

**BIOLOGICAL RESOURCES ASSESSMENT
FOR THE
±4.0-ACRE 5601 GIBBONS DRIVE STUDY AREA
CARMICHAEL, SACRAMENTO COUNTY, CALIFORNIA**



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AUGUST 2022

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Biological Resources Assessment for the ±4.0-ACRE 5601 GIBBONS DRIVE STUDY AREA

INTRODUCTION

Project Location

Salix Consulting, Inc. (Salix) has prepared a Biological Resources Assessment for the ±4.0-acre 5601 Gibbons Drive study area located on Gibbons Drive, in Carmichael, Sacramento County, California. The approximate coordinates for the center of the property are 38°38'10.85"N and 121°20'2.12"W. 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 Citrus Heights, California 7.5-minute USGS topographic quadrangle (Figure 1).

Project Setting

The site occurs in the Sacramento Valley at an elevation of approximately 125 feet; it is essentially flat and is surrounded by high density urban residential development. Gibbons Drive is the southern boundary with houses on all other sides. Fair Oaks Boulevard is 1/4th-mile east of the site and Garfield Avenue is less than 1/10th-mile west of the site. The property is a mostly weedy ruderal herbaceous species with a single unoccupied residential dwelling near the west central area of the parcel. Woody vegetation lines much of the perimeter and oak trees occur in a few interior areas (Figure 2).

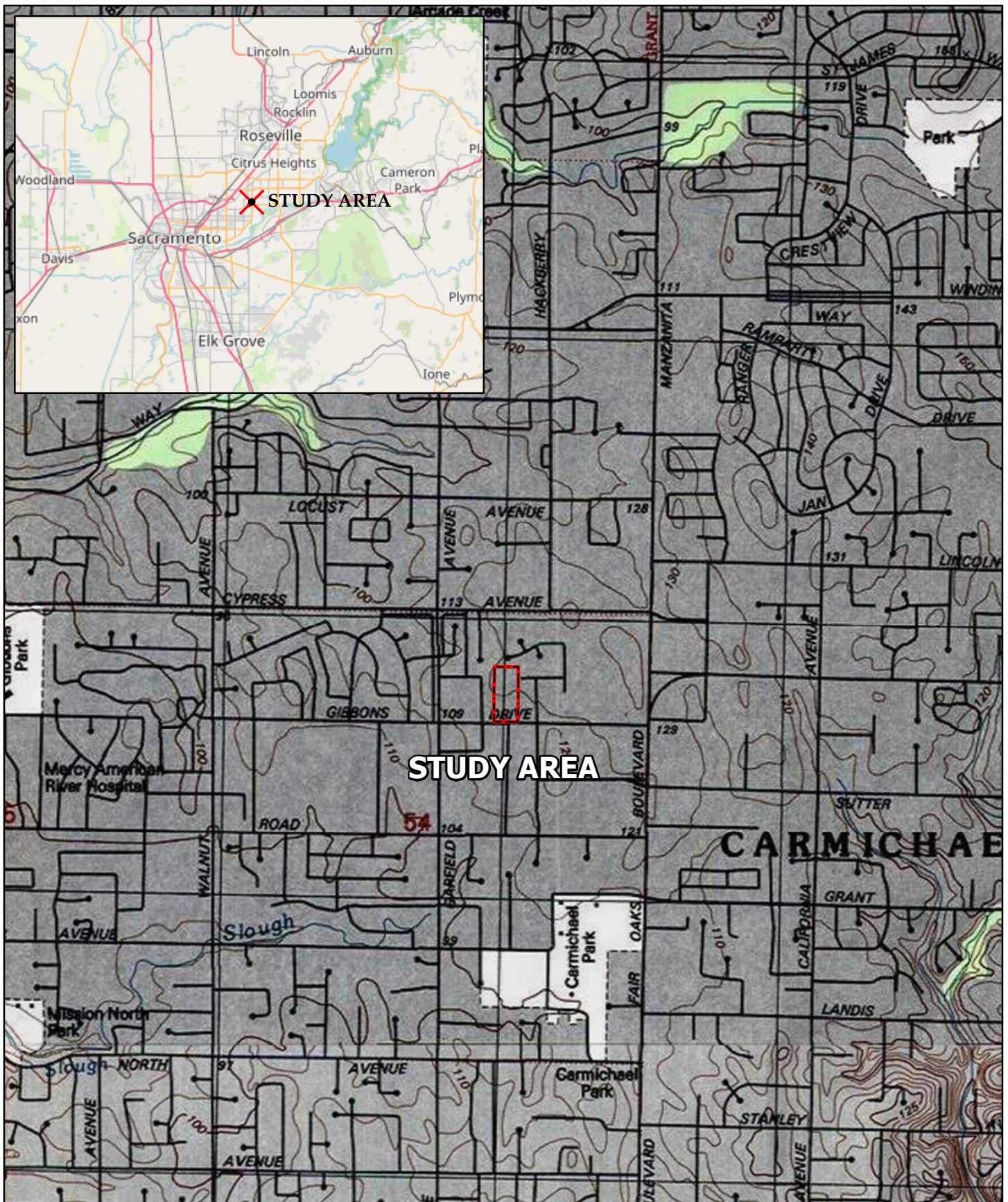
Objectives of Biological Resources Assessment

- 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 aquatic resources are present, and
- Provide recommendations for further study, if necessary.

METHODS

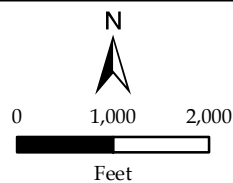
Literature Review

For this analysis, Salix biologists reviewed aerial photographs, USGS maps, and the tentative subdivision map for the project. Standard publications were reviewed to provide information on life history, habitat requirements, and distribution of regionally occurring animal species.



STUDY AREA

CARMICHAEL

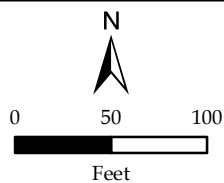
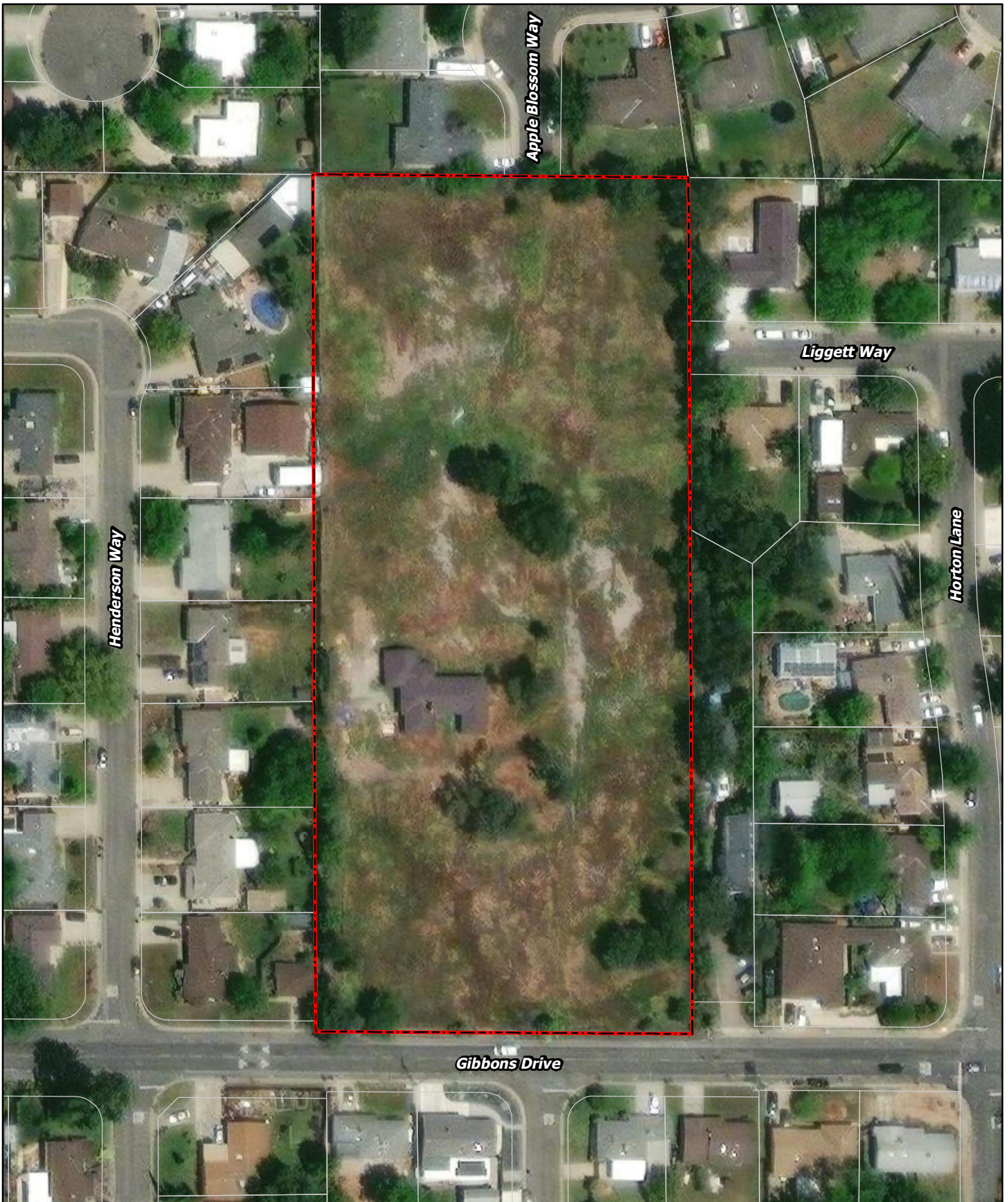


Source Maps: USGS Topographic Map
Citrus Heights Quad 1:24,000
S00 T9N R6E

Figure 1

SITE AND VICINITY MAP

5601 Gibbons Drive
Carmichael, Sacramento County, CA



 Study Area
(±4.2 acres)

Imagery: 4-26-22 Maxar

Figure 2

AERIAL MAP

5601 Gibbons Drive

Carmichael, Sacramento County, CA

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 2022) and the California Native Plant Society Inventory (CNPS 2022) and the USFWS Information for Planning and Consultation (USFWS IPaC 2022) database for reported occurrences of special-status fish, wildlife, and plant species in the region surrounding the study area. The 4-quadrangle search area included the Carmichael, Citrus Heights, Folsom, and Buffalo Creek USGS quadrangles.

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

A field assessment of the study area was conducted by Salix Principal Biologist Jeff Glazner on August 9, 2022, 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.

Plants observed are listed in Appendix A; animals observed are listed in the *Wildlife Occurrence and Use* section below. Plant names are according to the Jepson Herbarium, Jepson Flora Project (Jepson eFlora) and updated literature that appears in the eFlora. Standard manuals were used as needed to identify wildlife species observed.

SURVEY AND LITERATURE SEARCH RESULTS

Soils

One soil unit has been mapped within the study area as illustrated in Figure 3: 229 - Urban land-Xerarents-Fiddyment complex, 0 to 8 percent slopes (NRCS 2022). The components of the soil units are illustrated in Figure 3 and described below.

229 - Urban land-Xerarents-Fiddyment complex, 0 to 8 percent slopes

Component: Urban land (40%)

Urban land is a miscellaneous area. Soil descriptions do not include miscellaneous areas.

Component: Xerarents (30%)

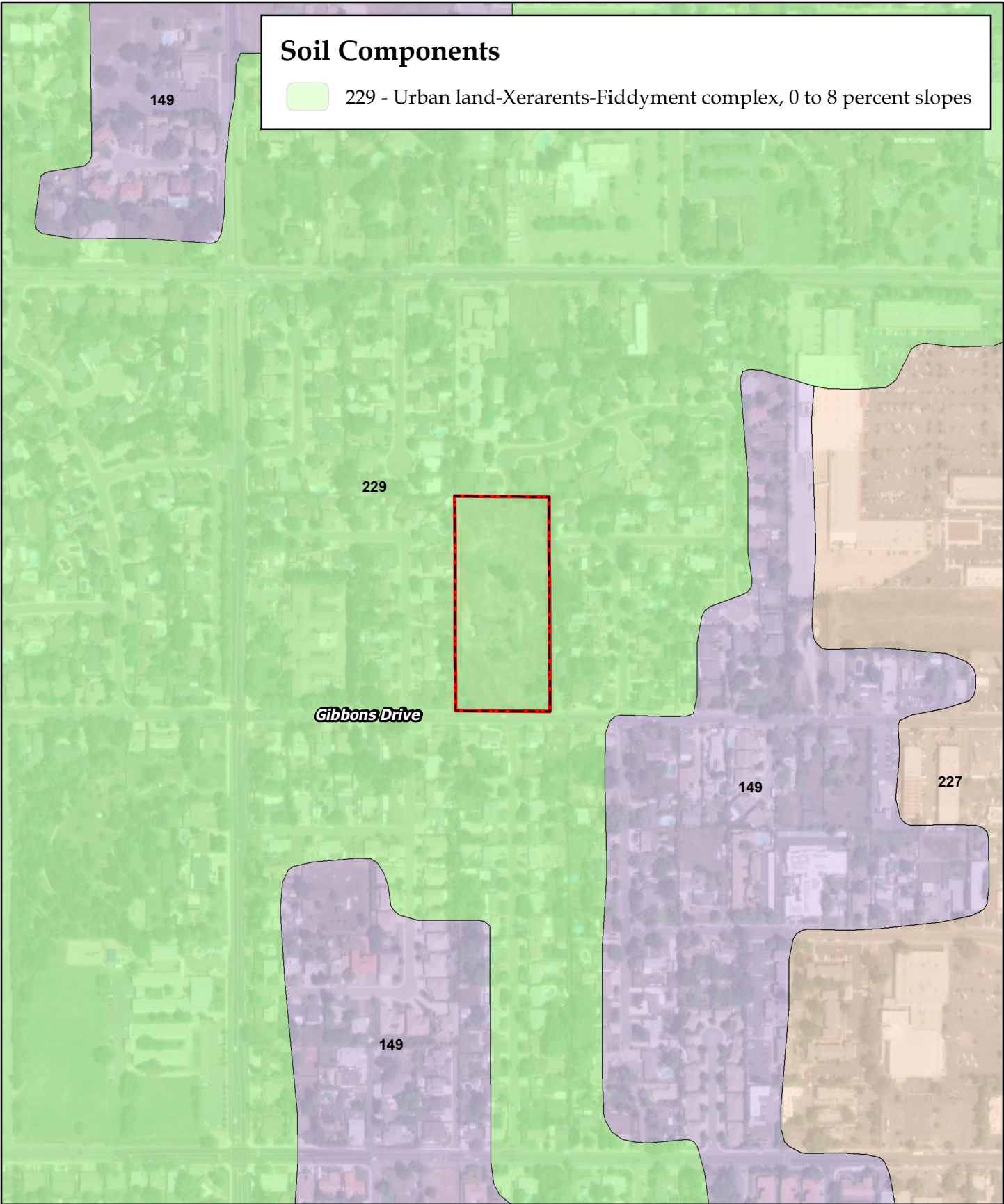
The Xerarents component makes up 30 percent of the map unit. Slopes are 0 to 8 percent. This component is on valleys, hills. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Fiddyment (15%)

The Fiddyment component makes up 15 percent of the map unit. Slopes are 1 to 8 percent. This component is on hills, valleys. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer, duripan, is 28 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Hydrology

The site occurs in the Lower American HUC12 (180201110202) watershed which is part of the greater Lower American HUC8 (18020111) watershed. Water on site trends southerly towards urban drainages along Gibbons Road and then presumably flows through urban drainage networks eventually into the Lower American River approximately three miles south of the site.



Study Area
(±4.2 acres)

Imagery: 4-26-22 Maxar

Figure 3

SOIL COMPONENTS

5601 Gibbons Drive
Carmichael, Sacramento County, CA

Biological Communities

Three biological communities are present – ruderal grassland, residential, and oak / landscape as illustrated in Figure 4. Site photos of the study area are presented in Figures 5a through 5c. No aquatic resources are present within the study area.

Ruderal Grassland

The property is an urban lot that was recently cleared of ornamental vegetation resulting in a mostly weedy herbaceous flora throughout the site. Common species observed include wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), soft chess (*B. hordeaceus*), Italian ryegrass (*Festuca perennis*), broad-leaf filaree (*Erodium botrys*), rose clover (*Trifolium hirtum*), prickly lettuce (*Lactuca seirola*), field bindweed (*Convolvulus arvensis*), wall barley (*Hordeum murinum*), summer cottonseed (*Epilobium brachycarpum*), common salsify (*Tragapogon porrifolius*), and yellow starthistle (*Centaurea solstitialis*). Other locally common herbaceous species observed were wild radish (*Raphanus sativus*), Bermudagrass (*Cynodon dactylon*), dallis grass (*Paspalum dilatatum*), vetch (*Vicia* sp.) and dove's foot geranium (*Geranium mole*).

Residential

An unoccupied residential dwelling occurs on site. This is a single structure (no outbuildings) with a relatively small footprint.

Oak / Landscape

Many native oaks and landscape trees and shrubs occur on the parcel, primarily along the perimeter. Three oak species valley oak (*Quercus lobata*), interior live oak (*Q. wislizeni*) and coast live oak (*Q. agrifolia*) grow on the parcel. Coast live oak is the most abundant. Shrubs on the property include an ornamental rose (*Rosa* sp), pyracantha (*Pyracantha* sp), Himalayan blackberry (*Rubus armineacus*), Chinese privet (*Ligustrum lucidum*), olive (*Olea europaea*), white mulberry (*Morus alba*), Chinese elm (*Ulmus parvifolia*), and lilac chastetree (*Vitex agnus-castus*).

An arborist survey and tree inventory has been prepared for the property by others.

Potential Aquatic Resources

The study area was walked and observed carefully for the presence of aquatic resources. In addition, historic aerial photos were reviewed prior to the site visit to determine if any areas appeared to be wetland. The study area is essentially flat, and no area shows evidence of ponding or prolonged saturation long enough to be a wetland. Upland weedy vegetation is dominant throughout the entire site. No areas of potential aquatic resources are present on the property.

Wildlife Occurrence and Use

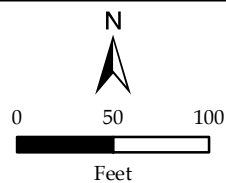
Due to the disturbed nature of the site and lack of vegetative diversity, quality wildlife habitat is minimal. However, the site is used by many common species and provides habitat for a number of animals. The ruderal grassland provides foraging habitat for many resident and migratory birds and small to mid-sized mammals. Trees and shrubs

associated with the property provide suitable nesting habitat for common species. Quality of habitat for large species or special status species is lacking.

Animal species observed during the site visit include rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), western scrub-jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), Anna's hummingbird (*Calypte anna*), American robin (*Turdus migratorius*), lesser goldfinch (*Spinus psaltria*), house finch (*Carpodacus mexicanus*), northern flicker (*Colaptes auratus*), spotted towhee (*Pipilo maculatus*), western gray squirrel (*Sciurus griseus*), and western fence lizard (*Sceloporus occidentalis*).

Habitat Components

- Oak / Landscape (± 0.7 acre)
- Residential (± 0.2 acre)
- Ruderal Grassland (± 3.3 acres)



Study Area
(± 4.2 acres)

Imagery: 4-26-22 Maxar

Figure 4

HABITAT MAP

5601 Gibbons Drive
Carmichael, Sacramento County, CA



Looking north into property at southwest corner from Gibbons Drive.
Photo date 8-9-22



Looking east along southern property line toward southeast corner of property. Recent fire in southeast area. *Photo date 8-9-22*



Figure 5a

SITE PHOTOS

5601 Gibbons Drive
 Carmichael, Sacramento County, CA



Looking south along western boundary from near northwest corner of site. *Photo date 8-9-22*



Looking northeast towards northeast corner of stie.
Photo date 8-9-22



Figure 5b

SITE PHOTOS

5601 Gibbons Drive
Carmichael, Sacramento County, CA



Looking northwest from southeast corner towards residence.
Photo date 8-9-22



Looking south along eastern boundary from near northeast corner
of stie. *Photo date 8-9-22*



Figure 5c

SITE PHOTOS

5601 Gibbons Drive
Carmichael, Sacramento County, CA

Special-Status Species

To determine potentially-occurring special-status species, the standard databases from CDFW (CNDDDB), CNPS, and USFWS (IPaC) were queried and reviewed as described above. These searches provided a list of regionally-occurring special-status species and were used to determine which species have some potential to occur within or near the study area. Appendix B lists potentially-occurring special-status plants, and Appendix C lists potentially-occurring special-status animals compiled from these queries. The field survey and the best professional judgment of Salix biologists were used to further refine the tables in Appendices B and C. Additionally, CNPS Rank 4 plant species are not considered further in the document. Figure 6 shows the approximate locations of reported occurrences of CNDDDB special-status plants and special-status animals within a five-mile radius of the study area.

Plants

Of the eight (8) potentially-occurring plant species identified in the database queries (Appendix B), one (1) was identified as occurring within or near a five-mile radius of the study area (Figure 6), but was determined to have no potential for occurring onsite due to the absence of suitable wet habitats. This species is:

- Sanford's arrowhead (*Sagittaria sanfordii*)

Seven (7) other species identified in the CNDDDB query (but not reported to occur within a 5-mile radius) were also determined to have no potential for occurring onsite due to the absence of suitable wet habitats. These include:

- Dwarf downingia (*Downingia pusilla*)
- Legenere (*Legenere limosa*)
- Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*)
- Bogg's Lake hedge-hyssop (*Gratiola heterosepala*)
- Slender Orcutt grass (*Orcuttia tenuis*)
- Sacramento Valley Orcutt grass (*Orcuttia viscida*)
- Pincushion navarretia (*Navarretia myersii* ssp. *myersii*)

In summary, eight (8) special-status plants are known from the region surrounding the study area (Appendix B), and one (1) of these plants are known from within a five-mile radius and are shown in Figure 6. All of the plant species identified in Appendix B require wet habitats that do not occur within the study area. Therefore, all eight were determined to have no potential for occurring onsite and were eliminated from further consideration

CNDDDB Special-Status Species

Animals

- Cooper's hawk
- Swainson's hawk
- bank swallow
- burrowing owl
- purple martin
- song sparrow ("Modesto" population)
- steelhead - Central Valley DPS

- tricolored blackbird
- valley elderberry longhorn beetle
- vernal pool fairy shrimp
- vernal pool tadpole shrimp
- western pond turtle
- western yellow-billed cuckoo
- white-tailed kite

Plants

- Sagittaria sanfordii*

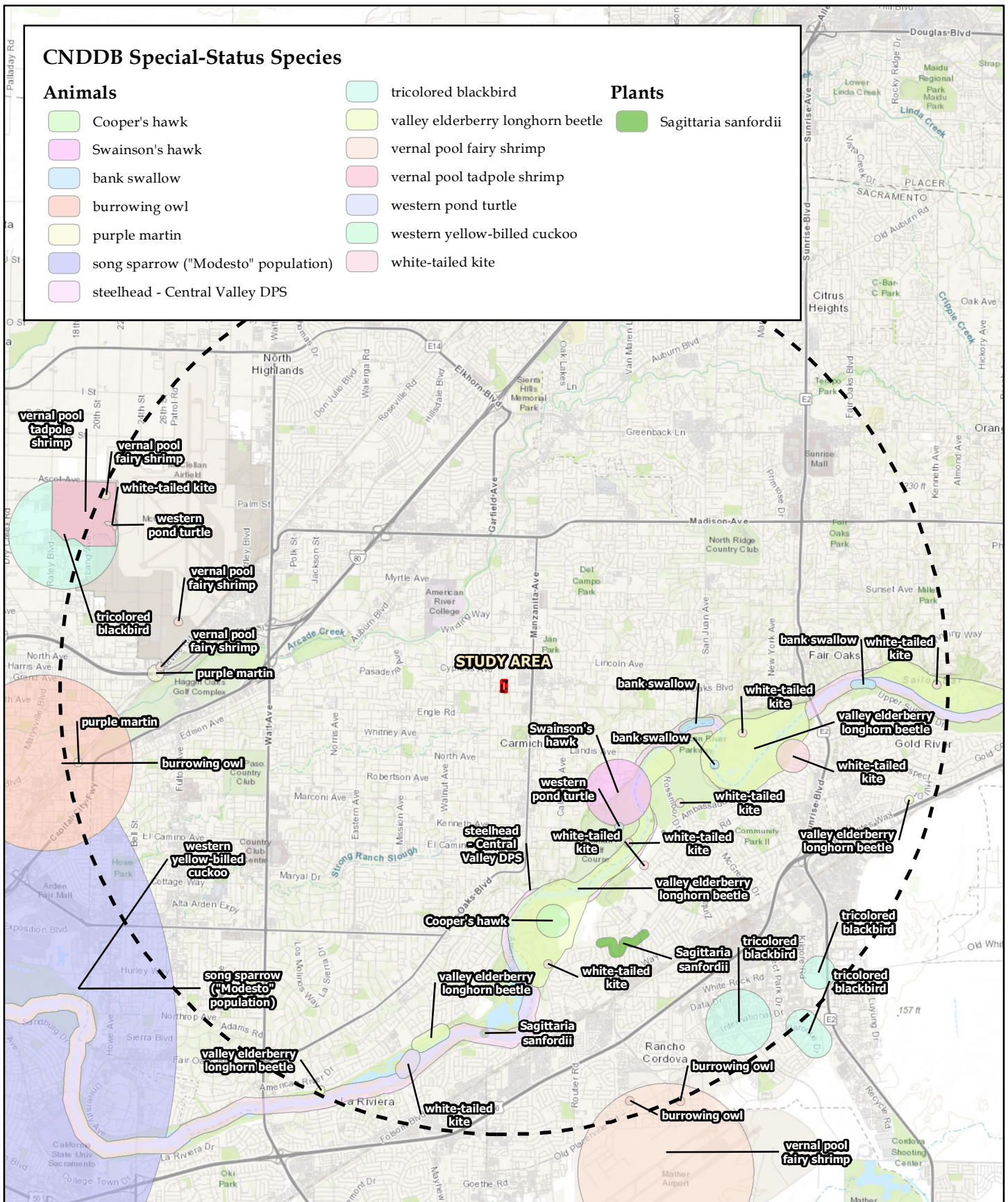
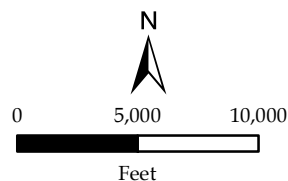


Figure 6

CNDDDB OCCURRENCES

5601 Gibbons Drive

Carmichael, Sacramento County, CA



Animals

Of the seventeen (17) animal species identified in the CNDDDB and USFWS queries (Appendix C), thirteen (13) were identified as occurring within or near the five-mile radius of the study area (Figure 6). All thirteen (13) of the species occurring within a 5-mile radius were determined to have no potential for occurring onsite due to the absence of suitable aquatic habitat and/or suitable nesting habitat. These include:

- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Vernal pool tadpole shrimp (*Lepidurus packardii*)
- Western pond turtle (*Actinemys marmorata*)
- Steelhead, Central Valley ESU (*Oncorhynchus mykiss irideus*)
- White-tailed kite (*Elanus leucurus*)
- Cooper's hawk (*Accipiter cooperii*)
- Swainson's hawk (*Buteo swainsoni*)
- Burrowing owl (*Athene cunicularia*)
- Tricolored blackbird (*Agelaius tricolor*)
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- Purple martin (*Progne subis*)
- Bank swallow (*Riparia riparia*)

One species occurred within a 5-mile radius but was determined to have no potential for occurring onsite due to the absence of elderberry shrubs:

- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)

Four (4) other species identified in the CNDDDB and USFWS query but not reported to occur within a 5-mile radius were also determined to have no potential for occurring onsite due to the absence of suitable habitat (or nesting habitat) or due to the site being located outside of the species' known range. These include:

- Monarch butterfly (*Danaus plexippus*)
- Delta smelt (*Hypomesus transpacificus*)
- California tiger salamander (*Ambystoma californiense*)
- Western spadefoot (*Spea hammondi*)

In summary, of the seventeen (17) special-status animals identified through the CNDDDB query and other literature as occurring within the broader region surrounding the study area, 13 were identified as occurring within a five-mile radius of the study area, and all 13 of these (listed above) were determined to have no potential for occurring on site due to the absence of suitable habitat such as vernal pool or other wet/aquatic habitats, absence of a host plant or suitable nesting habitat.

In particular, the study area lacks aquatic habitats such as streams and ponds that would support California tiger salamander, western spadefoot or western pond turtle. There are no streams within the study area to support Central Valley steelhead.

The study area does not contain any areas that would qualify as suitable habitat for vernal pool crustaceans (vernal pools or seasonal wetlands). No critical habitat for vernal pool crustaceans is mapped within or near the study area.

The site does not contain suitable nesting habitat for Swainson's hawk, white-tailed kite, Cooper's hawk, western yellow-billed cuckoo, bank swallow, burrowing owl, purple martin or tricolored blackbird.

Valley elderberry longhorn beetle is a federal-threatened species that occurs in association with live elderberry shrubs. Valley elderberry longhorn beetle has no potential for occurring within the study area due to the absence of elderberry shrubs.

RECOMMENDATIONS

Aquatic Resources

The study area has no areas of ponding water or prolonged saturation. No aquatic land cover types (such as vernal pools, swales, seasonal wetlands, marsh, streams/creeks, open water, or riparian habitats) are present in the study area. Because there are no aquatic resources, no Clean Water Act permits (Section 404 or Section 401) will be required.

Streams, Pond, and Riparian Habitat

No streams, ponds or riparian habitat are present on the site. Thus, no Lake & Streambed Alteration Agreement (LSAA) will be required from the California Department of Fish and Wildlife (CDFW).

Tree Conservation

In the County of Sacramento, a Tree Pruning or Tree Removal Permit is required to prune or remove any public tree and certain private trees. Public Trees are those that occur on any County owned land (parks, building grounds, etc.) and/or within Right-of-Way situations. Privately owned trees also require a tree permit in accordance with Zoning Code Regulations and the County's Tree Preservation and Protection Ordinance".

It is recommended that a certified arborist be consulted regarding compliance with the County Tree Ordinance, and/or that consultation with the County Planning Department take place.

Special-Status Plants

The study area contains no suitable habitats for special-status plant species that may occur in the region. No further studies are recommended.

Special-Status Wildlife

The study area contains no suitable habitats for special-status animal species that may occur in the region. No further studies are recommended.

Nesting Birds

The site may provide suitable nesting habitat for bird species protected by the Migratory Bird Treaty Act. Take of any 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, or begin outside of the nesting season and carry on into the 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 City and the California Department of Fish and Wildlife (CDFW) may be warranted.

REFERENCES AND OTHER RESOURCES

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Appendix A.
Plant Species Observed Within the Gibbons Drive Study Area

Appendix A

5601 Gibbons Dive - Plants Observed August 9, 2022

Angiosperms - Dicots

Araliaceae - Ginseng Family

**Hedera helix* English ivy

Asteraceae (Compositae) - Sunflower Family

**Carduus pycnocephalus* Italian thistle
**Centaurea solstitialis* Yellow starthistle
**Cichorium intybus* Chicory
**Cirsium vulgare* Bull thistle
Erigeron canadensis Canadian horseweed
**Helminthotheca echinoides* Bristly ox-tongue
**Hypochaeris glabra* Smooth cat's-ear
**Lactuca serriola* Prickly lettuce
**Leontodon saxatilis* Long-beaked hawkbit
**Logfia gallica* Narrowleaf cottonrose
**Sonchus asper subsp. asper* Prickly sow-thistle
**Tragopogon porrifolius* Common salsify

Brassicaceae (Cruciferae) - Mustard Family

**Hirschfeldia incana* Short-podded mustard
**Raphanus sativus* Wild radish

Convolvulaceae - Morning-Glory Family

**Convolvulus arvensis* Bindweed

Euphorbiaceae - Spurge Family

Croton setiger Turkey mullein

Fabaceae (Leguminosae) - Legume Family

**Medicago polymorpha* California burclover
**Trifolium hirtum* Rose clover
**Vicia villosa* Winter vetch

Fagaceae - Oak Family

Quercus agrifolia Coast live oak
Quercus lobata Valley oak
Quercus wislizeni var. wislizeni Interior live oak

Geraniaceae - Geranium Family

**Erodium botrys* Broad-leaf filaree
**Geranium dissectum* Cut-leaf geranium

Lamiaceae (Labiatae) - Mint Family

**Lamium amplexicaule* Deadnettle

Moraceae - Mulberry Family

**Morus alba* White mulberry

Oleaceae - Olive Family

**Ligustrum lucidum* Chinese privet
**Olea europaea* Olive

Onagraceae - Evening Primrose Family*Epilobium brachycarpum*

Summer cottonweed

Phytolaccaceae - Pokeweed Family**Phytolacca americana var. americana*

Pokeweed

Plantaginaceae - Plantain Family**Plantago lanceolata*

English plantain

Polygonaceae - Buckwheat Family**Polygonum aviculare*

Common knotweed

**Rumex crispus*

Curly dock

Rosaceae - Rose Family**Pyracantha sp.*

Pyracantha

**Rosa sp.*

Wild rose

**Rubus armeniacus*

Himalayan blackberry

Solanaceae - Nightshade Family*Solanum americanum*

American black nightshade

Ulmaceae - Elm Family**Ulmus parvifolia*

Chinese elm

Verbenaceae -**Vitex agnus-castus*

Lilac chastetree

Vitaceae - Grape Family**Vitis vinifera*

Cultivated grape

Angiosperms -Monocots

Juncaceae - Rush Family*Juncus bufonius*

Toad rush

Poaceae (Gramineae) - Grass Family**Aira caryophylla*

Silver European hairgrass

**Avena fatua*

Wild oat

**Briza minor*

Small quaking grass

**Bromus diandrus*

Ripgut grass

**Bromus hordeaceus*

Soft chess

**Cynodon dactylon*

Bermudagrass

**Festuca myuros*

Rattail sixweeks grass

**Festuca perennis*

Italian ryegrass

**Hordeum murinum*

Wall barley

**Paspalum dilatatum*

Dallis grass

**Phalaris aquatica*

Harding grass

**Poa annua*

Annual bluegrass

Appendix B.
Potentially-Occurring Special-Status Plants in the Region of the Gibbons Drive Study
Area

Appendix B

5601 Gibbons Drive - Special-status Plants Considered

Family	Taxon	Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
Alismataceae						
	<i>Sagittaria sanfordii</i>		Fed: -	May-October	Marshes, shallow freshwater.	None. Site lacks wetlands.
	Sanford's arrowhead		State: -			
			CNPS: Rank 1B.2			
Campanulaceae						
	<i>Downingia pusilla</i>		Fed: -	March-May	Vernal pools and seasonal wetlands.	None. Site lacks wetlands.
	Dwarf downingia		State: -			
			CNPS: Rank 2B.2			
	<i>Legenere limosa</i>		Fed: -	April-June	Vernal pools and seasonal wetlands.	None. Site lacks wetlands.
	Legenere		State: -			
			CNPS: Rank 1B.1			
Juncaceae						
	<i>Juncus leiospermus ahartii</i>		Fed: -	March-May	Vernal pools.	None. Site lacks wetlands.
	Ahart's dwarf rush		State: -			
			CNPS: Rank 1B.2			
Plantaginaceae						
	<i>Gratiola heterosepala</i>		Fed: -	April-August	Vernal pools.	None. Site lacks wetlands.
	Bogg's Lake hedge-hyssop		State: CE			
			CNPS: Rank 1B.2			
Poaceae (Gramineae)						
	<i>Orcuttia tenuis</i>		Fed: FT	May-September	Vernal pools.	None. Site lacks wetlands.
	Slender Orcutt grass		State: CE			
			CNPS: Rank 1B.1			

Appendix B

5601 Gibbons Dr. - Special-status Plants Considered

Family	Taxon	Common Name	Status*	Flowering Period	Habitat	Probability on Project Site
	<i>Orcuttia viscida</i>		Fed: FE	May-June	Vernal pools.	None. Site lacks wetlands.
	Sacramento Valley Orcutt grass		State: CE			
			CNPS: Rank 1B.1			
Polemoniaceae						
	<i>Navarretia myersii myersii</i>		Fed: -	May-May	Vernal pools.	None. Site lacks wetlands.
	Pincushion navarretia		State: -			
			CNPS: Rank 1B.1			

*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 C.
Potentially-Occurring Special-Status Animals in the Region of the Gibbons Drive
Study Area

Appendix C

5601 Gibbons Drive Special-Status Animals Considered

	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.	None. Site lacks wetlands.
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.	None. Site lacks wetlands.
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. Elderberry not present onsite.
Monarch butterfly <i>Danaus plexippus</i>	Fed: FC State: - Other: *	Monarchs west of Rockies generally migrate to and overwinter along California coast, including those tagged in Oregon, Washington, Idaho, Arizona, and Nevada. Breeding areas must have milkweed for egg laying.	None. No suitable habitat. No milkweeds onsite.
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	None. Site lacks aquatic resources.
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 lacks aquatic resources.

Appendix C

5601 Gibbons Drive Special-Status Animals Considered

	Status*	Habitat	Probability on Project Site
Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	Fed: FE 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 lacks aquatic resources.
Western spadefoot <i>Spea hammondi</i>	Fed: - State: CSC Other: -	Found primarily in grassland habitats, but may occur in valley and foothill woodlands. Requires vernal pools, seasonal wetlands, or stock ponds for breeding and egg laying. Prefers more turbid pools for predator avoidance.	None. Site lacks wetlands.
Reptiles			
Western pond turtle <i>Actinemys marmorata</i>	Fed: - State: - Other: SSC	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying.	None. Site lacks aquatic resources.
Birds			
White-tailed kite <i>Elanus leucurus</i>	Fed: - State: - Other: CFP	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. Urbanized area.
Cooper's hawk <i>Accipiter cooperii</i>	Fed: - State: - Other: WL	Breeds in deciduous, mixed, and coniferous forests. Becoming more common in suburban and urban areas. Occurs in open to interrupted woodland.	None. Urbanized area.
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. Urbanized area.
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. Urbanized area.

Appendix C

5601 Gibbons Drive Special-Status Animals Considered

	Status*	Habitat	Probability on Project Site
Burrowing owl <i>Athene cunicularia</i>	Fed: - State: - Other: SSC	Found in annual grasslands. Nests in burrows dug by small mammals, primarily ground squirrels.	None. Urbanized area.
Purple martin <i>Progne subis</i>	Fed: - State: CSC 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. Urbanized 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 habitat.
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CT Other: SSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	None. Urbanized area.

*Status	Federal: FE - Federal Endangered FT - Federal Threatened FPE - Federal Proposed Endangered FPT - Federal Proposed Threatened FC - Federal Candidate FPD - Federal Proposed for Delisting	State: CE - California Endangered CT - California Threatened CR - California Rare CC - California Candidate CFP - California Fully Protected CSC - California Species of Special Concern	Other: 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
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