouthEast Connector Right-of way and for the Scott Road realignment, as well as construction of buildings and parking areas for the future corporation yard. Construction activities such as ground disturbance and vegetation removal, and conversion of wetlands and vernal pools to urban uses could result in disturbance or loss of special-status animals and their habitat, if they are present. Potential effects of future development of the SOIA/annexation area on the special-status animal species known or with potential to occur on the project site are discussed below.

#### **Western Spadefoot**

Western spadefoot is a CDFW species of special concern. The project site contains potentially suitable grassland habitat as well vernal pool habitat that represent potentially suitable breeding habitat for western spadefoot. The nearest known occurrence of this species is approximately 4.5 miles northwest of the project site within similar habitat (CNDDDB 2017). Future land use changes and development within the SOIA/annexation area could result in disturbance or direct mortality to western spadefoot, if they are present on the project site, through conversion of grassland and vernal pool habitat to urban uses and construction-related ground disturbance. This would be a **potentially significant** impact.

#### **Burrowing Owl**

Burrowing owl is a CDFW species of special concern. This project site contains potentially suitable annual grassland breeding habitat for this species. The nearest known occurrence of this species is approximately 1.5 miles east of the project site within similar annual grassland habitat (CNDDDB 2017). Future land use changes and development within the SOIA/annexation area could result in destruction of active burrows or direct mortality of burrowing owls, if they are present on the project site, through conversion of grassland to urban uses and construction-related ground disturbance. This would be a **potentially significant** impact.

### Nesting Raptors

The project site contains a large, isolated valley oak tree, and is adjacent to a grove of large Fremont cottonwood trees associated with the stock pond south of the project site. These trees could be used for nesting by Swainson's hawk, golden eagle, white tailed kite, or other raptors. All three species have known nesting occurrences within 5 miles of the project site (CNDDDB 2017). Grassland and wetland habitat within the project site could be used for nesting by northern harrier. Additionally, the project site contains suitable foraging habitat for all raptor species and signs of rodent activity (many burrows, rodent trails, and scat) suggests that the site supports a healthy population of rodents. While the large valley oak tree did not contain a nest during the November 2017 reconnaissance survey, it is possible that a raptor could establish a nest prior to the commencement of construction. A large raptor nest, potentially associated with a Swainson's hawk, white-tailed kite, or red-shouldered hawk (*Buteo linneatus*), was observed within a large cottonwood tree next to the stock pond.

Project construction activities within the SOIA/annexation area such as ground disturbance, construction vehicles, and presence of construction crews could disturb nesting Swainson's hawks, golden eagles, white-tailed kites, or other raptors if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. The potential loss of raptor nests would be a **potentially significant** impact.

In addition to direct impacts to active raptor nests, proposed conversion of approximately 41.5 acres of grassland habitat to urban uses is associated with development of the proposed Folsom Corporation Yard site and the Scott Road realignment, and would result in the loss of suitable foraging habitat for raptors including Swainson's hawk and golden eagle. Permanent loss of Swainson's hawk and golden eagle foraging habitat would be a **significant** impact.

### American Badger

The project site contains annual grassland habitat that is potentially suitable for American badger. The nearest known occurrence of this species is approximately 6 miles southwest of the project site near Mather Airport (CNDDDB 2017). Future land use changes and development within the SOIA/annexation area could result in destruction of active burrows or direct mortality of American badgers, if they are present on the project site, through conversion of grassland to urban uses and construction-related ground disturbance. This would be a **potentially significant** impact.

### Aquatic Invertebrates

Two aquatic invertebrate species, vernal pool fairy shrimp and vernal pool tadpole shrimp, could potentially occur on the project site. Vernal pool fairy shrimp is listed as threatened under ESA, and vernal pool tadpole shrimp is listed as endangered under ESA. Vernal pool tadpole shrimp have been observed within vernal pools on the project site during wet season branchiopod surveys (GenCorp Realty Investments, LLC. 2009). Vernal pool fairy shrimp were not observed during the branchiopod surveys; however, there are multiple known occurrences of this species within approximately 0.5 mile of the project site and suitable habitat is present within the project site (CNDDDB 2017). Development activities within the SOIA/annexation area, including conversion of vernal pool habitat to urban uses, ground disturbance, and vegetation removal, could result in disturbance or removal of vernal pool fairy shrimp, vernal pool tadpole shrimp, and their habitat if they are present. This would be a **potentially significant** impact.

### **Mitigation Measure 3.4-2a: Avoidance and protection of spadefoot toad.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

- ▲ For work conducted during the western spadefoot toad migration and breeding season (November 1 to May 31), a qualified biologist shall survey the project site (including access roads) within 48 hours prior to initiation of construction activities. If no western spadefoot individuals are found during the preconstruction survey, the biologist shall document the findings in a letter report to CDFW and the City of Folsom, and further mitigation shall not be required.

- ▲ If western spadefoot toad is found within the project site, the qualified biologist shall consult with CDFW to determine appropriate avoidance measures. When feasible, there will be a 50-foot no-disturbance buffer around burrows that provide suitable upland habitat for western spadefoot toad. Burrows considered suitable for spadefoot will be identified by a qualified biologist. The biologist will delineate and mark the no-disturbance buffer.
- ▲ If a 50-foot no-disturbance buffer is not feasible, then other mitigation measures may include relocation of aquatic larvae, construction monitoring, or preserving and enhancing existing populations.
- ▲ Prior to initiation of construction activities, the project applicant shall employ a qualified biologist to conduct environmental awareness training for construction activities. The training will describe special-status wildlife and habitats, and applicable measures designed to minimize disturbance to these species.

#### **Significance after Mitigation**

Implementing Mitigation Measure 3.4-2a would reduce potential impacts on western spadefoot to a **less-than-significant** level because western spadefoot would be avoided and protected from construction activities.

#### **Mitigation Measure 3.4-2b: Protection of burrowing owl.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

- ▲ The applicant shall retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat on and within 1,500 feet of the project site. Surveys shall be conducted prior to the start of construction activities and in accordance with Appendix D of CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012).
- ▲ If no occupied burrows are found, a letter report documenting the survey methods and results shall be submitted to CDFW and no further mitigation would be required.
- ▲ If an active burrow is found during the nonbreeding season (September 1 through January 31), the applicant shall consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan shall be developed, as described in Appendix E of CDFW's 2012 Staff Report. Burrowing owls shall not be excluded from occupied burrows until the project's burrowing owl exclusion plan is approved by CDFW. The exclusion plan shall include a plan for creation, maintenance, and monitoring of artificial burrows in suitable habitat proximate to the burrows to be destroyed, that provide substitute burrows for displaced owls.
- ▲ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and will be provided with a 150- to 1,500-foot protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer shall depend on the time of year and level disturbance as outlined in the CDFW Staff Report (CDFW 2012). The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented to prevent burrowing owls from being detrimentally affected. Once the fledglings are capable of independent survival, the owls can be evicted and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW's 2012 Staff Report.
- ▲ If active burrowing owl nests are found on the site and are destroyed by project implementation, the project applicant shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW 2012 Staff Report, which states that permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat shall be mitigated such that habitat acreage, number of burrows, and burrowing owls adversely affected are replaced through permanent conservation of comparable or better habitat with

similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The applicant shall retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards:

- ▲ Mitigation lands shall be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species range wide.
- ▲ If feasible, mitigation lands shall be provided adjacent or proximate to the site so that displaced owls can relocate with reduced risk of take. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient suitable habitat to support displaced owls that may be preserved in perpetuity.
- ▲ If suitable habitat is not available for conservation adjacent or proximate to the project site, mitigation lands shall be focused on consolidating and enlarging conservation areas outside of urban and planned growth areas and within foraging distance of other conservation lands. Mitigation may be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. If mitigation credits are not available from an approved bank and mitigation lands are not available adjacent to other conservation lands, alternative mitigation sites and acreage shall be determined in consultation with CDFW.
- ▲ If mitigation is not available through an approved mitigation bank and will be completed through permittee-responsible conservation lands, the mitigation plan shall include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success shall be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the 2012 Staff Report, shall include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.

#### Significance after Mitigation

Implementing Mitigation Measure 3.4-2b would reduce potential impacts on burrowing owl to a **less-than-significant** level because burrowing owls would be avoided and protected from construction activities, or the project applicant would compensate for project-related loss of suitable occupied habitat.

#### **Mitigation Measure 3.4-2c: Protection measures for nesting raptors.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

The following measures will be implemented and are intended to avoid and minimize impacts to nesting raptors including Swainson's hawk:

- ▲ For project activities, including tree removal and ground disturbance, that begin between February 1 and September 15, qualified biologists shall conduct preconstruction surveys for Swainson's hawk and other nesting raptors and to identify active nests on and within 0.5 mile of the project site. The surveys shall be conducted before the beginning of any construction activities between March 1 and September 15.
- ▲ For construction activities that would occur within 0.5 mile of a likely Swainson's hawk nest site, the project applicant shall attempt to initiate construction activities prior to nest initiation phase (i.e., before March 1). Depending on the timing, regularity, and intensity of construction activity, construction in the area prior to nest initiation may discourage a Swainson's hawk pair from using that site and eliminate the need to implement further nest-protection measures, such as buffers and limited construction operating periods around active nests. Other measures to deter establishment of nests (e.g., reflective striping or decoys)

may be used prior to the breeding season in areas planned for active construction. However, if breeding raptors establish an active nest site, as evidenced by nest building, egg laying, incubation, or other nesting behavior, near the construction area, they shall not be harassed or deterred from continuing with their normal breeding activities.

- ▲ Impacts to nesting Swainson's hawks and other raptors shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Project activity shall not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. CDFW guidelines recommend implementation of 0.5-mile-wide buffer for Swainson's hawk and 500 feet for other raptors, but the size of the buffer may be adjusted if a qualified biologist and the project applicant, 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 shall be required if the activity has potential to adversely affect the nest.
- ▲ Trees shall not be removed during the breeding season for nesting raptors unless a survey by a qualified biologist verifies that there is not an active nest in the tree.

#### Significance after Mitigation

Implementation of Mitigation Measure 3.4-2c would reduce impacts on nesting raptors to a **less-than-significant** level because preconstruction surveys would be conducted and active raptor nests would be protected from construction activities.

#### **Mitigation Measure 3.4-2d: Mitigation for loss of Swainson's hawk foraging habitat.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

To mitigate for the loss of approximately 41.5 acres of suitable Swainson's hawk foraging habitat, the project applicant shall implement a Swainson's hawk mitigation plan consistent with the Sacramento County Swainson's Hawk Ordinance, including but not limited to the requirements described below:

- ▲ Prior to any site disturbance, such as clearing or grubbing, the issuance of any permits for grading, building, or other site improvements, or recordation of a final map, whichever occurs first, the project applicant shall acquire suitable Swainson's hawk foraging habitat as determined by CDFW and approved by the County.
- ▲ The project applicant shall preserve through conservation easement(s) or fee title one acre of similar habitat for each acre affected.
- ▲ The project applicant shall transfer said easement(s) or title to the County, CDFW, and a third-party conservation organization as acceptable to the County and CDFW. The County may, at its discretion, waive the requirement for a third-party conservation organization to be party to the easement or fee title. Such third-party conservation organizations shall be characterized by non-profit 5019(c)(3) status with the Internal Revenue Service and be acceptable to both the County and CDFW.

#### Significance after Mitigation

Implementing Mitigation Measure 3.4-2d would reduce impacts on Swainson's hawk foraging habitat, but not to a less-than-significant level. Approximately 41.5 acres of suitable foraging habitat within the project site would be converted to urban uses for the Folsom Corporation Yard and Scott Road realignment. Development within the region surrounding the project site has resulted in widespread loss of foraging habitat for Swainson's hawk because of conversion of grassland and agricultural habitats. While loss of foraging habitat within the project site would be mitigated at a 1:1 ratio, no new lands would be created; therefore, any loss of foraging habitat would result in **significant and unavoidable** impacts to local nesting Swainson's hawks.

### **Mitigation 3.4-2e: Protection measures for American badger.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

This mitigation measure applies to projects or ground-disturbing activities with potential to disturb suitable habitat for American badger.

Prior to construction activities within suitable habitat for American badger (e.g., annual grassland), a qualified wildlife biologist shall conduct surveys to identify any American badger burrows/dens. These surveys shall be conducted not more than 15 days prior to the start of construction. If occupied burrows are not found, further mitigation will be not required. If occupied burrows are found, impacts to active badger dens shall be avoided by establishing exclusion zones around all active badger dens, within which construction-related activities shall be prohibited until denning activities are complete or the den is abandoned. A qualified biologist shall monitor each den once per week to track the status of the den and to determine when a den area has been cleared for construction.

#### **Significance after Mitigation**

Implementation of Mitigation Measure 3.4-2e would reduce impacts on American badger to a **less-than-significant** level because preconstruction surveys would be conducted and active badger dens would be protected from construction activities.

### **Mitigation Measure 3.4-2f: Mitigation for aquatic invertebrates; vernal pool fairy shrimp and vernal pool tadpole shrimp.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

- ▲ This mitigation measure applies to projects or ground-disturbing activities with potential to disturb habitat for vernal pool crustaceans; it incorporates the conservation measures from the USFWS Programmatic Biological Opinion (USFWS 1996) that provide for both habitat preservation and habitat creation for vernal pool fairy shrimp and vernal pool tadpole shrimp.
- ▲ Because suitable wetland or vernal pool habitat is known to occur on the project site (see Mitigation Measure 3.4-3), the project applicant shall implement the following measures to minimize and compensate for loss of vernal pool fairy shrimp and vernal pool tadpole shrimp.
- ▲ **Habitat Preservation:** The applicant, in consultation with USFWS, shall compensate for direct effects of the project on potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 2:1, by purchasing vernal pool preservation credits from a USFWS-approved conservation bank. Compensation credits shall be purchased prior to any ground-disturbing activities.
- ▲ **Habitat Creation:** The applicant shall compensate for the direct effects of the project on potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp at a ratio of 1:1, by purchasing vernal pool creation credits from a USFWS-approved conservation bank.
- ▲ Mitigation shall occur before the approval of any grading or improvement plans for any project phase that would allow work within 250 feet of such habitat, and before any ground-disturbing activity within 250 feet of the habitat.
- ▲ For seasonal wetlands and drainages that shall be retained on the site (i.e., those not proposed to be filled), a minimum setback of at least 50 feet from these features will be avoided on the project site. The buffer area shall be fenced with high visibility construction fencing prior to commencement of ground-disturbing activities, and shall be maintained for the duration of construction activities.



- ▲ A worker environmental awareness training shall be conducted to inform onsite construction personnel regarding the potential presence of listed species and the importance of avoiding impacts to these species and their habitat.
- ▲ The applicant shall secure any necessary take authorization prior to project construction through formal consultation between USACE and USFWS pursuant to Section 7 of the ESA, and shall implement all measures included in the Biological Opinion issued by USFWS.

#### **Significance after Mitigation**

Implementation of Mitigation Measure 3.4-2f would reduce significant impacts on vernal pool fairy shrimp and vernal pool tadpole shrimp and suitable habitat to a **less-than-significant** level because it would offset the impact through preserving vernal pool habitat at a ratio of 2:1 and the creation of vernal pool habitat at a ratio of 1:1 within a USFWS-approved mitigation bank or onsite habitat enhancement and protection subject to USFWS approval.

### **Impact 3.4-3: Disturbance and loss of wetlands, other waters of the United States, and waters of the state**

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Seasonal wetlands, intermittent drainages, and vernal pools are present within the SOIA/annexation area. Future land use changes and development would result in conversion of wetland habitat to urban uses. Loss or degradation of wetland or vernal pool habitat would be a **potentially significant** impact.

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The project site contains approximately 0.35 acre of vernal pool habitat, 0.14 acre of seasonal wetland habitat, 0.25 acre of seasonal wetland swale, 0.19 acre of ephemeral and intermittent drainage, and 0.08 acre of constructed ditches (Table 3.4-1). Land use changes associated with development plans of the SOIA/annexation area include construction of roads for the Capitol SouthEast Connector right-of-way and for the Scott Road realignment, as well as construction of buildings and parking areas for the future corporation yard. Construction activities such as ground disturbance and vegetation removal, and conversion of habitat to urban uses could result in fill or disturbance to vernal pools, wetlands, or other waters of the United States or state, which would be a **potentially significant** impact.

### **Mitigation Measure 3.4-3: Wetlands, other waters of the U.S., and waters of the state.**

The City of Folsom shall impose the following conditions prior to, and during, construction:

- ▲ Wetlands and vernal pools are of special concern to resource agencies and are afforded specific consideration, based on Section 404 of the CWA and other applicable regulations. The project applicant shall retain a qualified biologist to conduct an updated delineation of waters of the United States or state, including wetlands that would be affected by the project, through the formal Section 404 wetland delineation process. The delineation shall be submitted to and verified by USACE. If, based on the verified delineation, it is determined that fill of waters of the United States or state would result from implementation of the project, authorization for such fill shall be secured from USACE through the 404 permitting process. Any waters of the United States that would be affected by project development shall be replaced or restored on a “no-net-loss” basis in accordance with USACE mitigation guidelines (or the applicable USACE guidelines in place at the time of construction). In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the RWQCB shall be obtained.
- ▲ If it is determined that waters subject to jurisdiction by CDFW are present within the project site following the delineation of waters of the United States and state, and that site development would affect the bed, bank, or channel, a Streambed Alteration Notification will be submitted to CDFW, pursuant to Section 1600 et seq. of the California Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the project proponent will abide by the conditions of any executed agreement prior to the

issuance of a grading permit. Several aquatic features on site, including intermittent streams, would likely fall under the jurisdiction of CDFW.

#### **Significance after Mitigation**

Implementation of Mitigation Measure 3.4-3 would reduce impacts to wetlands, other waters of the United States, and waters of the state to a **less-than-significant** level because it would result in no net loss of functions and acreage of wetlands, vernal pools, and other waters through implementation of USACE mitigation guidelines.

#### **Impact 3.4-4: Conflict with City of Folsom Tree Preservation Ordinance**

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A large valley oak tree that would qualify as a “heritage tree” under the City of Folsom Tree Preservation Ordinance is present within the northeastern corner of the property. Removal of this tree could result in a conflict with this ordinance and would be a **potentially significant** impact. However, future development of the SOIA/annexation area does not include plans to remove the tree. Because the one “heritage tree” within the SOIA/annexation area would not be removed under the project, impacts would be **less than significant**.

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The SOIA/annexation area contains a valley oak tree within the northeastern corner of the property that would qualify as a “heritage tree” under the City of Folsom Tree Preservation Ordinance. “Heritage trees” are defined as native oak trees over 19 inches DBH or a multitrunked native oak tree having an aggregate diameter of 38 inches or more DBH. The valley oak within the project is greater than 19 inches DBH. The Capitol SouthEast Connector Right-of-way is proposed to run directly through the valley oak tree on the project site, so it is assumed that the tree will be removed with that project. No plans for removal of the tree would occur under the project. Several nonnative black locust trees would also likely be removed with the Capital SouthEast Connector project, but do not qualify as “heritage trees” or as any other protected tree under the Ordinance. Project impacts to “heritage trees” would be **less than significant**.

#### **Mitigation Measure**

No mitigation is required.

#### **Impact 3.4-5: Interference with resident or migratory wildlife corridors or native wildlife nursery sites**

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Future land use changes and development within the SOIA/annexation area would result in loss of grassland and wetland habitats but would not substantially impede wildlife movement because the project site is relatively small, and near existing urban development. The project site does not contain any native wildlife nursery sites. Impacts to movement corridors and habitat connectivity for these species would be **less than significant**.

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The project site is located within an area of relatively contiguous grassland habitat to the east and southeast leading to the Sierra Nevada foothills, and is considered a natural landscape block (Exhibit 3.4-2). Land to the north of the project site will be developed in the near future as residential land, and the land to the south of the project site has been developed as an off-highway vehicle recreation area. The project site does not contain portions of any creeks or rivers that would serve as wildlife corridors, nor does the project site contain any nursery sites. Because of the relatively small size of the project site and its proximity to existing and future urban development, the project site is not expected to provide significant connectivity for wildlife movement between important habitats or core areas within the region or contain any portion of a major or local wildlife corridor. Therefore, impacts to wildlife corridors or nursery sites would be **less than significant**.

#### **Mitigation Measure**

No mitigation is required.