

APPENDIX C
BIOLOGICAL RESOURCES ASSESSMENT

**BIOLOGICAL RESOURCES ASSESSMENT
FOR THE**

±25.8-ACRE ROBLA ESTATES STUDY AREA

CITY OF SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA



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Biological Resources Assessment for the ±25.8-ACRE ROBLA ESTATES STUDY AREA

INTRODUCTION

Project Location

Salix Consulting, Inc. (Salix) has prepared a Biological Resources Assessment and Rare Plant Survey for the ±25.8-acre Robla Estates study area located in the vicinity of Northpointe, in the City of Sacramento, Sacramento County, California. The approximate coordinates for the center of the property are latitude 38.66621° and longitude -121.4488°. It is situated within the Del Paso Land Grant (not part of the Township and Range system, which was a survey of federal lands). The parcel is located on the Rio Linda, California 7.5-minute USGS topographic quadrangle (Figure 1).

Project Setting

The site occurs in the eastern Sacramento Valley, south of the unincorporated community of Rio Linda and directly south of the northern edge of the City of Sacramento city limits. The study area is bounded on the west by Rio Linda Boulevard, on the east by a bike trail, and on the north by a gravel access road. The site is mostly flat, with elevations ranging from approximately 45 feet near the northeast corner to 33 feet near an outfall in the northwest corner. Robla Elementary School is located near the southern corner of the study area and suburban residential neighborhoods are located to the south and east of the site. Land to the north and west of the site is mostly undeveloped (Figure 2).

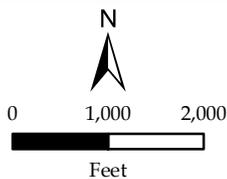
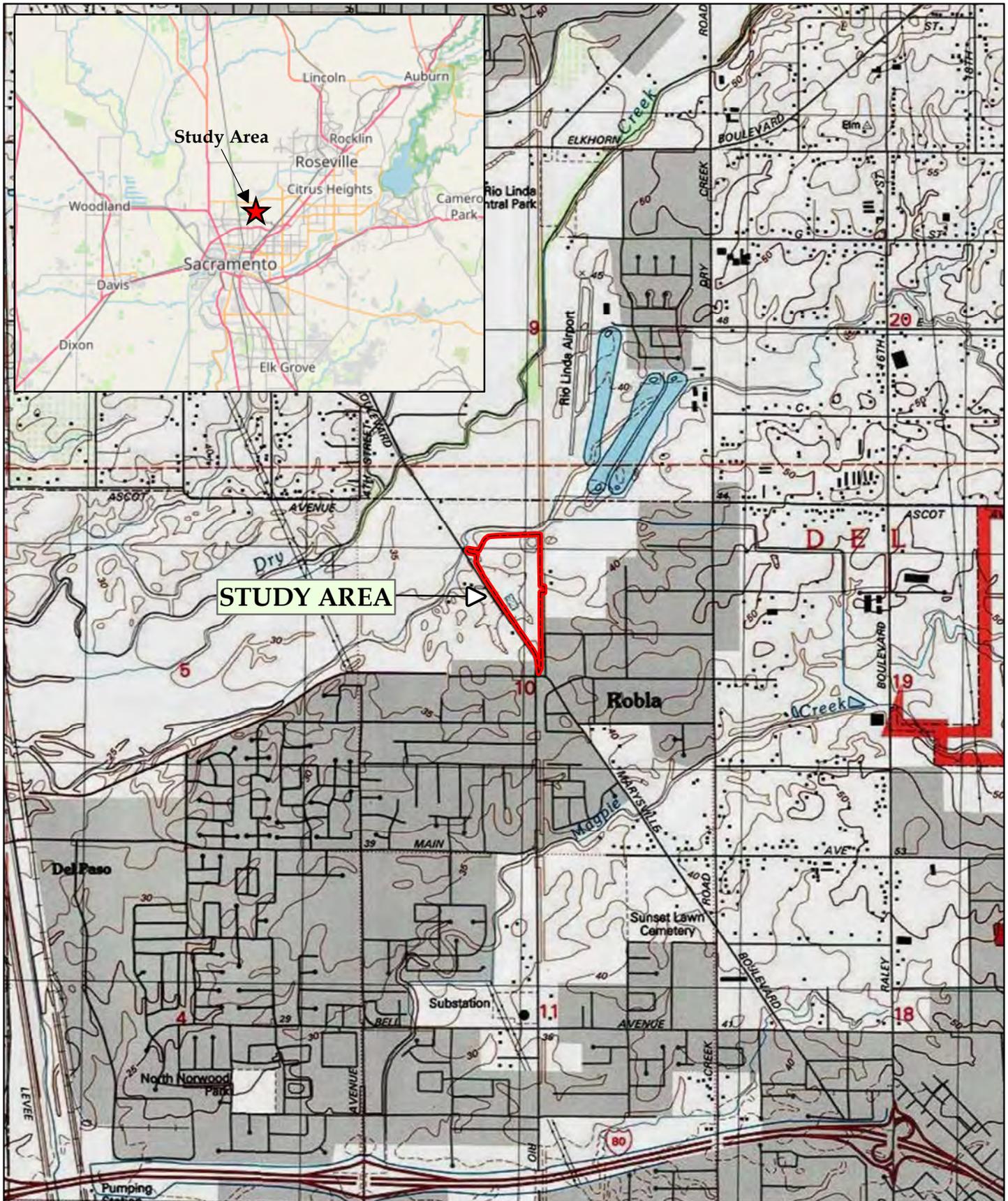
Objectives of Biological Resources Assessment

- Identify and describe the biological communities present in the study area;
- Evaluate and identify if any sensitive habitats or special-status plant and animal species exist or could exist on the site;
- Conduct an analysis to determine if waters of the U.S. are present, and
- Provide conclusions and recommendations.

METHODS

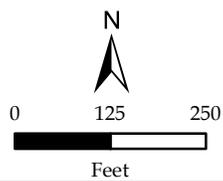
Literature Review

For this analysis, Salix biologists reviewed aerial photographs, USGS maps, and engineering drawings of the proposed tentative map. Standard publications were reviewed to provide information on life history, habitat requirements, and distribution of regionally occurring animal species. Information on soils of the study area was



Source Maps: USGS Topographic Map
Rio Linda Quad 1:24,000
Rancho Del Paso Land Grant

Figure 1
SITE AND VICINITY MAP
Robla Estates
City of Sacramento, Sacramento County, CA



 Study Area
 (±25.8 acres)
 Project Boundary
 (±21.1 acres)
Imagery provided by:
 Baker-Williams Engineering Group, May 2020
 Overlaid on Sac Regional GIS Coop, March 2018

Figure 2
AERIAL MAP
Robla Estates
 City of Sacramento, Sacramento County, CA

obtained from the U.S. Department of Agriculture – National Resource Conservation Service’s online Web Soil Survey (NRCS 2020).

Special-Status Species Reports

To assist with the determination of which special-status species could occur within or near the study area Salix biologists queried the California Natural Diversity Data Base (CDFW 2020) and the California Native Plant Society Inventory (CNPS 2020) and the U.S. Fish and Wildlife Service Information for Planning and Consultation (USFWS IPaC 2020) database for reported occurrences of special-status fish, wildlife, and plant species in the region surrounding the study area. The four-quadrangle search area included the Rio Linda, Citrus Heights, Sacramento East, and Taylor Monument USGS quadrangles. In addition, Salix biologists reviewed the California Department of Fish and Wildlife list of Species of Special Concern for the project vicinity.

For the purposes of this report, special-status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (or candidate species, or formally proposed for listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- Designated a Species of Special Concern by the California Department of Fish and Wildlife, or
- Designated as Ranks 1, 2, or 3 on lists maintained by the California Native Plant Society.

Field Assessments

Field assessments of the study area were conducted by Salix biologists Jeff Glazner and Joelle Soch on May 3 and June 3, 2020 to characterize existing conditions, to assess the potential for sensitive plant and wildlife resources to occur, and to determine if waters of the U.S. were present onsite. During the field assessments, biological communities were mapped and assessed for the potential to support special status species, plants and animals observed were documented, and ground photos were taken.

A botanical survey was conducted by Jeff Glazner to determine the presence or absence of regionally-occurring rare plant species. The survey was timed to coincide with the best chance of detecting potentially-occurring special-status plant species, if present. All areas of the site were observed, with a particular focus given to habitats that are most likely to support regionally-occurring special-status species (wetlands). The survey was floristic in nature and all species observed were identified to the taxonomic level necessary to determine rarity.

Plants observed are listed in Appendix A; animals observed are listed in Appendix B. Plant names are according to The Jepson Manual: Vascular Plants of California, Second

Edition (Baldwin et. al. 2012) and updated literature that supersedes the Jepson Manual. Standard manuals were used as needed to identify wildlife species observed.

SURVEY AND LITERATURE SEARCH RESULTS

Soils

Four soil units have been mapped on the property: Andregg coarse sandy loam, 2 to 9 percent slopes, Andregg-Rock outcrop complex, 5 to 30 percent slopes, Xerorthents, cut and fill areas and Xerorthents, placer areas (NCRS 2020). The components of each complex are described below.

Cosumnes silt loam, drained, 0 to 2 percent slopes, occasionally flooded

The Cosumnes component, which makes up 85 percent of the map unit, is found in valleys and narrow low flood plains. Its parent material consists of alluvium and its natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. This soil is occasionally flooded, is not ponded, and meets hydric criteria. There is no zone of water saturation within a depth of 72 inches and there are no saline horizons within 30 inches of the soil surface.

Liveoak sandy clay loam, 0 to 2 percent slopes, occasionally flooded

The Liveoak component, which makes up 85 percent of the map unit, is found on narrow high flood plains and valleys. Its parent material consists of alluvium derived from granite, and its natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. This soil is occasionally flooded, is not ponded, and does not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches.

Madera loam, 0 to 2 percent slopes

The Madera component, which makes up 85 percent of the map unit, is found in valleys and low areas on low terraces. Its parent material consists of alluvium derived from granite and its natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. This soil is not flooded, is not ponded, and does not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches. There are no saline horizons within 30 inches of the soil surface.

San Joaquin-Urban land complex, 0 to 3 percent slopes

The San Joaquin component, which makes up 65 percent of the map unit, is found in valleys and low terraces. Its parent material consists of alluvium derived from granite, and its natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth)

is low. This soil is not flooded, is not ponded, and does not meet hydric criteria. There is no zone of water saturation within a depth of 72 inches.

The urban land component, which makes up 25 percent of the map unit, is a miscellaneous area.

Climate

The study area has a Mediterranean climate with cool, wet winters and hot, dry summers. The average high temperature is 74°, with the hottest months being July and August, averaging 93° and 92°, respectively. The low temperatures for these months averages 58° each month. The coolest months are December and January, averaging a high temperature of 54° and a low temperature of 38° each month. Annual precipitation averages 17.2 inches, nearly all of which occurs as rainfall between October and April. The wettest months are December, January, and February, each averaging more than 3 inches of rainfall.

Hydrology

The site occurs in the Lower Steelhead Creek HUC12 (180201110303) part of the greater Lower American HUC8 watershed (18020111). Surface water in the southern half of the site trends toward one of three features. A seasonal wetland located near the western boundary collects on-site surface water, while two seasonal wetlands located along the eastern boundary receive surface water runoff from a drainage east of the bike path. The three seasonal wetlands have no drainage outlet, and water within the wetlands evaporates or percolates into the ground.

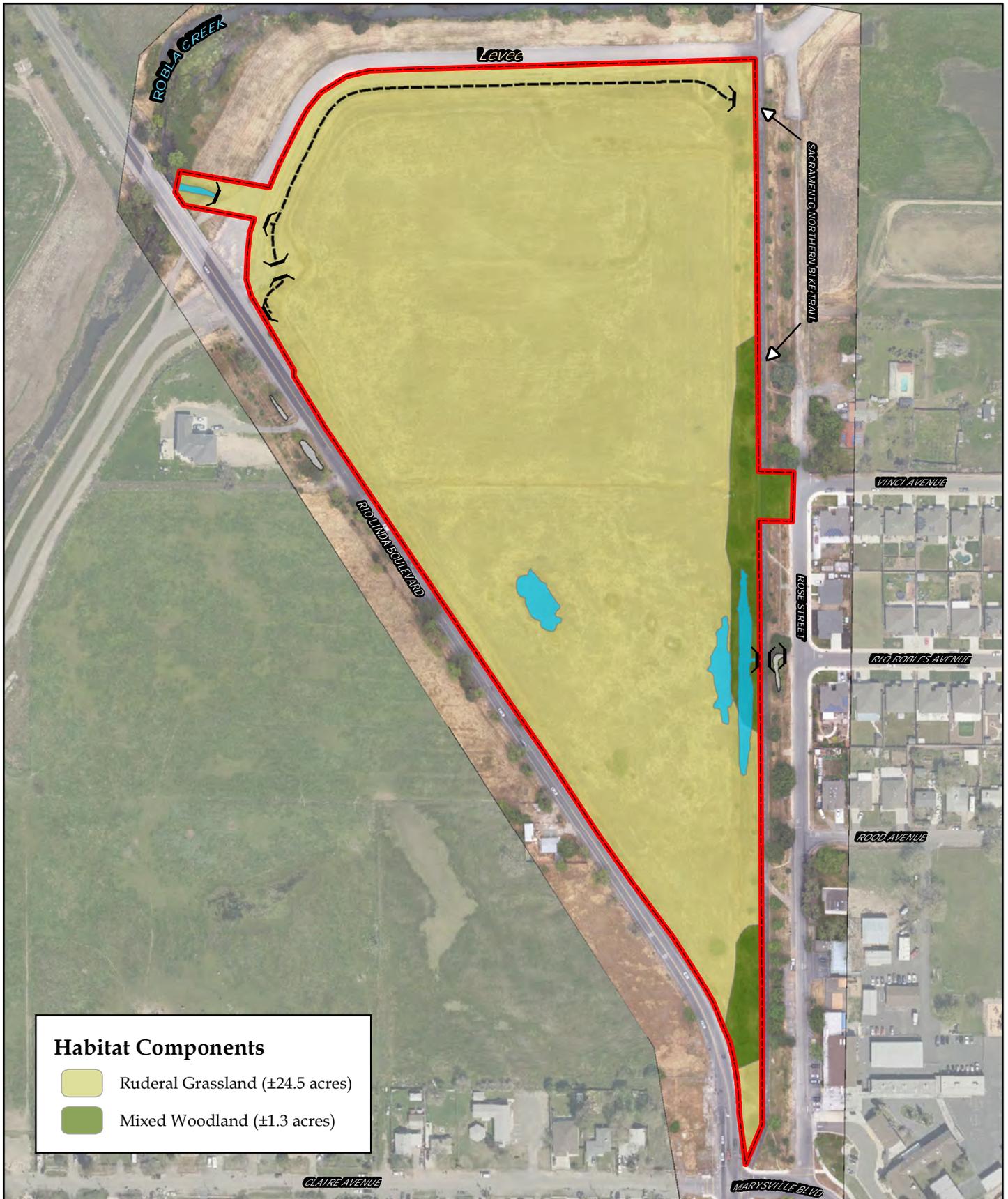
Surface water in the northern portion of the study area trends toward a ditch along the base of a levee that follows the northern boundary of the study site. Water in the ditch passes through an outfall underneath the levee near the northwest corner of the study area before exiting the site and draining into Robla Creek. Robla Creek continues southwest for approximately 2 miles before draining into Steelhead Creek. Water in Steelhead Creek flows in a southwesterly direction for approximately 8 miles before draining into the Lower American and Sacramento Rivers near Discovery Park in Sacramento, CA.

Biological Communities

Two biological community are mapped within the study area - ruderal grassland and mixed woodland, as illustrated in Figure 3. Representative ground photos of the property are presented in Figures 4a-4c. Potential waters of the U.S. are embedded within the ruderal grassland and are mapped in the wetland delineation to be submitted under separate cover. These areas are discussed briefly below under "Potential Waters of the U.S."

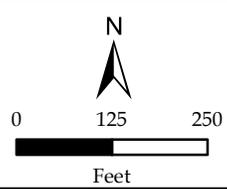
Ruderal Grassland

The majority of the study area, approximately 24.5 acres, is disturbed annual grassland (ruderal). This habitat type consists mostly of weedy annual grasses and forbs and is



Habitat Components

- Ruderal Grassland (±24.5 acres)
- Mixed Woodland (±1.3 acres)



- Study Area (±25.8 acres)
 - Wetlands
 - Offsite Wetlands
 - Drainage Ditch
- Imagery provided by:
Baker-Williams Engineering Group, May 2020
Overlaid on Sac Regional GIS Coop, March 2018

Figure 3
HABITAT COMPONENTS
Robla Estates
City of Sacramento, Sacramento County, CA



Looking southeast along Rio Linda Boulevard. *Photo Date: 5-03-20.*



Looking south from near northeast corner of study area.
Photo Date: 5-03-20.



Figure 4a

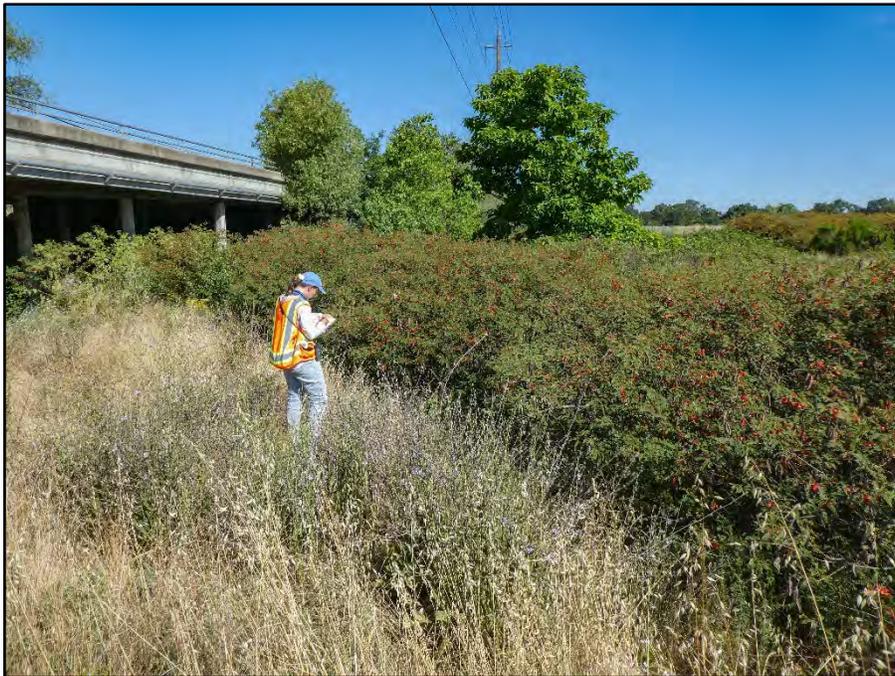
SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA



Looking east along northern boundary from levee. *Photo Date: 5-03-20.*



Swale that drains study area into Robla Creek. Dense population of red sesbania along swale. *Photo Date: 6-03-20.*



Figure 4b

SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA



Seasonal wetland 1 with Goodding's willow. *Photo Date: 6-03-20.*



From bike path, looking northwest over Seasonal Wetlands 2 and 3 into study area. *Photo Date: 5-03-20.*



Figure 4c

SITE PHOTOS

Robla Estates

City of Sacramento, Sacramento County, CA

regularly disked. Woody vegetation is minimal, represented by scattered trees and saplings, mostly in the southern portion of the site where tree of heaven (*Ailanthus altissima*) is scattered. Common species throughout the ruderal grassland include wild oat (*Avena fatua*), Italian ryegrass (*Festuca perennis*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow starthistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), red-stemmed filaree (*Erodium botrys*), English plantain (*Plantago lanceolata*), Italian thistle (*Carduus pycnocephalus*), turkey mullein (*Croton setiger*), prickly lettuce (*Lactuca serriola*), and ruby sand-spurrey (*Spergularia rubra*).

Mixed Woodland

Approximately 1.3 acres of the study area, located primarily along the eastern boundary following the bike trail, is mixed woodland. The mixed woodland is composed of native trees including valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*) and Goodding's black willow (*Salix gooddingii*) interspersed with planted trees and non-native species including silk tree (*Albizia julibrissin*), peach (*Prunus persica*), tree of heaven and ornamental pine (*Pinus sp.*). The herbaceous layer, which is regularly mowed, contains many of the same species as the ruderal grassland described above.

Potential Waters of the U.S

A wetland delineation has been conducted on the site and will be submitted under separate cover. Two categories of potential waters of the United States have been mapped on the study area, including three seasonal wetlands and one wetland swale for a total of 0.455 acre.

Seasonal Wetland

- SW-1, 0.120 ac
- SW-2, 0.119 ac
- SW-3, 0.196 ac

Wetland Swale

- WS-1, 0.020 ac

Seasonal Wetland 1 (SW-1), which appears to be an excavated feature, is located in the western area of the site. It is approximately three feet deep and has exposed hardpan in the bottom. It supports a variable flora of mostly annual species, the most abundant being annual beard grass (*Polypogon monspeliensis*). Stalked popcorn-flower (*Plagiobothrys stipitatus*) is abundant in the basin as is prickly lettuce (*Lactuca serriola*), Italian ryegrass, curly dock (*Rumex crispus*) and creeping spikerush (*Eleocharis macrostachya*). One large Goodding's black willow also grows in the middle of the seasonal wetland (Figure 4b).

Seasonal Wetland 2 (SW-2) is located along the eastern study area boundary and is generally a low area of the field near the outfall of a storm drain originating in the subdivision just east of the study area. The wetland supports a mix of seasonal wetland and vernal pool species including spikerush, purslane speedwell (*Veronica peregrina* subsp. *xalapensis*), double-horned downingia (*Downingia bicornuta* var. *bicornuta*), common knotweed (*Polygonum aviculare*), and hyssop loosestrife (*Lythrum hyssopifolia*).

The wetland is quite compromised by frequent disking and the subtle edge of the wetland is covered by dense Italian ryegrass (Figure 4c).

Seasonal Wetland 3 (SW-3) is adjacent to SW-2 but it is situated between the fence line and the bike trail within the mixed woodland strip. It is not as frequently disturbed and has a more well-defined edge. It contains more organic matter and is sparsely vegetated by Italian ryegrass, curly dock, and other wetland generalists (Figure 4c).

Wetland Swale

A wetland swale is mapped between the levee near Robla Creek to Robla Creek. This constructed swale originates at an outfall situated beneath the levee, which drains ditches located on the south side of the levee. The swale supports a dense population of red sesbania (*Sesbania punicea*). The herbaceous layer in the upper portion of the swale near the levee is mostly Bermudagrass (*Cynodon dactylon*), while the lower portion of the swale (near the confluence with Robla Creek) receives backwater from the creek and supports a mix of marsh species (Figure 4a).

Wildlife Occurrence and Use

The study area, which is bordered on one side by a busy avenue and on the other by a heavily trafficked bike trail, is regularly disked and occurs in a suburban area with high human activity. Due to the disturbed nature of the site, quality habitat and species diversity are lacking. However, wire fencing and fence-posts around the perimeter of the property provide perches, and mixed woodland along the eastern boundary provides foraging and nesting habitat for many common bird species that are adapted to urban areas. Bird species observed during the site visit include mourning dove (*Zenaidura macroura*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), western scrub-jay (*Aphelocoma californica*) and turkey vulture (*Cathartes aura*), among others.

The mixed woodland along the eastern boundary does not contain trees that would provide suitable nesting habitat for larger raptors, and no nests were identified within the study area. However, raptors may nest in more suitable woody vegetation situated along the Robla Creek riparian corridor directly north of the study area and use the site for forage. During the field assessment, a pair of Swainson's hawks (*Buteo swainsoni*) and a pair of Red-tailed hawks (*Buteo jamaicensis*) were observed flying over the site. As no raptor nests were observed on or near the study area, these birds were presumed to be foraging. Numerous cliff swallows (*Petrochelidon pyrrhonota*) observed foraging over the site were found to be nesting underneath the Rio Linda Boulevard bridge over Robla Creek.

The study area also contains piles of broken concrete that could provide shelter to smaller mammals or reptiles. Black-tailed jackrabbit (*Lepus californicus*) and western fence lizard (*Sceloporus occidentalis*) were each observed during the field assessment. In addition, a small population of California ground squirrel (*Spermophilus beecheyi*) and a small number of associated burrows were noted on the property.

Special-Status Species

To determine potentially-occurring special-status species, the standard databases from the USFWS, CDFW (the CNDDDB), and CNPS were queried and reviewed. These searches provided a list of regionally occurring species and were used to determine which species have some potential to occur within or near the study area. Appendix C lists potentially-occurring special-status plants, and Appendix D lists special-status animals compiled from our queries as described above. The field survey and the best professional judgment of Salix biologists were used to further refine the tables in Appendices C and D. Additionally, plant species found on the CNPS List 4 are not considered further in the document. Figure 5a shows the approximate locations of reported occurrences of CNDDDB special-status plants within a five-mile radius of the study area, and Figure 5b shows the same for reported occurrences of special-status animals.

Plants

Four (4) potentially occurring plant species were identified in the CNDDDB and CNPS queries (Appendix C), and all four of these species were identified as occurring within a five-mile radius of the study area (Figure 5a).

One of these species, Sanford's arrowhead (*Sagittaria sanfordii*), was determined to have no potential to occur within the study area due to lack of suitable habitat such as marshes, swamps, or slow-moving streams. Nearby Robla Creek could support this species, but it is located outside of the study area.

Three (3) of the special-status from Appendix C (listed in Table 2 below), were determined to have some potential to occur within the study area and are discussed in further detail below the table.

Table 1.

Special-Status Plant Species Determined to Have Some Potential to Occur Within the Robla Estates Study Area

Species	Status*			Habitat	Potential for Occurrence Within Study Area**
	Federal	State	CNPS		
Dwarf downingia <i>Downingia pusilla</i>	-	-	2B.2	Vernal pools and seasonal wetlands.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. This species was not detected during the botanical survey.
Legenere <i>Legenere limosa</i>	-	-	1B.1	Vernal pools and seasonal wetlands.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. This species was not detected during the botanical survey.

Species	Status*			Habitat	Potential for Occurrence Within Study Area**
	Federal	State	CNPS		
Bogg's Lake hedge-hyssop <i>Gratiola heterosepala</i>	-	-	1B.2	Vernal pools.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. This species was not detected during the botanical survey.

*Status Codes:

CNPS

Rank 1 Rare, Threatened, or Endangered in California
Rank 2 R, T, or E in California, more common elsewhere
1- Seriously threatened in California
2- Fairly threatened in California

**Definitions for the Potential to Occur:

Unlikely. Some habitat may occur, but disturbance may restrict/eliminate the possibility of occurrence. Habitat may be very marginal, or study area is outside range of species.

Dwarf downingia (*Downingia pusilla*) is a small annual member of the bellflower family (Campanulaceae). It has no state or federal status. The CNPS places the dwarf downingia on their List 2.2, meaning that, although it is rare in California, it is more widespread elsewhere. Dwarf downingia also occurs in Chile where the type specimen was collected. Dwarf downingia is distinguished from other members of the genus by having very small flowers that are not upside down at blooming time. The species is an obligate wetland plant that occurs primarily in vernal pools. It blooms from March to May, depending on the amount and distribution of winter rains.

The CNNDDB documents the nearest reported occurrence of dwarf downingia as an April 1993 observation, approximately 3 miles northwest of the study area, off of East Levee Road in Rio Linda. Because the compromised seasonal wetlands within the study area provide very marginal habitat for dwarf downingia, it was determined that the species has some potential to occur, although unlikely. However, this species was not detected during the botanical survey.

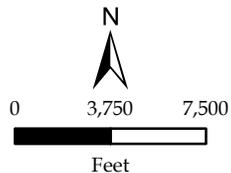
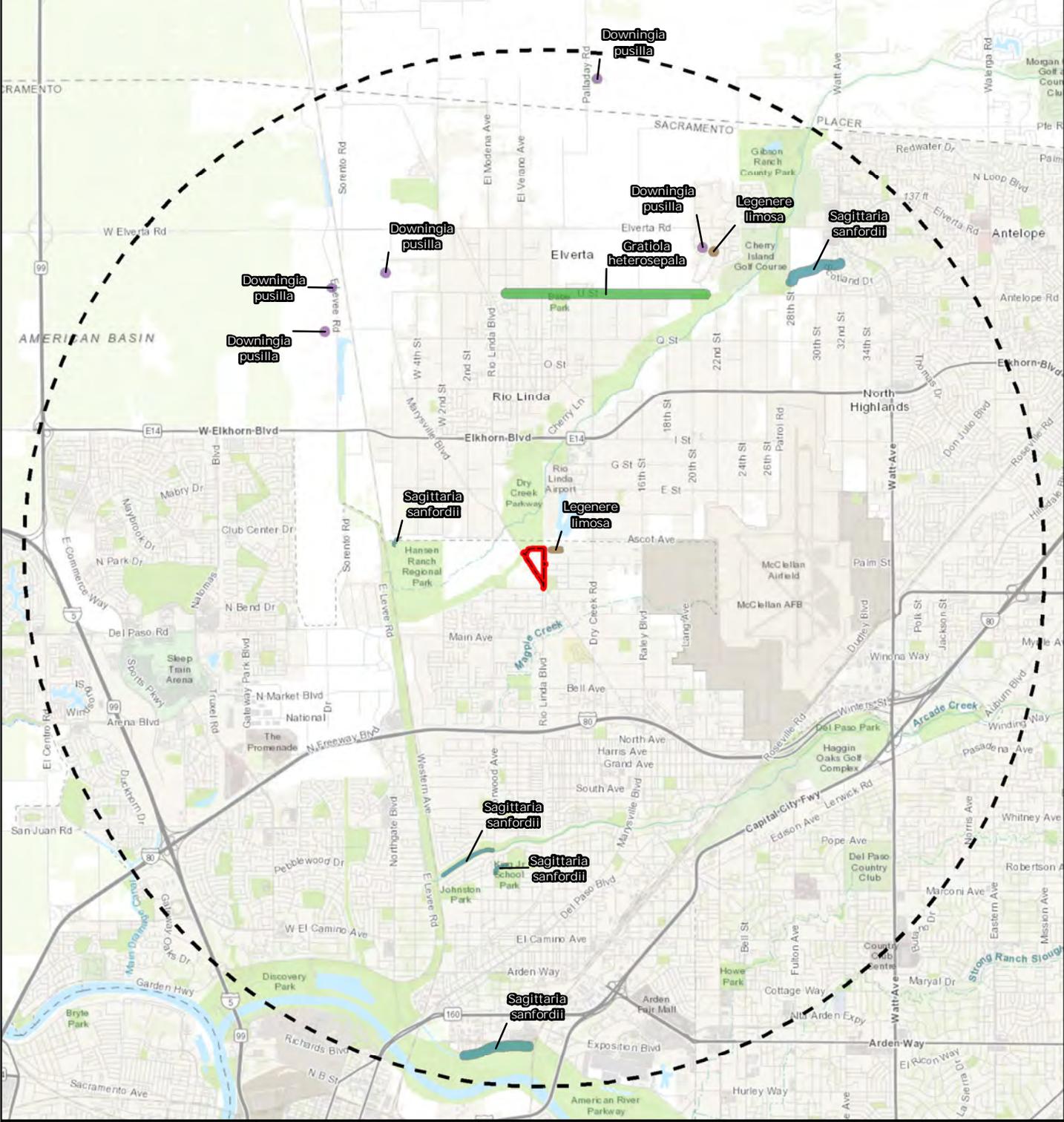
Legenere (*Legenere limosa*) is small annual member of the bellflower family (Campanulaceae). It has no state or federal status, but it is a CNPS List 1B.1 species. It is the only species in the genus and has small, inconspicuous flowers that have pedicels rather than being sessile. Legenere prefers the drying mud of late season vernal pools and swales and it blooms from April to June.

The CNNDDB documents the nearest reported occurrence of legenere as a May 1991 observation, approximately 250 feet east of the study area, in a seasonal wetland north of Vinci Avenue and east of Rose Street. Because the compromised seasonal wetlands within the study area provide very marginal habitat for legenere, it was determined that the species has some potential to occur, although unlikely. However, this species was not detected during the botanical survey.

Bogg's Lake hedge-hyssop (*Gratiola heterosepala*) is a small annual member of the figwort family (Scrophulariaceae). It is given endangered status by the state

CNDDDB Special-Status Plant Species

- Downingia pusilla*
- Gratiola heterosepala*
- Legenere limosa*
- Sagittaria sanfordii*



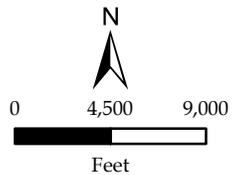
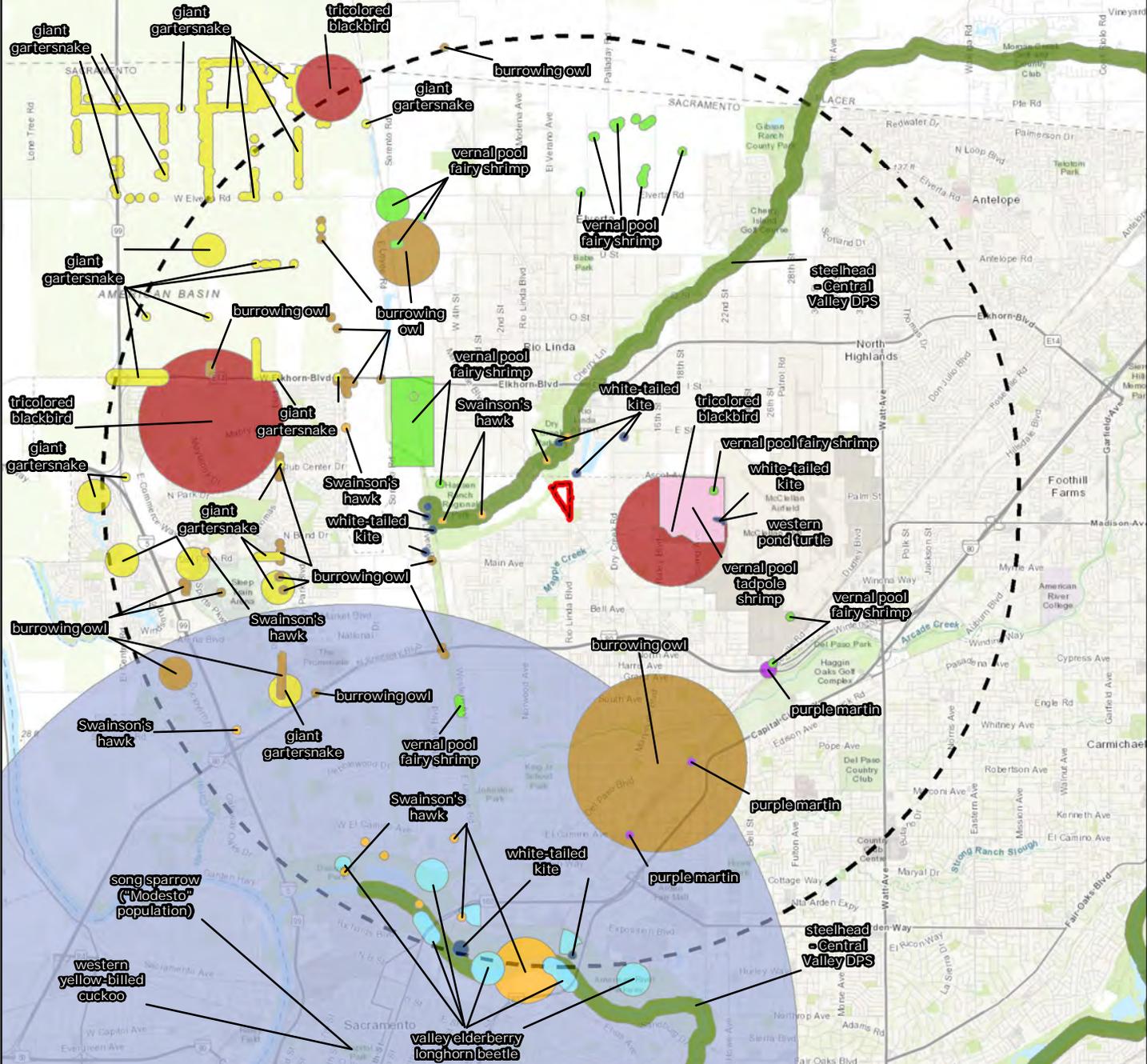
- 5-Mile Radius
- Study Area

Figure 5a

CNDDDB OCCURRENCES MAP
Robla Estates
 City of Sacramento, Sacramento County, CA

CNDDDB Special-Status Animal Species

- Swainson's hawk
- song sparrow ("Modesto" population)
- vernal pool fairy shrimp
- burrowing owl
- steelhead - Central Valley DPS
- vernal pool tadpole shrimp
- giant gartersnake
- tricolored blackbird
- western pond turtle
- purple martin
- valley elderberry longhorn beetle
- western yellow-billed cuckoo
- white-tailed kite



5-Mile Radius
 Study Area

Figure 5b
CNDDDB OCCURRENCES MAP
Robla Estates
 City of Sacramento, Sacramento County, CA

Endangered Species Act, although it has no federal status. The CNPS places it on its List 1B.2. It differs from the common *G. ebracteata* by having blunt tips on the leaves and sepals, which are smaller and of different lengths. It occurs in vernal pools and the moist margins of marshes in northern California. It blooms from April to June, usually as the pools begin to dry.

The CNNDDB documents the nearest reported occurrence of Bogg's Lake hedge-hyssop as an April 1960 observation, approximately 2.5 miles north of the study area, north of U Street in Rio Linda. Because the compromised seasonal wetlands within the study area provide very marginal habitat for legenera, it was determined that the species has some potential to occur, although unlikely. However, this species was not detected during the botanical survey.

In summary, four (4) special-status plants were identified in the database queries as occurring in the greater region surrounding the study area (Appendix C), and all four (4) of these plants are known from within a five-mile radius and are shown in Figure 5a. One (1) of these four (4) plant species, Sanford's arrowhead, requires habitats or substrates that do not occur within the study area, was determined to have no potential for occurring, and was eliminated from further consideration.

Three (3) of the species (listed in Table 1 above) were determined to have some potential to occur within the study area, although unlikely, due to the presence of very marginal habitat within three seasonal wetlands. A botanical survey of the study area was conducted and found no occurrences of any of the three species.

Animals

Of the 20 animal species identified in the CNDDDB and USFWS queries (Appendix D), thirteen (13) were identified as occurring within or near the five-mile radius of the study area (Figure 5b) and are marked with an asterisk (*) in the lists below. Seventeen (17) of the species listed in Appendix D were determined to have no potential to occur within the study area due to lack of suitable habitats or microhabitats. These have been dismissed from further consideration.

Five (5) of the species have no potential to occur within the study area due to the lack of vernal pools, wetlands, marshes, streams, and similar aquatic habitats. These include:

- Steelhead, Central Valley ESU (*Oncorhynchus mykiss irideus*)*
- Western pond turtle (*Actinemys marmorata*)*
- California tiger salamander (*Ambystoma californiense*)
- California red-legged frog (*Rana draytonii*)
- Giant garter snake (*Thamnophis gigas*)*

Seven (7) species have no potential to occur because the site lacks suitable nesting or foraging habitat (such as large/old growth trees close to a body of water, secondary cavities near open foraging areas, cliffs, banks, expansive wetlands, riparian forests/thickets, or other dense vegetation). These include:

- White-tailed kite (*Elanus leucurus*)*

- Swainson’s hawk (*Buteo swainsoni*)*
- Tricolored blackbird (*Agelaius tricolor*)*
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)*
- Bank swallow (*Riparia riparia*)
- Song sparrow - Modesto population (*Melospiza melodia*)*
- Purple martin - (*Progne subis*)*

Three (3) other species have no potential to occur because the site is located outside of the species known range (the Sacramento-San Joaquin Delta or other parts of the Sacramento-San Joaquin Estuary). These include:

- Delta smelt (*Hypomesus transpacificus*)
- Longfin smelt (*Spirinichus thaleichthys*)
- Sacramento splittail (*Pogonichthys macrolepidotus*)

One species, the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)* has no potential to occur because the study area lacks any occurrence of its host plant (elderberry shrub) and one species, American badger (*Taxidea taxus*) has no potential to occur because the site lacks friable, uncultivated soil and is highly disturbed by frequent human activity.

Three (3) animal species were determined to have some potential to occur within the study area. They are listed in Table 2 below and discussed in further detail following the table. No other special-status species were determined to have any potential to occur within the study area.

Table 2.					
Special-Status Animal Species Determined to Have Some Potential to Occur Within the Robla Estates Study Area					
Species	Status*			Habitat	Potential for Occurrence Within Study Area**
	Federal	State	CNPS		
Aquatic Invertebrates					
Vernal pool fairy shrimp* <i>Branchinecta lynchi</i>	FT	-	-	Vernal pools and other temporary bodies of water in southern and Central Valley of California. Most common in smaller grass or mud bottomed swales or basalt flow depression pools in unplowed grasslands.	Unlikely. Seasonal wetlands within the study area are compromised and provide very marginal habitat for the species.

**Table 2.
Special-Status Animal Species Determined to Have Some Potential to Occur
Within the Robla Estates Study Area**

Species	Status*			Habitat	Potential for Occurrence Within Study Area**
	Federal	State	CNPS		
Vernal pool tadpole shrimp* <i>Lepidurus packardii</i>	FE	-	-	Found in vernal pools in the Central Valley of California and in the San Francisco Bay area. Inhabits vernal pools with clear to highly turbid water.	Unlikely. Seasonal wetlands within the study area are compromised and provide very marginal habitat for the species.
Birds					
Burrowing owl* <i>Athene cunicularia</i>	-	SSC	-	Dry grasslands, deserts, and scrublands.	Unlikely. Site is highly disturbed but contains a small ground squirrel population and a small number of ground squirrel burrows which are used for nesting. No burrowing owls were observed during field assessment.

*Status Codes:

Federal

FT Federal Threatened
FE Federal Endangered

State

SSC California Species of Concern

**Definitions for the Potential to Occur:

Unlikely: Minimal or marginal quality habitat in the study area.

Vernal pool fairy shrimp* (*Branchinecta lynchi*), a federally listed threatened species, and **vernal pool tadpole shrimp*** (*Lepidurus packardii*), a federally listed endangered species, are small crustaceans that occur primarily in association with vernal pools and other seasonal wetland habitats throughout the Central Valley. These species occur within a range of specific environmental conditions that include soil type, vegetation characteristics, water depth, water temperature, inundation duration, and water quality (Erickson and Belk 1999). Emergence of adult animals is also dependent on these and other environmental factors (Eng et al 1990).

The CNDDDB documents the nearest reported occurrence of vernal pool fairy shrimp as a February 1995 observation approximately 1.2 miles west of the study area near the Natomas East Main Drainage Canal at Dry Creek and the nearest reported occurrence of vernal pool tadpole shrimp as a July 1998 observation approximately 1 mile east of the study area between Magpie Creek and Ascot Avenue. Due to the high level of disturbance and marginal habitat value, the three seasonal wetlands in the study area not likely to support these species. However, the Corps of Engineers would make that determination during the Clean Water Act Section 404 permitting process and, in turn, determine if Section 7 Consultation should be initiated with the USFWS.

Burrowing owl* (*Athene cunicularia*), an SSC species, occurs in association with open, dry grasslands, deserts, agricultural areas, and rangeland throughout the Central Valley. They often occur where numerous burrowing mammals are present and frequently occupy California ground squirrel burrows (Shuford and Gardali 2008). Burrowing owls may also use man-made structures such as debris piles, culverts, and cement piles for cover. Distinctive burrow characteristics for burrowing owl are not known. However, given the size of this owl, burrow entrances are expected to be at least seven centimeters in diameter. Circumstantial evidence of burrowing owl occurrence typically consists of the presence of molted feathers, cast pellets, prey remains, or excrement near a burrow entrance. Breeding of burrowing owl occurs from March to late August and incubation lasts between 28 to 30 days. Young are fledged at about 44 days but remain near the burrow and join the adults to forage at dusk.

The CNDDDB documents the nearest reported occurrence of the burrowing owl as a July 2003 observation, approximately 1.5 miles southwest of the study area near Del Paso Road on the bank of the Natomas East Main Drainage Canal. The study area contains a small number of ground squirrel burrows that provide suitable nesting habitat for the species. However, the site is regularly disked and highly disturbed by frequent human activity and noise from Rio Linda Boulevard, and it is unlikely that the burrowing owl would occur. The species was not observed during the May or June surveys.

In summary, 20 special-status animal species are known from the region surrounding the study area (Appendix D) and thirteen (13) of these species are known from within a five-mile radius (Figure 5b) of the site. Seventeen (17) of the species require habitats that do not occur within the study area, were determined to have no potential for occurring onsite, and were eliminated from further consideration. Three (3) of the special-status animal species (listed in Table 2 above) were determined to have some potential to occur within the study area, although unlikely, due to the presence of very marginal habitat. In particular, three compromised seasonal wetlands in the southern half of the study area provide marginal habitat for the vernal pool fairy shrimp and the vernal pool tadpole shrimp. Marginal nesting habitat for the burrowing owl occurs in association with a small number of ground squirrel burrows located within the ruderal grassland onsite.

RECOMMENDATIONS

Waters of the United States

The site contains areas being evaluated as potential waters of the U.S. If these areas are deemed to be waters of the U.S. and any are proposed to be filled by the proposed project, a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers would be required. In addition, a Clean Water Act Section 401 water quality certification from the Regional Water Quality Control Board would be required.

Streams, Pond, and Riparian Habitat

Impacts to the bed, bank, or channel of streams or ponds require a Lake & Streambed Alteration Agreement (LSAA) from the California Department of Fish

and Wildlife (CDFW). Other than the wetland swale connection to Robla Creek, the study area does not contain any areas that are under the jurisdiction of the CDFW and thus, an LSAA would not be required.

Tree Conservation

Native oak trees (valley oak, interior live oak, coast live oak, and blue oak), non-oak native trees (California sycamore and California buckeye), and large, healthy non-native trees are afforded various levels of protection through the City of Sacramento Tree Ordinance. The applicant should consult with the City to determine what, if any, provisions of the Tree Ordinance are applicable.

Special-Status Plants

Of four (4) special-status plant species identified through the IPaC and CNDDDB database searches as occurring within the four-quadrangle region surrounding the site, one (1) was determined to have no potential to occur within the study area due to the lack of suitable habitats or soil substrates. The site contains marginal habitat for three special-status plant species: dwarf downingia, legenere, and Bogg's Lake hedge-hyssop. Marginal habitat for this species occurs in association with three seasonal wetlands located in the southern half of the site. A botanical survey of the site was conducted within the species' blooming/identification period, and no occurrences of any of the three species were discovered within the study area. No further action is recommended.

Special-Status Wildlife

Of 20 special-status animal species identified through the IPaC and CNDDDB database searches as occurring within the four-quadrangle region surrounding the site, only three species were determined to have any potential to occur: vernal pool fairy shrimp, vernal pool tadpole shrimp, and burrowing owl.

Aquatic Invertebrates

Three wetlands in the southern half of the study area provide very marginal habitat for the vernal pool fairy shrimp and the vernal pool tadpole shrimp. If the seasonal wetlands are deemed to be waters of the U.S. and any are proposed to be filled by the proposed project, a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers would be required. If the U.S. Army Corps of Engineers determines the seasonal wetlands to be habitat for the vernal pool fairy shrimp or the vernal pool tadpole shrimp, authorization from the USFWS is required. This happens through Section 7 (ESA) consultation between the Corps of Engineers (the Federal Lead Agency) and the USFWS.

Burrowing Owl

Marginal habitat for burrowing owl occurs throughout the study area in association with a small number of ground squirrel burrows within the open ruderal grassland. Prior to any future work activities or ground disturbance on site, a pre-construction burrowing-owl survey should be conducted to determine presence/absence of the

species within and directly adjacent to proposed work areas. Pre-construction surveys should be conducted according to the California Burrowing Owl Consortium's 1993 *Burrowing Owl Survey Protocol and Mitigation Guidelines*. In the event that active burrows are found during the pre-construction surveys, CDFW should be contacted to determine avoidance measures and mitigation responsibilities.

Nesting Raptors and Migratory Birds

The site may provide suitable nesting habitat for some common raptors known from the region, and for other birds protected by the Migratory Bird Treaty Act. Take of any active raptor nest is prohibited under California Fish and Game Code sections 3503, 3503.5, and 3513. If tree removal or other ground disturbance takes place during the breeding/nesting season (February 1 through August 31), disturbance of nesting activities could occur. To avoid impacts to nesting birds, disturbance should occur outside of the typical nesting season. If disturbance occurs at any time during the nesting season, a pre-construction survey should be conducted by a qualified biologist within two weeks prior to initiation of proposed development activities. If active nests are found during the pre-construction survey, buffer zones will be established around any identified nests, and the nests will be monitored by a qualified biologist until the offspring have fledged. Consultation with the California Department of Fish and Wildlife (CDFW) may be warranted.

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Appendix A.
Plant Species Observed Within the Robla Estates Study Area

Appendix A

Robla Estates - Plants Observed - May/June 2020

Gymnosperms

Pinaceae - Pine Family

**Pinus sp.* Ornamental Pine

Angiosperms - Dicots

Apiaceae (Umbelliferae) - Carrot Family

Eryngium vaseyi Coyote thistle

Apocynaceae - Dogbane/Milkweed Family

Asclepias fascicularis Narrow-leaf milkweed

Asteraceae (Compositae) - Sunflower Family

Achyrachaena mollis Blow-wives
**Carduus pycnocephalus* Italian thistle
**Centaurea solstitialis* Yellow starthistle
Centromadia fitchii Fitch's spikeweed
**Cichorium intybus* Chicory
**Dittrichia graveolens* Stinkwort
Erigeron canadensis Canadian horseweed
Euthamia occidentalis Western goldenrod
**Helminthotheca echioides* Bristly ox-tongue
Holocarpha virgata subsp. virgata Virgate tarweed
**Hypochaeris glabra* Smooth cat's-ear
**Lactuca serriola* Prickly lettuce
Lasthenia glaberrima Smooth goldfields
**Leontodon saxatilis* Long-beaked hawkbit
**Matricaria discoidea* Pineapple-weed
Pseudognaphalium canescens Wright's rabbit-tobacco
**Silybum marianum* Milk thistle
**Sonchus asper subsp. asper* Prickly sow-thistle
**Sonchus oleraceus* Common sow-thistle
**Tragopogon dubius* Yellow salsify
Xanthium strumarium Cocklebur

Boraginaceae - Borage Family

Amsinckia menziesii Rancher's fireweed
Plagiobothrys stipitatus Stalked popcorn-flower

Brassicaceae (Cruciferae) - Mustard Family

**Brassica nigra* Black mustard
**Hirschfeldia incana* Short-podded mustard
Lepidium strictum Peppergrass
**Raphanus sativus* Wild radish
**Sinapis arvensis* Wild mustard

Campanulaceae - Bellflower Family

Downingia bicornuta var. bicornuta Double-horned downingia

* Indicates a non-native species

Caryophyllaceae - Pink Family

**Spergularia rubra*

Ruby sand-spurrey

**Stellaria media*

Common chickweed

Chenopodiaceae - Goosefoot Family

**Chenopodium album*

White pigweed

**Dysphania ambrosioides*

Mexican tea

Convolvulaceae - Morning-Glory Family

**Convolvulus arvensis*

Bindweed

Crassulaceae - Stonecrop Family

Crassula aquatica

Water pygmy-weed

Euphorbiaceae - Spurge Family

Croton setiger

Turkey mullein

Fabaceae (Leguminosae) - Legume Family

Acmispon americanus

Spanish lotus

**Albizia julibrissin*

Silk tree

Lupinus bicolor

Miniature lupine

**Medicago polymorpha*

California burclover

**Melilotus indicus*

Annual yellow sweetclover

**Sesbania punicea*

Red sesbania

**Trifolium dubium*

Little hop clover

**Trifolium hirtum*

Rose clover

**Vicia sativa*

Common vetch

**Vicia villosa*

Winter vetch

Fagaceae - Oak Family

Quercus agrifolia

Coast live oak

Quercus lobata

Valley oak

Geraniaceae - Geranium Family

**Erodium botrys*

Broad-leaf filaree

**Erodium cicutarium*

Red-stem filaree

**Geranium dissectum*

Cut-leaf geranium

**Geranium molle*

Dove's-foot geranium

Hypericaceae - St. John's Wort Family

**Hypericum perforatum* subsp. *perforatum*

Klamathweed

Lythraceae - Loosestrife Family

**Lythrum hyssopifolia*

Hyssop loosestrife

Malvaceae - Mallow Family

**Malva neglecta*

Common mallow

Martyniaceae - Unicorn-Plant Family

**Proboscidea louisianica* subsp. *louisianica*

Common unicorn plant

Onagraceae - Evening Primrose Family

Epilobium brachycarpum

Summer cottonweed

Epilobium densiflorum

Dense-flower spike-primrose

Papaveraceae - Poppy Family

Eschscholzia californica

California poppy

Plantaginaceae - Plantain Family

**Plantago lanceolata*

English plantain

<i>Veronica peregrina</i> subsp. <i>xalapensis</i>	Purslane speedwell
Platanaceae - Plane Tree Family	
<i>Platanus acerfolia</i>	Common cudonia
Polygonaceae - Buckwheat Family	
* <i>Polygonum aviculare</i>	Common knotweed
* <i>Rumex acetosella</i>	Sheep sorrel
* <i>Rumex crispus</i>	Curly dock
* <i>Rumex pulcher</i>	Fiddle dock
Rosaceae - Rose Family	
* <i>Prunus avium</i>	Sweet cherry
* <i>Prunus persica</i>	Peach
Salicaceae - Willow Family	
<i>Populus fremontii</i>	Fremont cottonwood
<i>Salix gooddingii</i>	Goodding's black willow
Simaroubaceae - Quassia Family	
* <i>Ailanthus altissima</i>	Tree of heaven
Zygophyllaceae - Caltrop Family	
* <i>Tribulus terrestris</i>	Puncture vine

Angiosperms - Monocots

Alismataceae - Water-Plantain Family	
<i>Alisma triviale</i>	California water plantain
Cyperaceae - Sedge Family	
<i>Carex barbarae</i>	Whiteroot sedge
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Eleocharis macrostachya</i>	Creeping spikerush
<i>Schoenoplectus acutus</i>	Hardstem bulrush
Juncaceae - Rush Family	
<i>Juncus balticus</i>	Baltic rush
* <i>Juncus effusus</i>	Soft rush
<i>Juncus xiphioides</i>	Iris-leaved rush
Poaceae (Gramineae) - Grass Family	
* <i>Aira caryophyllea</i>	Silver European hairgrass
* <i>Avena fatua</i>	Wild oat
* <i>Bromus diandrus</i>	Ripgut grass
* <i>Bromus hordeaceus</i>	Soft chess
* <i>Bromus madritensis</i>	Foxtail brome
* <i>Cynodon dactylon</i>	Bermudagrass
* <i>Elymus caput-medusae</i>	Medusahead
<i>Elymus glaucus</i>	Blue wildrye
<i>Elymus triticoides</i>	Beardless wildrye
* <i>Festuca myuros</i>	Rattail sixweeks grass
* <i>Festuca perennis</i>	Italian ryegrass
* <i>Hordeum marinum</i> subsp. <i>gussoneanum</i>	Mediterranean barley
* <i>Hordeum murinum</i>	Wall barley
* <i>Leersia oryzoides</i>	Rice cutgrass
<i>Phalaris lemmonii</i>	Lemmon's canary grass

* Indicates a non-native species

**Phalaris paradoxa*

**Poa annua*

**Polypogon monspeliensis*

**Sorghum halepense*

Themidaceae - Brodiaea Family

Brodiaea elegans subsp. elegans

Dichelostemma capitatum

Triteleia hyacinthina

Paradox canary-grass

Annual bluegrass

Annual beard grass

Johnsongrass

Elegant harvest brodiaea

Blue dicks

White triteleia

Appendix B.
Wildlife Species Observed Within the Robla Estates Study Area

Appendix B
Robla Estates - Animals Observed - May/June 2020

Reptiles

Western fence lizard *Sceloporus occidentalis*

Birds

Turkey vulture	<i>Cathartes aura</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Mourning dove	<i>Zenaida macroura</i>
Black phoebe	<i>Sayornis nigricans</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western scrub-jay	<i>Aphelocoma californica</i>
Yellow-billed magpie	<i>Pica nuttalli</i>
American crow	<i>Corvus brachyrhynchos</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
House finch	<i>Haemorhous mexicanus</i>

Mammals

Black-tailed jackrabbit	<i>Lepus californicus</i>
California ground squirrel	<i>Spermophilus beecheyi</i>

Appendix C.
Potentially-Occurring Special-Status Plants in the Region of the Robla Estates Study Area

Appendix C
Robla Estates Potentially-Occurring Special-Status Plants

Family Taxon Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
Alismataceae				
<i>Sagittaria sanfordii</i> Sanford's arrowhead	Fed: - State: - CNPS: Rank 1B.2	May-October	Marshes and swamps (assorted shallow freshwater).	None. No suitable habitat (marshes, swamps, or slow moving streams) occurs within the study area. No occurrences of the species were observed during the botanical survey.
Campanulaceae				
<i>Downingia pusilla</i> Dwarf downingia	Fed: - State: - CNPS: Rank 2B.2	March-May	Vernal pools and seasonal wetlands.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. No occurrences of the species were observed during the botanical survey.
<i>Legenere limosa</i> Legenere	Fed: - State: - CNPS: Rank 1B.1	April-June	Vernal pools and seasonal wetlands.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. No occurrences of the species were observed during the botanical survey.
Plantaginaceae				
<i>Gratiola heterosepala</i> Bogg's Lake hedge-hyssop	Fed: - State: CE CNPS: Rank 1B.2	April-August	Vernal pools.	Unlikely. Marginal habitat present in seasonal wetlands within the study area. No occurrences of the species were observed during the botanical survey.

Appendix C

Robla Estates Potentially-Occurring Special-Status Plants

Family				
Taxon				
Common Name	Status*	Flowering Period	Habitat	Probability on Project Site

***Status**

Federal:

- FE - Federal Endangered
- FT - Federal Threatened
- FPE - Federal Proposed Endangered
- FPT - Federal Proposed Threatened
- FC - Federal Candidate
- FSS - Forest Service Sensitive
- FSW - Forest Service Watchlist

State:

- CE - California Endangered
- CT - California Threatened
- CR - California Rare
- CSC - California Species of Special Concern

CNPS (California Native Plant Society - List.RED Code):

- Rank 1A - Extinct
- Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
- Rank 2A- Plants extinct in California, but more common elsewhere
- Rank 2B - Plants rare, threatened, or endangered in California, more common elsewhere
- Rank 3 - Plants about which more information is needed, a review list
- Rank 4 - Plants of limited distribution, a watch list
- RED Code
- 1 - Seriously endangered (>80% of occurrences threatened)
- 2 - Fairly endangered (20 to 80% of occurrences threatened)
- 3 - Not very endangered (<20% of occurrences threatened)

Appendix D.
Potentially-Occurring Special-Status Animals in the Region of the Robla Estates
Study Area

Appendix D
Robla Estates Potentially-Occurring Special-Status Animals

	Status*	Habitat	Probability on Project Site
Invertebrates			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Fed: FT State: - Other: -	Vernal pools and other temporary bodies of water in southern and Central Valley of California. Most common in smaller grass or mud bottomed swales or basalt flow depression pools in unplowed grasslands.	Unlikely. Seasonal wetlands within the study area are compromised and provide very marginal habitat for the species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	Fed: FE State: - Other: -	Found in vernal pools in the Central Valley of California and in the San Francisco Bay area. Inhabits vernal pools with clear to highly turbid water.	Unlikely. Seasonal wetlands within the study area are compromised and provide very marginal habitat for the species.
Insects			
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	Fed: FT State: - Other: *	Requires host plant, elderberry (<i>Sambucus nigra</i>) for its life cycle. Shrubs must have live stem diameters at ground level of 1.0 inch or greater. Occurs in Great Valley and lower foothills.	None. Site lacks any occurrence of the species' host plant (elderberry shrub).
Fish			
Steelhead, Central Valley ESU <i>Oncorhynchus mykiss irideus</i>	Fed: FT State: - Other: -	Occurs below man-made impassable barriers in the Sacramento and San Joaquin rivers and tributaries. Adults migrate from ocean to natal freshwater streams to spawn. Yuba River has essentially the only remaining wild steelhead fishery in Central Valley.	None. No suitable habitat (freshwater stream above man-made barriers) occurs within the study area.
Delta smelt <i>Hypomesus transpacificus</i>	Fed: FT State: CT Other: -	Endemic to the Sacramento-San Joaquin Delta in coastal and brackish waters. Occurs seasonally in Suisun and San Pablo bays. Spawning usually occurs in dead-end sloughs and shallow channels.	None. Site occurs outside of the species known range.
Longfin smelt <i>Spirinichthys thaleichthys</i>	Fed: FC State: CSC Other:	Endemic to the lower reaches of the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas.	None. Site occurs outside of the species known range.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	Fed: - State: CSC Other:	Found in: (1) the Delta, (2) Suisun Bay, (3) Suisun Marsh, (4) Napa River, (5) Petaluma River, and (6) other parts of the Sacramento-San Joaquin Estuary. Requires flooded vegetation for spawning and rearing.	None. Site occurs outside of the species known range.

Appendix D
Robla Estates Potentially-Occurring Special-Status Animals

	Status*	Habitat	Probability on Project Site
Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	Fed: FT State: CT Other: -	Occurs in annual grassland habitat (<1500 feet) and occasionally in grassy understory of valley-foothill hardwood habitats where lowland aquatic sites are available for breeding. Breeds primarily in vernal pools.	None. Site is highly disturbed and lacks suitable wetland habitat. Species is very uncommon in region.
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: SSC Other: -	Occurs in lowlands and foothills in deeper pools and slow-moving streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	None. Site is highly disturbed and lacks suitable habitat (ponds, deeper pools, or slow-moving streams with necessary duration of water).
Reptiles			
Western pond turtle <i>Actinemys marmorata</i>	Fed: - State: SSC Other: -	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying.	None. No suitable wetland habitat with necessary duration of water occurs within the study area.
Giant garter snake <i>Thamnophis gigas</i>	Fed: FT State: CT Other: -	Primarily associated with marshes and sloughs, less with slow-moving creeks, and absent from larger rivers. Nocturnal retreats include mammal burrows and crevices. During the day, basks on emergent vegetation such as cattails and tules.	None. No suitable habitat (marshes, sloughs, slow-moving creeks) present within the study area.
Birds			
White-tailed kite <i>Elanus leucurus</i>	Fed: - State: CFP Other: -	Found in lower foothills and valley margins with scattered oaks and along river bottomlands or marshes adjacent to oak woodlands. Nests in trees with dense tops.	None. Site is highly disturbed, occurs in close proximity to regular human activity, and lacks suitable nesting trees.
Swainson's hawk <i>Buteo swainsoni</i>	Fed: - State: CT Other: *	Breeds in open areas with scattered trees; prefers riparian and sparse oak woodland habitats. Requires nearby grasslands, grain fields, or alfalfa for foraging. Rare breeding species in Central Valley.	None. Site lacks preferred nesting habitat (large trees within a riparian corridor). May nest along nearby Robla Creek. Species is likely to forage on site and was observed flying overhead.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Fed: FT State: CE Other: -	Inhabits riparian forests along the broad, lower floodplains of larger rivers. Nests in thickets of willows and cottonwoods with an understory of blackberry, nettle, or wild grape.	None. No suitable habitat (riparian areas along floodplains or large rivers) occurs within the study area.

Appendix D
Robla Estates Potentially-Occurring Special-Status Animals

	Status*	Habitat	Probability on Project Site
Burrowing owl <i>Athene cucularia</i>	Fed: - State: SSC Other: *	Found in annual grasslands. Nests in burrows dug by small mammals, primarily ground squirrels.	Unlikely. Site is highly disturbed but contains a small ground squirrel population and a small number of ground squirrel burrows which are used for nesting. No burrowing owls were observed during field assessment.
Purple martin <i>Progne subis</i>	Fed: - State: SSC Other: *	Breeds in riparian woodland, oak woodland, open coniferous forests. Secondary cavity nester. Requires nest sites close to open foraging areas of water or land.	None. No suitable nesting habitat (secondary cavities in birdhouse, dead trees, cliffs, or buildings near open foraging areas) occurs within the study area.
Bank swallow <i>Riparia riparia</i>	Fed: - State: CT Other: *	Colonial nester near riparian and other lowland habitats. Requires vertical banks or cliffs with fine-textured, sandy soils near streams, rivers, and lakes.	None. No suitable nesting habitat (vertical banks or cliffs near a stream, river or lake) occurs within the study area.
Song Sparrow - Modesto population <i>Melospiza melodia</i>	Fed: State: SSC Other: -	Occurs in expansive freshwater wetlands and early stage riparian thickets of Sacramento Valley. Prefers emergent freshwater marshes dominated by tules, cattails, and willow thickets.	None. No suitable nesting habitat (expansive freshwater wetlands and early stage riparian thickets) occurs within the study area.
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CT Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	None. No suitable nesting habitat (dense cattails, tules, brambles or other dense vegetation) occurs within the study area.
Mammals			
American badger <i>Taxidea taxus</i>	Fed: - State: CSC Other: -	Occurs in dry, open soils in herbaceous, shrub, and forest habitats. Needs friable, uncultivated soil. Preys on rodents.	None. Site is highly disturbed and lacks suitable habitat (friable, uncultivated soils).

Appendix D
Robla Estates Potentially-Occurring Special-Status Animals

Status*	Habitat	Probability on Project Site
<p>*Status Federal:</p> <p>FE - Federal Endangered FT - Federal Threatened FPE - Federal Proposed Endangered FPT - Federal Proposed Threatened FC - Federal Candidate FPD - Federal Proposed for Delisting</p>	<p>State:</p> <p>CE - California Endangered CT - California Threatened CR - California Rare CC - California Candidate CFP - California Fully Protected CSC - California Species of Special Concern</p>	<p>Other:</p> <p>Some species have protection under the other designations, such as the California Department of Forestry Sensitive Species, Bureau of Land Management Sensitive Species, U.S.D.A. Forest Service Sensitive Species, and the Migratory Bird Treaty Act. Raptors and their nests are protected by provisions of the California Fish and Game Code. Certain areas, such as wintering areas of the monarch butterfly, may be protected by policies of the California Department of Fish and Game. WL - CDFG Watch List</p>