This section describes the regulatory setting, regional biological resources, and impacts that are likely to result from Project implementation. This section is based in part on the following:

- *Rancho Cordova General Plan* (City of Rancho Cordova, Adopted June 26, 2006);
- *Rancho Cordova General Plan Draft Environmental Impact Report* (City of Rancho Cordova, March 2006);
- *South Sacramento Habitat Conservation Plan* (February 2018);
- *Special-Status Plan Survey for The Ranch (Jaeger 530) Project located in the City of Rancho Cordova, Sacramento County, California* (Foothill Associates, 2017);
- *Aquatic Resources Delineation Report* (Foothill Associates, 2017);
- *Biological Resources Assessment* (Foothill Associates, 2017);
- Site visit by De Novo Planning Group staff biologist, Steve McMurtry (August 2018).

The analysis contained in this section is intended to be at a Project -level, and covers impacts associated with development of the entire site, with the exception of the parcels designated as protected areas for preservation (Lots E and F), to an urban use.

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the following: California Department of Fish and Wildlife (CDFW, August 2018), and Central Valley Regional Water Quality Control Board (RWQCB, July 2018). Each of the comments related to this topic are addressed within this section.

3.3.1 ENVIRONMENTAL SETTING

REGIONAL SETTING

The Project site is located within the southern portion of the Sacramento Valley bioregion, and just north of the Bay/Delta bioregion. The Sacramento Valley bioregion is a watershed of the Sierra Nevada that encompasses the northern end of the great Central Valley, stretching from Redding to Yolo and Sacramento counties. The bioregion is generally flat, and is rich in agriculture. The bioregion has a climate that is characterized by hot dry summers and cool wet winters. Historically, oak woodlands, riparian forests, vernal pools, freshwater marshes, and grasslands have been the major natural vegetation of the bioregion; however, much of the region has been converted to agricultural uses. This bioregion is the most prominent wintering area for waterfowl, attracting significant numbers of ducks and geese to its seasonal marshes along the Pacific Flyway. Species include northern pintails, snow geese, tundra swans, sandhill cranes, mallards, grebes, peregrine falcons, heron, egrets, and hawks. Black-tailed deer, coyotes, river otters, muskrats, beavers, ospreys, bald eagles, salmon, steelhead, and swallowtail butterflies are some of the wildlife that are common in this bioregion.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

The California Wildlife Habitat Relationships (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the

CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

The Sacramento Valley region is considered to have low biological diversity due to the conversion of native habitat to agricultural and urban uses. As shown in Figure 3.3-1, the CWHR shows the entire Project site as having Annual Grassland habitat. In addition, although not found on the Project site, the following CWHR wildlife habitats exist in the Project vicinity: Fresh Emergent Wetland, Riverine, and Urban. Below is a brief description of these CWHR habitats.

Annual Grassland habitats occurs mostly on flat plains to gently rolling foothills. Annual Grassland habitats are open grasslands composed primarily of annual plant species. Introduced annual grasses are the dominant plant species in this habitat. These include wild oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue. Common forbs include broadleaf filaree, redstem filaree, turkey mullein, true clovers, bur clover, popcorn flower, and many others.

Many wildlife species use Annual Grasslands for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Characteristic reptiles that breed in Annual Grassland habitats include the western fence lizard, common garter snake, and western rattlesnake. Mammals typically found in this habitat include the black-tailed jackrabbit, California ground squirrel, Botta's pocket gopher, western harvest mouse, California vole, badger, and coyote. Common birds known to breed in Annual Grasslands include the burrowing owl, short-eared owl, horned lark, and western meadowlark. This habitat also provides important foraging habitat for the turkey vulture, northern harrier, American kestrel, black-shouldered kite, and prairie falcon. The entire Project site contains the Annual Grassland wildlife habitat type.

Riverine habitats can occur in association with many terrestrial habitats. Riverine habitats are found adjacent to many rivers and streams. Riverine habitats are also found contiguous to lacustrine and fresh emergent wetland habitats. This habitat requires intermittent or continually running water generally originating at some elevated source, such as a spring or lake, and flows downward at a rate relative to slope or gradient and the volume of surface runoff or discharge. Velocity generally declines at progressively lower altitudes, and the volume of water increases until the enlarged stream finally becomes sluggish. Over this transition from a rapid, surging stream to a slow, sluggish river, water temperature and turbidity will tend to increase, dissolved oxygen will decrease, and the bottom will change from rocky to muddy. Riverine habitat is located west of the Project site.

Fresh Emergent Wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. They are most common on level to gently rolling topography. They are found in various depressions or at the edge of rivers or lakes. Soils are predominantly silt and clay, although coarser sediments and organic material may be intermixed. In some areas organic soils (peat) may constitute the primary growth medium. Climatic conditions are highly variable and range from the extreme summer heat to winter temperatures well below freezing. Fresh Emergent Wetland habitats are located to the west and south of the Project site.

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Urban habitats are located to the north, west, and south of the Project site.

SOUTH SACRAMENTO HABITAT CONSERVATION PLAN COVER TYPES

The South Sacramento Habitat Conservation Plan (SSHCP) Conservation Strategy provides for conservation of 28 Covered Species and 17 Land Cover types, avoids or minimizes impacts of Covered Activities, mitigates for the impacts of Covered Activities on the Covered Species and their habitats on the basis of species and habitat needs, provides a regional approach to the mitigation of impacts and the conservation of species and their habitats, protects wetlands and waters of the SSHCP Plan Area, and conserves natural communities in the SSHCP Plan Area.

Seventeen of the SSHCP land cover types are classified by the SSHCP as "Natural Land Covers," which includes 10 Aquatic land cover types and 7 Terrestrial land cover types. Agricultural lands that provide Covered Species habitat are included in the "Natural Land Covers" grouping.

The SSHCP land cover types for the Project site are shown in Figure 3.3-2. As shown, the Project site contains two SSHCP land cover types: Vernal Pool and Valley Grassland. Below is a brief description of these SSHCP land cover types.

Vernal Pool habitats support unique assemblages of highly specialized plants and animals that are adapted to the annual cycle of winter inundation and summer drought. Consequently, vernal pools are one of the few habitats in California still dominated by native plant and animal species. Vernal pools provide habitat for rare and endangered animals such as vernal pool tadpole shrimp (*Lepidurus packardi*), vernal pool fairy shrimp (*Branchinecta lynchi*), conservancy fairy shrimp, Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*), and several amphibians (e.g., western spadefoot toad (*Spea hammondii*), California tiger salamander (*Ambystoma californiense*), and vernal pools support a number of migratory birds in the winter.

Valley Grassland habitats are the most common land cover type in the SSHCP. Valley Grassland is an annual herbaceous plant community now characterized mostly by naturalized annual grasses. Valley Grassland supports numerous wildlife species, including several Covered Species. Covered Species associated with Valley Grassland included California tiger salamander, western spadefoot toad, giant gartersnake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), all of the bird Covered Species (except Cooper's hawk (*Accipiter cooperii*)), American badger (*Taxidea taxus*), and western red bat (*Lasiurus blossevillii*).

LOCAL SETTING

The Project site consists of approximately 530 acres located in the Rancho Cordova city limits. The Project site is bound by existing single-family residential uses and Douglas Road to the north, vacant land and Grant Line Road to the east, vacant land and Kiefer Boulevard to the south, and Rancho Cordova Parkway, single family residential, and vacant land on the west.

The Project site is currently vacant and has been previously used for agricultural uses (cattle grazing). The topography of the site exhibits low relief topography with elevations ranging between 170 and 210 feet above mean sea level (MSL). The slopes throughout the site range from approximately zero to eight percent. The site is characterized by moderate rolling hills and areas of extensive flatlands, with wetlands, vernal pools, and seasonal drainage courses scattered throughout the site. A headwater tributary of Morrison Creek traverses the Project site, entering at the northeast corner and flowing generally to the southwest. A total of 21.53 acres of jurisdictional aquatic resources have been mapped with the Project site, including: 2.92 acres of depressional seasonal wetlands, 15.04 acres of vernal pools, 1.66 acres of riverine seasonal wetlands, 0.06 acres of riverine seasonal wet swales, 1.54 acres of intermittent drainages, and 0.30 acres of drainage basin outfalls.

The property is traversed by a 275-foot-wide utility easement occupied by a 230-kV Pacific Gas and Electric (PG&E) transmission line, one 230-kV Sacramento Municipal Utility District (SMUD) transmission line, and one 69-kV SMUD sub-transmission line. No other public utilities (water, sewer, drainage) are located on site.

The Project site is bound by the Sunridge Specific Plan to the north, east, and west, and by the SunCreek Specific Plan to the south and east. Land uses anticipated to the east and south of the Project site by the Sunridge Specific Plan and the SunCreek Specific Plan include low, medium, and high density residential uses, commercial mixed uses (retail, office, and retail professional), and neighborhood parks. Other land uses located nearby include new elementary, junior and senior high schools.

SPECIAL-STATUS SPECIES

Special-status species are generally defined as: 1) species listed as a candidate, threatened, or endangered under the federal or state Endangered Species Act; 2) species considered rare or endangered under the California Environmental Quality Act; 3) plants considered “rare, threatened, or endangered in California” by the California Native Plant Society (CNPS) (Lists 1B); 4) animal listed as "species of special concern" by the state; and 5) animals fully protected in California by the Fish and Game Code.

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the CNPS Inventory of Rare and Endangered Plants, the U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPAC) endangered and threatened species list, and observations from local experts. The background search was regional in scope and focused on the documented occurrences within the 9-quadrangle radius of the Project site, which includes the following USGS quadrangles: Citrus

Heights, Folsom, Clarksville, Carmichael, Buffalo Creek, Folsom Southeast, Elk Grove, Sloughhouse, and Carbondale.

The search revealed 50 special-status species within the region: 23 plants, and 27 animals. Figure 3.3-3 illustrates the general location of these records maintained by the CNDDB. Table 3.3-1 provides a list of special-status plant species that are documented in the region, their habitat, potential for Project site occurrence, and current protective status. Potential for occurrence is based on the findings of Foothill Associates identified in 1) the Biological Resources Assessment dated October 13, 2017, which included a field survey to determine potential for species, and 2) the Special-Status Plant Survey dated October 20, 2017 which included a focused field survey conducted on June 12 and 13, 2017 to identify the presence of rare plants associated with vernal pool and riverine wetland features present on the Project site with a blooming period in June. Table 3.3-2 provides a list of special-status wildlife species that are documented in the region, their habitat, potential for Project site occurrence, and current protective status.

TABLE 3.3-1: SPECIAL-STATUS PLANTS WITHIN 9-QUADRANGLE REGION FOR PROJECT SITE

PLANT	*STATUS (FED; CA; CNPS)*	*HABITAT ASSOCIATION*	*BLOOMING PERIOD*	*POTENTIAL FOR OCCURRENCE*
Ahart's dwarf rush *Juncus leiospermus var. ahartii*	--;--;1B.2	Valley and foothill grassland. Restricted to the edges of vernal pools in grassland. 30-100 m.	March to May	**High Potential**. Not observed. Site supports habitat in the seasonal wetlands and drainages. There are two occurrences of this species within five miles of the site.
Bisbee Peak rush-rose *Crocanthemum suffrutescens*	--;--;3.2	Chaparral. Often on serpentine, gabbroic, or Ione formation soils; in openings in chaparral. 45-840 m.	April to August	**Absent**. Site does not contain the required soil types.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	--;CE;1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 4-2410 m.	April to August	**Absent**. Though the vernal pools within the Project site provide habitat for this species, this species was not observed during the June 12 and 13, 2017 rare plant survey.
Brandegee's clarkia *Clarkia biloba* ssp. *brandegeeae*	--;--;4.2	Chaparral, cismontane woodland, lower montane coniferous forest. Often in roadcuts. 75-915 m.	May to July	**Absent**. Not observed. Lacks potential suitable habitat.
Dwarf downingia *Downingia pusilla*	--;--;2B.2	Annual herb found in vernal pools and valley and foothill grasslands (mesic). At elevations of 1-445 meters.	March to May	**Low Potential**. Not observed. There is a low potential for this species to occur within the non-native annual grassland and vernal pools within the Project site.
El Dorado bedstraw *Galium californicum ssp. sierrae*	FE;CR; 1B.2	Cismontane woodland, chaparral, lower montane coniferous forest. In pine-oak woodland or chaparral. Restricted to gabbroic or serpentine soils. 130-585 m.	May to June	**Absent**. Not observed. Lacks potential suitable habitat.

PLANT	*STATUS (FED; CA; CNPS)*	*HABITAT ASSOCIATION*	*BLOOMING PERIOD*	*POTENTIAL FOR OCCURRENCE*
El Dorado County mule ears *Wyethia reticulata*	--;--;1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Stony red clay and gabbroic soils; often in openings in gabbro chaparral. 120-630 m.	April to August	**Absent**. Not observed. Lacks potential suitable habitat.
Hoary navarretia *Navarretia eriocephala*	--;--;4.3	Annual herb found in pine and oak woodlands and grasslands from 30 to 1,300 feet above sea level.	May to June	**Low Potential.** Not observed. The grassland of the Project site provides habitat for this species. There are no documented CNDDB records of this species occurring within five miles of the Project site.
Ione buckwheat *Eriogonum apricum var. apricum*	FE;CE; 1B.1	Chaparral. In gravelly openings on Ione formation soil. 85-150 m.	July to October	**Absent**. Not observed. Lacks potential suitable habitat.
Ione manzanita *Arctostaphylos myrtifolia*	FT;--;1B.2	Chaparral, cismontane woodland. On Ione clay with chaparral associates. Often comprises 50-80% cover. 90-560 m.	November to March	**Absent**. Not observed. Lacks potential suitable habitat.
Irish Hill buckwheat *Eriogonum apricum var. prostratum*	FE;CE; 1B.1	Chaparral. Gravelly openings on Ione formation soils. 90-100 m.	June to July	**Absent**. Not observed. Lacks potential suitable habitat.
Layne's ragwort *Packera layneae*	FT;CR; 1B.2	Chaparral, cismontane woodland. Ultramafic soil (serpentine or gabbro); occasionally along streams. 200-1085 m.	April to August	**Absent**. Not observed. Lacks potential suitable habitat.
Legenere *Legenere limosa*	--;--;1B.1	Vernal pools. In beds of vernal pools. 1-880 m.	April to June	**Absent**. Though the vernal pools within the Project site provide habitat for this species, this species was not observed during the June 12 and 13, 2017, rare plant survey. There are 13 CNDDB occurrences within five miles of the site.
Parry's horkelia *Horkelia parryi*	--;--;1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; especially known from the Ione formation in Amador County. 85-1115 m.	April to September	**Absent**. Not observed. Lacks potential suitable habitat.
pincushion navarretia *Navarretia myersii* ssp. *myersii*	--;--;1B.1	Vernal pools. Clay soils within non-native grassland. 45-100 m.	April to May	**Low Potential**. Not observed. There is a low potential for this species to occur within the vernal pools within the Project site. There are no documented CNDDB records of this species occurring within five miles of the Project site.
Pine Hill ceanothus *Ceanothus*	FE;CR; 1B.1	Chaparral, cismontane woodland. Gabbroic or serpentine soils; often in	April to June	**Absent**. Not observed. Lacks potential suitable

PLANT	STATUS (FED; CA; CNPS)	HABITAT ASSOCIATION	BLOOMING PERIOD	POTENTIAL FOR OCCURRENCE
roderickii		"historically disturbed" areas with an ensemble of other rare plants. 260-630 m.		habitat.
Pine Hill flannelbush *Fremontodendron decumbens*	FE;CR; 1B.2	Chaparral, cismontane woodland. Rocky ridges; gabbro or serpentine endemic; often among rocks and boulders. 425-765 m.	April to June	**Absent**. Not observed. Lacks potential suitable habitat.
Red Hills soaproot *Chlorogalum grandiflorum*	--;--;1B.2	Cismontane woodland, chaparral, lower montane coniferous forest. Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites. 265-1695 m.	May to June	**Absent**. Not observed. Lacks potential suitable habitat.
Sacramento Orcutt grass *Orcuttia viscida*	FE;CE; 1B.1	Vernal pools. 15-85 m.	April to September	**Absent**. The vernal pools within the Project site provide habitat for this species. This species was not observed during the June 12 and 13, 2017, plant survey.
Sanford's arrowhead *Sagittaria sanfordii*	--;--;1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.	May to November	**Absent**. Not observed. Lacks potential suitable habitat.
slender Orcutt grass *Orcuttia tenuis*	FT;CE; 1B.1	Vernal pools. Often in gravelly substrate. 25-1755 m.	May to October	**Absent**. Though the vernal pools within the Project site provide habitat for this species, this species was not observed during the June 12 and 13, 2017, rare plant survey.
stinkbells *Fritillaria agrestis*	--;--;4.2	Cismontane woodland, chaparral, valley and foothill grassland, pinyon and juniper woodland. Sometimes on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 10-1555 m.	March to June	**Absent**. Not observed. Lacks potential suitable habitat.
Tuolumne button-celery *Eryngium pinnatisectum*	--;--;1B.2	Vernal pools, cismontane woodland, lower montane coniferous forest. Volcanic soils; vernal pools and mesic sites within other natural communities. 70-915 m.	May to August	**Absent**. Though the vernal pools and grassland within the Project site provide habitat for this species, this species was not observed during the June 12 and 13, 2017, rare plant survey.

[1]*RARE PLANT SURVEY CONDUCTED FOR SACRAMENTO ORCUTT GRASS, SLENDER ORCUTT GRASS, AND BOGGS LAKE HEDGE HYSSOP.*

SOURCE: FOOTHILL ASSOCIATES, 2017; CDFW, 2018; CNDDB 2018.

ABBREVIATIONS:

FEDERAL LISTS

FE FEDERAL ENDANGERED

FT FEDERAL THREATENED

STATE LISTS

CE CALIFORNIA ENDANGERED SPECIES

CR CALIFORNIA RARE

CALIFORNIA RARE PLANT RANKS (FORMERLY CNPS LISTS)

1B RARE, THREATENED, OR ENDANGERED

2B RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE

3 REVIEW LIST: PLANTS WHICH MORE INFORMATION IS NEEDED

4 WATCH LIST: PLANTS OF LIMITED DISTRIBUTION

TABLE 3.3-2: SPECIAL-STATUS ANIMALS WITHIN 9-QUADRANGLE REGION FOR PROJECT SITE

ANIMAL	*STATUS (FED; CA)*	*HABITAT ASSOCIATION*	*POTENTIAL FOR OCCURRENCE*
MAMMALS			
American badger *Taxidea taxus*	--;SSC	This species prefers dry open fields, grasslands, and pastures. From high alpine meadows to se a level.	**Low Potential.** There are no CNDDB records for this species within five miles of the Project site. The annual grassland and burrows provide marginal habitat for this species given the lack of sandy soils within the Project site. No American badgers were observed during the biological surveys.
pallid bat *Antrozous pallidus*	--;SSC	Roosts in rock outcrops, hollow trees, abandoned mines, barns, and attics.	**Low Potential.** There are no CNDDB records for this species within five miles of the Project site. No bat species were observed roosting during previous site visits. The sparse man-made structures, including utility towers and a utility shed in the center of the Project site, provide marginal day roosting habitat and the annual grassland provides foraging habitat for this species.
BIRDS			
bald eagle *Haliaeetus leucocephalus*	MBTA;CE	Breeding range includes the Sierra Nevada, Cascade Range and portions of the Coast Ranges; winter range expands to include most of the state. Forages primarily in large inland fish-bearing waters with adjacent large trees or snags and occasionally in uplands with abundant rabbits, other small mammals, or carrion.	**Absent**. No potential to occur. Habitat not present.
bank swallow *Riparia Riparia*	MBTA;CT	Prefer to nest along banks or bluffs alone rivers or coastal areas. Prefer low gradient and meandering rivers or bodies of water.	**Absent**. No potential to occur. Habitat not present.
burrowing owl *Athene cunicularia*	MBTA; SSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats. Found in areas with sparse vegetation and few trees.	**High Potential**. There are 12 CNDDB records for this species within five miles of the Project site, though no western burrowing owls were observed during site visits. The Project site contains suitable burrows to support this species.
California black rail *Laterallus jamaicensis coturniculus*	MBTA;CT	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Low Potential**. Site supports habitat in the seasonal wetlands and drainages.
Cooper's hawk *Accipiter cooperii*	MBTA;--	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	**High Potential.** Suitable habitat present. The annual grassland on and surrounding the Project site may provide nesting and foraging habitat.
double-crested cormorant *Phalacrocorax auritus*	MBTA;--	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping	**Absent**. No potential to occur. Habitat not present.

ANIMAL	STATUS (FED; CA)	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
		surface, or in tall trees along lake margins.	
ferruginous hawk *Buteo regalis*	MBTA; WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	**High Potential.** Suitable habitat present. The annual grassland on and surrounding the Project site may provide nesting and foraging habitat.
golden eagle *Aquila chrysaetos*	MBTA;FP	Winter range spans most of California; breeding range excludes the Central Valley floor. Nests in cliffs, rocky outcrops and large trees. Forages in a variety of open habitats, including grassland, shrubland, and cropland.	**High Potential.** Suitable habitat present. There is one CNDDB record of golden eagle documented within five miles of the Project site. No golden eagles were observed during previous site visits. Although the Project site does not provide suitable nesting trees, the non-native annual grassland provides foraging habitat for this species.
great egret *Ardea alba*	MBTA;--	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	**Absent.** The grassland of the Project site provides foraging habitat for this species. There is no nesting habitat within the Project site.
great blue heron *Ardea herodias*	MBTA;--	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	**Absent.** The grassland of the Project site provides foraging habitat for this species and this species was observed flying over the Project site during the June 12, 2017, rare plant survey. However, there is no nesting habitat within the Project site.
grasshopper sparrow *Ammodramus savannarum*	MBTA; SSC	Prefer open grasslands with barren ground for foraging. Tend to be found in areas with vegetation and scrub cover especially in grasslands and prairies.	**High Potential.** Suitable habitat present. The annual grassland on and surrounding the Project site may provide nesting and foraging habitat.
merlin *Falco columbarius*	MBTA; WL	It is not known to nest in California, but it is a winter transient throughout most of California with wintering populations in the Central Valley. Avoid dense forests and inhabit fairly open land.	**High Potential.** Suitable habitat present. The annual grassland on and surrounding the Project site may provide nesting and foraging habitat.
Swainson's hawk *Buteo Swainsoni*	MBTA;CT	Nests in tall cottonwoods, valley oaks or willows. Forages in fields, cropland, irrigated pasture, and grassland often near riparian corridors.	**High Potential.** Suitable habitat present. The annual grassland on and surrounding the Project site may provide nesting and foraging habitat.
tricolored blackbird *Agelaius tricolor*	MBTA;CE	Colonial nester in cattails, bulrush, or blackberries associated with wetland or drainage habitats. Also need foraging areas such as grasslands or agricultural pastures.	**Low Potential**. The SSHCP tricolored blackbird modeled habitat map (SSHCP Figure 3-26) shows that modeled habitat for tricolored blackbird is present within the Project footprint. The annual grassland on the Project site provides suitable foraging habitat for this species. The aquatic habitat on the Project site does not provide suitable nesting habitat for this species.
white-tailed kite *Elanus leucurus*	MBTA;FP	Nests in riparian corridors along streams and rivers, and forages in nearby grasslands and fields.	**High Potential.** Suitable habitat present.

ANIMAL	*STATUS (FED; CA)*	*HABITAT ASSOCIATION*	*POTENTIAL FOR OCCURRENCE*
AMPHIBIANS & REPTILES			
California red-legged frog *Rana draytonii*	FT;SSC	Along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County. Permanent and semi-permanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods.	**Absent**. No potential to occur. The Project site is outside of the known extant range for this species.
California tiger salamander *Ambystoma californiense*	FT;CT	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	**Absent.** Though the grassland, burrows, and detention basin outfall of the Project site provide habitat for this species, the Project site is outside of the known range for this species and this species has not been observed during previous focused surveys.
foothill yellow-legged frog *Rana boylii*	--;SSC	Found in most of northern California west of the Cascade crest and along the western Sierra Nevada foothills up to approximately 6,370 feet. Rocky streams in a variety of habitats including valley-foothill hardwood, conifer, and riparian forests, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral and wet meadow.	**Absent**. The Project site is outside of the known range for this species and this species has not been observed during previous focused surveys. There are no CNDDB occurrences within five miles of the Project site.
giant garter snake *Thamnophis gigas*	FT;CT	Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	**Absent**. The Project site does not provide habitat for this species.
western pond turtle *Emys marmorata*	--;SSC	Occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests.	**Absent**. The Project site does not provide habitat for this species.
western spadefoot *Spea hammondii*	--;SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California. Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	**High Potential.** Suitable habitat present. The vernal pools and depressional seasonal wetlands in the Project site provide breeding habitat and there is one known occurrence within five miles of the Project site.
FISH			
steelhead - Central Valley DPS *Oncorhynchus mykiss irideu*	FT;--	Populations in the Sacramento and San Joaquin Rivers and their tributaries. Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3-inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.	**Absent.** No potential to occur. Habitat not present.

ANIMAL	*STATUS (FED; CA)*	*HABITAT ASSOCIATION*	*POTENTIAL FOR OCCURRENCE*
INVERTEBRATES			
vernal pool fairy shrimp *Branchinecta lynchi*	FT;--	Vernal pools or other seasonal wetlands. Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County. Isolated populations also in Riverside County.	**High Potential.** Suitable habitat present.
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT;--	Dependent upon elderberry plant (*Sambucus mexicana*) as primary host species. Riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant. Stream side habitats below 3,000 feet throughout the Central Valley.	**Absent**. The Project site does not provide habitat for this species. There are five CNDDB occurrences within five miles of the Project site.
vernal pool tadpole shrimp *Lepidurus packardi*	FE;--	Vernal pools and ephemeral stock ponds. Shasta County south to Merced County.	**High Potential.** Suitable habitat present.

SOURCE: CDFW CNDDB 2018.

ABBREVIATIONS:

FEDERAL LISTS

FE *FEDERAL ENDANGERED*
FT *FEDERAL THREATENED*
MBTA *PROTECTED BY MIGRATORY BIRD TREATY ACT*

STATE LISTS

CE *CALIFORNIA ENDANGERED SPECIES*
CT *CALIFORNIA THREATENED*
SSC *CDFW SPECIES OF SPECIAL CONCERN/CDFW SPECIAL ANIMALS*
WL *WATCH LIST*
FP *FULLY PROTECTED*

3.3.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the state and nation including the CDFW, USFWS, U.S. Army Corps of Engineers (USACE), and the National Marine Fisheries Service (NMFS). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the federal, state and local regulations that are applicable to the Project.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), administered by the USFWS and NMFS, provides protection to plant and wildlife species listed as endangered or threatened. In general, USFWS has jurisdiction over terrestrial and fresh-water species, while NMFS has jurisdiction over ocean-going species.

Section 9 of FESA generally prohibits all persons from causing the "take" of any member of a listed species. (16 U.S.C. Section 1538.) This prohibition applies mainly to animals; it only extends to plants in areas “under federal jurisdiction” and plants already protected under state law. (Id., subd. (a)(2)(B); see also Northern Cal. River Watch v. Wilcox (9th Cir. 2010) 620 F.3d 1075.)

"Take" is defined in statute as, "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." (16 U.S.C. Section 1532(19).) Harass is defined in regulation as "...an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering." (See 50 CFR Section 17.3.) Harm is defined in regulation as "...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering." (Id.) Despite the general prohibition against take, FESA in some circumstances permits "incidental take," which means take that is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity. (16 U.S.C. Section 1539(a).) Under section 10 of FESA, persons seeking permission to engage in actions that could result in such incidental take can obtain such permission through the approval of a habitat conservation plan (HCP) by either USFWS or NMFS. (16 U.S.C., Section 1539(a).)

Proposed federal actions that would result in take of a federal-listed or proposed species require consultation with USFWS or NMFS under section 7 of FESA. (Id., Section 1536.) The objective of consultation is to determine whether the proposed federal action would jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Where such an outcome would not occur, USFWS or NMFS must still impose reasonable and prudent measures to minimize the effects of the incidental taking. Where such an outcome could occur, USFWS or NMFS must propose reasonable and prudent alternatives that, if implemented, would avoid such an outcome. (Id.)

Compliance with FESA can be achieved under Section 7 or 10 of FESA depending on the involvement of the federal government. Section 7 requires federal agencies to make a finding on all federal actions, including the approval by an agency of a public or private action, such as the issuance of a "404 permit" for filling wetlands by the USACE, on the potential of the action to jeopardize the continued existence of any listed species impacted by the action or to result in the destruction or adverse modification of such species' critical habitat. Provisions of Section 10 are implemented when there is no federal involvement in a project except compliance with FESA. A take not specifically allowed by federal permit under Section 7 or Section 10(a)(1)(B) of the FESA is subject to enforcement through civil or criminal proceedings under Section II of the FESA.

Migratory Bird Treaty Act

To kill, posses, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (MBTA: 16 U.S.C., Section 703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Federal Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act provide regulations to protect bald and golden eagles as well as their nests and eggs from willful damage or injury.

Clean Water Act - Section 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. Section 328.2(f)]. Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "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 typically adapted for life in saturated soil conditions" [33 C.F.R. Section 328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. Section 328.3(e)].

Clean Water Act - Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the RWQCB. To obtain the water quality certification, the Central Valley RWQCB must indicate that the proposed fill would be consistent with the standards set forth by the state.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

STATE

Fish and Game Code Sections 2050-2097 - California Endangered Species Act

The CDFW administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act (CESA) of 1984 (California Fish and Game Code Section 2050 et seq.), which regulates the listing and take of state endangered and threatened species, as well as candidate species. Under Section 2081 of CESA, CDFW may authorize take of an endangered and/or threatened species, or candidate species, by an incidental take permit (ITP) or Memorandum of Understanding (MOU) for scientific, educational, or management purposes. In approving an incidental permit, CDFW must ensure, among other things, that "[t]he impacts of the authorized take shall be minimized and fully mitigated." Further, "[t]he measures required to meet this obligation shall be roughly proportional

in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation." To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants, as previously designated under the California Native Plant Protection Act (discussed below). Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code Sections 2800-2835 - Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning Act is set forth in Fish and Game Code Sections 2800–2835. The intent of the legislation is to provide for conservation planning as an officially recognized policy that can be used as a tool to eliminate conflicts between the protection of natural resources and the need for growth and development. In addition, the legislation promotes conservation planning as a means of coordination and cooperation among private interests, agencies, and landowners, and as a mechanism for multispecies and multi-habitat management and conservation. The development of Natural Community Conservation Plans (NCCPs) is an alternative to obtaining take authorization under Section 2081 of the Fish and Game Code.

Fish and Game Code Sections 1900-1913 - California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Wildlife Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code Sections 3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code Sections 1601-1603 - Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a "Streambed Alteration

Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Fish and Game Code Sections 3511, 3513, 4700, and 5050 - Fully Protected Species

Fish and Game Code Sections 3511, 3513, 4700, and 5050 pertain to fully protected wildlife species (birds in Sections 3511 and 3513, mammals in Section 4700, and reptiles and amphibians in Section 5050) and strictly prohibit the take of these species. CDFW cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock, or if an NCCP has been adopted.

California Environmental Quality Act Guidelines Section 15380 – Endangered, Rare or Threatened Species

The CEQA Guidelines provide that a species that is not listed on the federal or state endangered species list may nevertheless be considered rare or endangered if the species meets certain criteria. (CEQA Guidelines Section 15380) Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the CNPS, a nongovernmental organization, maintains a list of plant species native to California that have low populations, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) is California's primary water quality control statute. But its protections extend to wetlands, and in some instances wetlands that are not subject to federal jurisdiction under the Clean Water Act. Under the Porter-Cologne Act definition, waters of the state are "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code Section 13050[e].) Although all waters of the United States that are within the borders of California are also waters of the state, the reverse is not necessarily true. Therefore, California retains authority to regulate discharges of waste into any waters of the state, discharges to receiving waters more broadly than the CWA does.

Waters of the state fall under the jurisdiction of the nine RWQCBs. Under Porter-Cologne, each RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution. California Water Code Section 13260 requires any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements [WDRs]) with the applicable RWQCB. Construction activities that may discharge wastes into the waters of the state must meet the discharge control requirements of the Porter-Cologne Act.

LOCAL

South Sacramento Habitat Conservation Plan

The SSHCP is a regional effort that provides development and infrastructure projects with streamlined, predictable federal and state permitting processes while creating a Preserve System to protect habitat, open space, and agricultural lands. The SSHCP allows project proponents within the SSHCP Area to simplify and expedite the state and federal Endangered Species Act (ESAs) permitting process. In addition to streamlining the ESAs permitting processes, a separate but parallel multi-tiered permitting program has been developed to streamline Clean Water Act Section 404 and 401 permitting process and a Master Streambed Alteration Agreement will be prepared to address Section 1602 of the California Fish and Game Code. The SSHCP allows Sacramento County (the County), the City of Rancho Cordova, City of Galt, Sacramento County Water Agency, and the Southeast Connector Joint Powers Authority (collectively referred to as the Plan Permittees) to receive an Incidental Take Permit (ITP) for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) have the ability to extend incidental take coverage provided by the SSHCP ITPs to activities and projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. This will allow Third-Party Project Proponents to avoid the

extensive negotiation and processing currently required to obtain individual project permits under the CESA from the CDFW and project ESA compliance from the USFWS.

In most cases, an individual Covered Activity project or activity would trigger CEQA and require preparation of a CEQA document that analyzes the proposed project or activity. The final SSHCP EIS/EIR can be used to simplify and streamline preparation of individual project CEQA documents for future Covered Activity projects that they directly implement over the proposed 50-year term of the SSHCP. The SSHCP EIS/EIR provides regional-scale comprehensive analyses of environmental impacts of all planned urban development within the Planning Area over a 50-year period.

The three local Land Use Authority Permit Applicants (Sacramento County, Galt, and Rancho Cordova) would also have the ability to extend the species incidental take coverage provided by the SSHCP ITPs to the Covered Activities implemented by third-party project proponents under their jurisdiction. The SSHCP term "third-party project proponents" refers to individuals or organizations that implement a SSHCP Covered Activity under the jurisdiction of a Land Use Authority Permit Applicant (i.e., Sacramento County, Galt, or Rancho Cordova). An example would be a developer (the third-party project proponent) who proposes a development project that is consistent with the requirements of an SSHCP urban development Covered Activity, and the proposed project's approvals or entitlements are subject to the jurisdiction of Sacramento County (a Land-use Authority Permit Applicant). Third-party project proponent uses of the Final EIS/EIR are discussed in Section 1.6.5.

The SSHCP Area (317,655 acres) is located in the southern portion of Sacramento County. The SSHCP Area includes portions of unincorporated Sacramento County, Galt, and the southern half of Rancho Cordova. Parts of southern Sacramento County, including the community of Rancho Murieta, the sovereign lands of the Miwok Tribe, and a majority of the Delta are not included within the SSHCP Area. The SSHCP Area was defined using political and ecological factors and is the area in which all conservation actions will be implemented and where all incidental take will occur.

The SSHCP Conservation Strategy mitigates to the maximum extent practicable the impacts of Covered Activities, including all direct and indirect impacts on Covered Species and their habitats. The SSHCP Conservation Strategy provides for conservation of 28 Covered Species and 17 land cover types, avoids or minimizes impacts of Covered Activities, mitigates for the impacts of Covered Activities on the Covered Species and their habitats on the basis of species and habitat needs, provides a regional approach to the mitigation of impacts and the conservation of species and their habitats, protects wetlands and waters of the Plan Area, conserves natural communities in the Plan Area, and provides take authorization for the 28 Covered Species, with the exception that direct injury or mortality of white-tailed kite and greater sandhill crane is not covered by the ITP and the SSHCP plans for full avoidance and protection of all slender Orcutt grass and Sacramento Orcutt grass occurrences.

The SSHCP includes Avoidance and Minimization Measures (AMMs) as conditions on Covered Activities. Each condition contains several AMMs that are intended to eliminate or reduce direct or indirect effects to species that could result from implementation of a Covered Activity. In addition,

the SSHCP provides species-specific take and avoidance measures to avoid or minimize effects of Covered Activities on specific SSHCP Covered Species. Species-specific AMMs include species surveys, preconstruction surveys, and construction monitoring.

SSHCP Figure 2-2 identifies the area where the Project site is located as the Preserve Planning Unit 1 (PPU 1), which is an Urban Development Area planned for urbanization, and shows that a Linkage Preserve is planned for a portion of the Project site.

The Rancho Cordova City Council adopted the SSHCP in October 2018.

Rancho Cordova General Plan

The Rancho Cordova General Plan contains the following goals and policies that are relevant to biological resources:

NATURAL RESOURCES ELEMENT

GOAL NR.1: Protect and preserve diverse wildlife and plant habitats, including habitat for special status species.

Policy NR 1.1: Protect rare, threatened, and endangered species and their habitats in accordance with State and federal law.

Policy NR 1.2: Conserve Swainson's hawk habitat consistent with State policies and Department of Fish and Game guidelines.

Policy NR 1.3: Promote educational programs that inform the public about natural resources.

Policy NR 1.4: Discourage the planting of invasive species.

Policy NR 1.5: Ensure the protection of wildlife through the establishment of programs to control feral pet populations.

Policy NR 1.6: Participate in the development of a habitat conservation plan to address the unique biological resources in Rancho Cordova.

Policy NR 1.7: Prior to project approval, the City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain listed plant and/or wildlife species based upon the City's biological resource mapping provided in the General Plan EIR or other technical materials.

Policy NR 1.8: The City shall encourage creation of habitat preserves that are immediately adjacent to each other in order to provide interconnected open space areas for animal movement.

Policy NR 1.9: The City shall require that impacts to riparian habitats be mitigated at a no net loss of existing function and value based on field survey and analysis of the riparian habitat to be impacted. No net loss may be accomplished by avoidance of the habitat, restoration of existing habitat, or creation of new habitat, or through some combination of the above.

Policy NR 1.10: The placement of new roadways within habitat preserves shall be discouraged, but is not prohibited. This Policy shall not apply to roadways shown in the Circulation Element or needed to meet goals or policies of the Circulation Element.

Policy NR 1.11: In such cases where a new roadway crosses a habitat preserve or separates two adjacent preserves, the roadway shall include design features, where feasible and appropriate, to allow for the movement of wildlife across or beneath the road without causing a hazard for vehicles, bicycles and pedestrians on the roadway.

GOAL NR.2: Preserve the City's rich and diverse natural wetlands.

Policy NR 2.1: Require mitigation that provides for "no net loss" of wetlands consistent with current State and federal policies.

Policy NR 2.2: Ensure that direct and indirect effects to wetland habitats are mitigated to the extent feasible by environmentally sensitive project siting and design or other measures.

Policy NR 2.3: Work with private and non-profit conservation organizations to ensure competitive pricing for mitigation bank credits by allowing government agencies, non-profit organizations, and private landowners to establish vernal pool preserves, designate mitigation areas, create and restore vernal pools, and sell credits to developers for off-site mitigation.

Policy NR 2.4: Educate the public on the importance and benefit of wetlands areas.

Policy NR 2.5: The City shall require that drainage improvements that discharge into areas of wetlands to be preserved are, to the maximum extent feasible, designed to mimic the undeveloped surface water flow conditions of the area in terms of seasonality, volume, and flow velocity.

GOAL NR.3: Preserve and maintain creek corridors and wetland preserves with useable buffer zones throughout the new development areas as feasible.

Policy NR.3.1: Coordinate with property owners and local interest groups, such as the Sacramento Urban Creeks Council, to restore, enhance, and preserve creeks in Rancho Cordova.

Policy NR.3.2: In general, the City will encourage the preservation of existing location, topography, and meandering alignment of natural creeks. The modification, re-creation and realignment of creek corridors shall recreate the character of the natural creek corridor to the extent feasible, appropriate and consistent with other City policies. Channelization and the use of concrete within creek corridors shall be discouraged, but is not prohibited.

Policy NR.3.3: Encourage the creation of secondary flood control channels where the existing channel supports extensive riparian vegetation.

Policy NR.3.4: Encourage projects that contain wetland preserves or creeks, or are located adjacent to wetland preserves or creeks, to be designed for visibility and, as appropriate, access.

GOAL NR.4: Encourage the planting and preservation of high-quality trees throughout the City.

Policy NR.4.1: Conserve native oak and landmark tree resources for their historic, economic, aesthetic, educational, and environmental value.

Policy NR.4.2: Improve overall landscaping quality and sustainability in all areas visible to the public.

Policy NR.4.3: Promote trees as economic and environmental resources for the use, education, and enjoyment of current and future generations.

Policy NR.4.4: Prior to the approval of any public or private development project in areas identified or assumed to contain trees, the City shall require that a determinate survey of trees species and size be performed. If any native oaks or other native trees six inches or more in diameter at breast height (dbh), multitrunk native oaks or native trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a certified arborist to be in good health are found to occur, such trees shall be avoided if feasible. If such trees cannot be avoided, the project applicant shall do one of the following:

- All such trees shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the City of Rancho Cordova for approval prior to removal of trees; or,
- The project applicant shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City of Rancho Cordova. The mitigation plan shall be subject to the approval of the City.
- If the City of Ranch Cordova adopts a tree preservation ordinance at any time in the future, any future development activities shall be subject to that ordinance instead.

GOAL NR.5: Protect the quantity and quality of the City's water resources.

Policy NR.5.1: Promote water conservation within existing and future urban uses.

Policy NR.5.2: Encourage the use of treated wastewater to irrigate parks, golf courses, and landscaping.

Policy NR.5.3: Protect surface and ground water from major sources of pollution, including hazardous materials contamination and urban runoff.

Policy NR.5.4: Prevent contamination of the groundwater table and surface water, and remedy existing contamination to the extent practicable.

Policy NR.5.5: Minimize erosion to stream channels resulting from new development in urban areas consistent with State law.

Policy NR.5.6: Incorporate Storm Water, Urban Runoff, and Wetland Mosquito Management Guidelines and Best Management Practices into the design of water retention structures, drainage ditches, swales, and the construction of mitigated wetlands in order to reduce the potential for mosquito-borne disease transmission.

Policy NR.5.7: Continue to cooperate and participate with the County, other cities, and the Regional Water Quality Control Board regarding compliance with the joint National Pollutant Discharge Elimination System Permit (NPDES No. CAS082597) or any subsequent permit and support water quality improvement projects in order to maintain compliance with regional, state and federal water quality requirements.

Policy NR.5.8: The City shall require groundwater impact evaluations be conducted for the Grant Line West, Westborough, Aerojet, Glenborough, Mather and Jackson Planning Areas to determine whether urbanization of these areas would adversely impact groundwater remediation activities associated with Mather and Aerojet prior to the approval of large-scale development. Should an adverse impact be determined, a mitigation program shall be developed in consultation with applicable local, state, and federal agencies to ensure remediation activities are not impacted. This may include the provision of land areas for groundwater remediation facilities, installation/extension of necessary infrastructure, or other appropriate measures.

City of Rancho Cordova Municipal Code

Chapter 16.94, Aquatic Resources Protection, of the City's Municipal Code outlines the purpose, definitions, applicability, impact permit and delineation requirements, avoidance, minimization, and compensation standards, and other provisions pertaining to aquatic resources. All proposed projects within the City's plan area that permanently and/or temporarily impact an aquatic resource shall require an aquatic resources impact permit from the city. There are aquatic resources located on the Project site.

Chapter 19.12, Preservation and Protection of Private Trees, of the City's Municipal Code outlines the purpose, definitions, tree permit requirements, and other related provisions pertaining to tree preservation. Native oak trees grow naturally in Rancho Cordova. There are no trees on the Project site.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines contains a sample Initial Study checklist that includes a number of factual inquiries related to the subject of biological resources, as it does on a whole series of additional environmental topics. Notably, lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on the subject of air quality impacts, or indeed on

any subject addressed in the checklist. (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance." (*Ibid*.) Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that language in fashioning thresholds. The City has done so here, though it has exercised its discretion to modify the language of the Appendix G threshold as described below.

Although CEQA generally gives agencies considerable discretion in fashioning significance thresholds, there are some thresholds that must, as a matter of law, be used by public agencies. Many of these relate to biological resources, and are found in CEQA Guidelines Section 15065 ("Mandatory Findings of Significance").

Finally, the City is aware that neither Appendix G nor Section 15065 sets forth language directly addressing potential effects on birds of prey or nesting birds due to violation of laws (described earlier) intended to protect them. The City has, therefore, exercised its discretion to formulate a threshold to address this particular category of impact.

In light of the foregoing, for purposes of this EIR, a significant impact would occur if implementation of the Project would:

- 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;
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species;
- 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;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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 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;
- Result in the take or destruction of any nesting birds or birds of prey or the nest or eggs of such birds.

METHODOLOGY

Aquatic Resources Delineation Report

As part of the *Aquatic Resources Delineation Report*, Foothill Associates completed a wetland delineation for the Project site. The Delineation Report is included as Appendix C.1 of this Draft EIR. The delineation utilized the USACE's 1987 three-parameter (vegetation, hydrology, and soils) methodology to delineate aquatic resources. The USACE's Arid West Regional Supplement (Supplement) (USACE 2008) was also used in conjunction with the USACE Manual for applications in the Arid West Region. Where differences in the two documents occur, the Supplement takes precedence over the USACE Manual. The three-parameter methodology requires the collection of data on soils, vegetation, and hydrology at several locations to establish the jurisdictional boundary of wetlands. Additional methods to identify and delineate other waters of the U.S. (e.g., streams, drainages, lakes) were used as applicable. The method typically used for delineation of non-wetland waters of the U.S. is the delineation of the Ordinary High Water Mark (OHWM). The OHWM was identified based on soils, vegetation, slope, and other indicators such as debris and high water marks.

As part of the delineation efforts, a review of historic and recent aerial photographs, topographic maps, and soils survey data was conducted by Foothill Associates before delineating the Project site in December 2003, and January through April 2004. Revisions were made in the field with Justin Cutler and/or Will Ness of the USACE in April and June in 2005 and a reverification was conducted in October 2014. Biologists visually inspected the entire site and collected representative data at points within potential wetland areas and corresponding uplands. The on-site soils were examined for hydric indicators. Observations were made and recorded for both primary and secondary wetland hydrology indicators, if present. Boundaries of wetlands and other waters of the U.S. within the site were surveyed and mapped with a Trimble GeoXT Global Positioning System (GPS) hand-held unit.

Biological Resources Assessment

Foothill Associates also prepared a *Biological Resources Assessment* for the Project site. The Assessment is included as Appendix C.2 of this Draft EIR. Prior to conducting a survey of the Project site, existing information, including *The Ranch at Sunridge Project: Section 7 Biological Assessment* (Foothill Associates 2012), *Jaeger ±530-Acre Study Area: Wetland Delineation Report* (Foothill Associates 2005), *Special Status Plant Report ±530-Acre Peery Arrillaga Sunrise Douglas Site* (North Fork Associates 2002), and rare plant survey letter reports prepared by Foothill Associates in 2009 and 2017 for the Project site were reviewed by Foothill Associates. The results of the special-status species records search and five-mile radius CNNDB query are summarized in Appendix B of Appendix C.2. As part of the *Biological Resources Assessment* efforts, the most recent field surveys of the Project site were conducted on June 12 and 13, 2017. The Project site was systematically surveyed on foot with binoculars to ensure total search coverage, with special attention given to identifying those portions of the Project site with the potential for supporting special-status species and sensitive habitats. During the field surveys, biologists recorded plant and animal species observed (Appendix C of Appendix C.2), as well as characterized biological communities

occurring within the Project site. As noted above, wetland features were previously delineated within the Project site and verified by the USACE in 2014. Wetland polygons along the eastern boundary of Rancho Cordova Parkway were remapped in 2017 to address impacts that may have occurred during expansion of Rancho Cordova Parkway.

Following the Project site survey, the potential for each species identified in the records search to occur in the Project site was determined based within the Project site surveys, soils, and species-specific information, as shown in Appendix B of Appendix C.2.

Special-Status Plant Survey for The Ranch

Focused botanical surveys for special-status plant species were also performed by two Foothill Associates biologists on June 12 and 13, 2017. The surveys were completed within the identified blooming period of the potentially occurring special-status plant species listed in the *Special-Status Plant Survey for The Ranch.* The Plant Survey is included as Appendix C.3 of this Draft EIR. The survey was conducted in accordance with and subject to guidelines provided by the CDFW and the CNPS. The purpose of the survey was to determine whether three special-status plants, Sacramento Orcutt grass (*Orcuttia viscida*), slender Orcutt grass (*Orcuttia tenuis*), and Boggs lake hedge-hyssop (*Gratiola heterosepala*), occur within the Project site. Transects were systematically walked throughout the whole of the Project site, with special attention paid to areas that contained suitable habitat for the special-status plant species. In this case, five-foot transects were walked throughout each vernal pool on the Project site and all riverine wetland features were surveyed.

The surveys were conducted by two biologists with the following qualifications: experience with conducting floristic surveys; intimate knowledge of plant taxonomy and plant community ecology and classification; familiarity with the plants of the area, including special-status and locally significant plants; familiarity with the appropriate State and federal statutes related to plants and plant collecting; and experience with analyzing impacts of Project activities on native plants and plant communities.

Additionally, a literature review and database search were conducted to gather information regarding sensitive plants, animals, and habitats. The purpose of the literature and database review is to identify species known to occur within the region based on historic range, observations, and habitat requirements.

South Sacramento Habitat Conservation Plan Final EIR/EIS

Section 15152 of the State CEQA Guidelines allows the Lead Agency to "tier" the environmental analysis for separate but related projects. Per Section 15152(b) of the State CEQA Guidelines, tiering "can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration." Section 15152(d) of the State CEQA Guidelines requires that tiering "shall be limited to situations where the project is consistent with the general

plan and zoning of the city or county in which the project is located, except that a project requiring a rezone to achieve or maintain conformity with a general plan may be subject to tiering." CEQA Guidelines Section 15152(d) provides the following direction regarding limiting analysis of a later project, where an EIR has already been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of Section 15152:

> *Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:*
>
> *(1) Were not examined as significant effects on the environment in the prior EIR; or*
>
> *(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.*

The USFWS and County of Sacramento prepared a EIS/EIR (SCH #2008062030) to evaluate the environmental impacts of implementing the SSHCP, which was described previously in this section. The analysis provided in this section tiers from the SSHCP EIS/EIR to focus on examining project-specific impacts.

The City of Rancho Cordova is using the analyses presented in the final SSHCP EIS/EIR to simplify and streamline preparation of future CEQA documents for individual Covered Activity projects, especially the comprehensive analyses of impacts to native plant and animal species, natural communities, aquatic resources, water quality, and hydrology. Project-level CEQA and NEPA documents can reference and use the final SSHCP EIS/EIR's regional-scale and 50-year comprehensive and programmatic analysis of future Covered Activity impacts to native plant and animal species, natural communities, aquatic resources, water quality, hydrology, and other environmental resources natural resources, as well as the EIS/EIR's cumulative analysis of impacts to wetlands and other waters in the region.

In determining potential environmental impacts to biological resources as a result of the Project, the impact analysis below analyzes the Projects consistency and implementation of the SSHCP and also identifies any potential impacts that were not examined in the SSHCP EIS/EIR. Impacts associated with biological resources identified in the final SSHCP EIS/EIR, which are anticipated to occur with the urbanization of the SSHCP area and establishment of planned preserves in the SSHCP area as described in the SSHCP, that are applicable to the Project's habitat types and potential species are identified in Table 3.3-3 below.

TABLE 3.3-3: SSHCP EIS/EIR IMPACTS OF SSHCP PROPOSED ACTION/PROPOSED PROJECT

IMPACT	*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
NATURAL LAND COVER HABITATS, AND ASSOCIATED PLANT AND ANIMAL COMMUNITIES		
DIRECT AND INDIRECT EFFECTS – VERNAL POOL ECOSYSTEM		
As compared to the No Action/No Project Alternative baseline condition, the Proposed Action/Proposed Project would: • directly and indirectly impact 690 fewer total acres of the Planning Area's total vernal pool ecosystem and the associated vernal pool plant and animal communities; • directly and indirectly impact 1,283 fewer acres of the Mather Core Area's vernal pool ecosystem and the associated vernal pool plant and animal communities; • require Covered Activities to implement better and more consistently implemented AMMs to avoid and minimize indirect effects of development projects and activities on the vernal pool ecosystem; • preserve approximately 7,340 more acres of Vernal Pool Ecosystem in the Planning Area; • result in interconnected and more contiguous preserves of vernal pool ecosystem within the Planning Area; and • preserve 934 more acres of the Mather Core Area's vernal pool ecosystem and the associated vernal pool plant and animal communities.	Significant Beneficial Effect	None required
CUMULATIVE EFFECTS – VERNAL POOL ECOSYSTEM		
Overall, the Proposed Action/Proposed Project Alternative would make a slightly smaller contribution to Study Area cumulative effects on the vernal pool ecosystem, when compared to the No Action/No Project Alternative. However, at the scale of Vernal Pool Ecosystem impacts throughout the Study Area, the 690-acre difference in impacts under the Proposed Action/Proposed Project Alternative compared to impacts under the No Action/No Project Alternative is not discernibly different.	No Cumulative Effect	None required

IMPACT	*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
DIRECT AND INDIRECT EFFECTS – SEASONAL WETLANDS, FRESHWATER MARSH, STREAMS/CREEKS, OPEN WATER		
As compared to the No Action/No Project Alternative baseline condition, the Proposed Action/Proposed Project would: • directly impact 79 fewer acres of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water land covers and associated plant and animal communities; • require Covered Activity activities and project to implement better and more consistently implemented AMMs to avoid and minimize indirect effects to Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, Open Water natural communities, such as larger setbacks between new development and streams and creeks; • preserve 480 more acres of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water; • re-establish or establish 213 more acres of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water land covers within the Planning Area; and • result in more interconnected and contiguous preserves of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water land covers within the Planning Area.	Minor Beneficial Effect	None required
CUMULATIVE EFFECTS – SEASONAL WETLANDS, FRESHWATER MARSH, STREAMS/CREEKS, OPEN WATER		
Overall, the Proposed Action/Proposed Project Alternative would make a slightly smaller incremental contribution the cumulative loss of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water in the Study Area, when compared to the No Action/No Project Alternative. However, at the scale of impacts to these aquatic resources throughout the Study Area, the 79-acre difference in direct impacts, the 480-acre difference in preservation, and the 213-acre difference in re-establishment of Seasonal Wetlands, Freshwater Marsh, Streams/Creeks, and Open Water land covers under the Proposed Action/Proposed Project Alternative when compared to impacts under the No Action/No Project Alternative is not discernibly different.	No Cumulative Effect	None required

IMPACT	*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
DIRECT AND INDIRECT EFFECTS – VALLEY GRASSLAND		
As compared to the No Action/No Project Alternative baseline condition, the Proposed Action/Proposed Project would: • directly impact(remove) 1,415 fewer acres of Valley Grassland land cover and the associated plant and animal communities; • require Covered Activities to implement better and more consistently implemented AMMs to avoid and minimize indirect effects to Valley Grasslands; • preserve 10,208 acres more Valley Grassland within a large SSHCP Preserve System; and • result in more interconnected and contiguous preserves of Valley Grassland within the Planning Area, which would reduce habitat fragmentation effects on the Valley Grassland plant and animal community.	Significant Beneficial Effect	None required
CUMULATIVE EFFECTS – VALLEY GRASSLAND		
The incremental impacts of the Proposed Action/Proposed Project Alternative would make a smaller contribution to the cumulative loss of Valley Grassland in the Study Area, when compared to the incremental impact of the No Action/No Project Alternative.	Minor Beneficial Cumulative Effect	None required.
DIRECT AND INDIRECT EFFECTS – WILDLIFE MOVEMENT CORRIDORS		
As compared to the No Action/No Project Alternative baseline condition, the Proposed Action/Proposed Project would: • provide a coordinated, interconnected Preserve System designed to provide connectivity between existing preserves and new preserves established under the Proposed Action/Proposed Project; • require new development project to incorporate AMMs that would avoid or minimize effects on riparian corridors used for wildlife movement; • require new development projects inside the UDA and related roadway projects outside the UDA to incorporate wildlife crossing structures at specific locations; and • not result in displaced development outside the UDA, to locations that have a greater potential to affect designated wildlife movement corridors.	Minor Beneficial Effect	None required

IMPACT		*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
CUMULATIVE EFFECTS –– WILDLIFE MOVEMENT CORRIDORS			
The incremental impacts of the Proposed Action/Proposed Project Alternative would make a smaller contribution the cumulative loss of wildlife movement and dispersal in the Study Area, when compared to the incremental impact of the No Action/No Project Alternative. However, at the scale of wildlife movement throughout the Study Area, the difference in movement under the Proposed Action/Proposed Project Alternative when compared to impacts under the No Action/No Project Alternative is not discernibly different.		No Cumulative Effect	None required
SPECIAL-STATUS SPECIES INCLUDING HCP COVERED SPECIES			
DIRECT, INDIRECT, AND CUMULATIVE EFFECTS			
SPECIES COMMON NAME	*COVERED SPECIES?*	*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
Vernal Pool Tadpole Shrimp	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Vernal Pool Fairy Shrimp	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Mid-Valley Fairy Shrimp	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Ricksecker's Water Scavenger Beetle	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Dwarf Downingia	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Ahart's Dwarf Rush	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Pincushion Navarretia	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Slender Orcutt Grass	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Sacramento Orcutt Grass	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Boggs Lake Hedge-Hyssop	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Legenere	Y	Significant Beneficial Effect No Cumulative Effect	None required.
Valley Elderberry Longhorn Beetle	Y	Minor Beneficial Effect No Cumulative Effect	None required.

IMPACT		*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
California Tiger Salamander (Central Valley population)	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Western Spadefoot	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Giant Garter Snake	Y	Minor Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Western Pond Turtle	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Cooper's Hawk	Y	Minor Beneficial Effect No Cumulative Effect	None required.
Tricolored Blackbird	Y	Significant Beneficial Effect Significant Beneficial Cumulative Effect	None required.
Western Burrowing Owl	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Ferruginous Hawk	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Swainson's Hawk	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Northern Harrier	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
White-Tailed Kite	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Greater Sandhill Crane	Y	Minor Beneficial Effect No Cumulative Effect	None required
Lesser Sandhill Crane	N	Minor Beneficial Effect No Cumulative Effect	None required
Loggerhead Shrike	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.

IMPACT		*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
Grasshopper Sparrow	N	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Song Sparrow (Modesto population)	N	Minor Beneficial Effect No Cumulative Effect	None required
Bank Swallow	N	Less than Significant Adverse Effect No Cumulative Effect	None required
Western Red Bat	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
American Badger	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Sanford's Arrowhead	Y	Significant Beneficial Effect Minor Beneficial Cumulative Effect	None required.
Watershield	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Bristly sedge	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Fleshy owl's clover	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Brandegee's clarkia	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Bolander's water-hemlock	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Peruvian dodder	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Tuolumne button-celery	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Stinkbells	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Woolly rose-mallow	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Northern California black walnut	N	Less than Significant Adverse Effect No Cumulative Effect	None required.

IMPACT		*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
Delta tule pea	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Heckard's pepper-grass	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Mason's lilaeopsis	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Delta mudwort	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Marsh skullcap	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Side-flowering skullcap	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Suisun Marsh aster	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
Saline clover	N	Less than Significant Adverse Effect No Cumulative Effect	None required.
AQUATIC RESOURCES			
DIRECT AND INDIRECT EFFECTS			
As compared to the No Action/No Project Alternative baseline condition, the Proposed Action/Proposed Project would: • result in the loss of 855 acres of wetland waters, which is 34 more acres than the 821-acre loss anticipated under the No Action/No Project Alternative; • result in the loss of 294 other waters, which is 65 acres less than the 359-acre loss anticipated under the No Action/No Project Alternative; • result in the loss of 464 acres of Riparian land cover types, which is 37 acres more than the 427 acres expected under the No Action/No Project Alternative; • in total, result in the loss of 1,613 acres of aquatic resources, which is 5 acres greater loss of aquatic resources compared to the 1,607-acre loss of the No Action/No Project Alternative; • preserve 2,738 acres of aquatic resources, which is greater by 998 acres compared 1,740 acres under the No Action/No Project Alternative;		Minor Beneficial Effect	None required

IMPACT	*CEQA/NEPA SIGNIFICANCE*	*MITIGATION MEASURES*
• require AMMs such as increased Stream Setbacks that would be more protective to aquatic resources relative to the No Action/No project Alternative; • implement the SSHCP and ARP resulting in a greater area of aquatic resources protections and management than the No Action/No Project Alternative; and • improve aquatic resource abundance, diversity, and condition within the Planning Area over that expected under the No Action/No Project Alternative.		
CUMULATIVE EFFECTS		
Implementation of the SSHCP Conservation Strategy, including the SSHCP AMMs, the SSHCP ARP, and the interconnected SSHCP Preserve System is expected to result in more consistent and frequent conservation of aquatic resources compared to the No Action/No Project Alternative.	Minor Beneficial Cumulative Effect	None required

SOURCE: FINAL SSHCP EIS/EIR, 2018

Peer Review

A peer review of the biological work performed by Foothill Associates was performed by De Novo Planning Group. The peer review included reviewing the Foothill Associates biological studies, performing a database search to gather information regarding sensitive plants, animals, and habitats, and performing a reconnaissance level survey of the Project site. The database search includes a 9-quad region (USGS quadrangles: Citrus Heights, Folsom, Clarksville, Carmichael, Buffalo Creek, Folsom Southeast, Elk Grove, Sloughhouse, and Carbondale). The review also included a review of the SSHCP modeling habitats for the Project site. The intent of the peer review was to verify the accuracy of the information provided in the reports, to identify information gaps, and to ultimately prepare the biological resources chapter for the Draft EIR.

IMPACTS AND MITIGATION

Impact 3.3-1: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Invertebrates (Less than Significant with Mitigation)

The SSHCP has five invertebrates that are Covered Species. These include: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Ricksecker's Water Scavenger Beetle, Mid-Valley Fairy Shrimp (*Branchinecta mesovallensis*), Vernal Pool Fairy Shrimp, and Vernal Pool Tadpole Shrimp. Of these five species, the SSHCP modeled habitat maps (SSHCP Figures 3-11 through 3-15) show that modeled habitat is present within the Project footprint for four of the five Covered Species, including: Ricksecker's water scavenger beetle, Mid-Valley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. There is no SSHCP modeled habitat for valley elderberry longhorn beetle within the Project site.

Valley Elderberry Longhorn Beetle: The valley elderberry longhorn beetle is a federally threatened insect that is dependent upon the elderberry plant (*Sambucus* sp.) as a primary host species. Elderberry shrubs are a common component of riparian areas throughout the Sacramento Valley region. There are five CNDDB occurrences within five miles of the Project site.

The SSHCP valley elderberry longhorn beetle modeled habitat map (SSHCP Figure 3-13) shows that modeled habitat for valley elderberry longhorn beetle is not present within the Project footprint. The Project site does not provide habitat for this species and surveys did not indicate the presence of valley elderberry longhorn beetle on the site.

Ricksecker's Water Scavenger Beetle: Ricksecker's Water Scavenger Beetle is a SSHCP Covered Species. This vernal pool insect is entirely dependent upon the aquatic environment provided by vernal pools. The Ricksecker's water scavenger beetle depends upon the presence of water in the winter and early spring and the absence of water during the summer. These specific vernal pool wetland characteristics are dependent upon the surrounding uplands. Vernal pools supporting Ricksecker's water scavenger beetle are typically in Central Valley California floristic provinces below 300 meters in elevation. Collection records suggest that the Ricksecker's water scavenger beetle is not sensitive to the size of vernal pools, and uses both vernal pools and swales, as well as constructed vernal pools. Optimal Ricksecker's water scavenger beetle habitat tends to be neutral to slightly alkaline, clear vernal pools, low in dissolved salts, dominated with vernal pool plants, sustaining a complex vernal pool crustacean community.

The SSHCP Ricksecker's water scavenger beetle modeled habitat map (SSHCP Figure 3-12) shows that modeled habitat for Ricksecker's water scavenger beetle is present within the Project

footprint. The field surveys revealed that the necessary habitat for this species is present within the vernal pools located on the Project site, and this species has a high potential to occur on-site.

Mid-Valley Fairy Shrimp: Mid-Valley Fairy Shrimp is a SSHCP Covered Species. This small vernal pool crustacean is entirely dependent upon the aquatic environment provided by vernal pool ecosystems. Mid-valley fairy shrimp depends upon the presence of water in the winter and early spring and the absence of water during the summer. These specific vernal pool wetland characteristics are dependent upon the surrounding uplands. Mid-valley fairy shrimp are typically in Central Valley California floristic provinces below 300 meters in elevation. Typical habitat for mid-valley fairy shrimp in California includes vernal pools and seasonally ponded areas within vernal swales. Optimal mid-valley fairy shrimp habitat tends to be small vernal pools, with an abbreviated hydroperiod, neutral to slightly alkaline, clear vernal pools, low in dissolved salts, dominated with vernal pool plants, and sustains a complex vernal pool crustacean community.

The SSHCP Mid-valley fairy shrimp modeled habitat map (SSHCP Figure 3-11) shows that modeled habitat for Mid-valley fairy shrimp is present within the Project footprint. The field surveys revealed that the necessary habitat for this species is present within the vernal pools located on the Project site, and this species has a high potential to occur on-site.

Vernal Pool Fairy Shrimp: Vernal Pool Fairy Shrimp is a SSHCP Covered Species and is listed as federally threatened. This small vernal pool crustacean is entirely dependent upon the aquatic environment provided by vernal pool wetland ecosystems. Vernal pool fairy shrimp depends upon the presence of water in the winter and early spring and the absence of water during the summer. Habitats supporting the vernal pool fairy shrimp are typically in Central Valley California floristic provinces below 300 meters elevation. Typical habitat for vernal pool fairy shrimp in California includes vernal pools, seasonally ponded areas within vernal swales, rock outcrop ephemeral pools, playas, and alkali. Vernal pool fairy shrimp have also been found in water pooled in sandstone outcrops and in alkaline vernal pools. Optimal habitat for vernal pool fairy shrimp tends to be neutral to slightly alkaline, clear vernal pools, low in dissolved salts, dominated with vernal pool plants, and sustains a complex vernal pool crustacean community. Fairy shrimp occurs only in cool-water pools. Individuals hatch from cysts during cold-weather winter storms; they require water temperatures of 50°F or lower to hatch. The time to maturity and reproduction is temperature-dependent, varying between 18 days and 147 days, with a mean of 40 days. Pool volume is also important in determining potential shrimp habitat because deeper pools with a large surface area can more easily maintain their dissolved oxygen levels. Similarly, deeper pools will pond long enough to allow the shrimp to complete their life cycle.

The SSHCP vernal pool fairy shrimp modeled habitat map (SSHCP Figure 3-13) shows that modeled habitat for vernal pool fairy shrimp is present within the Project footprint. The field surveys revealed that the necessary habitat for this species is present within the vernal pools located on the Project site, and this species has a high potential to occur on-site.

Vernal Pool Tadpole Shrimp: Vernal Pool Tadpole Shrimp is a SSHCP Covered Species and is listed as federally endangered. This small vernal pool crustacean is entirely dependent upon the aquatic environment provided by vernal pool wetland ecosystems. Vernal pool tadpole shrimp depends

upon the presence of water in the winter and early spring and the absence of water during the summer. These specific vernal pool wetland characteristics are dependent upon the surrounding uplands. Habitats supporting the Vernal pool tadpole shrimp are typically in Central Valley California floristic provinces below 300 meters in elevation. Typical habitat for vernal pool tadpole shrimp in California includes vernal pools, seasonally ponded areas within vernal swales, rock outcrop ephemeral pools, playas, and alkali flats. Vernal pool tadpole shrimp have also been found in alkaline vernal pools. Optimal habitat for vernal pool tadpole shrimp tends to be neutral to slightly alkaline, clear vernal pools, low in dissolved salts, dominated with vernal pool plants, and sustains a complex vernal pool crustacean community. Pool volume is also important in determining potential shrimp habitat because deeper pools with a large surface area can more easily maintain their dissolved oxygen levels. Similarly, deeper pools will pond long enough to allow the shrimp to complete their life cycle. Occupied pools may have aquatic vegetation that may provide shelter from predators and range in size from 54 square feet to 84 acres. Although the tadpole shrimp is found on a variety of geologic formations and soil types, more than 50% of tadpole shrimp occurrences have been found on High Terrace, also known as old terrace landforms and Laguna Formation Redding and Corning soils. In the SSHCP Plan Area, vernal pool tadpole shrimp has been observed in many of the vernal streams.

The SSHCP vernal pool tadpole shrimp modeled habitat map (SSHCP Figure 3-14) shows that modeled habitat for vernal pool tadpole shrimp is present within the Project footprint. The field surveys revealed that the necessary habitat for this species is present within the vernal pools located on the Project site, and this species has a high potential to occur on-site.

Conclusion: Protocol-level surveys were not conducted in the preparation of the Biological Resources Assessment for this Project. In accordance with USFWS policy, given the presence of potential habitat and the absence of protocol surveys, these species are presumed present on the Project site.

The Project will result in the direct loss of 4.75 acres of vernal pool habitat, and the death of an unknown number of Ricksecker's water scavenger beetle, Mid-valley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp through the direct filling of vernal pools and vernal swales within the Project site.

The Project would result in indirect effects to vernal pool habitat, and the death of an unknown number of Ricksecker's water scavenger beetle, Mid-valley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp, in the form of death, injury, and harm, found in vernal pools that are supported by associated upland areas and swales, and all habitat otherwise damaged by loss of watershed, human intrusion, introduced species, and pollution that will be caused by the Project. The Project would result in indirect effects to 4.75 acres of federally-listed crustacean habitat. This is a **potentially significant** impact.

The Project proponent intends to obtain coverage for their activities under the City's ITP. As required by the federal ESA (Section 10(a)(2)(A)(ii)) and Fish and Game Code Section 2081, the SSHCP includes measures to avoid and minimize take of Covered Species. All relevant SSHCP AMMs will be required for the Project. Mitigation Measure 3.3-1 requires that the Project

proponent submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. The City must review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency ("Implementing Entity) with a copy of the SSHCP requirements for tracking purposes. The Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy. Because the Project includes a 199.5-acre preserve, they will be required to include a consistency analysis in their application in order to receive credit for the preserve. Mitigation Measure 3.3-1 would require the Project proponent to fulfill all SSHCP requirements to ensure consistency with the SSHCP Conservation Strategy and receive coverage under the SSHCP, which has been developed to ensure preservation of species, natural communities, and aquatic resources in the SSHCP area, while providing for an environmental permitting process for Covered Activities that impact listed species, listed species habitats, or aquatic resources.

Mitigation Measure 3.3-2 requires that all applicable AMMs identified in the SSHCP be implemented to avoid direct and indirect effects to invertebrates. As required, a post-construction compliance report would be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report would detail the construction start and completion dates, any information about meeting or failing to meet species take AMMs, effectiveness of each AMM that was applied at the Project site, and any known Project effects to Covered Species. The SSHCP AMMs would reduce indirect impacts on vernal pool invertebrate and other species. For example, AMM EDGE-3 establishes a 50-foot setback from the edge of established preserves to minimize indirect effects. AMM EDGE-4 requires roads, sidewalks, and other impermeable surfaces adjacent to planned preserves to slope away from preserves and preserve setbacks. AMM ROAD-1 requires road projects to be located in the least environmentally sensitive area to avoid impacts on covered species. AMM RE-ESTABLISHMENT/ESTABLISHMENT-1 requires that vernal pool wetlands be established or re-established. The maximum anticipated loss of species modeled habitat for vernal pool tadpole shrimp and vernal pool fairy shrimp modeled habitat due to direct impacts of the SSHCP would be approximately 17,117 acres (Table 9-23 of the SSHCP). Indirect effects on vernal pool tadpole shrimp and vernal pool fairy shrimp modeled aquatic habitat are anticipated to result in additional approximately 142 acres of impacts as a result of the SSHCP. The total impact, including direct and indirect impacts, of the Proposed Action/Proposed Project Alternative of the SSHCP on vernal pool tadpole shrimp and vernal pool fairy shrimp modeled habitat is expected to be approximately 17,259 acres. The total SSHCP impact area of 17,233 acres for Ricksecker's water scavenger beetle modeled habitat under the Proposed Action/Proposed Project of the SSHCP is approximately 674 acres less than the estimated 17,907 acres of total loss under the No Action/No Project Alternative of the SSHCP (Table 9-4 of the SSHCP). The Proposed Action/Proposed Project Alternative of the SSHCP is not

expected to remove any of the eight occurrences of Ricksecker's water scavenger beetle in the SSHCP Planning Area; no occurrences would be removed under the No Action/No Project Alternative of the SSHCP.

Additional AMMs are specifically presented later in this document for specific species. It is noted, however, that before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled. This is accomplished by having pre-construction AMMs in place prior to construction and by having a plan that shows how all applicable post-construction AMMs will be addressed. During construction, it is the responsibility of the City to ensure that the AMMs are being implemented. The City can compel the Project proponent to stop working if a project is not in compliance with all SSHCP AMMs. Upon construction completion, the City will monitor and confirm that post-construction conditions are acceptable and consistent with the requirements of the SSHCP permits (e.g., revegetation, soil treatments). Once the constructed Project has received final clearance from the City, it is the responsibility of the City to monitor continued operation of installed AMMs (e.g., swales, retention basins) and to monitor compliance with AMMs required for future operations and maintenance of the Covered Activity. The Implementing Entity (i.e., the South Sacramento Conservation Agency) may also assist with and in some instances may assume responsibility for monitoring continued operation of installed AMMs when those AMMs are part of the Preserve System, Preserve Setbacks, or Stream Setbacks.

The below mitigation measures would result in compensatory mitigation for the loss of habitat, and would avoid or minimize impacts to protected species to the extent feasible. Implementation of the Project, with the below mitigation measures and consistency with the SSHCP, would reduce the potential for impacts to special-status species to a ***less than significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-1: *Prior to any ground disturbing activities, the Project proponent shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova ("Land Use Authority Permittee") as a request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency ("Implementing Entity) with a copy of the SSHCP requirements for tracking purposes. The Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova. Any proposal to provide land in fee title or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy.*

Mitigation Measure 3.3-2: *The Project proponent shall implement the following SSHCP Avoidance and Minimization Measures (AMMs) to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on Covered Species:*

- *AMM SPECIES-1 (Litter Removal Program): A litter control program shall be instituted for the entire Project site. All workers shall ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. All garbage shall be removed from the Project site at the end of each work day, and construction personnel shall not feed or otherwise attract wildlife to the area where construction activities are taking place.*
- *AMM SPECIES-2 (No Pets in Construction Areas): To avoid harm and harassment of native species, workers and visitors shall not bring pets onto a Project site.*
- *AMM SPECIES-3 (Take Report): If accidental injury or death of any Covered Species occurs, workers shall immediately inform the approved biologist or on-site monitor and site supervisor. The approved biologist or on-site monitor shall phone the appropriate contact person at the Implementing Entity (i.e., the South Sacramento Conservation Agency). The Implementing Entity shall immediately contact the Wildlife Agencies (i.e., the USFWS and CDFW) by telephone. A memorandum shall be provided to the Implementing Entity and Wildlife Agencies within 1 working day of the incident. The report shall provide the date and location of the incident, number of individuals taken, the circumstances resulting in the take, and any corrective measures taken to prevent additional take.*
- *AMM SPECIES-4 (Post-Construction Compliance Report): A post-construction compliance report shall be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report shall detail the construction start and completion dates, any information about meeting or failing to meet species take AMMs, effectiveness of each AMM that was applied at the Project site, and any known Project effects to Covered Species.*
- *AMM LID-1 (Stormwater Quality): When the size of a Covered Activity project exceeds the thresholds established by the State Water Resources Control Board (SWRCB) (see the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions, or future SWRCB-approved design manuals applicable to the Plan Area), incorporate stormwater management into site design to satisfy the requirements outlined in the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions. Stormwater management may include groundwater recharge (LID-2) and natural site features (LID-3).*
- *AMM LID-3 (Natural Site Features): Incorporate preservation of a site's natural aquatic features (such as creeks and streams) into project design to retain natural hydrologic patterns and to retain habitat that might be used by Covered Species.*
- *AMM EDGE-1 (Compatible Land Uses): To the maximum extent practicable, development project Covered Activities will locate compatible land uses (e.g., designated open space such as parks and ball fields, detention basins, and other land uses with less-intensive human activity) in areas immediately adjacent to existing or planned Preserve boundaries. The compatible land use will provide additional buffering of Preserves from potential indirect effects of adjacent urban development. The soil surfaces in a compatible land use area may be re-contoured provided that the soil restrictive layer remains undamaged and most of the soil profile above the restrictive layer remains intact. The Land Use Authority*

will determine when it is not practicable to locate a compatible land use adjacent to existing or planned Preserve boundaries.

- *AMM EDGE-2 (Single-Loaded Streets): To the maximum extent practicable, the design of Urban Development Covered Activities will locate single-loaded streets adjacent to existing or planned Preserve. The Land Use Authority will determine when single-loaded streets are not practicable.*
- *AMM EDGE-3 (Preserve Setbacks): Urban Development Covered Activities constructed adjacent to existing or planned Preserves must establish a minimum 50-foot-wide setback outward from the boundary of any existing Preserve or planned SSHCP Preserve. This minimum 50-foot-wide setback will function as a transition between Urban Development and the Preserve, and must be managed to maintain the natural community of vegetation present in the adjacent Preserve. As much of the setback as possible should remain in the same natural habitat as the Preserve.*

  However, as discussed in Section 5.2.5, Covered Activities in Preserve Setbacks in the UDA, where an existing or planned Preserve is adjacent to an existing roadway (e.g., collectors, arterials, thoroughfares), the 50-foot Preserve Setback will not be required, and any bicycle or pedestrian trail will be established in the road right-of-way. In addition, where a planned roadway crosses an existing or planned Preserve, no Preserve Setback will be required, and any bicycle or pedestrian trail will be established in the road right-of-way.
- *AMM EDGE-4 (Locate Stormwater Control Outside Preserves): Roads, sidewalks, and other impermeable surfaces of Urban Development Covered Activities adjacent to existing or planned Preserves will slope away from Preserves and Preserve Setbacks or intercept drainage with swales or curbs and gutters to preclude drainage from entering Preserves and Preserve Setbacks. Stormwater flows must be directed away from Preserves and Preserve Setbacks and directed into stormwater control facilities inside the development (outside Preserves and Preserve Setbacks) (see EDGE-6 for exception to EDGE-4 in certain SSHCP Linkage Preserves).*
- *AMM EDGE-5 (Stormwater Control in Preserve Setbacks): If trails are established in any Preserve Setback in compliance with EDGE-3, the trail must be sloped away from the Preserve, and rainwater leaving the trail surface must flow into an adjacent low-velocity bio-retention swale or cell to keep rainwater runoff and trail contaminants from entering the Preserve. Low-velocity bio-retention swales or cells are typically small linear features placed on one or both sides of a trail. As required by EDGE-3, trails and their adjacent bio-retention swales or cells must be located on the side of the Preserve Setback nearest development.*
- *AMM EDGE-7 (Hardpan/Duripan Protection): To protect the soil perched aquifer and the micro-watersheds supporting existing vernal pool hydrology, activities that have the potential to cut into, disrupt, or remove the soil's restrictive layer (hardpan or duripan) will not occur within Preserves or Preserve Setbacks. However, in certain circumstances, the Covered Activities defined in Section 5.2.6, Covered Activities in Stream Setbacks in the UDA, and Section 5.2.8, Covered Activities in the Laguna Creek Wildlife Corridor of the Preserve System, may result in punctures or other minor disruptions of the soil hardpan or duripan if approved by the Implementing Entity and the Technical Advisory Committee*

according to the process described in Chapter 9 of the SSHCP. If a Covered Activity on a Preserve or Preserve Setback results in a puncture or other disruption to the soil hardpan or duripan, the puncture will be sealed using bentonite clay or other material that maintains the functionality of the soil's restrictive layer and associated perched aquifer.

- *AMM EDGE-10 (Prevent Invasive Species Spread): Completed Covered Activities (including roads) will be maintained in a manner that avoids the spread of invasive species into Preserve and Open Space areas. Such maintenance measures will include the following:*
    - *To prevent the transport of non-native invasive species onto Preserves, before bringing any equipment onto an SSHCP Preserve or Preserve Setback, equipment must be cleaned of mud, dirt, and plant material. Cleaning will occur in the infested area or another appropriate location as approved by a Plan Permittee.*
    - *Mowing rotation will start in un-infested areas and move to infested areas.*
    - *Invasive plant prevention techniques will be incorporated into maintenance plans.*
    - *The SSHCP Implementing Entity will survey road shoulders, ditches, and rights-of-way that border SSHCP Preserves for invasive weeds or other exotic plant species. Where roadside weed infestations have reached a critical control point, the Implementing Entity or Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment.*
- *AMM BMP-9 (Soil Compaction): After construction is complete, all temporarily disturbed areas will be restored similar to pre-project conditions, including impacts relating to soil compaction, water infiltration capacity, and soil hydrologic characteristics.*
- *AMM NATURE TRAIL-1 (Nature Trail Plan): A nature trail plan must be prepared for each Preserve where a trail is allowed by the Preserve Management Plan. Nature trails will be unpaved trails that vary in width depending on terrain and existing constraints, but will never exceed 4 feet in width. Where a trail crosses a swale, wooden walkways elevated to a height no greater than 2 feet will be installed. Trail improvements may include mowing vegetation to create or maintain a trail, minor grading to remove trip hazards, and signs providing directional and educational information. Public access to land acquired for preservation will be prohibited until a trail plan can be prepared by the Implementing Entity and approved by the Permitting Agencies. A trail plan will include the following:*
    - *Maps identifying areas that contain sensitive habitats or species occurrences.*
    - *Maps that show the location and footprint of proposed trails.*
    - *Methods used to control public access.*
    - *Trail and use monitoring methods, schedules, and responsibilities.*
    - *Trail operation and maintenance guidelines and responsibilities.*
    - *Clear triggers for use restrictions or closure based on sensitive biological indicators (e.g., seasonal closures of some trails on the basis of activity periods of Covered Species or sensitive species).*
- *AMM NATURE TRAIL-2 (Nature Trail Protection of Duripan): Nature trails will be sited and constructed so as not to interfere with existing soil duripan and the perched aquifer that support the existing hydrologic regime of the Vernal Pool–Grassland and will not interfere with existing pool hydrology. Trails within Preserves will not be paved.*

- *AMM NATURE TRAIL-3 (Nature Trail Location): Nature trails will be located away from sensitive natural resources (e.g., vernal pools, riparian habitat, woodland habitat, Covered Species occurrences, raptor nesting sites, tricolored blackbird (Agelaius tricolor) colony sites). The Wildlife Agencies will determine the distance necessary to avoid impacts to sensitive natural resources.*
- *AMM NATURE TRAIL-4 (Biological Studies Prior to Nature Trail Design): Biological studies will be conducted within the area being considered for nature trail construction prior to project design. The studies will include land cover type mapping and focused species surveys and/or wetland delineations. The biological studies will include assessments of potential effects of trail construction on Preserve System resources, and recommendations for avoidance and minimization that may be incorporated into project siting, design, construction, and operation.*
- *AMM NATURE TRAIL-5 (Monitoring of Nature Trail Impacts): Impacts that could result from use of a nature trail within a Preserve will be monitored according to the Preserve Management Plan (Chapter 8) to ensure that uses do not conflict with the individual Preserve Management Plan. If use of a trail is found to conflict with the individual Preserve Management Plan, use of that trail will be discontinued until adjustments in the use can be made to reduce or eliminate conflicts. The Implementing Entity will make decisions about discontinuing or modifying use of a trail in consultation with the Preserve Manager or other applicable Preserve management agency or organization.*
- *AMM ROAD-1 (Road Project Location): Road projects will be located in the least environmentally sensitive area to avoid, to the maximum extent practicable, impacts on Covered Species, Covered Species habitat, and waters of the United States. Road project alignments will follow existing roads, road easements, and rights-of-way, or be sited in disturbed areas to minimize habitat loss and additional habitat fragmentation.*
- *AMM ROAD-3 (Roadside Pesticide Use): If pesticide use is necessary along roadsides, the appropriate SSHCP Permittee will ensure that the pesticide application strictly complies with the pesticide label and all other applicable federal, state, and local authorities pertaining to the use, safety, storage, disposal, and reporting of the pesticide. Where roadside weed infestations have reached a critical control point, the Implementing Entity or a Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment. In addition, the Implementing Entity or appropriate Land Use Authority Permittee will post signs along road shoulders adjacent to sensitive areas that are within the SSHCP Preserve System (e.g., California tiger salamander breeding ponds, endemic plant populations, vertebrates that rely on insects for part of their diet). The signs will identify pesticide use restrictions or other roadside maintenance restrictions.*
- *AMM RE-ESTABLISHMENT/ESTABLISHMENT-1 (Vernal Pool): Re-establish or establish Vernal Pool Wetland according to the following guidelines:*
    - *Re-establishment will always take priority over establishment of vernal pools. Establishment will be permitted only after it has been determined that sites with the potential to re-establish vernal pools no longer exist in the Plan Area or cannot be acquired through a willing seller/buyer agreement.*

- *When possible, re-established or established sites will be located adjacent to an existing Preserve(s) to maximize connectivity and Preserve area.*
- *Re-establishment or establishment will not result in direct or indirect adverse impacts to the hydrologic regime of existing vernal pools. Vernal pool re-establishment or establishment actions will not remove more than 10% of any existing vernal pool watershed, as defined by the SSHCP LIDAR analysis (see Section 3.3 and Conservation Action VPI1.2 in Table 7.1).*
- *Vernal pool re-establishment will attempt to restore the historical density and range of vernal pool sizes to the maximum extent feasible using historical aerial photography of the site, if available. Where aerial photography of the site's historical conditions is not available, vernal pool re-establishment will include a range of pool sizes (area and depth) to accommodate the different habitat needs and life history characteristics of the vernal pool invertebrate Covered Species.*
- *Established vernal pools must be located on sites with vernal pool soils, defined as any Plan Area soil type where vernal pools currently exist.*
- *Established vernal pool sites will include a range of pool sizes to accommodate the different habitat needs and life history characteristics of the three vernal pool invertebrate Covered Species.*
- *The total density of vernal pools will not exceed 10% of the suitable soil areas in any vernal pool re-establishment and/or establishment site, unless it can be shown that the suitable areas of that site historically supported greater densities.*
- *Re-establishment or establishment may include inoculation when it is likely that no seed or cyst bank of vernal pool species remains at a site. Vernal Pool inocula will come from nearby vernal pools that are on the same geologic formation and soil type.*

- *AMM UTILITY-2 (Utility Maintenance on Preserves): Utility maintenance inside SSHCP Preserves and SSHCP Preserve Setbacks containing vernal pools will occur only when vernal pools have been dry for 30 days, except in emergency situations related to human health and safety.*
- *AMM UTILITY-3 (Trenchless Construction Methods): Where a pipeline or conduit crosses an existing or planned Preserve or will be located between adjacent Preserves (e.g., under a roadway that has a Preserve on both sides), trenchless construction methods will be used to minimize impacts to the existing soil profile (including impacts to a hardpan or duripan) to maintain the perched aquifer in Vernal Pool Grassland land cover type.*

  AMM UTILITY-4 (Siting of Entry and Exit Location): The entry and exit locations for the trenchless construction method (see Utility-3) will be sited to avoid impacts to vernal pools and Riparian Woodland, and to avoid direct take of SSHCP Covered Species.

Impact 3.3-2: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Reptile and Amphibian (Less than Significant with Mitigation)

Special-status reptiles and amphibians that occur within the 9-quad region for the Project site include: California red-legged frog (*Rana draytonii*), California tiger salamander, foothill yellow-legged frog (*Rana boylii)i*, giant garter snake, western pond turtle, and western spadefoot. Each of these is discussed below:

California Red-Legged Frog: The California red-legged frog is a federally threatened and a California species of special concern. This species occurs along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County. California red legged-frog requires permanent and semi-permanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; this species may also estivate in rodent burrows or cracks during dry periods.

The Project site is outside of the known range for this species and does not provide the appropriate habitat. This species is not present.

California Tiger Salamander: The California tiger salamander is a federal and California threatened species. This species is also a SSHCP Covered Species. It typically breeds in fish-free seasonal or permanent ponds associated with grassland communities. California tiger salamander may also breed in deeper ponded vernal pools, seasonal wetlands and/or other seasonal pools within swales or channels. California tiger salamander spends the majority of its life cycle below ground in ground squirrel or pocket gopher burrows in grasslands situated adjacent to potential breeding sites.

Forty-seven units of critical habitat, or habitat that has been deemed as essential to the survival and recovery of the California tiger salamander, were proposed by the USFWS on August 10, 2004. The 9,966-acre Unit 3 (Southeastern Sacramento Unit) is located approximately 12 miles south of the Project site.

The SSHCP California tiger salamander modeled habitat map (SSHCP Figure 3-16) shows that modeled habitat for California tiger salamander is not present within the Project footprint or within 300 feet of the Project footprint. While the Project site has a variety of aquatic habitats, it does not have the necessary aquatic habitat for this species during their breeding season and, as such, this species is not present within the Project site.

Foothill Yellow-Legged Frog: The Foothill yellow-legged frog is a federally threatened and a California species of special concern. This species occurs is found in most of northern California

west of the Cascade crest and along the western Sierra Nevada foothills up to approximately 6,370 feet. This species requires rocky streams in a variety of habitats including valley-foothill hardwood, conifer, and riparian forests, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral and wet meadow.

The Project site is outside of the known range for this species and does not provide the appropriate habitat. There are no CNDDB occurrences within five miles of the Project site. This species is not present.

Giant Garter Snake: Giant garter snake is designated as a federally threatened and state threatened species afforded special protection by FWS and CDFW. This species is also a SSHCP Covered Species. The giant garter snake is generally associated with larger canals, irrigation ditches, and other semi-permanent to permanent aquatic sites with slow moving water and an abundance of emergent vegetation.

The SSHCP giant garter snake modeled habitat map (SSHCP Figure 3-18) shows that modeled habitat for giant garter snake is not present within the Project footprint or within 300 feet of the Project footprint. While the Project site has a variety of aquatic habitats, it does not have the necessary aquatic habitat for this species during their active season and, thus, is not present within the Project site.

Western Pond Turtle: The western pond turtle is a California species of special concern. This species is also a SSHCP Covered Species. Its favored habitats include streams, large rivers and canals with slow-moving water, aquatic vegetation, and open basking sites. Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. This species feeds mainly on invertebrates such as insects and worms, but will also consume small fish, frogs, mammals and some plants. Western pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. This species breeds from mid to late spring in adjacent open grasslands or sandy banks.

The SSHCP western pond turtle modeled habitat map (SSHCP Figure 3-19) does not show that modeled habitat for western pond turtle is present within the Project footprint or within 300 feet of the Project footprint. While the Project site has a variety of aquatic habitats, it does not have the necessary aquatic habitat for this species and, thus, is not present within the Project site.

Western Spadefoot: The western spadefoot is a California species of special concern. This species is also a SSHCP Covered Species. This species is found in the Sierra Nevada foothills, Central Valley, Coast Ranges, and coastal counties in southern California. Its favored habitats include shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands.

The SSHCP western spadefoot modeled habitat map (SSHCP Figure 3-17) shows that modeled habitat for western spadefoot is present within the Project footprint. The field surveys revealed that the necessary habitat for this species is present within the Project site, and this species has a high potential to occur on-site. The vernal pools and depressional seasonal wetlands in the Project

site provide breeding habitat and there is one known occurrence within five miles of the Project site.

Conclusion: The Project site is largely undeveloped and has been previously used for agricultural (grazing) uses. The Project site is outside of the known extant range for California red legged-frog, California tiger salamander, and Foothill yellow-legged frog. Additionally, habitat for giant garter snake and western pond turtle is not present within the Project site. However, due to the suitable vernal pool and seasonal wetland habitat present within the Project site, the potential for western spadefoot to occur within the Project site is high. Without mitigation, this would be considered a **potentially significant** impact.

As previously discussed, the Project proponent intends to obtain coverage for their activities under the City's ITP. The SSHCP includes western spadefoot as a Covered Species. Mitigation Measure 3.3-1 provides the requirement to submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. All relevant SSHCP AMMs will be required and the Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. The Project also includes a 199.5 acre preserve; however, credit for the preserve is subject to the review and approval of the City.

Mitigation Measure 3.3-3 includes AMMs that are specifically presented for western spadefoot. As noted in Impact 3.3-1, however, before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled. Additionally, the below mitigation measures would result in compensatory mitigation for the loss of habitat, and would avoid or minimize impacts to protected species to the extent feasible. Implementation of the Project, with the below mitigation measures and consistency with the SSHCP, would reduce the potential for impacts to special-status species to a ***less than significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-3: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on western spadefoot:*

- *AMM WS-1 (Western Spadefoot Work Window): Ground-disturbing Covered Activities shall occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.*
- *AMM WS-2 (Western Spadefoot Exclusion Fencing): If Covered Activities must be implemented after October 15 and before May 15, exclusion fencing shall be installed around the Project footprint before October 15, and the Project site must be monitored by an approved biologist following rain events. Temporary high visibility construction fencing shall be installed along the edge of work areas, and silt fencing shall be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing shall remain in place until all construction activities within the construction area are completed. No Project activities*

shall occur outside the delineated Project footprint. If a western spadefoot is encountered. If a western spadefoot is encountered, refer to WS-6, below.

- *AMM WS-3 (Western Spadefoot Monitoring): If Covered Activities must be implemented in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior shall monitor the Project site, including the integrity of any exclusion fencing. The approved biologist shall be on site daily while construction related activities are taking place, and shall inspect the Project site daily for western spadefoot prior to construction activities. The approved biologist shall also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.*
- *AMM WS-4 (Avoid Western Spadefoot Entrapment): If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17), all excavated steep-walled holes and trenches more than 6 inches deep shall be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches shall be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat shall be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6, below.*
- *AMM WS-5 (Erosion Control Materials in Western Spadefoot Habitat): If erosion control is implemented within western spadefoot modeled habitat, non-entangling erosion control material shall be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material shall be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*
- *AMM WS-6 (Western Spadefoot Encounter Protocol): If Covered Activities must be implemented during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist shall notify the Wildlife Agencies (i.e., the USFWS and CDFW) immediately. Construction activities shall be suspended in a 100-foot radius of the animal until the animal leaves the Project site on its own volition. If necessary, the approved biologist shall notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report shall be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist shall report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.*

Impact 3.3-3: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Fish (No Impact)

The SSHCP does not include any fish species that are Covered Species. Additionally, the SSHCP does not include any modeled habitat map for species status fish species. Special-status fish that occur within the 9-quad region for the Project site include steelhead - Central Valley DPS. Populations of this species can be found in the Sacramento and San Joaquin Rivers and their tributaries. This species requires aquatic habitat that is free of heavy sedimentation with adequate flow and cool, clear water. Escape cover such as logs, undercut banks, and deep pools are required for spawning adults. Although the Project site contains aquatic habitats, including a headwater tributary of Morrison Creek, seasonal drainages, and wetlands, these on-site aquatic habitats are not suitable for this species. Implementation of the Project would have ***no impact*** on special-status fish species.

Impact 3.3-4: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Birds (Less than Significant with Mitigation)

The SSHCP has nine birds that are Covered Species. These include: Cooper's hawk, ferruginous hawk (*Buteo regalis*), greater sandhill crane (*Grus canadensis tabida*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), Swainson's hawk (*Buteo Swainsoni*), tricolored blackbird (*Agelaius tricolor*), western burrowing owl (*Athene cunicularia*), and white-tailed kite (*Elanus leucurus*). Of these nine species, the SSHCP modeled habitat maps (SSHCP Figures 3-20 through 3-28) show that modeled habitat is present within the Project footprint for the seven of the nine Covered Species, including: ferruginous hawk, loggerhead shrike, northern harrier, Swainson's hawk, tricolored blackbird, western burrowing owl, and white-tailed kite. There is no SSHCP modeled habitat for Cooper's hawk or greater sandhill crane within the Project site.

In addition to the nine SSCHP Covered Species, there are nine special-status bird species documented as occurring within the 9-quad region for the Project site. This includes the following species: bald eagle (*Haliaeetus leucocephalus*), bank swallow (*Riparia riparia*), California black rail (*Laterallus jamaicensis coturniculus*), double-crested cormorant (*Phalacrocorax auritus*), golden eagle (*Aquila chrysaetos*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), grasshopper sparrow (*Ammodramus savannarum*), and merlin (*Falco columbarius*).

In addition to these SSHCP Covered Species and CNDDB documented species, all nesting raptors and migratory birds known within the region receive special protections. These species are discussed below.

Nesting Raptors (Birds of Prey)

All raptors (owls, hawks, eagles, falcons), including common species, and their nests, are protected from take pursuant to the Fish and Game Code of California Section 3503.5, and the federal MBTA, among other federal and state regulations. Powerlines on the Project site and trees located in the region represent potentially suitable nesting habitat for a variety of special-status raptors. There are no trees located on the Project site. The remainder of the Project site is generally not suitable for nesting raptors other than ground nesters. In general, raptor nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. The field surveys over the past decade, including the latest 2016 survey, did not reveal any evidence of raptor nesting in the powerline towers or ground nesting; however, the Project site provides foraging habitat for most raptors and nesting habitat for a few ground nesting raptors.

Raptors that are documented in the CNDDB in the regional vicinity, and/or that are SSHCP Covered Species, are discussed individually below.

SSHCP COVERED SPECIES

Cooper's Hawk: Cooper's hawk is a SSHCP Covered Species and is protected by the MBTA and the Fish and Game Code. They prefer open woodland habitat. Nest sites for this species are mainly found in riparian growths of deciduous trees, in canyon bottoms on river flood-plains, and also in live oaks.

The SSHCP Cooper's hawk modeled habitat map (SSHCP Figure 3-20) does not show that modeled habitat for Cooper's hawk is present within the Project footprint or within 300 feet of the Project footprint. The Project site does not contain suitable habitat for this species.

Ferruginous Hawk: Ferruginous hawk is a SSHCP Covered Species and is listed by CDFW as a Watch List species. They prefer open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon and juniper habitats. This species eats mostly lagomorphs, ground squirrels, and mice.

The SSHCP ferruginous hawk modeled habitat map (SSHCP Figure 3-21) shows that modeled habitat for ferruginous hawk is present within the Project footprint. The field survey revealed that the annual grassland on and surrounding the Project site may provide suitable foraging habitat. Suitable nesting habitat is not present.

Northern Harrier: Northern harrier is a SSHCP Covered Species and is listed by CDFW as a Watch List species. They prefer a variety of open grassland, wetland, and agricultural habitats. Open wetland habitats used for breeding include marshy meadows, wet and lightly grazed pastures, and freshwater and brackish marshes. Northern Harrier breeding habitat also includes dry upland habitats, including grasslands, croplands, drained marshlands, and shrub-steppe in cold deserts. This species is a ground nester.

The SSHCP northern harrier modeled habitat map (SSHCP Figure 3-24) shows that modeled habitat for northern harrier is present within the Project footprint. The field survey revealed that the annual grassland on and surrounding the Project site may provide suitable foraging and nesting habitat.

Swainson's Hawk: Swainson's hawk is a SSHCP Covered Species and currently listed as threatened in California by the CDFW. Breeding pairs typically nest in tall cottonwoods, valley oaks, or willows associated with riparian corridors, grassland, irrigated pasture, and cropland with a high density of rodents. The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter.

The SSHCP Swainson's hawk modeled habitat map (SSHCP Figure 3-25) shows that modeled habitat for Swainson's hawk is present within the Project footprint. The field survey revealed that the Project site is considered potential foraging habitat for this species since they are known to nest within five miles of the Project site. The nearest recorded nest location is approximately half a mile east of the northeast corner of the Project site.

Western Burrowing Owl: Western burrowing owl is a SSHCP Covered Species and is a CDFW species of special concern. They typically inhabit open grasslands and nest in abandoned ground squirrel burrows, cavities associated with raised mounds, levees, or soft berm features. This species is a ground nester.

The SSHCP western burrowing owl modeled habitat map (SSHCP Figure 3-27) shows that modeled habitat for western burrowing owl is present within the Project footprint. There are also 12 CNDDB records for this species within five miles of the Project site. The field survey revealed that the Project site contains annual grassland and suitable burrows to support this species.

White-Tailed Kite: White-tailed kite is a SSHCP Covered Species and a CDFW Fully Protected species. This non-migrating bird typically attains a wingspan of approximately 40 inches and feeds primarily on insects, small mammals, reptiles, and amphibians, which it forages from open grasslands. It builds a platform-like nest of sticks in trees or shrubs and lays 3 to 5 eggs, but may brood a second clutch if prey is abundant. The kite's distinct style of hunting includes hovering before diving onto its target.

The SSHCP white-tailed kite modeled habitat map (SSHCP Figure 3-28) shows that modeled habitat for white-tailed kite is present within the Project footprint. There are three CNDDB records of white-tailed kite documented within five miles of the Project site. One white-tailed kite was observed foraging within the annual grassland during the June 12, 2017 rare plant survey of the Project site. The annual grassland on the Project site provides suitable foraging habitat for this species.

OTHER RAPTOR SPECIES

Bald Eagle: Bald eagle is listed by CDFW as an Endangered species. The breeding range includes the Sierra Nevada, Cascade Range and portions of the Coast Ranges; winter range expands to include most of the state. This species forages primarily in large inland fish-bearing waters with

adjacent large trees or snags and occasionally in uplands with abundant rabbits, other small mammals, or carrion.

The Project site does not contain suitable habitat for this species.

Golden Eagle: Golden eagle is listed by CDFW as a Fully Protected species. The winter range for this species spans most of California; the breeding range excludes the Central Valley floor. This species nests in cliffs, rocky outcrops, and large trees. Golden eagles typically forage in a variety of open habitats, including grassland, shrubland, and cropland

There is one CNDDB record of golden eagle nest documented within five miles of the Project site. No golden eagles were observed during previous site visits. Given the territory size of foraging golden eagles, the site could potentially be within the nesting pair's foraging territory. The annual grassland on-site provides suitable foraging habitat for golden eagle; however, there is not suitable nesting habitat for golden eagles on-site.

Merlin: The Merlin is a CDFW species of special concern that has never been observed nesting in California. Though it is a transient throughout most of the state, wintering populations are known to occur in the Central Valley and along the coast.

The annual grassland on and surrounding the Project site may provide suitable foraging habitat for this species. This species does not nest in the region.

Nesting Passerine Birds (Songbirds)

There is limited nesting habitat present on the Project site for songbirds. The annual grasslands with aquatic features scattered throughout the Project site provide some foraging habitat for nesting passerine birds. Tricolored blackbird and loggerhead shrike are covered by the SSHCP. Additionally, the following birds are discussed further below: bank swallow and grasshopper sparrows. Development of the Project site would remove potential habitat.

SSHCP COVERED SPECIES

Tricolored Blackbird: Tricolored blackbirds is a SSHCP Covered Species and is listed by CDFW as a Threatened species. During the breeding season, tricolored blackbirds typically nest in dense colonies (some estimated as having 200,000+ nests), with males defending small territories and mating with one to four females. Studies have shown that nesting colonies are often located in seasonal wetlands with tules and cattails present. More recent studies indicate that nesting colonies are also regularly found in Himalayan blackberries (*Rubus discolor*) and grain fields. Other substrates where they have been observed nesting include giant European reed (*Arundo donax*), safflower (*Carthamus tinctorius*), tamarisk (*Tamarix* spp.), elderberry (*Sambucus* spp.), poison-oak (*Toxicodendron diversilobum*), and riparian scrublands and forests (e.g., *Salix*, *Populus*, and *Fraxinus* spp.).

Tricolored blackbird foraging habitats in all seasons include annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields (such as large tracts of alfalfa and pastures with continuous haying schedules, and recently tilled fields), cattle feedlots, and dairies. They also forage occasionally in Mixed Riparian Scrub habitats along marsh borders. Weed-free row crops,

intensively managed vineyards, and orchards do not serve as regular foraging sites (Beedy and Hamilton 1997, 1999; DeHaven 2000).

The SSHCP tricolored blackbird modeled habitat map (SSHCP Figure 3-26) shows that modeled habitat for tricolored blackbird is present within the Project footprint. The annual grassland on the Project site provides suitable foraging habitat for this species. The aquatic habitat on the Project site does not provide suitable nesting habitat for this species.

Loggerhead Shrike: loggerhead shrike is a SSHCP Covered Species and is listed by CDFW as a species of special concern. Loggerhead shrikes occur in dry, open habitats including grasslands, pastures with fence rows, agricultural fields, open woodlands (savannas), scrub, and riparian areas. They inhabit open areas with clear visibility for hunting, perches for scanning, and scattered small trees and large shrubs for nesting. Loggerhead shrikes typically avoid completely treeless and shrubless areas (Cade and Woods 1997), as well as urbanized and densely wooded areas (Grinnell and Miller 1944). Winter foraging habitat is similar to summer breeding and foraging habitat; however, shrikes also use idle pastures and hayfields during the winter (Bartgis 1992).

The SSHCP loggerhead shrike modeled habitat map (SSHCP Figure 3-23) shows that modeled habitat for loggerhead shrike is present within the Project footprint. The annual grassland on the Project site provides suitable foraging habitat for this species.

OTHER SPECIES

Bank Swallow: Bank swallow is listed by CDFW as a Threatened species. They typically prefer to nest along banks or bluffs along rivers or coastal areas. This species also prefers low gradient and meandering rivers or bodies of water.

The Project site does not contain suitable habitat for this species.

Grasshopper Sparrow: Grasshopper sparrows are listed by CDFW as a species of special concern due to declining populations in the Great Central Valley of California. They prefer open grasslands with barren ground for foraging, and tend to be found in areas with vegetation and scrub cover especially in grasslands and prairies.

The annual grassland on and surrounding the Project site may provide suitable nesting and foraging habitat.

Shore/Water Birds

Colonial nesting water birds, such as double-crested cormorant, great blue heron, and great egret, among others, are considered sensitive species. These species are not formally listed and protected pursuant to either the state or federal Endangered Species Acts and are not SSHCP Covered Species. However, these species are of stated interest to CDFW and are protected by the MBTA. The colonial nesting water birds documented within the region are discussed individually below.

Double-Crested Cormorant: Double-crested cormorant are protected by the MBTA. They are colonial nesters which prefer to nest on coastal cliffs, offshore islands, and along lake margins in

the interior of the state. This species nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.

The Project site does not contain suitable habitat for this species.

Great Egret: Great egret are protected by the MBTA. These colonial nesters prefer to nest in large trees. Rookery sites are typically located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.

The grassland of the Project site provides foraging habitat for this species. There is no nesting habitat within the Project site.

Great Blue Heron: Great blue heron are protected by the MBTA. These colonial nesters prefer to nest in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites are typically located in close proximity to foraging areas, which include marshes, lake margins, tide-flats, rivers and streams, wet meadows

The grassland of the Project site provides foraging habitat for this species and this species was observed flying over the Project site during the June 12, 2017, rare plant survey. However, there is no nesting habitat within the Project site.

Other Sensitive Birds (Gruiformes)

The term "Gruiformes" means "crane-like" and there are a considerable number of Gruiformes bird families with a widespread geographical diversity. Greater sandhill crane (*Grus canadensis tabida*) is an SSHCP Covered Species. Additionally, as discussed below, there is some suitable habitat (seasonal wetlands and drainages) on the Project site for California black rail (*Laterallus jamaicensis coturniculus*). The development of the Project site would remove this habitat.

SSHCP COVERED SPECIES

Greater Sandhill Crane: Greater sandhill crane is listed as a CDFW threatened species, and is a SSHCP Covered Species. Greater sandhill cranes winter and use open agricultural habitats, natural vegetation communities, and seasonally managed wetlands. After the onset of winter rains, sandhill cranes begin foraging for invertebrates by probing soils in grassland habitats and overturning cattle dung. They also hunt for mice in taller grassland vegetation. They appear to avoid grassland habitats when vegetation exceeds 10 inches. Invertebrates are also consumed in natural and managed seasonal wetlands.

The SSHCP greater sandhill crane modeled habitat map (SSHCP Figure 3-20) does not show that modeled habitat for greater sandhill crane is present within the Project footprint or within 300 feet of the Project footprint. The Project site does not contain suitable habitat for this species.

OTHER SPECIES

California Black Rail: California black rail are listed by CDFW as a Threatened species. They inhabit freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. This species requires water depths of about one inch that do not fluctuate during the year and dense vegetation for nesting habitat.

The aquatic habitat on the Project site is seasonally dry and is not optimal for this species. The Project site does not provide suitable habitat for this species.

Conclusion

Several bird species discussed above are protected under federal, state, or local regulations, and several are Covered Species under the SSHCP. The Project design includes an on-site preserve that would protect approximately 199.5 acres of habitat. Nevertheless, the Project would result in the removal of approximately 330 acres of suitable foraging habitat for a variety of special-status birds discussed above. Vegetation clearing activities could impact ground nesting birds. In addition, noise and vibration associated with construction activities could result in nest abandonment if active nesting were to occur during construction. This is a **potentially significant** impact.

As previously discussed, the Project proponent intends to obtain coverage for their activities under the City's ITP. Mitigation Measure 3.3-1 provides the requirement to submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. All relevant SSHCP AMMs will be required and the Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. The Project also includes a 199.5 acre preserve; however, credit for the preserve is subject to the review and approval of the City.

Mitigation Measures 3.3-4 through 3.7, included below, include AMMs that are specifically presented for special-status birds. It is noted, however, that before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled. Additionally, Mitigation Measure 3.3-8, included below, requires preconstruction surveys for other protected bird species.

The below Mitigation Measures would result in compensatory mitigation for the loss of habitat, and would avoid or minimize impacts to protected species to the extent feasible. Implementation of the Project, with the below mitigation measures and consistency with the SSHCP, would reduce the potential for impacts to special-status species to a ***less than significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-4: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on tricolored blackbird:*

- *AMM TCB-1 (Tricolored Blackbird Surveys): If modeled habitat for tricolored blackbird is present within a Covered Activity's Project footprint or within 500 feet of a project footprint, then an approved biologist shall conduct a field investigation to determine if existing or potential nesting or foraging sites are present within the Project footprint and adjacent areas within 500 feet of the Project footprint. Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. Within the Plan Area, potential tricolor blackbird nest sites are often associated with freshwater marsh and seasonal wetlands, or in thickets of willow,*

blackberry, wild rose, thistle, and other thorny vegetation. Tricolored blackbirds are also known to nest in crops associated with dairy farms. Foraging habitat is associated with annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields (such as large tracts of alfalfa and pastures with continuous haying schedules and recently tilled fields), cattle feedlots, and dairies. The Third-Party Project Proponent shall map all existing or potential nesting or foraging sites and provide these maps to the Local Land Use Permittees (i.e., City of Rancho Cordova) and Implementing Entity (i.e., the South Sacramento Conservation Agency). Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 of the SSHCP for the process to conduct and submit survey information.

- *AMM TCB-2 (Tricolored Blackbird Pre-Construction Surveys): Pre-construction surveys shall be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities shall occur during the breeding season (March 1 through September 15). An approved biologist shall conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the Project footprint and 500 feet of the Project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys shall be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 shall be implemented. The approved biologist shall inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn shall notify the Wildlife Agencies (i.e., the USFWS and CDFW).*
- *AMM TCB-3 (Tricolored Blackbird Nest Buffer): If active nests are found within the Project footprint or within 500 feet of any Project -related Covered Activity, the Third-Party Project Proponent shall establish a 500-foot temporary buffer around the active nest until the young have fledged.*
- *AMM TCB-4 (Tricolored Blackbird Nest Buffer Monitoring): If nesting tricolored blackbirds are present within the Project footprint or within 500 feet of any Project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior shall be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist shall be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer shall not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction shall cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies shall be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist shall also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event*

that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).

- *AMM TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves): On SSHCP Agricultural Preserves, pesticides (including herbicides) shall not be applied from January 1 through July 15.*

Mitigation Measure 3.3-5: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on Swainson's hawk:*

- *AMM SWHA-1 (Swainson's Hawk Surveys): If modeled habitat for Swainson's hawk (Figure 3-25) is present within a Covered Activity's Project footprint or within 0.25 mile of a Project footprint, then an approved biologist shall conduct a survey to determine if existing or potential nesting sites are present within the Project footprint and adjacent areas within 0.25 mile of the Project footprint. Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. Nest sites are often associated with Riparian land cover, but also include lone trees in fields, trees along roadways, and trees around structures. Nest trees may include, but are not limited to, Fremont's cottonwood (Populus fremontii), oaks (Quercus spp.), willows (Salix spp.), walnuts (Juglans spp.), eucalyptus (Eucalyptus spp.), pines (Pinus spp.), and Deodar cedar (Cedrus deodara). The Third-Party Project Proponent shall map all existing and potential nesting sites and provide these maps to the Local Land Use Permittees (i.e., City of Rancho Cordova) and Implementing Entity (i.e., the South Sacramento Conservation Agency). Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.*
- *AMM SWHA-2 (Swainson's Hawk Pre-Construction Surveys): Pre-construction surveys shall be required to determine if active nests are present within a Project footprint or within 0.25 mile of a Project footprint if existing or potential nest sites were found during initial surveys and construction activities shall occur during the breeding season (March 1 through September 15). An approved biologist shall conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys shall be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 shall be implemented. The approved biologist shall inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn shall notify the Wildlife Agencies (i.e., the USFWS and CDFW).*
- *AMM SWHA-3 (Swainson's Hawk Nest Buffer): If active nests are found within the Project footprint or within 0.25 mile of any Project-related Covered Activity, the Third-Party Project Proponent shall establish a 0.25 mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.*
- *AMM SWHA-4 (Swainson's Hawk Nest Buffer Monitoring): If nesting Swainson's hawks are present within the Project footprint or within 0.25 mile of any Project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior shall be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting*

season and to determine when the young have fledged. The approved biologist shall be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist shall have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies shall meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist shall also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).

Mitigation Measure 3.3-6: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on western burrowing owl:*

- *AMM WBO-1 (Western Burrowing Owl Surveys): Surveys within modeled habitat are required for both the breeding and non-breeding season. If the Project site falls within modeled habitat, an approved biologist shall survey the Project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping shall be conducted by the approved biologist while walking transects throughout the entire Project site plus all accessible areas within a 250-foot radius from the Project site. The centerline of these transects shall be no more than 50 feet apart and shall vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects shall be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the Project does not fully avoid the habitat, pre-construction surveys shall be required. Burrowing owl habitat is fully avoided if Project-related activities do not impinge on a 250-foot buffer established by the approved biologist around suitable burrows. See Chapter 10 for the process to conduct and submit survey information.*
- *AMM WBO-2 (Western Burrowing Owl Pre-Construction Surveys): Prior to any Covered Activity ground disturbance, an approved biologist shall conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the Project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey shall last a minimum of 3 hours. The survey shall begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after*

sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys shall be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed shall be counted and their location shall be mapped. Surveys shall conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.

- *AMM WBO-3 (Burrowing Owl Avoidance): If western burrowing owl or evidence of western burrowing owl is observed on the Project site or within 250 feet of the Project site during pre-construction surveys, then the following shall occur:*

  ***During Breeding Season**: If the approved biologist finds evidence of western burrowing owls within a Project site during the breeding season (February 1 through August 31), all Project-related activities shall avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other Project-related activities may occur outside of the 250-foot buffer zone. Construction and other Project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity (i.e., the South Sacramento Conservation Agency) and Wildlife Agencies (i.e., the USFWS and CDFW) prior to Project construction based on the following criteria:*

  - *The Implementing Entity (i.e., the South Sacramento Conservation Agency) and Wildlife Agencies (i.e., the USFWS and CDFW) approve of the avoidance and minimization plan provided by the Project applicant.*
  - *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).*
  - *The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.*

  If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist shall have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.

If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist shall excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies.

The Implementing Entity and Wildlife Agencies shall respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.

***During Non-Breeding Season**: During the non-breeding season (September 1 through January 31), the approved biologist shall establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer shall be allowed. Construction activities within the non-disturbance buffer shall be allowed if the following criteria are met to prevent owls from abandoning overwintering sites:*

- *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).*
- *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.*
- *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist shall have authority to shut down activities within the 250-foot buffer.*
- *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity (i.e., the South Sacramento Conservation Agency) and Wildlife Agencies (i.e., the USFWS and CDFW) that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone shall be removed and construction may continue.*

Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

- *AMM WBO-4 (Burrowing Owl Construction Monitoring): During construction of Covered Activities, 250-foot construction buffer zones shall be established and maintained around any occupied burrow. An approved biologist shall monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist shall also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.*
- *AMM WBO-5 (Burrowing Owl Passive Relocation): Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive*

relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation shall only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours to ensure that owls have left the burrow, and then the biologist shall excavate the burrow to prevent reoccupation. Burrows shall be excavated using hand tools only. During excavation, an escape route shall be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.

- *AMM WBO-6 (Burrowing Owl Timing of Maintenance Activities): All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas shall be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.*
- *AMM WBO-7 (Rodent Control): Rodent control shall be allowed only in developed portions of a Covered Activity Project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control shall comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*

Mitigation Measure 3.3-7: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid direct and indirect effects on covered raptor species. This measure applies to loggerhead shrike (Lanius ludovicianus), northern harrier (Circus cyaneus), and white-tailed kite (Elanus leucurus). The following AMMs do not apply to ferruginous hawk (Buteo regalis), as they do not nest in the Plan Area. The following AMMs also do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for these covered raptor species and are included in separate mitigation measures.*

- *AMM RAPTOR-1 (Raptor Surveys): An approved biologist shall conduct a field investigation to determine if existing or potential nesting sites are present within the Project footprint and adjacent areas within 0.25 mile of the Project footprint. Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. The Project proponent shall map all existing or potential nesting sites and provide these maps to the Local Land Use Permittees (i.e., City of Rancho Cordova) and Implementing Entity (i.e., the South Sacramento Conservation Agency). Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.*
- *AMM RAPTOR-2 (Raptor Pre-Construction Surveys): Pre-construction surveys shall be required to determine if active nests are present with a Project footprint or within 0.25 mile of a Project footprint if existing or potential nest sites are found during initial surveys and construction activities shall occur during the raptor breeding season. An approved biologist shall conduct pre-construction surveys within 30 days and 3 days of ground disturbing*

activities within the Project footprint and within 0.25 mile of the Project footprint to determine presence of nesting covered raptor species. Preconstruction surveys shall be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 shall be implemented. The approved biologist shall inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn shall notify the Wildlife Agencies.

- *AMM RAPTOR-3 (Raptor Nest/Roost Buffer): If active nests are found within the Project footprint or within 0.25 mile of any Project-related Covered Activity, the Third-Party Project Proponent shall establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.*
- *AMM RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring): If Project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior shall be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist shall be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor shall have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies shall meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist shall also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).*

Mitigation Measure 3.3-8: *The Project proponent shall implement the following measure to avoid or minimize impacts on other protected bird species that may occur on the site:*

- *Prior to any ground disturbance a pre-construction survey for protected bird species shall be completed. This survey shall be conducted in the morning or evening hours within 30 days prior to any construction activities. The entire site shall be surveyed for birds, nests and nesting behavior. Common nesting behavior by birds includes; collecting nesting materials, bringing food items to a nest and vocalizations from young or from adults to attract a mate and to establish or defend a nesting territory. A construction-free buffer of suitable dimensions must be established around any active migratory bird nests (up to 250 feet, depending on the location and species) for the duration of the Project or until it has been determined that the chicks have fledged and are independent of their parents.*

Impact 3.3-5: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Mammals (Less than Significant with Mitigation)

Special-status mammals that occur within the 9-quad region for the Project site include: American badger and pallid bat (*Antrozous pallidus*). Additionally, western red bat is a SSHCP Covered Species. These species, among others, are discussed below.

SSHCP COVERED SPECIES

American Badger: American badger is a SSHCP Covered Species and is a listed CDFW species of special concern. This burrowing carnivorous mammal is solitary and very territorial preferring to feed on small mammals, lizards, snakes, insects, and carrion. It has no known natural enemies and inhabits dry, open fields, grasslands, and pastures.

The SSHCP American badger modeled habitat map (SSHCP Figure 3-29) shows that modeled habitat for American badger is present within the Project footprint. There are no CNDDB records for this species within five miles of the Project site. The annual grassland and burrows provide marginal habitat for this species given the lack of sandy soils within the Project site.

Western Red Bat: Western red bat is a SSHCP Covered Species and is a CDFW species of special concern. Western red bat roosts in the foliage of large shrubs and trees in habitats bordering forests, rivers, agricultural areas, and urban areas (Harvey et al. 1999). Roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas with mature trees. Foraging has been noted in habitats such as mature orchards, oak woodland, low elevation conifer forest, and non-native trees in urban and rural residential areas. In addition, this species may forage in habitats adjacent to streams and rivers that do not provide roosting habitat. Water features are a vital habitat component because bats often drink immediately after emergence and water is an important source of concentrated insects.

The SSHCP western red bat modeled habitat map (SSHCP Figure 3-30) shows that modeled habitat for western red bat is present within the Project footprint. The annual grassland, especially in the area surrounding the aquatic habitats, provides foraging habitat for this bat species.

OTHER SPECIES

Special-Status Bats: The Project site is located within the range of several special-status bats, including: Mexican free-tailed bat (*Tadarida brasiliensis),* California mastiff bat (*Eumops perotis californicus*), big brown bat (*Eptesicus fuscus),* Hoary bat (*Lasiurus cinereus),* spotted bat (*Euderma maculatum),* Townsend's big-eared bat (*Corynorhinus townsendii),* pallid bat, western pipistrelle (*Pipistrellus Hesperus),* small-footed myotis/bat (*Myotis ciliolabrum*), long-eared myotis/bat

(*Myotis evotis*), California myotis (*Myotis californicus),* long-legged myotis/bat (*Myotis volans*), Yuma myotis/bat (*Myotis yumanensis*), and little brown bat *(Myotis lucifugus).* These species are not federal or state listed; however, most of them are considered species of special concern and/or are tracked by the CNDDB. Bats are found in a variety of habitats in the region, including buildings, bridges, mines, caves, tree cavities, under bark or rocks, etc. There are no CNDDB records for these species within five miles of the Project site. No bat species were observed roosting during site visits. The annual grassland provides foraging habitat for bat species.

CONCLUSION

The Project site is largely undeveloped and has been previously used for agricultural uses. Although the potential for these special-status mammal species to be found on the Project site is low, the Project site provides marginally suitable habitat to support foraging and movement of these special-status mammals, including bats. This is a **potentially significant** impact.

As previously discussed, the Project proponent intends to obtain coverage for their activities under the City's ITP. Mitigation Measure 3.3-1 provides the requirement to submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. All relevant SSHCP AMMs will be required and the Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. The Project also includes a 199.5 acre preserve; however, credit for the preserve is subject to the review and approval of the City.

Mitigation Measures 3.3-9 and 3.3-10 include AMMs that are specifically presented for special-status bats and American badger. It is noted, however, that before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled.

The below mitigation measures would result in compensatory mitigation for the loss of habitat, and would avoid or minimize impacts to protected species to the extent feasible. Implementation of the Project, with the above mitigation measures and consistency with the SSHCP, would reduce the potential for impacts to special-status species to a ***less than significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-9: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid or minimize impacts on protected bat species that may occur on the site:*

- *AMM BAT-1 (Winter Hibernaculum Surveys): An approved biologist shall conduct a field investigation of the Project footprint and adjacent areas within 300 feet of a Project footprint to determine if a potential winter hibernaculum is present, and to identify and map potential hibernaculum sites. Adjacent parcels under different land ownership shall be surveyed only if access is granted or if the parcels are visible from authorized areas. If potential hibernaculum sites are found, the Project proponent shall note their locations on Project designs and shall design the Project to avoid all areas within a 300-foot buffer*

around the potential hibernaculum sites. Winter hibernaculum habitat is fully avoided if Project-related activities do not impinge on a 300-foot buffer established by the approved biologist around an existing or potential winter hibernaculum site.

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

Mitigation Measure 3.3-10: *The Project proponent shall implement the following measure to avoid or minimize impacts on American badger that may occur on the site:*

- *A qualified biologist shall conduct a pre-construction survey for American badger within 14 days prior to the start of ground disturbance. If no American badgers are observed, then a letter report documenting the results of the survey shall be provided to the Project proponent for their records, and no additional measures are recommended. If construction does not commence within 14 days of the preconstruction survey, or halts for more than 14 days, a new survey is required. The results of the survey shall be submitted to the City's Planning Department.*
- *If American badgers or their dens are found during the survey, additional avoidance measures shall be implemented, including having a qualified biologist conduct a pre-construction survey within 24 hours prior to commencement of construction activities, performing a Worker Awareness Training to all construction workers, and being present on the Project site during grading activities for the purpose of temporarily halting construction activities until the biologist determines that the badger has left the construction footprint*

on its own accord. The results of the survey shall be submitted to the City's Planning Department.

Impact 3.3-6: The Project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special-status, in local or regional plans, policies, regulations, or by the CDFW or USFWS - Plants (Less Than Significant with Mitigation)

The SSHCP includes eight plants that are Covered Species, including: Ahart's dwarf rush (*Juncus leiospermus var. ahartii*), Boggs Lake hedge-hyssop, Dwarf downingia (*Downingia pusilla),* Legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii ssp. myersii*), Sacramento Orcutt grass, Sanford's arrowhead (*Sagittaria sanfordii*), and slender Orcutt grass. The CNDDB search identified an additional 15 documented special-status plant species within the 9-quad region for the Project site, including: Bisbee Peak rush-rose (*Crocanthemum suffrutescens*), Brandegee's clarkia (*Clarkia biloba ssp. brandegeeae*), El Dorado bedstraw (*Galium californicum ssp. sierra*), El Dorado County mule ears (*Wyethia reticulata*), hoary navarretia (*Navarretia eriocephala*), Ione buckwheat (*Eriogonum apricum var. apricum*), Ione manzanita (*Arctostaphylos myrtifolia*), Irish Hill buckwheat (*Eriogonum apricum var. prostratum*), Layne's ragwort (*Packera layneae*), Parry's horkelia (*Horkelia parryi*), Pine Hill ceanothus (*Ceanothus roderickii*), Pine Hill flannelbush (*Fremontodendron decumbens*), Red Hills soaproot (*Chlorogalum grandiflorum*), stinkbells (*Fritillaria agrestis*), and Tuolumne button-celery (*Eryngium pinnatisectum*).

The SSHCP modeled habitat maps (SSHCP Figure 3-3 through 3-10) show that modeled habitat for seven of the SSHCP Covered Species (plants) is found on-site, including: Ahart's dwarf rush, Boggs Lake hedge-hyssop, Legenere, pincushion navarretia, Sacramento Orcutt grass, Sanford's arrowhead, and slender Orcutt grass. Many of the species identified within the CNDDB search have no potential to occur. None of these species were observed on the Project site during botanical surveys.

Ground disturbance associated with the Project would result in the temporary disturbance of 0.09 acres and permanent removal of 318.82 acres within SSHCP modeled habitat for eight plants that could potentially occur. Plant surveys did not reveal the presence of any special-status plants within the Project site; however, given the habitat present, there is a future potential for presence during future years. This is a **potentially significant** impact.

As previously discussed, the Project proponent intends to obtain coverage for their activities under the City's ITP. Mitigation Measure 3.3-1 provides the requirement to submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. All relevant SSHCP AMMs will be required and the Project proponent shall be responsible for paying all SSHCP development fees associated

with obtaining coverage. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. The Project also includes a 199.5 acre preserve; however, credit for the preserve is subject to the review and approval of the City.

Mitigation Measure 3.3-11 includes AMMs that are specifically presented for special-status plants. It is noted, however, that before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled.

The below Mitigation Measure would result in compensatory mitigation for the loss of habitat, and would avoid or minimize impacts to protected species to the extent feasible. Implementation of the Project, with the below mitigation measure and consistency with the SSHCP, would reduce the potential for impacts to special-status species to a ***less than significant*** level.

MITIGATION MEASURE(S)

Mitigation Measure 3.3-11: *The Project proponent shall implement the following SSHCP AMMs to the satisfaction of the City to avoid or minimize impacts on special-status plants that may occur on the site:*

- *AMM PLANT-1 (Rare Plant Surveys): The Project site shall be surveyed for rare plants, specifically including Ahart's dwarf rush (Juncus leiospermus var. ahartii), Dwarf downingia (Downingia pusilla), pincushion navarretia (Navarretia myersii ssp. myersii), and hoary navarretia (Navarretia eriocephala), by an approved biologist and following the CDFW rare plant survey protocols (CDF 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols.*
- *AMM PLANT-2 (Rare Plant Protection): If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity (i.e., the South Sacramento Conservation Agency) will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the Project site.*
- *AMM ORCUTT-1 (Orcutt Grass Surveys): The Project site will be surveyed for Sacramento and slender Orcutt grass by an approved biologist following CDFW rare plant survey protocols (CDFG 2009) or most recent CDFW guidelines to determine if Sacramento and/or slender Orcutt grass is present. An approved biologist will conduct the field investigation to identify and map occurrences.*
- *AMM ORCUTT-2 (Orcutt Grass Protection): Where known or new Sacramento or slender Orcutt grass occurrences are found, they will be protected within an SSHCP Preserve that is at least 50 acres. The occurrence will be located interior to the Preserve at a distance of no less than 300 feet from the edge of the Preserve boundary. If a Project proponent encounters a previously undiscovered occurrence of Sacramento or slender Orcutt grass on a Covered Activity Project site, the Project proponent will contact the Implementing Entity or City of Rancho Cordova with authority over the Project, who will coordinate with the*

Wildlife Agencies (i.e., the USFWS and CDFW) for written concurrence of avoidance to ensure that the Project does not cause take of the species.

Impact 3.3-7: The Project has the potential to have substantial adverse effect on federally- or state-protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant with Mitigation)

The USACE has regulatory responsibility for navigable waters as well as "all other waters such as...streams ...wetlands...and natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce" (33 CFR 323.2) under Section 404 of the CWA. A formal jurisdictional determination must be made by the USACE relative to the protected wetlands and jurisdictional waters within the Project site.

As noted previously, the site is characterized by moderate rolling areas and extensive flatlands, with wetlands, vernal pools, and seasonal drainage courses scattered throughout the site. A headwater tributary of Morrison Creek traverses the Project site, entering at the northeast corner and flowing generally to the southwest. As shown in Table 3.3-4, a total of 21.53 acres of jurisdictional aquatic resources have been mapped with the Project site, including: 2.92 acres of depressional seasonal wetlands, 15.04 acres of vernal pools, 1.66 acres of riverine seasonal wetlands, 0.06 acres of riverine seasonal wet swales, 1.54 acres of intermittent drainages, and 0.30 acres of drainage basin outfalls.

TABLE 3.3-4: AQUATIC RESOURCES WITHIN THE PROJECT SITE

AQUATIC RESOURCE TYPE	*AQUATIC RESOURCE CLASSIFICATION*	*AQUATIC RESOURCE SIZE (ACRES)*
Depressional Seasonal Wetland	PEM2B	2.92
Vernal Pool	PEM2C	15.04
Riverine Seasonal Wetland	PEM2B	1.66
Seasonal Wet Swale	R4SB7	0.06
Intermittent Drainage	R4SB	1.54
Detention Basin Outfall	R4SB5	0.30
	Total	**21.53**

NOTE: ACREAGES ARE CALCULATED TO SIX SIGNIFICANT FIGURES AND SUBSEQUENTLY ROUND TO THREE SIGNIFICANT FIGURES. TOTAL ACREAGE IS FURTHER ROUNDED TO TWO SIGNIFICANT FIGURES.
SOURCE: FOOTHILL ASSOCIATES, 2017.

The Project would preserve approximately 199.5 acres as a wetland preserve that would be deeded to a third-party conservation entity for protection via a perpetual conservation easement and would preserve an additional 10.39 acres as protected area/drainage basin lots (Lots G through I) and 15.98 acres as protected area/landscape lots (Lots J through O). The Project applicant would incorporate protections for the preservation of wetland and natural resources within the preserve, including preserve fencing, long-term funding and management of the preserve in perpetuity, and protection of the preserve from drainage and runoff generated from development areas through the construction of several detention basins throughout the site. The

preserve itself is a design measure incorporated into the Project that is intended to avoid and minimize impacts to the jurisdictional features, and other habitat, to the extent practicable, while still seeking to achieve the overall goals and objectives of the development Project. Of the 199.5 acres preserved, 14.8 acres are aquatic features that are potentially jurisdictional. Construction activities located on the balance of the Project site would result in direct permanent impacts to 6.58 acres. Table 3.3-5 presents the impacts to the biological communities located on the Project site. Figure 3.3-4 illustrates the location of the aquatic features.

TABLE 3.3-5: IMPACTS TO BIOLOGICAL COMMUNITIES

HABITAT TYPES	*PROJECT IMPACTS*	*PREVIOUSLY PERMITTED IMPACTS*	*CITY (CIP) IMPACTS*	*SSHCP BUFFER ACREAGE*	*PRESERVED ACREAGE*	*TOTAL ACREAGE*
WETLANDS						
Depressional Seasonal Wetland	1.04	—	—	0.03	1.85	2.92
Vernal Pool	4.75	0.02	0.18	0.12	9.97	15.04
Riverine Seasonal Wetland	0.51	0.01	—	<0.01	1.15	1.66
Intermittent Drainage	—	<0.01	—	—	1.53	1.54
Seasonal Wet Swale	0.06	—	—	—	—	0.06
Detention Basin Outfall	—	—	—	—	0.30	0.30
BIOLOGICAL COMMUNITIES						
Annual Grassland	305.15	—	0.51	13.16	187.16	506.07
Developed/Disturbed	2.43	—	—	—	0.03	2.45
Total	**313.93**	**0.03**	**0.69**	**13.31**	**201.98**	**530.05**

NOTE: ACREAGE MAY NOT ADD ACROSS ROWS OR COLUMNS DUE TO ROUNDING.
SOURCE: FOOTHILL ASSOCIATES, 2017.

These aquatic features are all scattered throughout the 506.07 acres of annual grassland, making up the entirety of the vernal pool complex. While approximately 199.5 acres would be included in the preserve, including 14.8 acres of aquatic habitat, approximately 6.58 acres would be permanently disturbed. This is a **potentially significant** impact.

The Project applicant has made a significant effort to preserve aquatic features (14.8 acres preserved). However, the 6.58 acres of aquatic habitat that would be permanently lost is part of a vernal pool complex which is a sensitive habitat. All feasible mitigation has been incorporated into the Project by design through regulatory permit compliance (i.e. Section 404/401/1600 permits) and adherence to the no net loss requirements (minimum 1:1 replacement).

An important component of the SSHCP Conservation Strategy is an Aquatic Resources Program (ARP). The ARP describes how the SSHCP strategy for the conservation of aquatic habitat in the SSHCP Plan Area will avoid and minimize Covered Activity impacts on the SSHCP Plan Area's aquatic resources, and provide adequate compensatory mitigation for unavoidable Covered Activity impacts. In exchange for conservation of wetlands streams, riparian, and other SSHCP Plan Area aquatic resources, the USACE plans to develop a multi-level permitting strategy under Section 404 of the CWA for future Covered Activities that are consistent with all SSHCP requirements.

The Plan Permittees have requested that the RWQCB use the ARP document to develop a parallel program to issue Water Quality Certifications under Section 401 of the CWA, and a program to issue a Report of Waste Discharge under the California Porter-Cologne Water Quality Control Act.

The Plan Permittees will also request that CDFW use the ARP document to develop a Master Streambed Alteration Agreement under Section 1600 of the California Fish and Game Code for Plan Permittee Covered Activities and to streamline permitting for all Covered Activities described with the SSHCP.

In addition, Covered Activities implemented by Third-Party Project Proponents can avoid the extensive negotiation and processing currently required to obtain CWA 404 permits from the USACE and U.S. USEPA, as well as extensive negotiation and processing currently required to obtain CWA Section 401 approvals from the RWQCB and to issue Reports of Waste Discharge under the California Porter-Cologne Act.

The central goal of compensatory mitigation for Covered Activities authorized under the SSHCP permitting framework is to maintain and improve the aquatic resources diversity, abundance, condition, and ecological connectivity across the Plan Area's differing landscape and geomorphic settings. Under the SSHCP and ARP, there would be no minimum threshold of proposed acreage loss of aquatic resources for compensatory mitigation to be required. That is, all permanent loss of aquatic resources incurred by a project would require compensatory mitigation.

Costs for the aquatic resources compensatory mitigation projects would be covered through the Covered Activity project mitigation fees collected under the SSHCP. Fees under the SSHCP are set at levels that fully offset the cost of compensating for the unavoidable impacts to aquatic resources. The SSHCP includes a fee structure that is distinguished by land cover type. This approach accounts for variations in costs associated with the particular requirements for each land cover type. Each new project would pay fees based on the land cover types affected by the development project and the fee schedule. The Project would be subject to the mitigation fees collected under the SSHCP. Fees collected for compensatory mitigation would be routed to an in-lieu fee program that is consistent with the federal Mitigation Rule (33 CFR Part 332) so that project proponents can satisfy their obligations under Section 404 of the CWA and the SSHCP.

Mitigation Measure 3.3-12 requires the Project to submit a wetland delineation, site plan, and mitigation methods to the City of Rancho Cordova and the South Sacramento Conservation Agency. The Project proponent would also submit a SSHCP permit application package to the City of Rancho Cordova ("Land Use Authority Permittee") as a request that coverage provided by City's SSHCP Aquatic Resources Program be extended to the proposed activities. This measure also requires payment of the mitigation fees, which would be routed to the in-lieu fee program. Mitigation Measure 3.3-13 requires implementation of SSHCP AMMs that will minimize the direct and indirect impacts on the aquatic land covers of the vernal pool ecosystem. The SSHCP AMMs include limiting ground disturbance to the construction footprint; implementing erosion-control BMPs during ground disturbance and siting roads and utilities outside of sensitive areas (BMP-1, BMP-2, BMP-3, ROAD-1, and UTILITY-4); and implementing BMPs that control construction dust (BMP-5), limit construction lighting in adjacent natural habitats (BMP-6), require biological monitoring (BMP-7), require worker awareness training (BMP-8), and implement speed limits on the construction site (BMP-11). Indirect impacts to stream/creek and vernal pool water quality and hydrology would be minimized by AMM LID-1 through LID-3 and EDGE-4 through EDGE-7.

These mitigation measures would ensure that impacts to wetlands would be ***less than significant***.

MITIGATION MEASURE(S)

*Implement **Mitigation Measure 3.5-1** (see Section 3.5, Geology and Soils).*

***Mitigation Measure 3.3-12**: Prior to any construction activities that would disturb a jurisdictional feature, The Project proponent shall submit a wetland delineation, site plan, and mitigation methods to the City of Rancho Cordova and the SSHCP. The Project proponent shall submit a SSHCP permit application package to the City of Rancho Cordova ("Land Use Authority Permittee") as a request that coverage provided by City's SSHCP Aquatic Resources Program be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency ("Implementing Entity) with a copy of the SSHCP requirements for tracking purposes. The Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova.*

Additionally, the Project applicant shall participate in the SSHCP Aquatic Resources Program (ARP) by paying the applicable mitigation fee for the loss of jurisdictional aquatic features. Costs for the aquatic resources compensatory mitigation projects shall be covered through the Covered Activity project mitigation fees collected under the SSHCP. The SSHCP includes a fee structure that is distinguished by land cover type. This approach accounts for variations in costs associated with the particular requirements for each land cover type. The Project proponent shall pay fees based on the land cover types affected by the development Project and the fee schedule.

***Mitigation Measure 3.3-13**: The Project proponent shall implement the following SSHCP Avoidance and Minimization Measures (AMMs) to the satisfaction of the City to avoid direct and indirect effects of Covered Activities on Aquatic land covers of the Verna Pool Ecosystem:*

- *AMM LID-1 (Stormwater Quality): When the size of a Covered Activity project exceeds the thresholds established by the State Water Resources Control Board (SWRCB) (see the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions, or future SWRCB-approved design manuals applicable to the Plan Area), incorporate stormwater management into site design to satisfy the requirements outlined in the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions. Stormwater management may include groundwater recharge (LID-2) and natural site features (LID-3).*
- *AMM LID-2 (Groundwater Recharge): When siting SSHCP Preserves containing Riparian, Open Water, or Freshwater Marsh SSHCP land cover types, the Implementing Entity (i.e., the South Sacramento Conservation Agency) will prioritize locations that are suitable for groundwater recharge.*
- *AMM LID-3 (Natural Site Features): Incorporate preservation of a site's natural aquatic features (such as creeks and streams) into project design to retain natural hydrologic patterns and to retain habitat that might be used by Covered Species.*
- *AMM BMP-1 (Construction Fencing): Orange construction fencing will be installed to ensure that ground disturbance does not extend beyond the allowed construction footprint*

(i.e., the limit of project construction plus equipment staging areas and access roads). Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will mark the outer boundary of any Preserve Setback or Stream Setback adjacent to or within the project site with orange construction fencing prior to ground disturbance. This fencing will remain in place until project completion, as identified by the Plan Permittee.

- *AMM BMP-2 (Erosion Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will install temporary control measures for sediment, stormwater, and pollutant runoff as required by the Plan Permittee to protect water quality and species habitat. Silt fencing or other appropriate sediment control device(s) will be installed downslope of any Covered Activity that disturbs soils.*

  Fiber rolls and seed mixtures used for erosion control will be certified as free of viable noxious weed seed. As discussed in Section 5.4.2, Covered Species Take Avoidance and Minimization Measures, erosion controls installed in or adjacent to Plan Area modeled habitat for giant gartersnake (Thamnophis gigas), western pond turtle (Actinemys marmorata), California tiger salamander (California tiger salamander), or western spadefoot (see Chapter 3) must be of appropriate design and materials that will not entrap the species (e.g., not contain mesh netting). Regular monitoring and maintenance of the project's erosion control measures will be conducted until project completion to ensure effective operation of erosion control measures.
- *AMM BMP-3 (Equipment Storage and Fueling): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will ensure that equipment storage and staging will occur in the development footprint only (not sited in any existing on-site Preserve, planned on-site Preserve, Preserve Setback, Stream Setback, or aquatic land cover type). Fuel storage and equipment fueling will occur away from waterways, stream channels, stream banks, and other environmentally sensitive areas within the development footprint.*

  However, certain equipment storage and fueling activities can be allowed on Preserves within habitat re-establishment/establishment sites (refer to Section 5.2.7) if no location outside of the site is available. If a Covered Activity results in a spill of fuel, hydraulic fluid, lubricants, or other petroleum products, the spill will be absorbed and waste disposed of in a manner to prevent pollutants from entering a waterway, Preserve, Preserve Setback, or Stream Setback.
- *AMM BMP-4 (Erodible Materials): Plan Permittees and Third-Party Project Proponents implementing Covered Activities must not deposit erodible materials into waterways. Vegetation clippings, brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. Erodible material must be disposed of such that it cannot enter a waterway, Preserve, Preserve Setback, Stream Setback, or aquatic land cover type. If water and sludge must be pumped from a subdrain or other structure, the material will be conveyed to a temporary settling basin to prevent sediment from entering a waterway.*

- *AMM BMP-5 (Dust Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will water active construction sites regularly, if warranted, to avoid or minimize impacts from construction dust on adjacent vegetation and wildlife habitats. No surface water will be used from aquatic land covers; water will be obtained from a municipal source or existing groundwater well.*
- *AMM BMP-6 (Construction Lighting): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will direct all temporary construction lighting (e.g., lighting used for security or nighttime equipment maintenance) away from adjacent natural habitats, and particularly Riparian and Wetland habitats and wildlife movement areas.*
- *AMM BMP-7 (Biological Monitor): If a Covered Activity includes ground disturbance within Covered Species modeled habitat, an approved biologist will be on site during the period of ground disturbance, and may need to be on site during other construction activities depending on the Covered Species affected. After ground-disturbing project activities are complete, the approved biologist will train an individual to act as the on-site construction monitor for the remainder of construction, with the concurrence of the Permitting Agencies. The on-site monitor will attend the training described in BMP-8. The approved biologist and the on-site monitor will have oversight over implementation of Avoidance and Minimization Measures, and will have the authority to stop activities if any of the requirements associated with those measures are not met. If the monitor requests that work be stopped, the Wildlife Agencies Agencies (i.e., the USFWS and CDFW) will be notified within one working day by email. The approved biologist and/or on-site monitor will record all observations of listed species on California Natural Diversity Database field sheets and submit them to the California Department of Fish and Wildlife. The approved biologist or on-site monitor will be the contact source for any employee or contractor who might inadvertently kill or injure a Covered Species or who finds a dead, injured or entrapped individual. The approved biologist and on-site monitor's names and telephone numbers will be provided to the Wildlife Agencies prior to the initiation of ground-disturbing activities. Refer to species-specific measures for details on requirements for biological monitors.*
- *AMM BMP-11 (Speed Limit): Project-related vehicles will observe the posted speed limits on paved roads and a 10-mile-per-hour speed limit on unpaved roads and during travel in project areas. Construction crews will be given weekly tailgate instruction to travel only on designated and marked existing, cross-country, and project-only roads.*
- *AMM ROAD-1 (Road Project Location): Road projects will be located in the least environmentally sensitive area to avoid, to the maximum extent practicable, impacts on Covered Species, Covered Species habitat, and waters of the United States. Road project alignments will follow existing roads, road easements, and rights-of-way, or be sited in disturbed areas to minimize habitat loss and additional habitat fragmentation.*
- *AMM UTILITY-4 (Siting of Entry and Exit Location): The entry and exit locations for the trenchless construction method (see Utility-3) will be sited to avoid impacts to vernal pools and Riparian Woodland, and to avoid direct take of SSHCP Covered Species.*

- *AMM EDGE-4 (Locate Stormwater Control Outside Preserves): Roads, sidewalks, and other impermeable surfaces of Urban Development Covered Activities adjacent to existing or planned Preserves will slope away from Preserves and Preserve Setbacks or intercept drainage with swales or curbs and gutters to preclude drainage from entering Preserves and Preserve Setbacks. Stormwater flows must be directed away from Preserves and Preserve Setbacks and directed into stormwater control facilities inside the development (outside Preserves and Preserve Setbacks) (see EDGE-6 for exception to EDGE-4 in certain SSHCP Linkage Preserves).*
- *AMM EDGE-5 (Stormwater Control in Preserve Setbacks): If trails are established in any Preserve Setback in compliance with EDGE-3, the trail must be sloped away from the Preserve, and rainwater leaving the trail surface must flow into an adjacent low-velocity bio-retention swale or cell to keep rainwater runoff and trail contaminants from entering the Preserve. Low-velocity bio-retention swales or cells are typically small linear features placed on one or both sides of a trail. As required by EDGE-3, trails and their adjacent bio-retention swales or cells must be located on the side of the Preserve Setback nearest development.*
- *AMM EDGE-6 (Detention Basins in Linkage Preserves): Because planned SSHCP Linkage Preserves L1, L2, L4, L7, L8, L9, and L10 (see Section 7.5) surround natural creeks or streams that must receive stormwater from planned adjacent Urban Development Covered Activities, a limited number of stormwater detention basins will be allowed on those Linkage Preserves. Detention basins within Linkage Preserves (see Section 5.2.7) will be designed and constructed with fill material to build up the perimeter of the detention basin so as not to impact the soil restrictive layer (duripan or hardpan) and function of the soil perched aquifer. Detention basins within Linkage Preserves will capture stormwater flows and runoff, and will discharge water to the stream/creek or percolate collected water to the soil perched aquifer. Detention basin structures that collect stormwater entering the basin or convey stormwater leaving the basin must be designed to avoid and minimize effects to Covered Species habitat in the Linkage Preserve.*
- *AMM EDGE-7 (Hardpan/Duripan Protection): To protect the soil perched aquifer and the micro-watersheds supporting existing vernal pool hydrology, activities that have the potential to cut into, disrupt, or remove the soil's restrictive layer (hardpan or duripan) will not occur within Preserves or Preserve Setbacks. However, in certain circumstances, the Covered Activities defined in Section 5.2.6, Covered Activities in Stream Setbacks in the UDA, and Section 5.2.8, Covered Activities in the Laguna Creek Wildlife Corridor of the Preserve System, may result in punctures or other minor disruptions of the soil hardpan or duripan if approved by the Implementing Entity and the Technical Advisory Committee according to the process described in Chapter 9 of the SSHCP. If a Covered Activity on a Preserve or Preserve Setback results in a puncture or other disruption to the soil hardpan or duripan, the puncture will be sealed using bentonite clay or other material that maintains the functionality of the soil's restrictive layer and associated perched aquifer.*

Impact 3.3-8: The Project has the potential to have substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

The CNDDB record search revealed documented occurrences of two sensitive habitats, Northern Hardpan Vernal Pool and Valley Needlegrass Grassland, within the 9-quad region for the Project site. The CNDDB does not contain records for Valley Needlegrass Grassland on the Project site, and this native plant community was not observed during the field surveys. However, Northern Hardpan Vernal Pool is mapped within the Project site, and it was verified to be present during the field surveys. The Project site contains approximately 15.04 acres of vernal pools within a grassland vernal pool complex. There are other aquatic features such as Depressional Seasonal Wetland (2.92 acres), Riverine Seasonal Wetland (1.66 acres), Intermittent Drainage (1.54 acres), and Seasonal Wet Swale (0.06 acres). These aquatic features are all scattered throughout the 506.07 acres of annual grassland making up the entirety of the vernal pool complex.

Figure 3.3-4 illustrates the location of the aquatic features, including where the vernal pools are scattered. The impacts to vernal pools are summarized in Table 3.3-4 and shown in Figure 3.3-5. As previously discussed, the Project would preserve approximately 199.5 acres as a wetland preserve that would be protected in perpetuity. The Project applicant would incorporate protections for the preservation of wetland and natural resources within the preserve, including preserve fencing, long-term funding and management of the preserve in perpetuity, and protection of the preserve from drainage and runoff generated from development areas through the construction of several detention basins throughout the site. The preserve itself is a design measure incorporated into the Project that is intended to avoid and minimize impacts to the vernal pool complex to the extent practicable, while still seeking to achieve the overall goals and objectives of the development Project. Even though approximately 9.97 acres of the vernal pool complex is preserved in perpetuity through this design, 4.75 acres of vernal pool complex will be permanently removed.

All feasible mitigation has been incorporated into the Project by design, through regulatory permit compliance (i.e. Section 404/401/1600 permits), participation in the SSHCP, and through mitigation measures presented earlier in this chapter. Therefore, the permanent loss of the sensitive habitat is considered a ***less than significant*** impact.

Impact 3.3-9: The Project has the potential to interfere substantially with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites (Less than Significant with Mitigation)

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an

increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

Impacts from development, such as habitat fragmentation and/or isolation, and the creation of impassable barriers can cause a significant impact to wildlife corridors. Depending on the organism and its needs, movement corridors can either be continuous or discontinuous patches of suitable habitat. Preserving expanses of open space that are connected may enable species utilizing these areas as foraging or breeding habitat to persist.

The record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the Project site. Furthermore, the field surveys did not reveal any wildlife corridors or wildlife nursery sites on or adjacent to the Project site. The intermittent drainage that traverse the site (1.54 acres) provides some aquatic linkage and potential movement corridors for wildlife. The Project would temporarily impact 0.01 acres of the drainage, but would be restored after construction. The balance of 1.53 acres would be preserved. With the implementation of mitigation measures that require restoration of temporary impacts to all jurisdictional facilities, this impact would be reduced to a ***less than significant*** level.

Impact 3.3-10: The Project may result in conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

The City establishes the basic standards and measures for the preservation and protection of trees within the community in Chapter 19.12, Preservation and Protection of Private Trees, of the Municipal Code. There are no trees located on the Project site. Therefore, the Project would not conflict with the City's Preservation and Protection of Private Trees Ordinance.

The City establishes impact permit and delineation requirements, avoidance, minimization, and compensation standards, and other provisions pertaining to aquatic resources in Chapter 16.94, Aquatic Resources Protection, of the Municipal Code. Pursuant to Section 16.94.040 of the Code, because the Project would permanently and/or temporarily impact aquatic resources on the Project site, an aquatic resource impact permit would be required for any proposed development activities. All aquatic resource impact permits require approval of a compensatory mitigation plan in accordance with the provisions of Section 16.94.040(J) section unless the compensatory mitigation plan requirement is waived under the provisions of Section 16.94.040(J)(3). Further, the Project would be subject to the standards, pre-permit consultation requirements, and compensatory mitigation plan. The compensatory mitigation plan consists of two parts: baseline information for the site and a conceptual compensatory mitigation plan. If off-site aquatic resource compensatory mitigation is proposed, baseline information for both the Project site and mitigation site is required. Further, the Project would be subject to the setback standards set forth in Section 16.94.080, which are consistent with the requirements of Chapter 5 of the SSHCP.

Compliance with Chapter 16.94 of the Municipal Code would ensure that this impact is ***less than significant***.

Impact 3.3-11: The Project may result in conflicts with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Less than Significant)

The SSHCP is a regional effort that will provide development and infrastructure projects with streamlined, predictable federal and state permitting processes while creating a Preserve System to protect habitat, open space, and agricultural lands. The SSHCP allows project proponents within the Plan Area to simplify and expedite the state and federal ESA permitting process. In addition to streamlining the ESA permitting processes, a separate but parallel multi-tiered permitting program has been developed to streamline CWA Section 404 and 401 permitting process and a Master Streambed Alternation Agreement has been prepared to address Section 1602 of the California Fish and Game Code.

The SSHCP allows the City of Rancho Cordova, City of Galt, Sacramento County, Sacramento County Water Agency, and the Southeast Connector Joint Powers Authority (collectively referred to as the Plan Permittees) to receive an ITP for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) have the ability to extend incidental take coverage provided by the SSHCP ITPs to activities and projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. This will allow Third-Party Project Proponents to avoid the extensive negotiation and processing currently required to obtain individual project permits under the CESA from the CDFW and project ESA compliance from the USFWS. The SSHCP was adopted by the Rancho Cordova City Council in October 2018.

As required by the federal ESA (Section 10(a)(2)(A)(ii)) and Fish and Game Code Section 2081, the SSHCP includes measures to avoid and minimize take of Covered Species. All relevant SSHCP AMMs will be required.

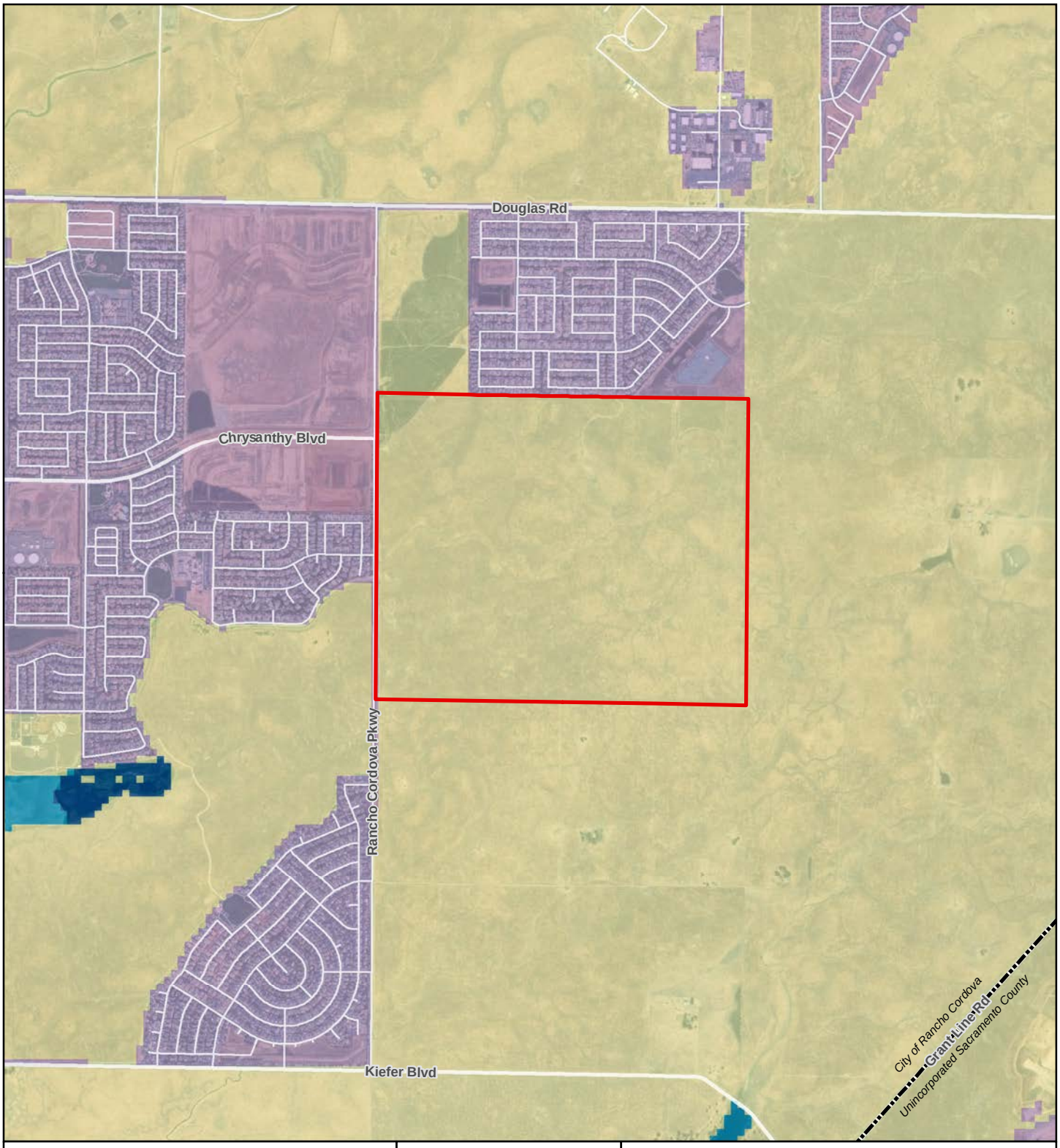
Mitigation Measure 3.3-1 requires that the Project proponent submit a SSHCP permit application package to the City as a request that the incidental take coverage provided by the City's SSHCP ITP be extended to the proposed activities. The City must review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency ("Implementing Entity) with a copy of the SSHCP requirements for tracking purposes. The Project proponent shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City. A portion of those fees are then used to purchase habitat land as compensatory mitigation for the loss of habitat. Any proposal to provide land in fee title or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy. Because the Project includes a 199.5-acre wetland preserve, they will be required to include a consistency analysis in their application in order to receive credit for the preserve. This Draft EIR addresses land cover types, wetland impacts, and Covered Species and other protected species habitat present on the Project site. As previously described, all relevant SSHCP AMMs will be required of the Project. The wetland

preserve has been designed to implement the requirements of the SSHCP, including provision of a 50-foot transition area buffering the preserve from areas proposed for development.

Additional AMMs are specifically presented throughout this document for specific species. It is noted, however, that before construction begins, the SSHCP requires that the Project proponent demonstrate to the City that all necessary AMMs will be fulfilled and that the Project design, including preserve features, are consistent with the SSHCP.

The Project proponent intends to obtain coverage for their proposed activities. Implementation of the Project, with the above mitigation measures and consistency with the SSHCP would ensure that there is not conflict. Implementation of the Project would have a ***less than significant*** impact relative to this topic.

This page left intentionally blank.



Legend

- Project Location (528.48 acres)
- Rancho Cordova City Boundary

Cover Type (WHR)

- Annual Grassland (528.48 acres on site)
- Fresh Emergent Wetland
- Riverine
- Urban

Data sources: Sacramento County GIS; ArcGIS Online World Imagery Map Service. FRAP Vegetation (FVEG15_1). Map date: July 16, 2018.

N

0 600 1,200

Feet

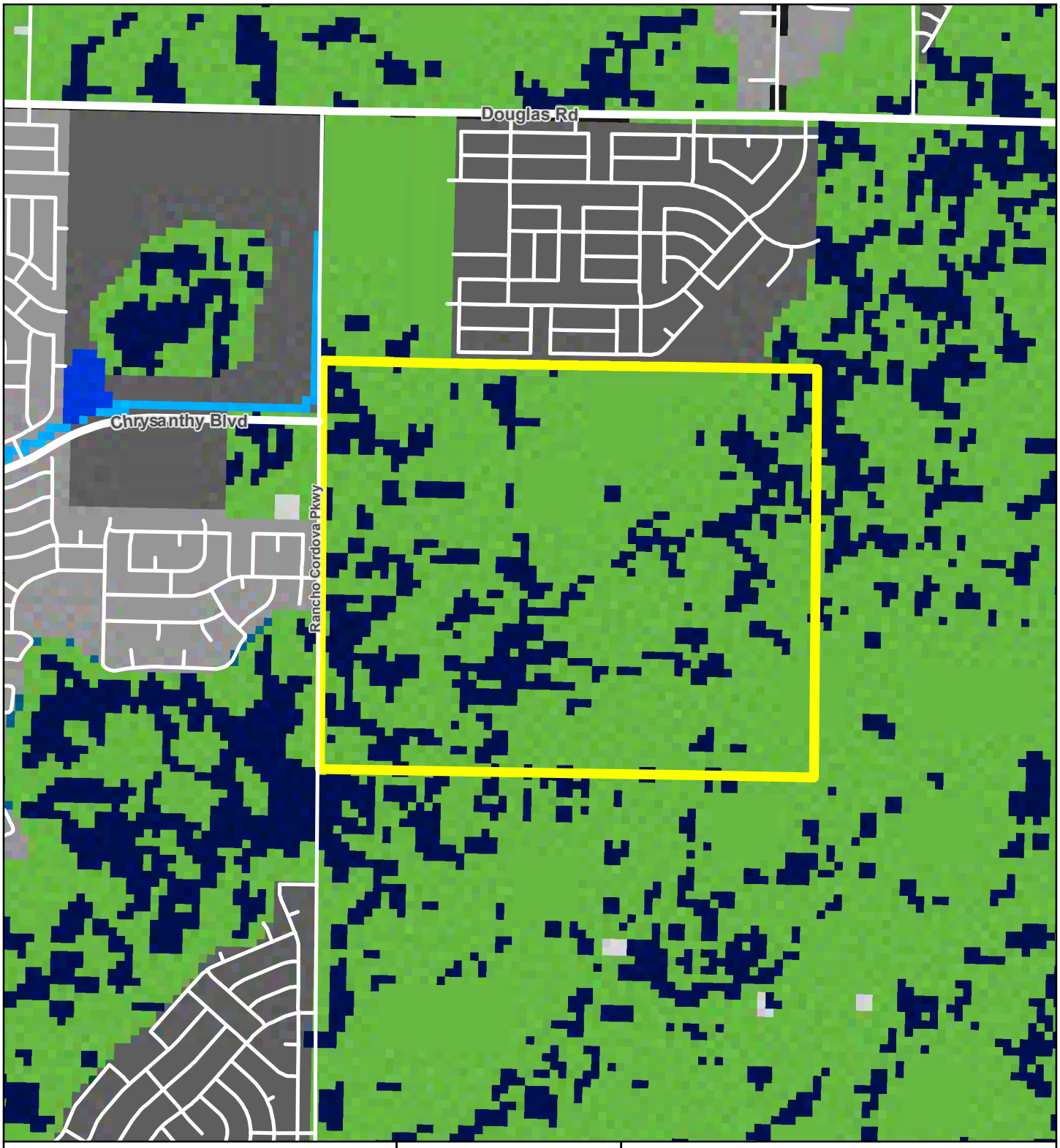
1:24,000

THE RANCH
SACRAMENTO COUNTY, CALIFORNIA

Figure 3.3-1. Cover Types

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



Legend

- Project Location (528.48 acres)

Land Cover Types (SSHCP)

- Valley Grassland
- Vernal Pool
- Open Water
- Streams/Creeks
- Disturbed
- High Density Development

Data sources: Sacramento County GIS; South Sacramento Habitat Conservation Plan, Figure 3-1 Plan Area Land Cover Types, 2014. Map date: June 20, 2019.

N

0 600 1,200

Feet

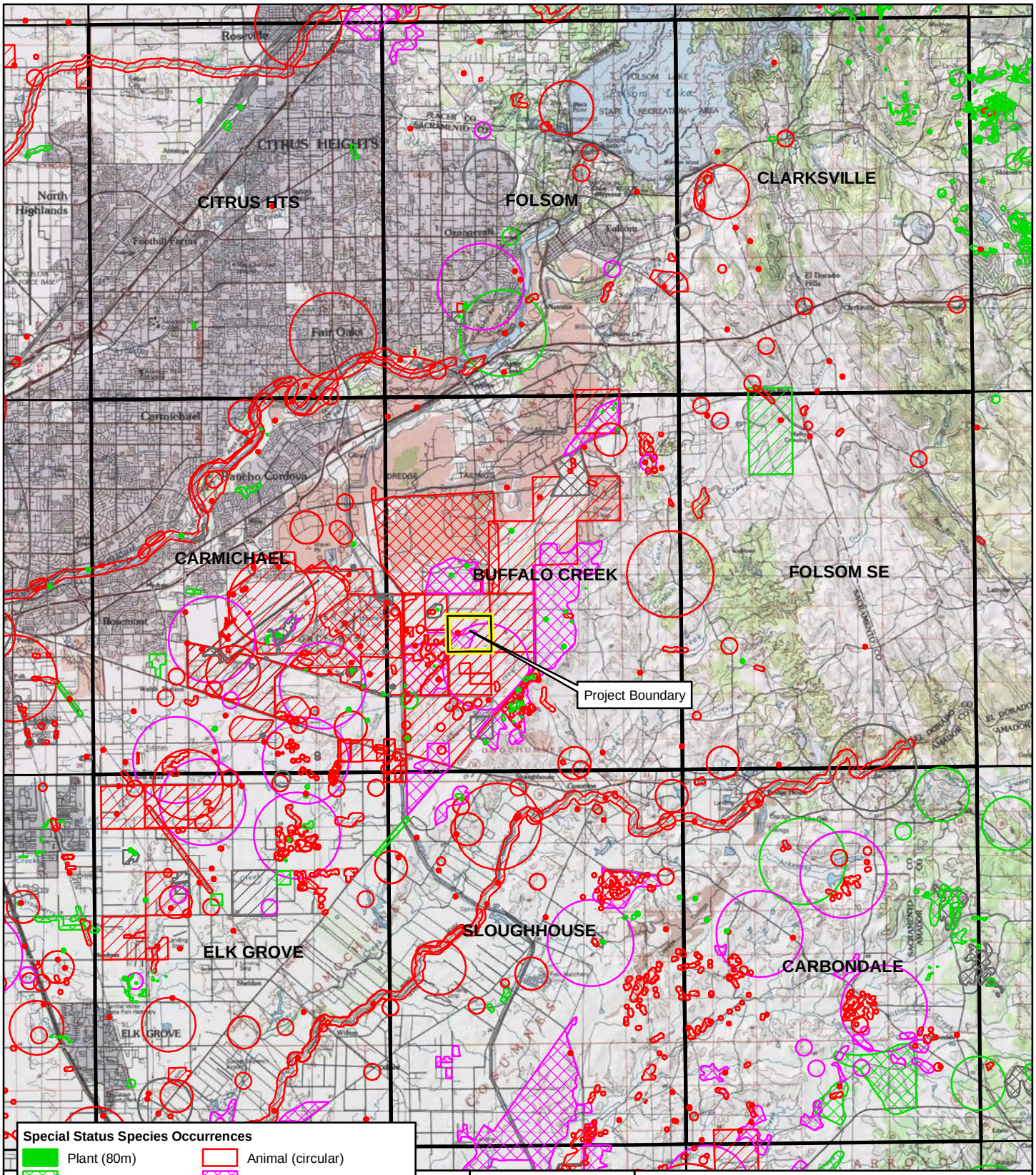
1:18,000

THE RANCH
SACRAMENTO COUNTY, CALIFORNIA

Figure 3.3-2.
South Sacramento Habitat Conservation Plan (SSHCP) Land Cover Types

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



CNDDB version 07/2018. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: July 16, 2018.

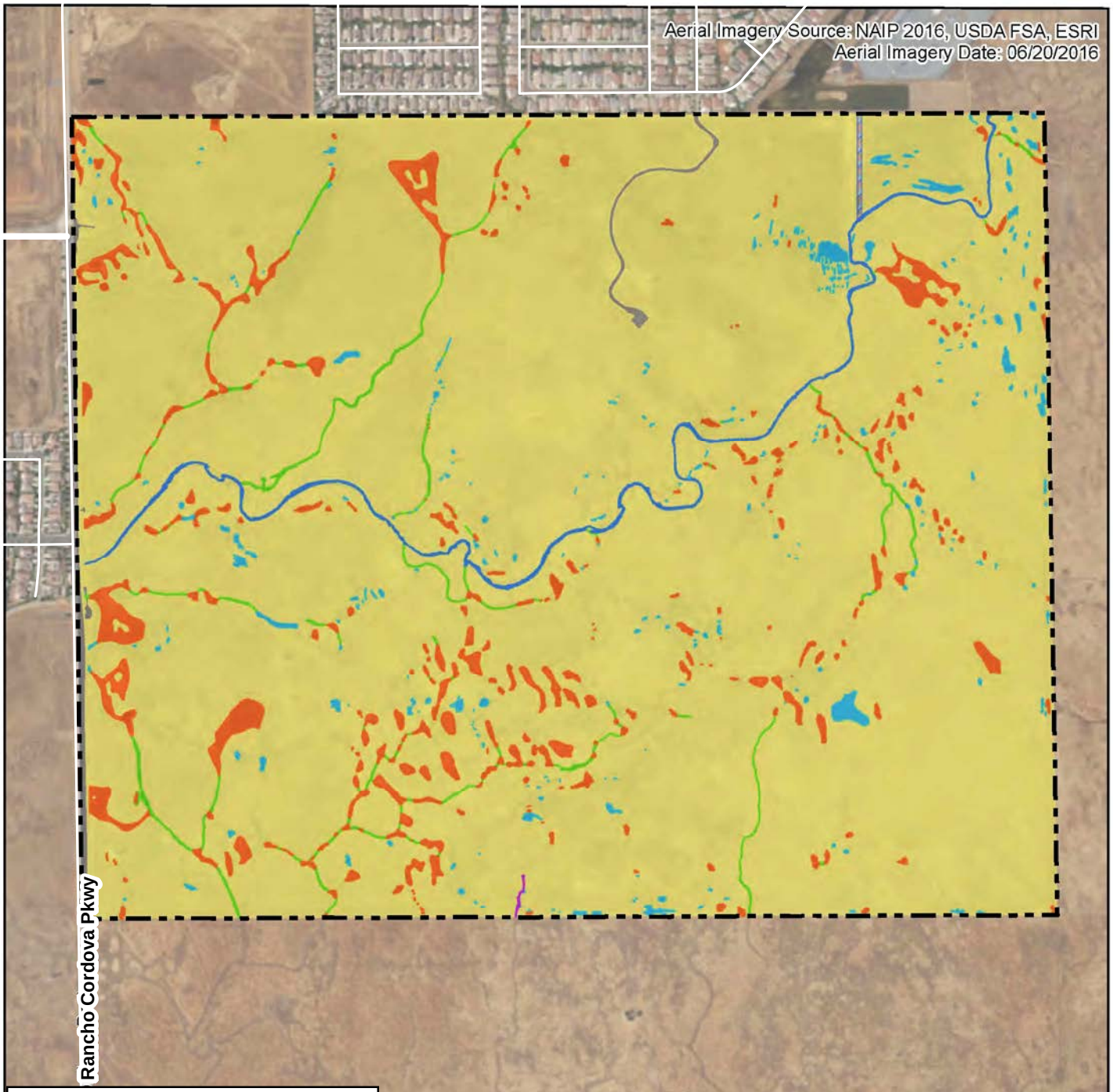
THE RANCH
SACRAMENTO COUNTY, CALIFORNIA

Figure 3.3-3: California Natural Diversity Database

9-Quad Search

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



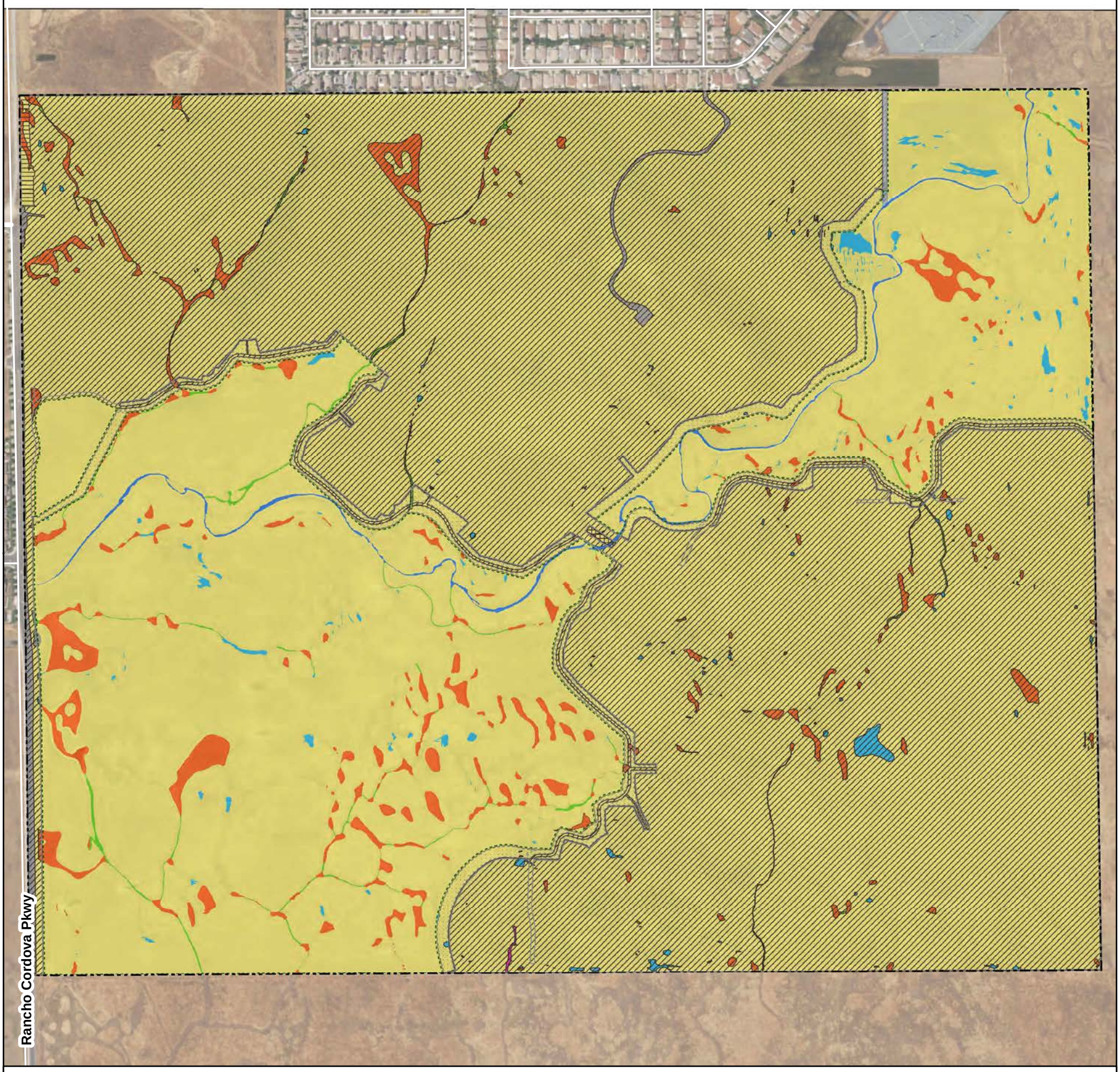
Data source: Foothill Associates. Map date: July 16, 2018.

THE RANCH
SACRAMENTO COUNTY, CALIFORNIA

Figure 3.3-4. Biological Communities and Aquatic Resources

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.



Habitat Types	Preserved (Acres)	Buffer Area (Acres)	Project Impact (Acres)	City Capital Improvement Projects Impact (Acres)	Past Impact (Acres)	Temp. Impact (Acres)	Total (Acres)
Wetlands:							
Depressional Seasonal Wetland	1.85	0.03	1.04				2.92
Vernal Pool	9.97	0.12	4.75	0.18	0.02		15.04
Riverine Seasonal Wetland	1.15	<0.01	0.51		0.01		1.66
Intermittent Drainage	1.53				<0.01	0.01	1.54
Seasonal Wet Swale			0.06				0.06
Detention Basin Outfall	0.30						0.30
Subtotal:	14.80	0.15	6.36	0.18	0.03	0.01	21.53
Biological Communities:							
Annual Grassland	187.16	13.16	305.15	0.51		0.09	506.07
Developed/Disturbed	0.03	0.00	2.43				2.45
Subtotal:	187.18	13.16	307.57	0.51		0.09	508.52
Total	**201.98**	**13.31**	**313.93**	**0.69**	**0.03**	**0.10**	**530.05**

Other Features

- Development Footprint (+/- 315 acres)
- Preserve buffer (+/-13 acres)
- Preserve Boundary (+/-202 acres)
- Project Boundary (+/-530 acres)

N

0 300 600

Feet

1:6,600

Data source: Foothill Associates. Map date: July 16, 2018.

THE RANCH
SACRAMENTO COUNTY, CALIFORNIA

Figure 3.3-5. Impacts to Biological Communities and Aquatic Resources

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page left intentionally blank.