BIOLOGICAL RESOURCES ASSESSMENT FOR THE ±1.7-ACRE 48TH AVENUE STUDY AREA SACRAMENTO COUNTY, CALIFORNIA

Prepared for:

BG Builders
8841 Williamson Drive, #10
Elk Grove, CA 95624

Prepared by:

Salix consulting, inc.
11601 Blocker Drive, Ste. 100
Auburn, California 95603
(530) 888-0130

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Biological Resources Assessment for the ±1.7-ACRE 48TH AVENUE STUDY AREA

INTRODUCTION

Project Location

Salix Consulting, Inc. (Salix) has prepared a Biological Resources Assessment for the ±1.7-acrestudy area located at 3945 48th Avenue in unincorporated Sacramento County, California. The approximate coordinates for the center of the property are 38°30'30.09" North and 121°27'40.67" West. It is situated within Section 32 Township 8N Range 5E of the Sacramento East, California 7.5-minute USGS topographic quadrangle (Figure 1). The study area occurs within the *South Sacramento Habitat Conservation Plan* (SSHCP or Plan) area, inside of an Urban Development Area (UDA) and outside of any Preserve Planning Units (PPUs).

Project Setting

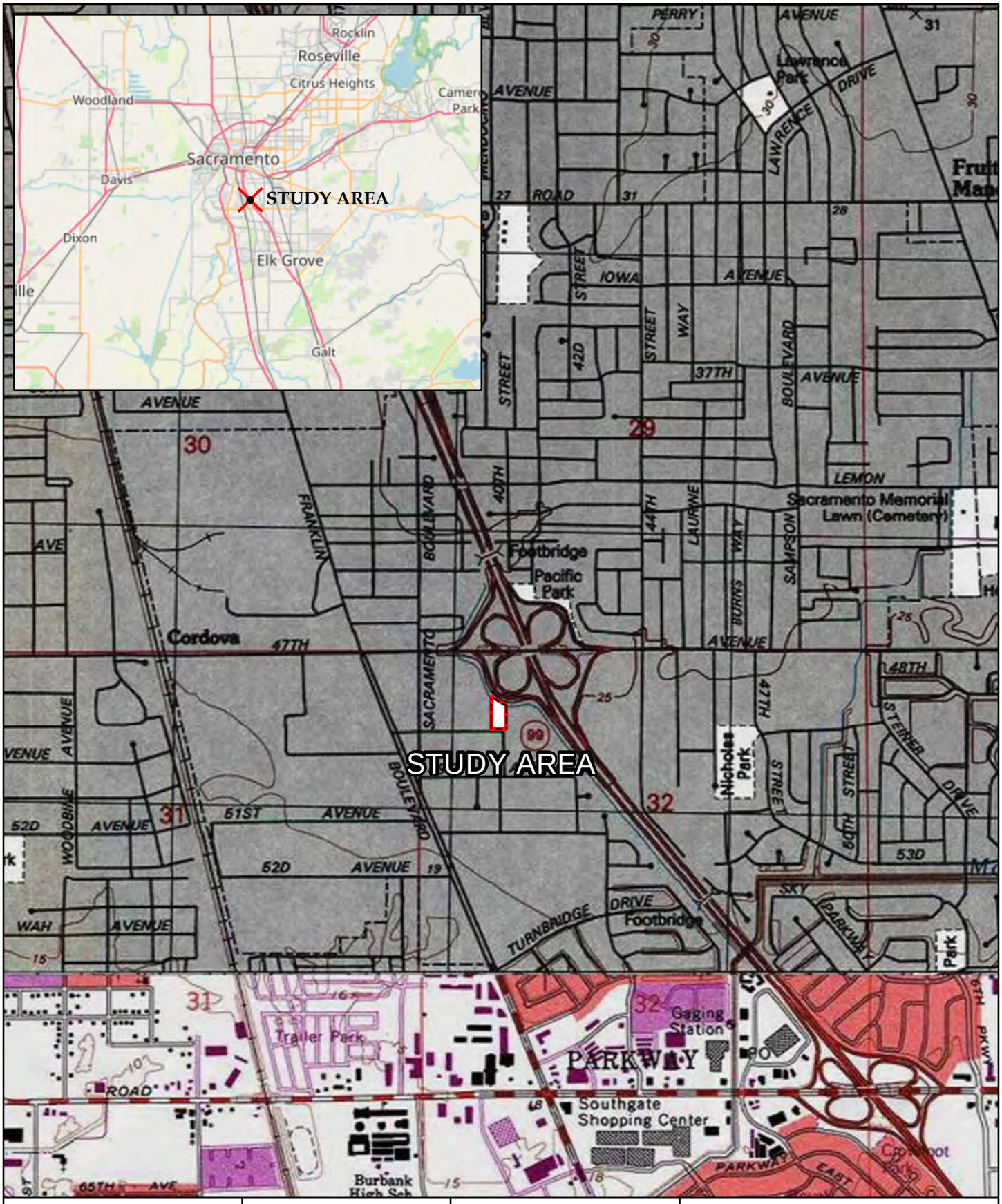
The study area is located in the Central Valley, in an urbanized area along the Highway 99 corridor of unincorporated Sacramento County. The study area site is a vacant lot, bordered on the east by a vacant lot, residential to the west and south (48th Avenue) and Highway 99 to the north. The northern boundary is bordered by a drainage channel, tributary to Morrison Creek, but this drainage in not included in this study. The elevation at the approximate center of the study area is 17 feet, and the site is almost flat (Figure 2). The site is disturbed in an ongoing manner by general human use (homeless encampments).

Background

The SSHCP allows for a streamlined federal and state permitting process for development projects or activities authorized through the Plan (Covered Activities) while still ensuring the protection of habitat, open space, and agricultural lands.

Under the SSHCP, Sacramento County and its partners (land use authorities) are issued Incidental Take Permits (ITPs) by U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). Through these permits, land use authorities may authorize Covered Activities that could result in the incidental take of certain State or Federal listed species (Covered Species).

The SSHCP also includes the Aquatic Resources Program, which streamlines Clean Water Act Section 404 and 401 permitting under the U.S. Army Corps of Engineers and the Central Valley Regional Water Quality Control Board.



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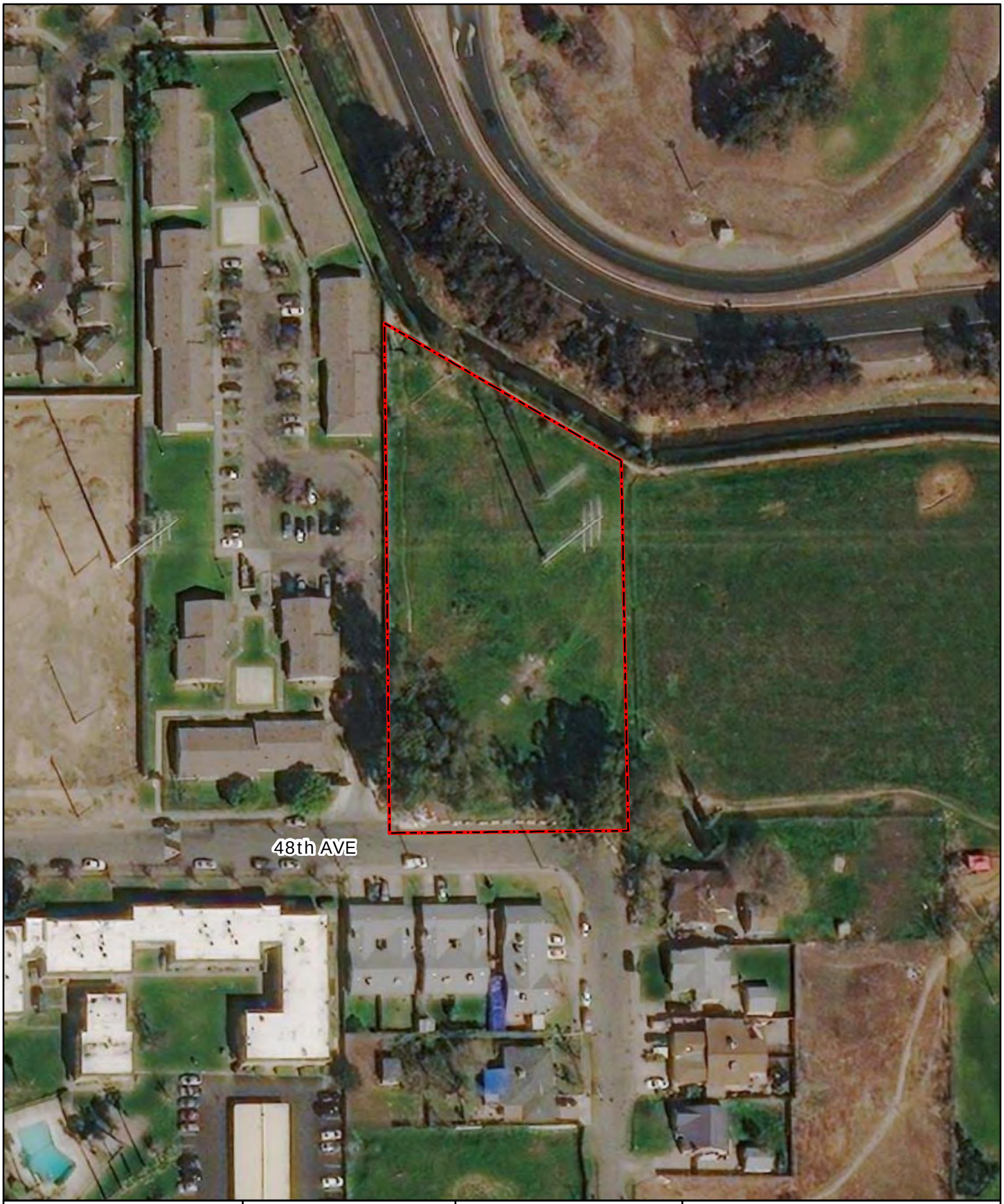
Source Maps: USGS Topographic Map
Sacramento East Quad 1:24,000
S32 T8N R5E

Figure 1

SITE AND VICINITY MAP

48th Ave

Sacramento County, CA



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N

0 50 100

Feet

Study Area
(±1.35 acres)

Imagery: 3-4-21 MAXAR

Figure 2

AERIAL MAP

48th Ave

City of Sacramento, CA

Objectives of Biological Resources Assessment

- Identify and describe the biological communities/land cover types present in the study area (consistent with definitions in the SSHCP);
- Evaluate and identify if any sensitive habitats or special-status plant and animal species covered under the SSHCP occur or could occur on the site;
- Determine if aquatic resources are present, and
- Provide conclusions and recommendations.

METHODS

Literature Review

For this analysis, Salix biologists reviewed the SSHCP, recent and historic aerial photographs, USGS maps, engineering exhibits, and site maps for the study area. Standard publications on life history, habitat requirements, and distribution of regionally occurring plant and animal species were reviewed as needed for identification and to determine the likelihood of occurrence for special status species. They include published books, field guides, the California Wildlife Habitats Relationships Program, and SSHCP Species Accounts. Information on soils of the study area was obtained from the U.S. Department of Agriculture – National Resource Conservation Service's online Web Soil Survey (NRCS 2022).

Special-Status Species Review

Through ITPs issued by USFWS and CDFW, the SSHCP provides take authorization for 28 special-status species (Covered Species), 11 of which are currently listed as threatened or endangered under the California Endangered Species Act (CESA) or the Federal Endangered Species Act (FESA). These include eight plant species and 20 animal species. Prior to conducting the field assessment, the California Natural Diversity Database (CDFW 2022) was queried to identify known and recorded occurrences of SSHCP Covered Species in or around the study area. The six-quadrangle search area included the Sacramento East, Florin, Sacramento West, Carmichael, Clarksburg, and Elk Grove USGS quadrangles. Details of these occurrences were reviewed along with the species accounts listed under Appendix B of the SSHCP to provide information regarding potential habitat for any of the Covered Species.

Field Assessments

A field assessment of the study area was conducted by Salix Principal Biologist Jeff Glazner on January 14, 2022, to characterize existing conditions, to assess the potential for sensitive plant and wildlife resources to occur, and to determine if aquatic resources were present onsite. Biological communities were mapped and assessed for the potential to support any of the 28 special-status species covered by the SSHCP as well as any other special-status species not covered under the Plan. Plants and animals observed were documented, and ground photos were taken.

Plants observed are listed in the ***Landcover Types and Biological Communities*** section below. Wildlife observed are listed within 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.

SURVEY AND LITERATURE SEARCH RESULTS

Climate

The study area has a Mediterranean climate with mild to cool, wet winters and hot, dry summers. The warm season in the region lasts from May to September, with average daily high temperatures remaining above 79°. The hottest months are July and August, with high temperatures each month averaging 93° and 92°, respectively. The low temperatures for each of these two months averages 58°. The cool season lasts from November to March, with average daily high temperatures remaining below 65°. The coolest months are December and January, each averaging 54° in high temperature and 38° in low temperature. Annual precipitation averages 17.24 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 (Western Regional Climate Center).

Soils

One soil unit has been mapped within the study area: San Joaquin-Urban land complex, 0 to 2 percent slopes (NRCS 2022), as illustrated in Figure 3 and described below.

San Joaquin

The **San Joaquin component** makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on valleys, low terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer, duripan, is 28 to 54 inches. The 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. 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 1 percent. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria.

Urban land

The **Urban Land component** makes up 35 percent of the map unit. The Urban land is a miscellaneous area.

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N

0 50 100

Feet

Study Area (±1.35 acres)

Imagery: 3-4-21 MAXAR

Figure 3

SOILS MAP

48th Ave

City of Sacramento, CA

Hydrology

The site occurs in the Lake Greenhaven-Sacramento River HUC12 (180201630701) watershed part of the greater Lower Sacramento HUC8 (18020163) watershed. Water on site trends north towards an unmanned stream. This stream flows southeast for approximately 1-mile before entering Morrison Creek. Morrsion Creek flows southwest for 8-miles before entering the Sacramento River.

Land Cover Types and Biological Communities

The study area is mapped as Valley Grassland land cover type (Figure 4) with a eucalyptus grove embedded in the grassland. A small sliver of 48th Avenue (a paved road) is included in the study area. Acreages are summarized in Table 1, and representative ground photos of the property are presented in Figures 5a-5c.

Table 1.
Landcover Types Present within the
3945 48th Avenue Study Area

Classification	Approximate Acreage
Valley Grassland (with 0.27 acre eucalyptus grove embedded)	1.31
Major Road (48th Avenue)	0.04
Total	**1.35**

Valley Grassland

The SSHCP characterizes Valley Grassland in the Plan Area as:

> "…annual herbaceous plant community now characterized mostly by naturalized annual grasses. Generally, its composition in the Plan Area varies with geographic, and land use factors, such as rainfall, temperature, elevation, slope, aspect, grazing, and other herbivory (e.g., livestock, wildlife, rodent, songbird, and insect use), and fire frequency and duration. In the Plan Area, Valley Grassland is dominated by naturalized herbaceous annual forbs."

The valley grassland in the study area is characterized by common weedy species including soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), wild oats (*Avena fatua*), and Italian ryegrass (*Festuca perennis*). Common herbaceous forbs include the redstem filaree (*Erodium cicutarium*), Mediterranean hoary mustard (*Hirschfeldia incana*), and wild radish (*Raphanus sativus*). Most herbaceous species were in seedling form and not yet identifiable.

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N

0 37.5 75

Feet

Study Area (±1.35 acres)

Imagery: 3-4-21 MAXAR

Figure 4

LANDCOVER TYPES

48th Ave

City of Sacramento, CA

Eucalyptus trees are planted on the property, primarily in the southern area. Most of the trees are blue gum (*Eucalyptus globulus*), with some red gum (*Eucalyptus camaldulensis*).

Aquatic Resources

The study area was evaluated for the presences of aquatic resources. The study area is essentially flat, and no area shows signs of ponding 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. The channel adjacent to the north is an aquatic resource but is not a part of the study area.

Wildlife Occurrence and Use

Due to the study area's location in a congested urban area, its generally disturbed nature, and the presence of frequent human activity, quality habitat and species diversity is lacking. Woody vegetation is mostly limited to the southern area of the site where a grove of mature eucalyptus grows. The site is utilized by many common animal species adapted to urban settings. Species observed include house sparrow, American crow, mourning dove, European starling, scrub jay, American robin, and house finch. Other common urban species that likely utilize the site include striped skunk, opossum, field mice and ground squirrels.

Looking northwest over property.
Photo date 1-14-22

Looking north over property from near southeast corner.
Photo date 1-14-22

Salix consulting, inc.

Figure 5a

SITE PHOTOS

48th Avenue

Sacramento County, CA

Looking west along southern fenceline toward large eucalyptus trees in southwest corner of site.
Photo date 1-14-22

Looking north along western fenceline from near southwest corner.
Photo date 1-14-22

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Figure 5b

SITE PHOTOS

48th Avenue

Sacramento County, CA

Looking north at northern fenceline. Drainage channel beyond fence.
Photo date 1-14-22

Looking east along southern fenceline and 48th Avenue.
Photo date 1-14-22

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Figure 5c

SITE PHOTOS

48th Avenue

Sacramento County, CA

Special-Status Species

Eight (8) special-status plant species and twenty (20) special-status animal species are identified as "Covered Species" under the SSHCP. The CNDDB was queried and reviewed as described above. Details of these reported occurrences were reviewed along with the SSHCP species accounts, and this information, along with the best professional judgment of Salix biologists were all used to assess habitat within the study area during the field survey and determine the potential for any of the Covered Species to occur. Figure 6a shows the reported occurrences of SSHCP-covered plant species within a five-mile radius of the study area, and Figure 6b shows the same for reported occurrences of SSHCP-covered animal species.

Plants

Eight (8) special-status plant species are covered under the SSHCP and are listed below. Two of these species were identified as occurring within a five-mile radius of the study area (Figure 6a) and are marked with an asterisk (*) in the list below.

- Ahart's Dwarf Rush (*Juncus leiospermus* var. *ahartii*)
- Boggs Lake Hedge-Hyssop (*Gratiola heterosepala*)
- Dwarf Downingia (*Downingia pusilla*)
- Legenere (*Legenere limosa*)*
- Pincushion Navarretia (*Navarretia myersii*)
- Sacramento Orcutt Grass (*Orcuttia viscida*)
- Slender Orcutt Grass (*Orcuttia tenuis*)
- Sanford's Arrowhead *(Sagittaria sanfordi*)*

All eight (8) of these SSHCP covered plant species were determined to have no potential for occurring onsite due to the absence of suitable wetland habitat (such as vernal pools, swales, seasonal wetlands, rivers, streams, ponds, or marshes) and due to the high use and ongoing disturbance of the site.

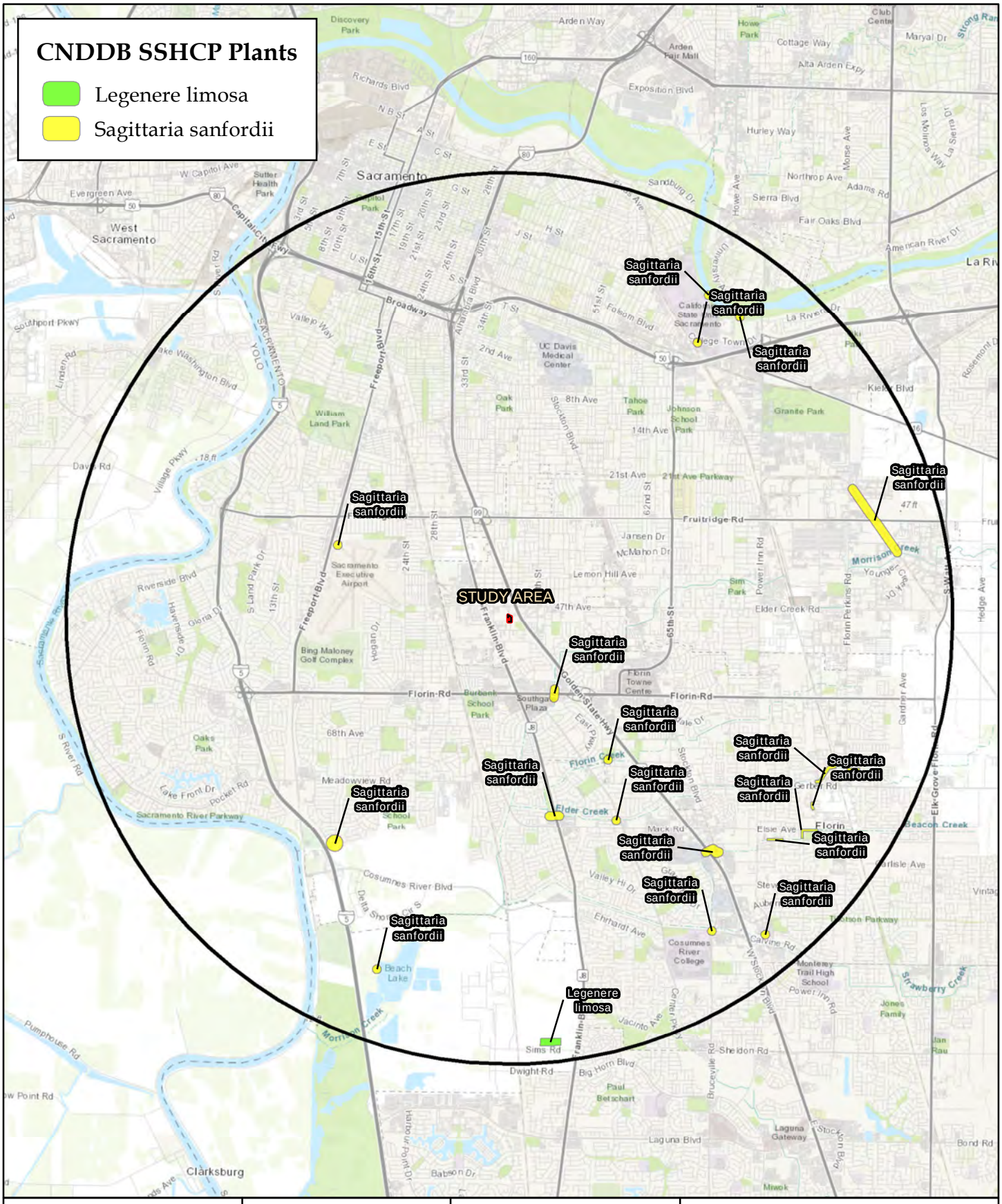

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Figure 6a

CNDDB SSHCP PLANTS

48th Ave

City of Sacramento, CA

Animals

Of the 20 special-status animal species covered under the SSHCP, 13 were identified as occurring within a five-mile radius of the study area (Figure 6b) and are marked with an asterisk (*) in the discussions below.

None of the eight (8) aquatic invertebrate, reptile, or amphibian species covered under the SSHCP were determined to have any potential to occur onsite because the site lacks suitable aquatic habitat (such as vernal pools, seasonal wetlands, streams, marshes, sloughs, ponds) and due to the high use and ongoing disturbance of the site. These include:

- California Tiger Salamander (*Ambystoma californiense*)
- Giant Gartersnake (*Thamnophis gigas*)*
- Mid-Valley Fairy Shrimp (*Branchinecta mesovallensis*)*
- Ricksecker's Water Scavenger Beetle (*Hydrochara rickseckeri*)
- Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)*
- Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)*
- Western pond turtle (*Actinemys marmorata*)*
- Western spadefoot (*Spea hammondii*)

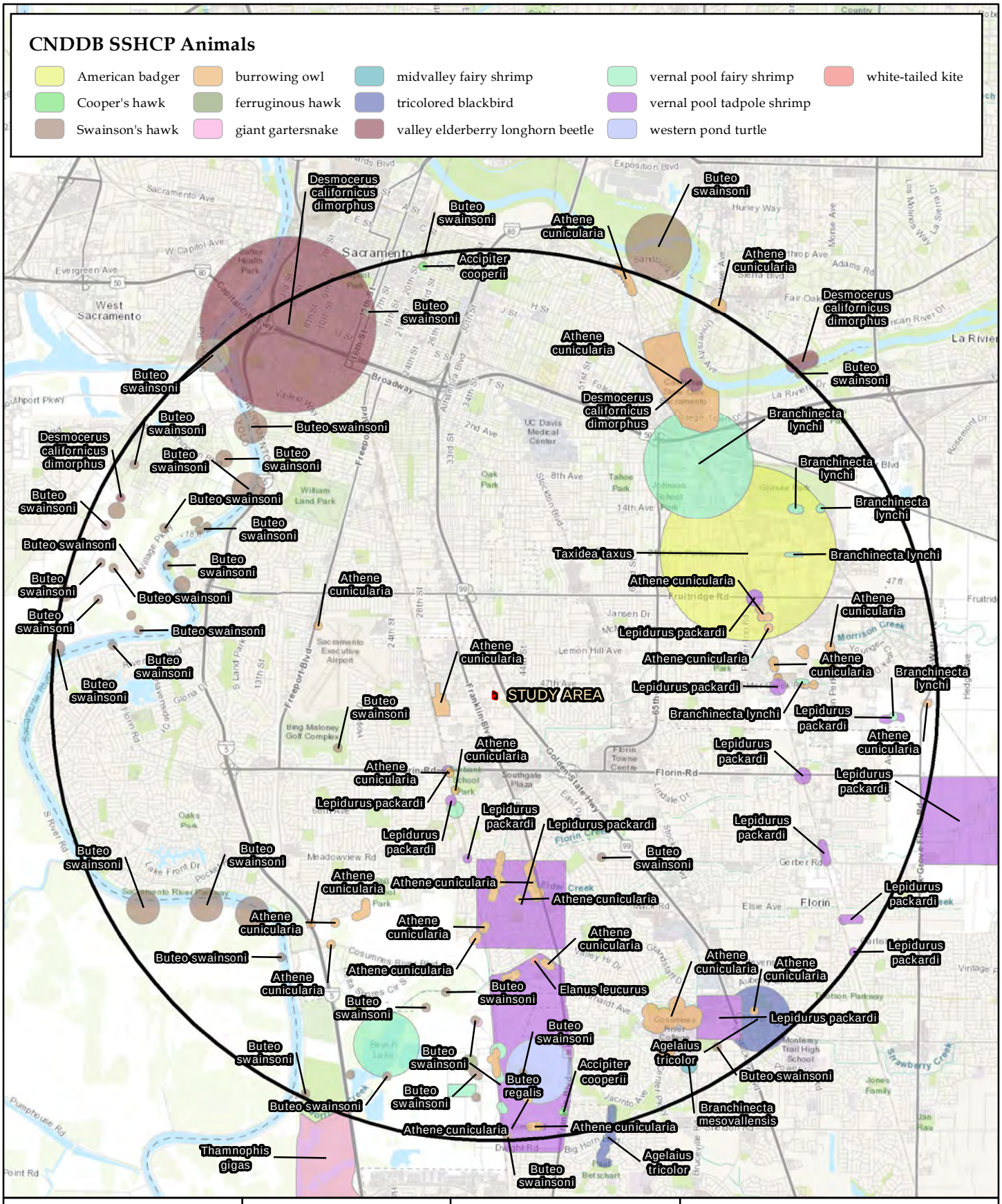
Five (5) of the bird species covered under the SSHCP were determined to have no potential to occur within the study area due to the site's lack of substantial woody vegetation or other suitable nesting and roosting habitat (such as marshes, riparian areas, dense bulrush/cattails/brambles, rock outcrops, cavities underneath rubble or other tunnel-like structures), and its location in a disturbed urban area. These include:

- Northern harrier (*Circus cyaneus*)
- Cooper's Hawk (*Accipiter cooperii*)*
- Greater Sandhill Crane (*Grus canadensis tabida*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Tricolored blackbird (*Agelaius tricolor*)*

White-tailed kite (*Elanus leucurus**) is unlikely to nest in the tall eucalyptus but cannot be ruled out as a possibility.

The western burrowing owl (*Athene cunicularia hypugaea**) is highly unlikely to occur in the study area due to the small size of the area, its proximity to urban activity and the lack of burrows. Owls that would take up residency at this location would be eliminated by domestic pets and the high human activity.

The site is not suitable nesting habitat for the Swainson's Hawk (*Buteo swainsoni*)*, due to the high amount of human activity directly below the tall trees. Suitable swainson's hawk nesting habitat is located in the nearby area, though. Ferruginous hawk (*Buteo regalis*)* is a winter visitor that does not regularly nest in California. Although the study



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N

0 5,000 10,000

Feet

5-Mile Radius

Figure 6b

CNDDB SSHCP ANIMALS

48th Ave

City of Sacramento, CA

area may provide marginal foraging habitat for these two species, because it occurs in a highly disturbed urban area, neither species would not likely utilize the site.

The American badger (*Taxidea taxus*)* has no potential to occur within the study area due to the lack of suitable habitat (large, undisturbed areas containing friable soils and uncultivated ground) and because the site occurs in a highly disturbed urban area.

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) has no potential to occur because the site lacks any occurrences of its host plant, the elderberry shrub.

The western red bat (*Lasiurus blossevillii*) was determined to have no potential to occur because the site lacks suitable roosting sites.

In summary, all eight (8) special-status plant species and the 20 special-status animal species covered under the SSHCP, including two (2) plant species and thirteen (13) animal species that are known from within a five-mile radius (Figures 6a and 6b), require habitats that do not occur within the study area, were determined to have little or no potential for occurring onsite. Of these, the only potential would be nesting birds high in the eucalyptus trees. A nesting season survey would be needed to definitively determine presence or absence.

Because the study area occurs in a disturbed, busy urban area, and the site has human activity on it on a daily basis, it also does not provide suitable habitat for other special-status plant and animals species not included in the list of species covered under the SSHCP.

RECOMMENDATIONS

Aquatic Resources

The study area does not contain any areas or features that may qualify as aquatic resources. Therefore, Clean Water Act permits (Section 404 from U.S. Army Corps of Engineers and Section 401 Water Quality Certification from Regional Water Quality Control Board) would not be required and do not need to be obtained through the SSHCP Aquatic Resources Program (ARP).

Streams, Pond, and Riparian Habitat

No streams or riparian areas are present within the study area. Thus, there will be no impacts to the bed, bank, or channel of streams or ponds, and no Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW) would be required.

SSHCP Covered Plants

Eight (8) special-status plant species covered under the SSHCP were determined to have no potential to occur within the study area due to the lack of suitable habitats (such as vernal pools or other wetlands) or due to the lack of soil types known to support those species. No further studies are recommended.

SSHCP Covered Wildlife

The site was assessed for its potential to provide habitat for twenty (20) special-status animal species covered under the SSHCP. None, except white tailed kite, were identified as having potential to occur in the study area due to the lack of suitable habitat. No aquatic resources were present that would support covered aquatic species. Thus, 19 of the 20 special-status covered animal species have no potential to inhabit the study area. The study area is too small to provide foraging habitat for ferruginous hawk and Swainson's hawk, nor does it provide nesting habitat for the Swainson's hawk.

Nesting Raptors and Migratory Birds

White-tailed kite (*Elanus leucurus**) is unlikely to nest in the tall eucalyptus but cannot be ruled out as a possibility. Only minimal nesting habitat is present for nesting of common urban-adapted bird species that may be protected by the Migratory Bird Treaty Act (MBTA). If project initiation occurs at any time during the nesting season (Feb-Aug), a pre-construction survey should be conducted prior to ground disturbance.

General Avoidance and Minimization Measures

Sections 5.4.1 and 5.4.2 of the SSHCP describe general Avoidance and Minimization Measures (AMMs) that should be implemented to avoid or minimize the effects of Covered Activities on SSHCP land cover types and Covered Species. This section of the Plan defines construction best management practices, measures to avoid and minimize impacts to watershed hydrology, and measures to avoid or minimize effects of Covered Activities on specific SSHCP Species. Approval of any Covered Activity requiring ITP coverage under the SSHCP is dependent on demonstration that the required AMMs have been properly incorporated into the project. These sections of the SSHCP should be reviewed to identify and implement any relevant AMMs.

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