APPENDIX F
BIOLOGICAL RESOURCES EVALUATION

Biological Resources Evaluation

7-Eleven Convenience Store & Fuel Station, Northgate Boulevard and Rosin Court

City of Sacramento, California

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EXECUTIVE SUMMARY

This report presents the results of a Biological Resources Evaluation (BRE) prepared for the 7-Eleven Convenience Store and Fuel Station, Northgate Blvd. and Rosin Ct. Project. The project site (hereafter referred to as "Study Area") is a 1.43-acre parcel [Assessor's Parcel Number (APN) 250-0010-115-0000] located in the northwest corner of the intersection of Northgate Blvd. and Rosin Ct., at 3801 Northgate Blvd. in the City of Sacramento, California. The proposed project includes construction of a 4,761 square foot convenience store building, fuel pumps, 23 parking spaces, and landscaping.

The purpose of this BRE is to provide the project applicant, the City of Sacramento and resource agencies with information on the current site conditions, habitat types present, and potential for impacts to special-status species and their habitats that could occur as a result of the proposed project. This BRE describes the general biological resources in the Study Area, assesses the suitability of the site to support special-status species and sensitive vegetation communities or habitats, discusses potential impacts to special-status species and/or protected biological communities, and provides recommended avoidance and minimization measures.

The Study Area is comprised of a vacant lot located in a commercial area. The zoning designation of the project parcel and the surrounding parcels to the north, south, east, and west is HC-R, Highway Commercial Zone. We estimate that roughly half of the Study Area has been scraped, graded, or otherwise subjected to ground disturbance over roughly the last 5 years based on Google Earth aerial imagery. Habitats/land covers in the Study Area include ruderal/disturbed (1.30 acres) and developed (0.13 acre).

Potential impacts to biological resources as a result of the proposed project include:

- Potential impacts to marginal nesting and foraging habitat for burrowing owl;
- Loss of low quality foraging habitat for Swainson's hawk and potential impacts to Swainson's hawk nesting within a 0.25-mile radius of the Study Area (no trees are present in the Study Area); and,
- Potential impacts to other nesting migratory birds and raptors.

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1.0 INTRODUCTION

Stringer Biological Consulting, Inc. (SBC) has prepared this Biological Resources Evaluation Report (report) for the proposed 7-Eleven Convenience Store & Fuel Station, Northgate Boulevard and Rosin Court Project. The purpose of this BRE is to provide the project applicant, the City of Sacramento, and other interested parties with information on the current site conditions, habitat types present, and potential for impacts to special-status species and their habitats that could occur as a result of the proposed project. This BRE describes the general biological resources on the property, assesses the suitability of the site to support special-status species and sensitive vegetation communities or habitats, discusses potential impacts to special-status species and/or protected biological communities, and provides recommended avoidance and minimization measures.

1.1 Project Location and Description

The project parcel (APN 250-0010-115-0000), hereafter referred to as the “Study Area”, is approximately 1.43 acres. The Study Area is located in the northwest corner of the intersection of Northgate Blvd. and Rosin Ct. at 3801 Northgate Blvd. in the City of Sacramento, California (Attachment A, Figure 1). The Study Area is in the southeastern portion of the Natomas Basin. Steelhead Creek, which forms the eastern boundary of the Natomas Basin, is roughly 1,150 feet east of the Study Area and Interstate 80 is located roughly 1,200 feet north of the Study Area. The Study Area is located in Section 18 of Township 09 North and Range 05 East, Mount Diablo Principal Meridian, and is depicted on the U.S. Geological Survey (USGS) “Rio Linda, CA”, 7.5-minute topographic quadrangle map (Attachment A, Figure 2). The approximate center of the Study Area is at latitude 38°38'12.04"N and longitude 121°28'38.27"W, NAD 83.

The proposed project includes construction of a 4,761 square foot convenience store building, fuel pumps, 23 parking spaces, and landscaping. The latest available conceptual site plan for the project is included as Figure 6 in Attachment A.

2.0 METHODS:

2.1 Biological Studies

Biological studies conducted in support of this report include a special-status species desktop evaluation and a biological reconnaissance survey that included a wetland assessment. The special-status species desktop evaluation was conducted in order to assemble a list of regionally-occurring special-status species with the potential to occur in the project region and/or be impacted by proposed projects in the region. The biological reconnaissance survey was conducted to document the site conditions, flora and fauna present, and habitats/ landcover types in and adjacent to the Study Area and to determine whether any of the regionally-occurring special-status species have the potential to be impacted by the proposed project activities.

Special-Status Species Evaluation

Regulations pertaining to the protection of biological resources in the Study Area are summarized in Attachment B. For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

- listed as endangered or threatened under the Federal Endangered Species Act (FESA; including candidates and species proposed for listing);
- listed as endangered or threatened under the California Endangered Species Act (CESA; including candidates and species proposed for listing);
- designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- designated a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- considered by CDFW to be a Watch List species with potential to become an SSC;
- defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA);
- having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, or 3; or,
- a Covered Species in the Natomas Basin Habitat Conservation Plan.

The species meeting the criteria above are collectively referred to as special-status species for the purposes of this report.

The special-status species evaluation included obtaining lists of special-status species and sensitive natural communities with the potential to occur in the project region from the following sources: the U.S. Fish and Wildlife Service (USFWS) online list of federally-listed special-status species with the potential to occur in, or be affected by projects in the Study Area (USFWS 2025) and the list of reported occurrences of special-status species in the California Natural Diversity Database (CNDDB; CDFW 2025) and the California Native Plant Society (CNPS; CNPS 2025) database for the "Verona, Pleasant Grove, Roseville, Citrus Heights, Rio Linda, Taylor Monument, Sacramento West, Sacramento East, and Carmichael, CA" USGS 7.5-minute topographic quadrangles (quads). Results of these queries are included in Attachment C. Special status species with the potential to occur in the project vicinity were compared with the habitats on site and other factors such as soil types in the Study Area and elevational and geographic ranges of the special-status species to determine if a species has the potential to occur within the Study Area.

Biological Reconnaissance Survey

SBC Principal Biologist Stephen Stringer, M.S., and an SBC Biological Technician conducted a biological reconnaissance survey on September 25, 2025. The survey was conducted between the hours of 10:00 am and 2:00 pm. The weather was mostly sunny and warm with a temperature ranging from 80-83 degrees Fahrenheit. The biological reconnaissance survey area consisted of walking pedestrian transects of the entire approximately 1.5-acre Study Area. Site conditions and habitats were assessed, and the site was searched for the presence of special-status species, habitats for special-status species, and sensitive natural communities. Trees in and adjacent to the Study Area were searched for bird nests or sign of nesting birds. The Study Area was also searched for the presence of mammal burrows, burrowing owls, or burrowing owl sign (pellets, feathers, whitewash) near mammal burrow openings. Additionally, a

complete inventory of vascular plants identifiable at the time of the survey was conducted and all plant and animal species observed in the Study Area were documented. Attachment D is a list of species observed on the site during the survey. Following the field survey, the potential for each species identified in the database query to occur within the Study Area was determined based on the site survey, soils, habitats present within the Study Area, and species-specific information, as documented in Appendix C.

Wetland Assessment

The National Wetlands Inventory Wetlands Mapper online and historic aerial imagery available on Google Earth were reviewed for any sign of potential wetlands prior to the biological reconnaissance survey. During the biological reconnaissance survey, the Study Area was searched for the presence of potential wetlands or other aquatic resources. Vegetation, soils, and hydrologic characteristics were visually assessed by walking meandering transects through the Study Area. The soil was also evaluated for the presence of hydric soil indicators in low points in the topography by digging pits with a shovel and evaluating soil color and looking for redoximorphic features. A formal wetland delineation was not conducted.

Plant Nomenclature

Plant nomenclature in this report is based on the Jepson eFlora (Jepson Flora Project 2025).

2.2 Surveyor Qualifications

Mr. Stringer holds a B.S. and M.S. in Biological Sciences with a focus in Biological Conservation from California State University, Sacramento and has more than 22 years of experience conducting biological and wetland studies in northern and central California. Mr. Stringer holds a U.S. Fish and Wildlife Service Section 10(a)(1)(A) Recovery Permit (ES-141359-4) for federally-listed vernal pool branchiopods and California tiger salamander (Central DPS), a CDFW Specific Use Scientific Collecting Permit (S-230460010-23048-001) for California tiger salamander, special-status vernal pool branchiopods, western spadefoot, and common reptiles and amphibians, a Memorandum of Understanding (MOU) from CDFW for California tiger salamander, a CDFW Rare Plant Voucher Collecting Permit (No. 2081(a)-22-093-V), is an International Society of Arboriculture, Certified Arborist (WE-7129A), and is an instructor for wetland delineation and plant identification courses for the Wetland Training Institute.

2.3 Determination of Potential Impacts

The following thresholds of significance are based on CEQA guidelines. Based on the CEQA guidelines, the proposed project would have a significant impact on biological resources if it would result in any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.0 RESULTS: ENVIRONMENTAL SETTING

3.1 Existing Conditions

The Study Area is located just south of the Northgate Blvd./Interstate 80 interchange in a commercial area. The zoning designation of the project parcel and the surrounding parcels to the north, south, east, and west is HC-R, Highway Commercial Zone. The Study Area is bordered by Kentucky Fried Chicken to the north, Northgate Blvd. and restaurants and hotels to the east, Rosin Ct. and McDonalds to the south, and agricultural land to the west.

The Study Area is comprised of a vacant lot located in a heavily used area due to the adjacent interstate interchange, fast food restaurants, and other establishments. We observed numerous pedestrians walking along the sidewalks adjacent to the Study Area, cars and other vehicles parked adjacent to the Study Area along Rosin Ct., and homeless encampments on the adjacent property across Rosin Ct. to the west. We estimate that roughly half of the Study Area has been scraped, graded, or otherwise subjected to ground disturbance over roughly the last 5 years based on Google Earth aerial imagery. Google Earth imagery dated February 15, 2022, shows disturbance of roughly 0.5 acre in the northern and western portions of the Study Area that appears to be associated with the construction of Rosin Ct. and the adjacent Kentucky Fried Chicken. An additional roughly 0.3 acre in the eastern portion of the Study Area was subjected to grading or other ground disturbance between February 2022 and April 2023. Attachment A, Figure 3 is a recent aerial photograph of the Study Area and vicinity.

Topography and Soils

The Study Area is essentially flat with an elevation ranging from approximately 17 to 19 feet above mean sea level (amsl). According to the Natural Resources Conservation Service (NRCS) Soil Survey Database, there is one soil type mapped within the Study Area: Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes (NRCS 2025). This soil is discussed below. A soil map is included as Figure 4 in Attachment A.

Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes, occurs on basin floors between 0 and 100 feet above mean sea level and consists of alluvium parent material. This soil map unit is comprised of 85% Clear Lake and similar soils and 15% minor components. A typical profile of this soil type is clay from 0 to 34 inches, clay loam from 34 to 48 inches, and cemented from 48 to 64 inches. Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes is a somewhat poorly drained soil with a frequency of flooding of “rare” and ponding of “none” and a depth to water table of about 0 inches. This soil series and the majority of the minor components have a hydric rating. Only San Joaquin soils, which comprise 7% of this map unit, do not have a hydric rating (NRCS 2025).

Habitat Types in the Project Area

Habitat types/land covers in the Study Area consist of ruderal/disturbed and developed. Figure 5 in Attachment A is a map of the habitats/land covers present in the Study Area. Representative digital photos of the Study Area are included in Attachment E.

Ruderal/Disturbed

The majority of the Study Area (1.30 acres) is classified as ruderal/disturbed habitat, which is a land cover that occurs in areas subject to past and/or ongoing anthropogenic disturbances and as a result lacks a recognizable plant species assemblage. Ruderal/disturbed areas tend to be dominated by non-native weedy species that rapidly colonize areas of recent disturbance or bare ground. As described in Section 3.1, roughly half of the Study Area has been scraped, graded, or otherwise subjected to ground disturbance over roughly the last 5 years and as a result the soil in much of the Study Area is compacted and/or has gravel or other remnant construction materials mixed into the surface soil layers. Species commonly observed in the ruderal/disturbed habitat at the time of the biological survey include alkali mallow (*Malvella leprosa*), wild oat (*Avena fatua*), Italian ryegrass (*Festuca perennis*), Bermuda grass (*Cynodon dactylon*), field bindweed (*Convolvulus arvensis*), and doveweed (*Croton setiger*).

Developed

Developed land comprises 0.13 acre in the Study Area and consists of sidewalk and paved areas associated with Rosin Ct. and Northgate Blvd.

General Wildlife Use of the Site

The Study Area represents very low quality habitat for wildlife due to the historic site disturbances and its location within a developed area of the City of Sacramento. Wildlife use of the site is expected to be limited to species with small home ranges (except for foraging birds) that are adapted to areas with a high level of human disturbance, such as the commercial/developed areas surrounding the Study Area. The only wildlife species observed in the Study Area during the survey were western fence lizard

(*Scleroporus occidentalis*) and California ground squirrel (*Otospermophilus beecheyi*). A few ground squirrel burrows were also present in the Study Area, mostly associated with vegetated mounds of soil and rubble.

4.0 RESULTS: SPECIAL-STATUS SPECIES AND OTHER PROTECTED BIOLOGICAL RESOURCES

4.1 Special-Status Species

Based on the results of the background review and database searches, there are a total of 15 special-status plant species, 39 special-status animal species, and 7 sensitive natural communities as defined in this report that are either documented as occurring or having the potential to occur or be impacted by projects within the "Verona, Pleasant Grove, Roseville, Citrus Heights, Rio Linda, Taylor Monument, Sacramento West, Sacramento East, and Carmichael, CA" USGS quads (referred to as regionally-occurring special-status species and habitats). All of these regionally-occurring special-status species and habitats, as well as the 22 NBHCP Covered Species, were evaluated for the potential to occur within the Study Area and/or be impacted by the project. The evaluation, which was based on factors such as habitat requirements, known elevational and geographic ranges, and soil requirements, is documented in Attachment F.

Special-Status Plants

No special-status plant species or suitable habitats for special-status plants were observed in the Study Area during the biological reconnaissance survey, and no special-status plant species have been reported in the Study Area or within a one-mile radius in the CNDDB (CDFW 2025). Based on the evaluation of the potential for regionally-occurring special-status plant species to occur in the Study Area that is described above and documented in Attachment F, no special-status plant species are considered to have the potential to occur in the Study Area or be impacted by the proposed project. The Study Area is highly disturbed and lacks any habitat or specialized soils to support special-status plants. All of the regionally-occurring special-status plant species whose elevational range overlaps the Study Area require mesic areas, vernal pools, marshes, or other wetland habitats, which are not present in the Study Area. Much of the Study Area has been previously disturbed and the site lacks a native or naturalized plant community. No impacts to special-status plant species or their habitats are anticipated as a result of the proposed project.

Special-Status Animals

No special-status animal species were observed in the Study Area during the biological reconnaissance survey. Based on field observations, published information, and literature review, two special-status animal species are considered to have the potential to occur in the Study Area and/or be impacted by the proposed project: burrowing owl (*Athene cunicularia*) and Swainson's hawk (*Buteo swainsoni*). These species are discussed in more detail below. Additionally, other migratory birds and raptors protected under federal, State, and local laws/policies have potential to occur within the Study Area and are discussed below. Regionally-occurring special-status animal species that were determined to have no potential to occur in the Study Area or be impacted by the proposed project (see Attachment F) are not discussed further in this document.

Burrowing Owl (State Candidate Endangered; CDFW Species of Special Concern; NBHCP Covered Species)
Burrowing owls are often found in open, dry grasslands, agricultural and range lands, and desert habitats. They can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. Burrowing owls occur at elevations ranging from 200 feet below mean sea level to over 9,000 feet amsl. In California, the highest elevation where burrowing owls are known to occur is 5,300 feet amsl in Lassen County. In addition to natural habitats, burrowing owls can be found in urban habitats such as at the margins of airports and golf courses and in vacant urban lots. Burrowing owls forage in adjacent grasslands and other suitable habitats primarily for insects and small mammals, and less often for reptiles, amphibians, and other small birds (Shuford and Gardali 2008). Burrowing owls nest in burrows in the ground and commonly perch on fence posts or mounds near the burrow. The owls often use ground squirrel burrows or badger dens or artificial burrows such as abandoned pipes or culverts. Although the more northern burrowing owl populations migrate seasonally, burrowing owls are year-round residents of the Sacramento Valley. In the Sacramento Valley, the nesting season for burrowing owl can begin as early as February 1 and continues through August 31.

No burrowing owls or sign (pellets, feathers, whitewash) were observed in the Study Area during the biological reconnaissance survey, and regular human presence around the site (e.g., pedestrians on the sidewalks and vehicles using the KFC drive through) renders the site less hospitable to burrowing owls. However, ground squirrel burrows are present in the Study Area that represent potential nesting habitat, and burrowing owls could forage in the ruderal/disturbed habitat in the Study Area as well as adjacent agricultural fields to the west. Nesting burrowing owls were documented roughly 1,500 feet northeast of the Study Area in 2007 in the vicinity of Steelhead Creek and Interstate 80 (CDFW 2025). There is a low potential that burrowing owl could utilize the Study Area for foraging, temporary refugia, overwintering and/or nesting.

Potential impacts to burrowing owls as a result of the proposed project include the loss of 1.30 acres of ruderal/disturbed land that represents marginal foraging habitat, if this species is present in the Study Area or vicinity, and potential disturbance of occupied burrows. If burrowing owls were to occupy ground squirrel burrows in the Study Area, construction activities could result in displacement of owls from their burrows or impacts to nesting owls. Project activities such as clearing and grubbing, grading, or other earthwork during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance.

Swainson's Hawk (State Threatened; NBHCP Covered Species)
Swainson's hawk is a breeding season migrant in California that winters in South America; migrants typically arrive and begin scouting nest locations in mid-April (SHTAC 2000). Breeding is finished by August and most birds have left the state by late-October (SHTAC 2000). Populations are largest in the southern Sacramento Valley and high deserts (CDFW 1994). Swainson's hawks nest in large trees in riparian woodlands, tall trees in upland stands (especially eucalyptus), and solitary trees in agricultural areas. Isolation from human foot traffic is important to nest site selection, though hawks are less sensitive to vehicle traffic; nests are typically concealed in dense canopy. Individuals exhibit high nest site fidelity over their lifetime. Swainson's hawks forage opportunistically over a large area, soaring up to 10 miles from the nest to hunt small mammals and insects in agricultural fields and grasslands (Estep 1989). Suitable foraging habitat is open, with low vegetation (less than 12 inches) and abundant prey.

Foraging activity is highest in agricultural fields during activities that drive prey into the open such as harvesting, disking, flooding, and burning (Estep 1989).

There are no trees in the Study Area and therefore no opportunity for Swainson's hawk to nest in the Study Area. Swainson's hawk could occasionally forage in the Study Area, although it is too small to provide any significant foraging opportunities. Although, there are no suitable nest trees in or immediately adjacent to the Study Area, suitable nest trees are present within 0.1 mile of the Study Area to the north in the vicinity of the Northgate Blvd./Interstate 80 interchange and within 0.25 mile of the Study Area to the east along Steelhead Creek. The closest reported occurrence of nesting Swainson's hawk is a documented occurrence of nesting Swainson's hawk from 2002 approximately 1.7 miles north of the Study Area in a narrow valley oak riparian corridor along Dry Creek (CDFW 2025).

Potential impacts to Swainson's hawk as a result of the proposed project include a loss of 1.30 acres of ruderal/disturbed land that represents low quality foraging habitat and potential nest disturbance if Swainson's hawk is nesting in the vicinity of the Study Area. Construction activities within 0.25 mile of an active nest (in an urban setting like the proposed project) have the potential to cause abandonment of eggs or young or forced fledging due to noise and other disturbance.

4.2 Raptors, Migratory Birds, and Other Nesting Birds

Nesting habitat for common raptors, migratory birds and other nesting birds is present in trees and shrubs in the immediate vicinity of the Study Area and there is a low potential that birds could nest on the ground or in herbaceous vegetation in the Study Area. Project activities conducted during the typical bird nesting season (February 1 to August 31) in the vicinity of active bird nests could lead to destruction of nests, abandonment of eggs or young or forced fledging, which would be a violation of Fish and Game Code.

4.3 Sensitive Natural Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, and/or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB. CNDDB vegetation alliances are ranked 1 through 5, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2020 sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2025). Wetland or non-wetland "Waters of the U.S" and "Waters of the State", as well as habitats subject to a CDFW Lake and Streambed Alteration Agreement are also often considered to be sensitive natural communities.

The ruderal/disturbed and developed land covers in the Study Area are not considered natural communities. Therefore, no sensitive natural communities occur in the Study Area and no impacts to sensitive natural communities would occur as a result of the proposed project.

4.4 Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are connections between patches of habitat, generally native vegetation, which join two or more larger areas of similar wildlife habitat and allow for physical and genetic exchange between animal populations that could otherwise be isolated. Habitat linkages are typically contiguous strips of natural areas such as riparian corridors, oak woodlands, or drainages. Wildlife movement corridors are critical for the maintenance of ecological processes including facilitating the movement of animals and the continuation of viable populations. Movement corridors may serve to provide a more local linkage such as between foraging and denning areas, or they may be regional in nature providing larger scale migration corridors such as between wintering and summering habitat. Habitat linkages may also serve to allow animals to periodically move away from an area and then subsequently return. Other corridors may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The Study Area is not located within an “Essential Connectivity Area”, “Natural Landscape Block”, or “Natural Areas Small”, which are habitat areas mapped by CDFW as part of the California Essential Habitat Connectivity Project (CDFW 2025). Essential Connectivity Areas, Natural Landscape Blocks, and Natural Areas Small are defined as relatively natural habitat blocks that support native biodiversity by CDFW. The closest mapped area is a “Natural Areas Small” along Steelhead Creek approximately 1,200 feet east of the Study Area. The Study Area, in combination with the adjacent agricultural parcel to the west, represents a small patch of habitat that is surrounded on all four sides by development and busy roadways (Interstate 80 and Northgate Blvd.). As a result, it is not considered a wildlife movement corridor. Therefore, no impacts to wildlife movement corridors would occur as a result of the proposed project.

4.5 Jurisdictional Waters

No wetlands or other waters were identified in the Study Area based on the desktop review and biological reconnaissance survey. Therefore, no impacts to “Waters of the U.S.” or “Waters of the State” are anticipated as a result of the proposed project.

4.6 Local Policies/Ordinances: Protected Trees

There are no trees in or overhanging the Study Area, and no trees will be impacted by the proposed project. Therefore, the proposed project will not conflict with any local policies or ordinances related to tree protection.

4.7 Habitat Conservation Plan, Natural Community Conservation Plan, or Other Local Habitat Conservation Measures

The Study Area is located within the Natomas Basin Habitat Conservation Plan area and will comply with associated measures required by the City of Sacramento including payment of land cover impact fees, if applicable. Therefore, the proposed project would not conflict with any Habitat Conservation Plans, Natural Community Conservation Plans, or local habitat conservation measures.

5.0 RECOMMENDED BIOLOGICAL MITIGATION MEASURES

The proposed project would have the potential to impact burrowing owl, Swainson's hawk, and nesting raptors and migratory birds and/or other nesting birds. Recommended measures are included below to avoid, minimize, and mitigate impacts to biological resources that would occur as a result of the proposed project.

5.1 Burrowing Owl

Payment of land cover impact fees required by the City of Sacramento in accordance with the NBHCP will mitigate for the loss of 1.30 acres of potential marginal foraging habitat for burrowing owl. The following *Measures to Reduce Take of Burrowing Owl* as outlined in the NBHCP (Section V. A. 5. h.) should be implemented to avoid any potential impacts to individual burrowing owls:

- Prior to the initiation of grading or earth disturbing activities, the applicant/developer should hire a qualified biologist to perform a pre-construction survey of the Study Area to determine if any burrowing owls are using the Study Area for foraging or nesting. The pre-construction survey should be submitted to the City of Sacramento prior to the developer's commencement of construction activities, and a mitigation program should be developed and agreed to by the City and developer prior to initiation of any physical disturbance in the Study Area.

- Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive measures that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

- If nest sites are found, the USFWS and CDFW should be contacted regarding suitable mitigation measures, which may include a 300 foot buffer from the nest site during the breeding season (February 1 - August 31), or a relocation effort for the burrowing owls if the birds have not begun egg-laying and incubation or the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If on-site avoidance is required, the location of the buffer zone will be determined by a qualified biologist. The developer shall mark the limit of the buffer zone with yellow caution tape, stakes, or temporary fencing. The buffer will be maintained throughout the construction period.

- If relocation of the owls is approved for the site by USFWS and CDFW, the developer should hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include: (a) the location of the nest and owls proposed for relocation; (b) the location of the proposed relocation site; (c) the number of owls involved and the time of year when the relocation is proposed to take place; (d) the name and credentials of the biologist who will be retained to supervise the relocation; (e) the proposed method of capture and transport for the owls to the new site; (f) a description of the site preparations at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control, etc.); and (g) a description of efforts and funding support proposed to monitor the relocation.

- Relocation options may include passive relocation to another area of the site not subject to disturbance through one way doors on burrow openings, or construction of artificial burrows in accordance with the CDFW's October 17, 1995, Staff Report on Burrowing Owls Mitigation (see Appendix D).

- Where on-site avoidance is not possible, disturbance and/or destruction of burrows should be offset through development of suitable habitat on the Natomas Basin Conservancy upland reserves. Such habitat should include creation of new burrows with adequate foraging area (a minimum of 6.5 acres) or 300 feet radii around the newly created burrows. Additional habitat design and mitigation measures are described in the CDFW's October 17, 1995, Staff Report on Burrowing Owl Mitigation (see Appendix D).

5.2 Swainson's Hawk

Payment of land cover impact fees required by the City of Sacramento in accordance with the NBHCP will mitigate for the loss of 1.30 acres of low quality foraging habitat for Swainson's hawk. The following *Measures to Reduce Nest Disturbance* as outlined in the NBHCP (Section V. A. 5. b.) should be implemented to avoid any potential impacts to nesting Swainson's hawk in the vicinity of the Study Area:

- Prior to the commencement of development activities, a pre-construction survey should be completed to determine whether any Swainson's hawk nest trees will be removed on-site, or active Swainson's hawk nest sites occur on or within ½ mile of the Study Area. These surveys should be conducted according to the Swainson's Hawk Technical Advisory Committee's (May 31, 2000) methodology or updated methodologies, as approved by the USFWS and CDFW, using experienced Swainson's hawk surveyors.

- If breeding Swainson's hawks (i.e. exhibiting nest building or nesting behavior) are identified, no new disturbances (e.g., heavy equipment operation associated with construction) will occur within ½ mile of an active nest between March 15 and September 15, or until a qualified biologist, with concurrence by CDFW, has determined that the young have fledged or that the nest is no longer occupied. If the active nest site is located within 1/4 mile of existing urban development, the no new disturbance zone can be limited to the 1/4 mile versus ½ mile. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within ½ mile of an active nest are not restricted.

- Where disturbance of a Swainson's hawk nest cannot be avoided, such disturbance shall be temporarily avoided (i.e., defer construction activities until after the nesting season) and then, if unavoidable, the nest tree may be destroyed during the non-nesting season. For purposes of this provision the Swainson's hawk nesting season is defined as March 15 to September 15. If a nest tree (any tree that has an active nest in the year the impact is to occur) must be removed, tree removal shall only occur between September 15 and February 1.

- If a Swainson's hawk nest tree is to be removed and fledglings are present, the tree may not be removed until September 15 or until CDFW has determined that the young have fledged and are no longer dependent upon the nest tree.

- If construction or other project related activities which may cause nest abandonment or forced fledgling are proposed within the 1/4 mile buffer zone, intensive monitoring (funded by the project sponsor) by a qualified biologist will be required. Exact implementation of this measure will be based on specific project-related information.

5.2 Nesting Raptors and Migratory Birds

The following measures are recommended to avoid impacts to nesting raptors and migratory birds:

- Any vegetation clearing or ground disturbing activities should take place outside of the typical avian nesting season (e.g., February 15 through August 31), if feasible. If construction needs to commence between February 15 and August 31, a pre-construction survey for nesting birds should be conducted within 14 days prior to commencement of construction. If a lapse in Project activity occurs for 14 days or more during the bird nesting season, then the nesting bird surveys should be re-conducted. If no nesting birds are observed no further mitigation is required.
- If active bird nests are observed during the pre-construction survey, a buffer zone should be established around the nest tree(s) until the young have fledged or are no longer dependent on the nest, as determined by a qualified biologist. The radius of the required buffer zone can vary depending on the species, (i.e., 25-100 feet for passerines and 200-300 feet for common raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist. Buffer zones could be reduced if the nest is monitored by a qualified biologist.
- The buffer zone around a nesting tree should be demarcated with high visibility orange construction fencing (or similar highly visible material) and no construction activities or personnel should be allowed within the buffer zone.

6.0 SUMMARY/CONCLUSION

SBC prepared this Biological Resources Evaluation Report for the 7-Eleven Convenience Store and Fuel Station, Northgate Blvd. and Rosin Court Project. The project parcel (250-0010-115-0000) is approximately 1.43 acres and is located in the northwest corner of the intersection of Northgate Blvd. and Rosin Ct., at 3801 Northgate Blvd. in the City of Sacramento, California. The proposed project includes construction of a 4,761 square foot convenience store building, fuel pumps, 23 parking spaces, and landscaping. The Study Area is comprised of a vacant lot located in a commercial area. We estimate that roughly half of the Study Area has been scraped, graded, or otherwise subjected to ground disturbance over roughly the last 5 years based on Google Earth aerial imagery. Habitats/land covers in the Study Area include ruderal/disturbed (1.30 acres) and developed (0.13 acre).

There are no potential "Waters of the U.S.", "Waters of the State", or protected trees in the Study Area. The proposed project has the potential to result in impacts to burrowing owl, Swainson's hawk, and other nesting raptors and migratory birds. No other impacts to special-status species or other biological

resources are anticipated as a result of the proposed project. Recommended biological mitigation measures are included to avoid and minimize impacts to burrowing owl, Swainson's hawk, and other nesting birds, including payment of land cover impact fees as required by the NBHCP (if applicable) and pre-construction surveys for special-status birds as well as protective measures if any are found. With the implementation of the proposed mitigation measures, impacts to biological resources would be less than significant.

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Attachment A: Figures

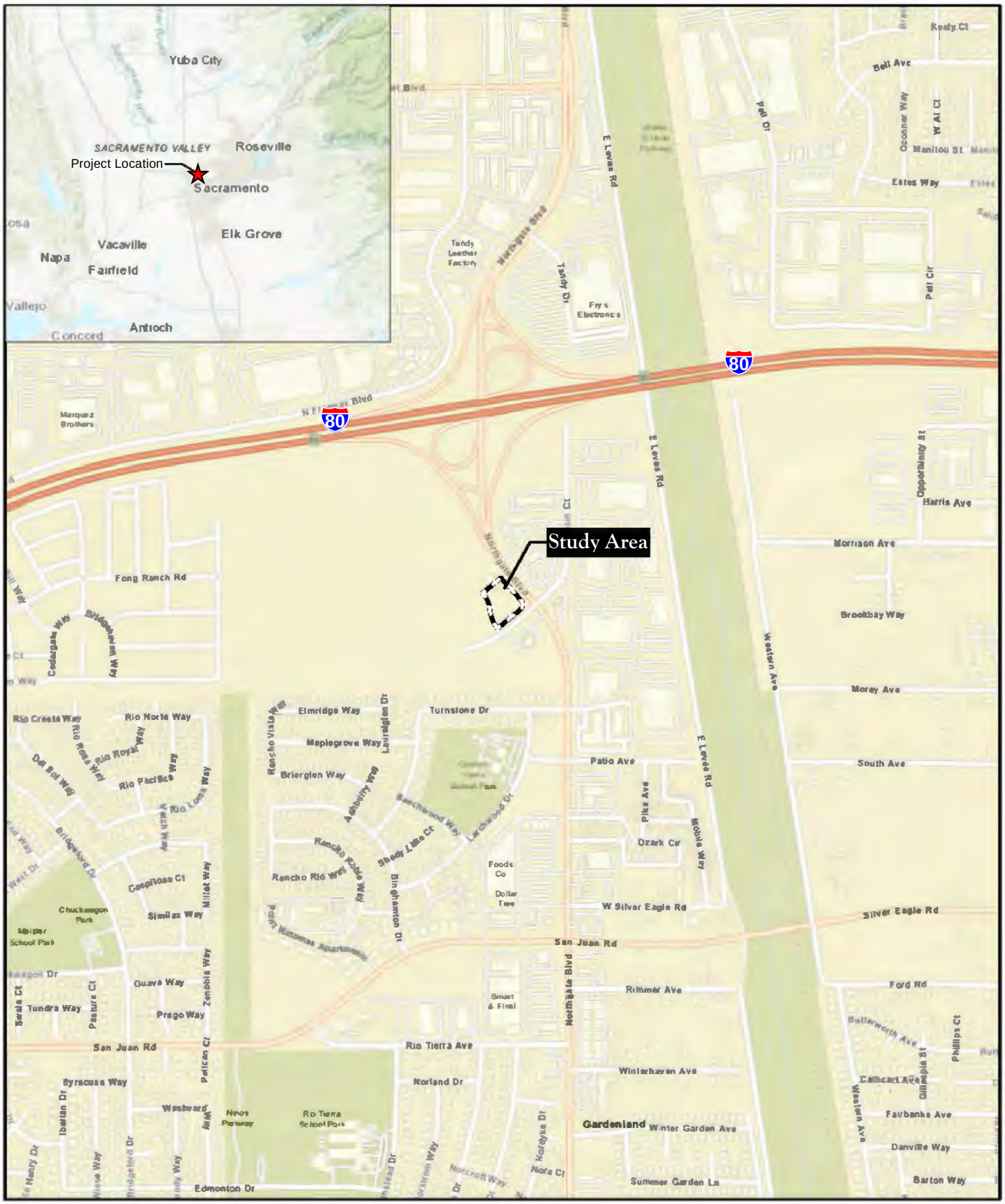


Figure 1 - Regional Location and Vicinity

7-Eleven Convenience Store and Fuel Station,
Northgate Boulevard and Rosin Court

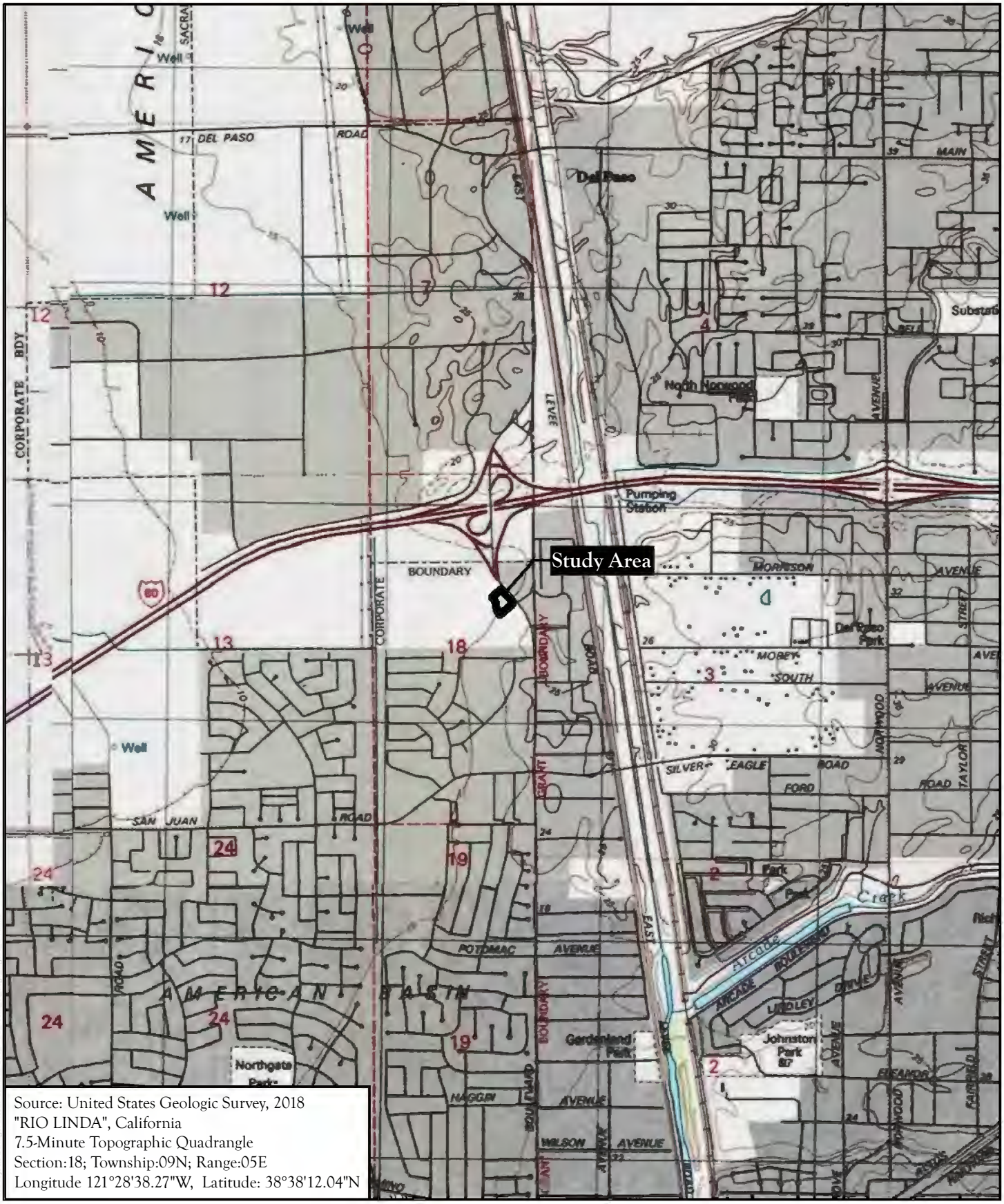
Sacramento, CA

0 500 1,000
Feet

N

Stringer Biological Consulting

Basemap Source: ESRI (2025)



0 1,000 2,000
Feet

N

Figure 2 - USGS

7-Eleven Convenience Store and Fuel Station,
Northgate Boulevard and Rosin Court

Sacramento, CA

Stringer Biological Consulting

0 50 100
Feet

N

Figure 3 - Aerial Photo

7-Eleven Convenience Store and Fuel Station,
Northgate Boulevard and Rosin Court

Sacramento, CA

Stringer Biological Consulting

Imagery Source: Google Earth (11/2023)

0 50 100
Feet

N

Figure 4 - Soils Map

7-Eleven Convenience Store and Fuel Station,
Northgate Boulevard and Rosin Court

Sacramento, CA

Stringer Biological Consulting

Imagery Source: Google Earth (11/2023); Data Source: Natural Resources Conservation Service (NRCS; 2025)

0 50 100
Feet

N

Figure 5 - Habitat Map

7-Eleven Convenience Store and Fuel Station,
Northgate Boulevard and Rosin Court

Sacramento, CA

Stringer Biological Consulting

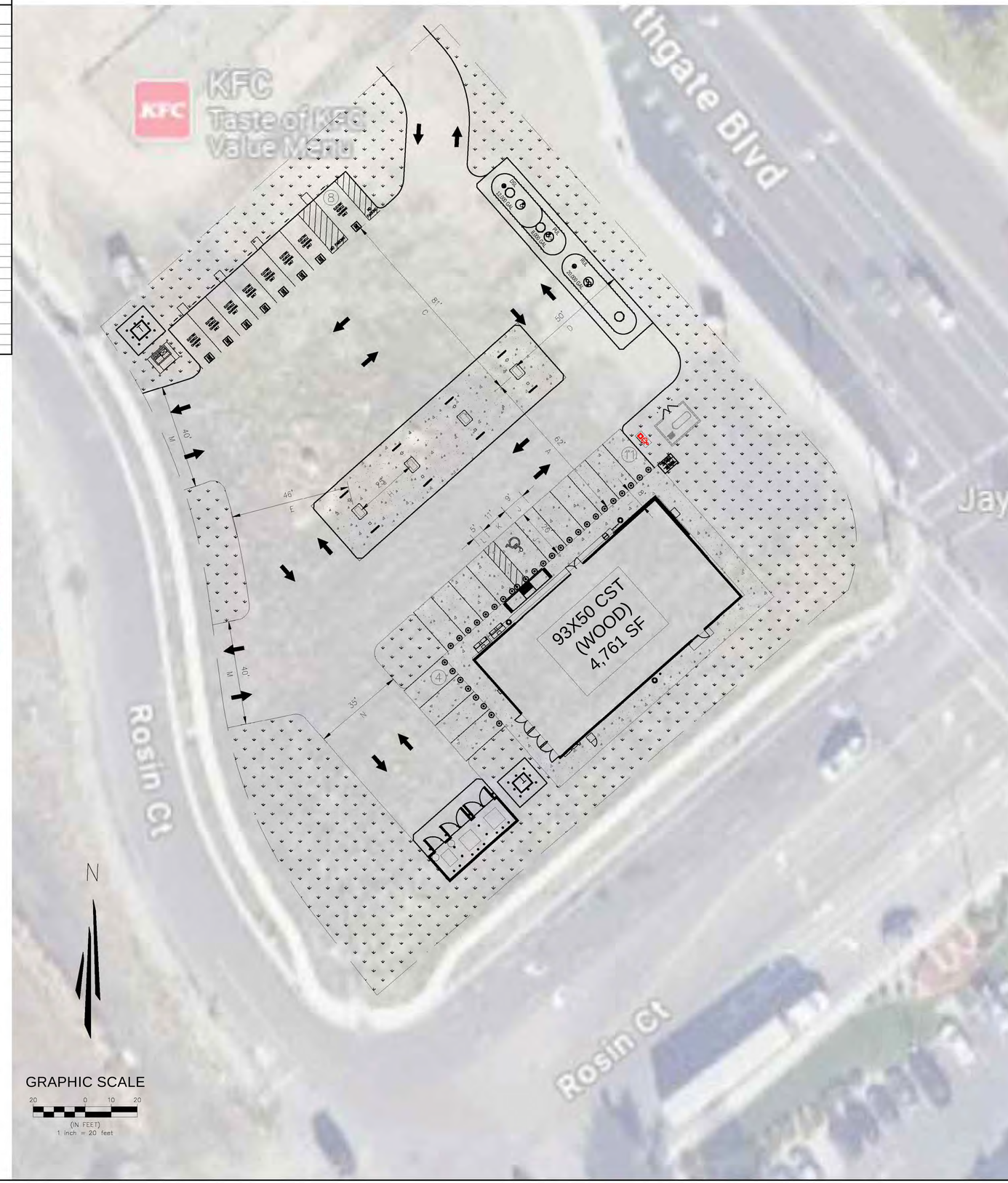
Imagery Source: Google Earth (11/2023)

PROJECT DATA

PROJECT INFORMATION:	
APPLICANT:	TAIT & ASSOCIATES, INC. ATTN: CHANDRA MIEHE 11280 TRADE CENTER DRIVE RANCHO CORDOVA, CA 95742 TEL: (916) 669-1822 CMIEHE@TAIT.COM
PROPERTY OWNER:	GUGGENHEIM PARTNERS
ASSESSOR'S PARCEL NUMBER(S):	25000101150000
ADDRESS:	7-ELEVEN NWC OF NORTHGATE BLVD & ROSIN CT
PROJECT DESCRIPTION:	NEW CONSTRUCTION 7-11 CONVENIENCE STORE FUEL STATION – 6 CONVENTIONAL MPD'S
CONSTRUCTION TYPE:	WOOD FRAMING
ADJACENT ZONING:	NORTH: HC-R HIGHWAY COMMERCIAL ZONE SOUTH: HC-R HIGHWAY COMMERCIAL ZONE EAST: HC-R HIGHWAY COMMERCIAL ZONE WEST: HC-R HIGHWAY COMMERCIAL ZONE
EXISTING ZONING:	HC-R HIGHWAY COMMERCIAL ZONE
EXISTING LAND USE:	VACANT LOT
PROPOSED ZONING / LAND USE:	4761 S.F. (WOOD) PROTO C-STORE WITH 6 MPD FUEL CANOPY
FIRE SPRINKLERS REQUIRED:	YES, FOR ANY BUILDING GREATER THAN 3,599 SF
UTILITY INFORMATION:	
ELECTRICAL:	SMUD
GAS:	PG&E
WATER:	TBD
STORM SEWER:	TBD
SEWER:	TBD

BUILDING INFORMATION:	
PROPOSED SITE AREA:	*59,179 SF (1.36 ACRES)
PROPOSED BUILDING AREA:	4,761 SF
PROPOSED BUILDING COVERAGE:	8.1%
PROPOSED PAVED AREA::	*-- SF
PROPOSED LANDSCAPE AREA::	*-- SF (--%)
BUILDING HEIGHT:	35' MAX
REQUIRED BUILDING SETBACKS	
FRONT	15'
REAR	15'
CORNER	N/A
SIDE	15'
SIDE (INTERIOR)	5'
REQUIRED LANDSCAPING SETBACKS	
FRONT	15'
REAR	15'
SIDE	15'
SIDE (INTERIOR)	5'
PARKING REQUIREMENTS:	1 PER 500 SF
PARKING REQUIRED:	10
PARKING PROVIDED:	23
ACCESSIBLE PARKING REQUIRED:	2 FOR 26-50 STANDARD PARKING SPACES
ACCESSIBLE PARKING PROVIDED:	2 (1-11'X20' W/ 5' ACCESS AISLE ON PASSENGER SIDE)
ELECTRIC VEHICLE PARKING/CHARGING REQ.	1 PER FUELING POSITION
EV PARKING/ CHARGING PROVIDED	8
BICYCLE PARKING REQUIRED:	2 LONG TERM & 2 SHORT TERM
BICYCLE PARKING PROVIDED:	2

Key	Dimension Element	7-Eleven Standard	Store
A	Center of bollard to center of dispenser	62'	62'
B	Center of dispenser to edge of front curb with tanks	47'	N/A
C	Center of dispenser to edge of front curb without tanks	39'	81'
D	Edge of dispenser to side curb with tanks	54'	50'
E	Edge of dispenser to side curb without tanks	46'	46'
F	Drive aisle width between the face of dispensers (in stacked position)	34'	N/A
G	Centerline dispenser spacing (in stacked position)	27'	N/A
H	Drive aisle width between the face of dispensers (in starting gate position)	25'	25'
I	Sidewalk width	8'	8'
J	Dimensions of typical parking spots	9'x20'	9'X20'
*K	Dimensions of ADA parking spots	11'x20'	11'X20'
*L	Dimension of ADA aisle	5'	5'
M	Ingress and egress dimension	40'	40'
N	Drive aisle width	35'	40'
	MPDs	6 MIN.	4
	Parking with restaurant	40	N/A
	Parking without restaurant	25	23
	Building prototype	93X50	Non-Proto



Rev. #	Date	Description
01	25/01/20	REDUCE MDP CANOPY
03	25/03/25	ADD CROSS ACCESS DRIVE

7-ELEVEN, INC.
3200 HACKBERRY ROAD, IRVING, TEXAS 75063

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NWC OF NORTHGATE BLVD & ROSIN CT
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Attachment B: Regulatory Context

Attachment B
Regulatory Context

Regulatory Setting

Policies, regulations, and plans pertaining to the protection of biological resources in the project site are summarized in the following sections.

Federal Regulations

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA; 16 USC 1531 et seq.). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Protection Act (NEPA) or California Environmental Quality Act (CEQA) although they are not otherwise protected under FESA.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. Section 16 U.S.C. 703–712 of the Act states “unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill” a migratory bird. A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. Currently, there are 836 migratory birds protected nationwide by the Migratory Bird Treaty Act, of which 58 are legal to hunt.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. “Take” under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The California Department of Fish and Wildlife (CDFW) can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the “take” of listed species,

either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as "fully protected animals." These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species unless any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

California Environmental Quality Act

Under the CEQA of 1970 (Public Resources Code Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (Public Resources Code Section 21001(c)). These "special-status" species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed under CEQA regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, 2A, 2B, and 3 are generally considered special-status species under CEQA.[1]

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur.

Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) empowers the Fish and Game Commission to list native plant species, subspecies, or varieties as endangered or rare following a public hearing. To the extent that the location of such plants is known, CDFW must notify property owners that a listed plant is known to occur on their property. Where a property owner has been so notified by CDFW, the owner must notify CDFW at least 10 days in advance

[1] The California Rare Plant Rank system can be found at: < http://www.cnps.org/cnps/rareplants/ranking.php>

of any change in land use (other than changing from one agricultural use to another), in order that CDFW may salvage listed plants that would otherwise be destroyed. Currently, 64 taxa of native plants have been listed as rare under the act.

Nesting Birds

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

Jurisdictional Waters

Federal Jurisdiction

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

Discharge of dredged or fill material into “Waters of the U.S.” requires authorization from the USACE under Section 404 of the Clean Water Act (CWA) (33 United States Code [USC] 1344). Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the USACE (33 USC 403).

Discharge of dredged or fill material into “Waters of the U.S.” requires authorization from the USACE under Section 404 of the Clean Water Act (CWA) (33 United States Code [USC] 1344). Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the USACE (33 USC 403).

The U.S. EPA and the USACE revised the prior definition of “Waters of the U.S.” (referred to as the “pre-2015 regulatory regime”) on December 30, 2022, when they announced the final "*Revised Definition of 'Waters of the United States*'" rule (referred to as the “January 2023 Rule). On January 18, 2023, the rule was published in the Federal Register; the rule became effective on March 20, 2023 [88 FR 3004; 3004-3144 (141 pages) (33 CFR 328) (40 CFR 120)]. As a result of subsequent litigation in spring of 2023 in Texas, North Dakota, and Kentucky, the January 2023 Rule was implemented by the U.S. EPA and the USACE in 23 states (including California), the District of Columbia, and the U.S. Territories, while the remaining 27 states were subject to the pre-2015 regulatory regime. On August 29, 2023, the U.S. EPA and the USACE issued a pre-publication version of the *Revised Definition of “Waters of the United States”; Conforming* (referred to as the “Conforming Rule”) to amend the January 2023 Rule. The

Attachment B
Regulatory Context

Conforming Rule was published in the Federal Register and became effective on September 8, 2023. This Conforming Rule conforms the definition of "Waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. Parts of the January 2023 Rule are invalid under the Supreme Court's interpretation of the Clean Water Act in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court's decision. As a result of ongoing litigation on the January 2023 Rule, the U.S. EPA and the USACE are implementing the January 2023 Rule, as amended by the Conforming Rule, in 23 states (including California), the District of Columbia, and the U.S. Territories.

According to the Conforming Rule, the following categories of aquatic features are considered ''Waters of the United States'':

- traditional navigable waters, the territorial seas, and interstate waters (''paragraph (a)(1) waters'');
- impoundments of ''Waters of the United States'' ("paragraph (a)(2) impoundments");
- tributaries to traditional navigable waters, the territorial seas, interstate waters, or "paragraph (a)(2) impoundments" when the tributaries meet the relatively permanent standard (relatively permanent, standing, or continuously flowing bodies of water) ("paragraph (a)(3) waters");
- wetlands adjacent to paragraph (a)(1) waters; wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or to jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard (collectively referred to as "paragraph (a)(4) waters"); and,
- intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) that meet the relatively permanent standard and have a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3 ("paragraph (a)(5) waters").

Additionally, according to the Conforming Rule, the following features are not considered "Waters of the U.S":

- Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
- Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
- Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Wetlands are defined under CFR Part 328.3 as:

"those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

In the absence of wetlands, the limit of CWA jurisdiction in non-tidal waters is the ordinary high water mark (OHWM), which is defined in 33 CFR Part 328.3 as:

"the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris."

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

State Jurisdiction

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification

(WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of Administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of streambeds…except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA)

for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

California Environmental Quality Act Significance Thresholds

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

California Native Plant Society

The CNPS maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of

Attachment B
Regulatory Context

CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere

Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

Rank 2A: Plants presumed extirpated in California but common elsewhere

Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere

Rank 3: Plants about which we need more information – A Review List

Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA. Furthermore, the CNPS Rare Plant Rankings include levels of threat for each species. These threat ranks include the following:

0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);

0.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.) be fully considered during preparation of environmental documents under CEQA.

Local Regulations

Natomas Basin Habitat Conservation Plan (NBHCP)

The Natomas Basin HCP (NBHCP) is a regional conservation plan intended to minimize and mitigate for the loss of habitat and the incidental take of 22 species (i.e., NBHCP-covered species) that could result from development of 17,500 acres in the City of Sacramento, unincorporated Sutter County, and the Metro Air Park Project area. The NBHCP was developed to satisfy the requirements of the FESA for a permit for the incidental take of threatened and endangered species, and was the basis for the mitigation necessary under Section 2081 of the California Fish and Game Code.

Native Trees and Other Protected Trees

Sacramento County has adopted measures for the preservation of native trees through the County Code and the General Plan.

Chapter 19.12 of the County Code, titled “Tree Preservation and Protection”, provides protection for native oak trees in the designated urban area of the unincorporated county. Native oaks are defined as

valley oak (*Quercus lobata*), interior live oak (*Q. wislizeni*), blue oak (*Q. douglasii*), and oracle oak (*Q. x morehus*) trees having a DBH of at least 6 inches for a single stem tree or a combined dbh of 10 inches for a tree with multiple stems. Grading, trenching, or filling within the dripline, or removal, destruction, or killing of a tree as defined in the ordinance is prohibited without a tree permit. Tree permits are issued by the Director of Public Works or by the body approving a discretionary action such as a conditional use permit.

Section 19.12.150 provides authority to approving bodies to adopt mitigation measures as conditions of approval for discretionary projects in order to protect other species of trees in addition to native oaks. The Tree Preservation Ordinance does not specify replacement obligations for native oaks removed under a tree permit; the approving body may impose "reasonable conditions of approval as are necessary to minimize the environmental, health, or safety effects of the development or use" and may require financial security to insure completion of "additional work" specified in the conditions of approval. "Additional work" may include replanting.

The Conservation Element of the General Plan includes a section regarding landmark and heritage tree protection. The stated objective of the plan is that "heritage and landmark tree resources [are] preserved and protected for their historic, economic, and environmental functions." The plan states that:

> *"Conservation of native tree species other than oaks and preservation of native oaks and landmark trees is the primary intent of the policies in the section. However, if preservation cannot be attained, then loss of the protected trees shall be compensated. Compensation for tree loss may be achieved by on-site or off-site replacement or payment into a Tree Preservation Fund."*

The section discusses thresholds of significance under CEQA for impacts to trees and concludes that tree impacts are "circumstantial". The section states that projects that exceed the threshold of significance may have significant impacts even after mitigation, and conversely, tree loss of some species that exceeds the threshold in certain circumstances may not constitute a significant impact. The section states that final determination of significance will be made by the Environmental Coordinator. The section does not include a definition of "tree" based on dbh.

Policy CO-139 of the General Plan states that "Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed." Tree replacement values are stipulated as follows:

- one D-pot seedling = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

The Sacramento County General Plan contains policies aimed at preserving tree canopy in the County. The Conservation Element of the General Plan includes a section on urban forest management. The stated objective of the plan is a "coordinated and funded Urban Tree Management Plan and program sufficient to achieve a doubling of the County's tree canopy by 2050..."

Attachment B
Regulatory Context

Policy CO-145 of the General Plan states that "Removal of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the 15-year shade cover values for tree species."

Policy CO-146 of the General Plan states that "If new tree canopy cannot be created onsite to mitigate for the non-native tree canopy removed for new development, project proponents (including public agencies) shall contribute to the Greenprint funding in an amount proportional to the tree canopy of the specific project."

Attachment C: Results of Database Queries

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Sacramento County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

NOT FOR CONSULTATION

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
Western Spadefoot Spea hammondii No critical habitat has been designated for this species.	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

NOT FOR CONSULTATION

Vernal Pool Fairy Shrimp Branchinecta lynchi Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

NOT FOR CONSULTATION

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Golden Eagle Aquila chrysaetos Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

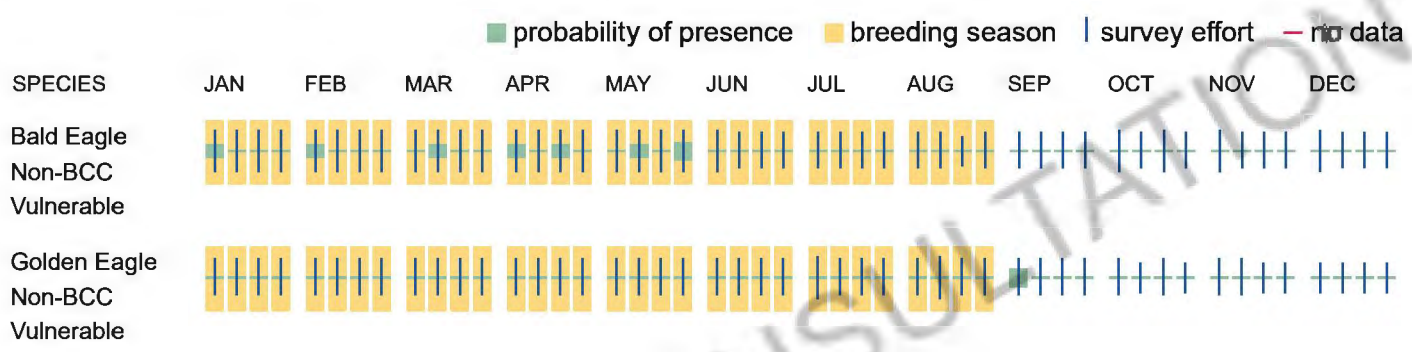
NOT FOR CONSULTATION

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

NOT FOR CONSULTATION

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

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Belding's Savannah Sparrow Passerculus sandwichensis beldingi — Breeds Apr 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

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Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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Yellow-billed Magpie Pica nuttalli Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

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Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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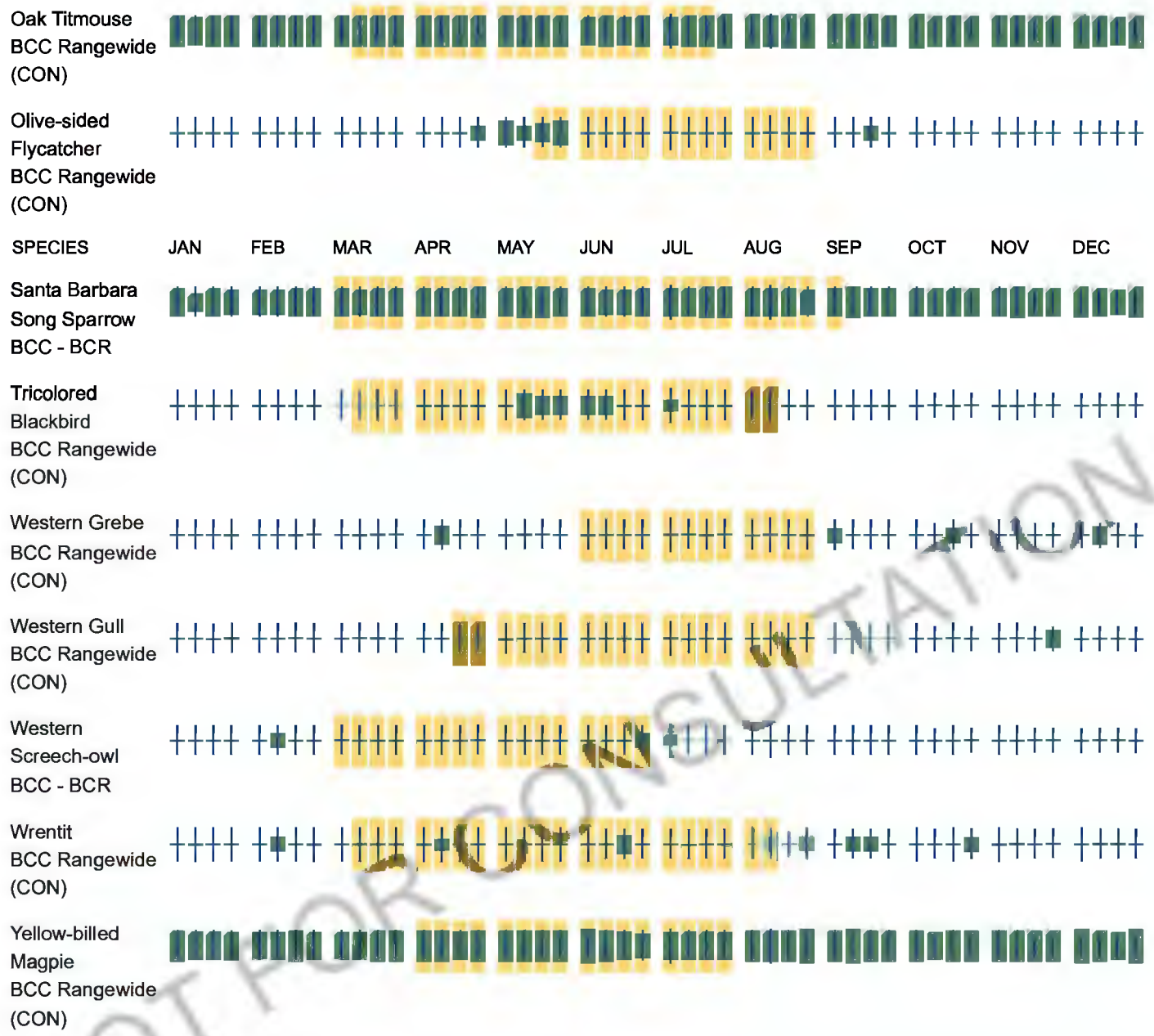

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Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

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2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

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To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

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Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate

Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Verona (3812175) OR Pleasant Grove (3812174) OR Roseville (3812173) OR Citrus Heights (3812163) OR Rio Linda (3812164) OR Taylor Monument (3812165) OR Sacramento West (3812155) OR Sacramento East (3812154) OR Carmichael (3812153))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Alkali Meadow Alkali Meadow	CTT45310CA	None	None	G3	S2.1	
Alkali Seep Alkali Seep	CTT45320CA	None	None	G3	S2.1	
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Andrena subapasta An andrenid bee	IIHYM35210	None	None	G1G2	S1S2	
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Archoplites interruptus Sacramento perch	AFCQB07010	None	None	G1	S1	SSC
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. ferrisiae Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Chloropyron molle ssp. hispidum hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T1	S1	1B.1
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Dumontia oregonensis hairy water flea	ICBRA23010	None	None	G1G3	S1	
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Fritillaria agrestis stinkbells	PMLIL0V010	None	None	G3	S3	4.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Gratiola heterosepala Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Hydrochara ricksecker Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
Juncus leiospermus var. ahartii Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
Juncus leiospermus var. leiospermus Red Bluff dwarf rush	PMJUN011L2	None	None	G2T2	S2	1B.1
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Melospiza melodia pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
Oncorhynchus tshawytscha pop. 11 chinook salmon - Central Valley spring-run ESU	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
Oncorhynchus tshawytscha pop. 7 chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	G5T2Q	S2	
Orcuttia viscida Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
Progne subis purple martin	ABPAU01010	None	None	G5	S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Spirinchus thaleichthys pop. 2 longfin smelt - San Francisco Bay-Delta DPS	AFCHB03040	Endangered	Threatened	G5TNRQ	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Thamnophis gigas	ARADB36150	Threatened	Threatened	G2	S2	
giant gartersnake						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S3	
least Bell's vireo						

Record Count: 62

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

12 matches found. Click on scientific name for details

Search Criteria: , CRPR is one of [**1A:1B:2A:2B:3**] , Quad is one of [**3812175:3812174:3812173:3812163:3812164:3812165:3812154:3812155:3812153**]

▲ SCIENTIFIC NAME	COMMON NAME	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	None	None	G2T1	S1	1B.1
Balsamorhiza macrolepis	big-scale balsamroot	None	None	G2	S2	1B.2
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	None	None	G2T1	S1	1B.1
Downingia pusilla	dwarf downingia	None	None	GU	S2	2B.2
Gratiola heterosepala	Boggs Lake hedge-hyssop	None	CE	G2	S2	1B.2
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	None	None	G5T3	S3	1B.2
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	None	None	G2T1	S1	1B.2
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	None	None	G2T2	S2	1B.1
Legenere limosa	legenere	None	None	G2	S2	1B.1

Orcuttia viscida	Sacramento Orcutt grass	FE	CE	G1	S1	1B.1
Sagittaria sanfordii	Sanford's arrowhead	None	None	G3	S3	1B.2
Symphyotrichum lentum	Suisun Marsh aster	None	None	G2	S2	1B.2

Showing 1 to 12 of 12 entries

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Attachment D: Species Observed in the Study Area

Attachment D
Plant and Animal Species Observed in the Study Area

Table D-1. Plant Species

Family	Species Name	Common Name
Native		
Euphorbiaceae	*Croton setiger*	Doveweed
Malvaceae	*Malvella leprosa*	Alkali mallow
Onagraceae	*Epilobium brachycarpum*	Willowherb
Non-native		
Asteraceae	*Centaurea solstitialis*	Yellow star thistle
	Cichorium intybus	Chicory
	Lactuca serriola	Prickly lettuce
	Silybum marianum	milkweed
	Sonchus oleraceus	Common sow thistle
Convolvulaceae	*Convolvulus arvensis*	Field bindweed
Fabaceae	*Vicia sativa*	Spring vetch
Plantaginaceae	*Plantago lanceolata*	English plantain
Poaceae	*Avena fatua*	Wild oat
	Cynodon dactylon	Bermuda grass
	Festuca perennis	Italian ryegrass
Polygonaceae	*Rumex crispus*	Curly dock

Table D-2. Wildlife Species

Family	Species Name	Common Name
Mammals		
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel
Reptiles		
Phrynosomatidae	*Scleroporus occidentalis*	Western fence lizard

Attachment E: Site Photos

Photo 1. View from the northern portion of the site looking southward toward the McDonalds across Rosin Court.

Photo 2. View from the southeast portion of the Study Area looking west. Kentucky Fried Chicken is visible in the top right corner of the photo.

Photo 3. View from the west side of the Study Area, looking east toward Northgate Blvd.

Photo 4. View of ground squirrel burrows on a soil mound in the northern portion of the Study Area.

Attachment F: Potential for Regionally-Occurring Special-Status Species and Sensitive Natural Communities to Occur in the Study Area

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Study Area

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
PLANTS			
Astragalus tener var. *ferrisiae* Ferris' milk-vetch	--/--/1B.1	An annual herb found in vernally mesic meadows and seeps, and subalkaline flats in valley and foothill grassland, from 2 – 75 meters elevation. Previously thought extinct and rediscovered in 1989; currently known from 13 locations in the Sacramento Valley. Blooms April – May (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks suitable habitat for this species.
Balsamorhiza macrolepis big-scale balsamroot	--/--/1B.2	A perennial herb found on slopes in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentine soil. Elevation range 45 – 1,555 meters. Blooms March – June (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks suitable habitat for this species. The Study Area is below the elevational range of this species.
Chloropyron molle ssp. *hispidum* hispid salty bird's-beak	--/--/1B.1	An annual hemiparasitic herb found in alkaline habitats in meadows, seeps, playas, and valley and foothill grassland from 1 – 155 meters elevation in the Central Valley. Blooms June – September (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks suitable habitat for this species. This species was not observed during a biological survey conducted during the blooming season.
Downingia pusilla dwarf downingia	--/--/2B.2	An annual herb found in vernal pools and mesic microsites in valley and foothill grassland from 1 – 445 meters elevation. Blooms March – May (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools or other suitable mesic habitat for this species.
Gratiola heterosepala Boggs' Lake hedge-hyssop	--/SE/1B.2/NBHCP Covered Species	An annual herb found on clay soils in marshes and swamps at lake margins, and in vernal pools from 10 – 2,375 meters elevation. Blooms April – August (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools or other wetland habitat for this species. No vernal pools are known to occur within 250 feet of the Study Area.
Hibiscus lasiocarpus var. *occidentalis* woolly rose-mallow	--/--/1B.2	A perennial rhizomatous emergent herb found in freshwater marshes and swamps from 0 – 120 meters elevation, often in riprap along levees. Blooms June – September (CNPS 2025).	**Will not occur.** There is no suitable marsh habitat in the Study Area.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--/--/1B.2	An annual herb found in vernal pools and mesic areas in valley and foothill grassland in the Sacramento Valley from 30 – 229 meters elevation. Blooms March – May (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools or other suitable mesic habitat for this species.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--/--/1B.1	An annual herb found in vernal pools and vernally mesic microsites in chaparral, cismontane woodland, meadows, seeps, and valley and foothill grassland from 35 – 1,250 meters elevation. Blooms March – June (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools or other suitable mesic habitat for this species.
Lathyrus jepsonii var. jepsonii Delta tule pea	--/--/1B.2/NBHCP Covered Species	A perennial herb found in freshwater and brackish marshes from 0 – 5 meters elevation. Blooms May – July (September) (CNPS 2025).	**Will not occur.** There is no suitable marsh habitat in the Study Area.
Legenere limosa legenere	--/--/1B.1/NBHCP Covered Species	An annual herb found in vernal pools from 1 – 880 meters elevation. Blooms April – June (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools. No vernal pools are known to occur within 250 feet of the Study Area.
Neostapfia colusana Colusa Grass	FT/SE/1B.1/NBHCP Covered Species	An annual herb found in the bottoms of large, deep vernal pools, typically on adobe substrate, from 5 to 200 meters elevation. Blooms May – August (CNPS 2025).	**Will not occur.** There are no vernal pools in the Study Area. No vernal pools are known to occur within 250 feet of the Study Area.
Orcuttia tenuis *Slender Orcutt grass*	FT/SE/1B.1/NBHCP Covered Species	An annual herb found in vernal pools from 35 – 1,760 meters elevation. Blooms May to October (CNPS 2025)	**Will not occur.** There are no vernal pools in the Study Area. No vernal pools are known to occur within 250 feet of the Study Area.
Orcuttia viscida Sacramento Orcutt grass	FE/SE/1B.1/NBHCP Covered Species	An annual herb found in vernal pools from 30 to 100 meters in elevation. Currently known from only 10 occurrences in Sacramento County. Blooms April – July (occasionally September) (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks vernal pools or other suitable mesic habitat for this species. No vernal pools are known to occur within 250 feet of the Study Area.
Sagittaria sanfordii Sanford's arrowhead	--/--/1B.2/NBHCP Covered Species	A perennial rhizomatous emergent herb found in marshes, swamps, and assorted shallow freshwater habitats from 0 – 650 meters	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks suitable aquatic habitat for this species.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		elevation. Blooms May – October (occasionally November) (CNPS 2025).	
Symphyotrichum lentum Suisun Marsh aster	--/--/1B.2	A perennial rhizomatous herb found in freshwater and brackish marsh from 0 – 3 meters elevation. Blooms May – November (CNPS 2025).	**Will not occur**. The Study Area is comprised of ruderal/disturbed habitat and lacks suitable aquatic habitat for this species.
WILDLIFE			
Invertebrates			
Bombus crotchii Crotch's bumble bee	--/SCE/--	Crotch's bumble bee occurs in grassland and scrub habitats (California Department of Fish and Wildlife [CDFW] 2019). New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (CDFW 2019). This species is a generalist forager and has been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; food plants include *Asclepias* spp., *Antirrhinum* spp., *Clarkia* spp., *Eschscholzia* spp., *Eriogonum* spp., *Chaenactis* spp., *Lupinus* spp., *Medicago* spp., *Phacelia* spp., and *Salvia* spp. (Koch et al. 2012). The flight period for queens in California is from February to October. New queens hibernate over the winter and initiate a new colony the following spring (CDFW 2019). Rare throughout its range and in decline in the Central Valley and southern California (CDFW 2019).	**Will not occur.** Crotch's bumble bee would not be expected to nest in the Study Area due to the regular disking and other ground disturbance. There are no reported occurrences of this species within a five-mile radius of the Study Area in the CNDDB (CDFW 2025).
Branchinecta lynchi vernal pool fairy shrimp	FT/--/--/NBHCP Covered Species	Vernal pools ranging from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. It is most frequently found in pools measuring less than 0.05 acre, although it has been collected from	**Will not occur**. There are no vernal pools or other suitable seasonally ponded wetland habitats in the Study Area. No vernal pools are known to occur within 250 feet of the Study Area.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		vernal pools exceeding 25 acres. The known range within California includes the Central Valley and southern California (USFWS 2005).	
Branchinecta mesovallensis mid-valley fairy shrimp	--/--/--/NBHCP Covered Species	Mid-valley fairy shrimp occur in vernal pools and other seasonally ponded habitats that fill in winter and spring. This species most commonly occurs in small to medium grassy or clay-bottomed vernal pools, roadside ditches, and railroad toe-drains (Jones and Stokes 2006). The mid-valley fairy shrimp is adapted to habitats that are inundated for short periods and can complete its life cycle in as little as 4 days, especially under extreme circumstances, such as years with below-average rainfall. This allows the shrimp to use habitats that are extremely hydrologically unstable (i.e., fill and dry quickly) (Jones and Stokes 2006).	**Will not occur**. There are no vernal pools or other suitable seasonally ponded wetland habitats in the Study Area. No vernal pools are known to occur within 250 feet of the Study Area.
Danaus plexippus Monarch Butterfly	FC/--/--	Monarch butterflies in eastern and western North America represent the ancestral origin for the species worldwide. They exhibit long-distance migration and overwinter as adults at forested locations in Mexico and California. These overwintering sites provide protection from the elements (rain, wind, hail, and excessive radiation) and moderate temperatures, as well as nectar and clean water sources located nearby. Adult monarch butterflies feed on nectar from a wide variety of flowers. Reproduction is dependent on the presence of milkweed, the sole food source for larvae (USFWS 2020).	**Not expected.** The project site does not provide suitable overwintering habitat and lacks protected tree groves of Eucalyptus and similar trees used by this species. Milkweed was not observed on the site. This species could migrate through the area but would not be expected to utilize the site for an extended period of time.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT/--/--/NBHCP Covered Species	Endemic to elderberry shrubs (*Sambucus* spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys, riparian habitats in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Fresno County (USFWS 2014) typically below 152 m amsl (USFWS 2017a).	**Will not occur.** Elderberry shrubs that provide habitat for valley elderberry longhorn beetle are not present in the Study Area.
*Hydrochara ricksecker*i Ricksecker's Water Scavenger Beetle	--/--/--	Aquatic beetle associated with vernal pools, slow moving streams, seeps, and ponds. Typically occurs in habitats with diverse vernal pool plant and invertebrate communities (Rogers 1998).	**Will not occur**. There are no vernal pools or other suitable aquatic habitats in the Study Area.
Lepidurus packardi vernal pool tadpole shrimp	FE/--/--/NBHCP Covered Species	Occurs in vernal pools from 54 square feet to 89 acres, containing clear- to highly-turbid water. Its known range is within the Central Valley of California and in the San Francisco Bay area (USFWS 2005).	**Will not occur**. There are no vernal pools or other suitable seasonally ponded wetland habitats in the Study Area. No vernal pools are known to occur within 250 feet of the Study Area.
Fishes			
Acipenser medirostris pop. 1 green sturgeon southern DPS	FT/--/SSC	Spawn in freshwater streams, in fast, deep water, over gravel, cobble, or boulders. Juveniles inhabit estuarine waters for 1-4 years until dispersing into coastal marine waters as adults. Adults return to spawn in fresh water every 6-10 years. Sacramento River watershed, including the Feather River, is the only known historical and present spawning areas for green sturgeon (NMFS 2018).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.
Archoplites interruptus Sacramento perch	--/--/SSC	Extinct in its native range, all known populations of this species are the result of introductions. The species is adapted for life in sloughs, slow moving rivers, and large lakes in	**Will not occur.** There is no suitable aquatic habitat in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		the Central Valley, and can tolerate high temperatures and salinities as well as high pH (alkalinity). Extant populations are in reservoirs; the species has been replaced in its native range by introduced game fishes (Crain and Moyle 2011).	
Oncorhynchus mykiss irideus pop. 11 Central Valley Steelhead DPS	FT/--/SSC	This distinct population segment includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (NMFS 2016). Steelhead spawn in rivers and streams with cool, clear, water and suitable silt free substrate (NMFS 2016).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.
Oncorhynchus tshawytscha pop. 11 Central Valley chinook salmon spring-run ESU	FT/ST/--	Central Valley spring-run Chinook salmon spawn in rivers and streams with cool, clear, water and suitable cobble and gravel substrate. Historically occurred in all major rivers and tributaries of the Central Valley. Spawning is currently located in tributary streams of the Sacramento River (NMFS 2014). Immigration of adults through the Delta and lower Sacramento River occurs from March through September. Spawning occurs between late-August through October (NMFS 2014).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.
Oncorhynchus tshawytscha	FE/SE/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable cobble and	**Will not occur.** There is no suitable aquatic habitat in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Sacramento River chinook salmon winter-run ESU		gravel substrate. Immigration of adults through the Delta and lower Sacramento River occurs from December through July. Spawning is currently limited to the Sacramento River downstream of Keswick Dam and upstream of the Red Bluff Diversion and the lower reaches of Battle Creek (NMFS 2014). Spawning occurs between late-April through mid-August (NMFS 2014).	
Pogonichthys macrolepitodus Sacramento Splittail	--/--/SSC	Endemic to the Central Valley. They occur below the Red Bluff Diversion Dam in Tehama County to the downstream reaches of the Sacramento and American Rivers (Moyle et al. 2015). They also occur in the lower reaches of the Feather, Merced, Tuolumne River and the San Joaquin Rivers (Moyle et al. 2015). This species is largely confined to the Delta, Suisun Bay, Suisun Marsh, Napa River, Petaluma River, and Sacramento-San Joaquin estuary. This species occurs predominantly in freshwater estuarine systems and prefers low-salinity, shallow-water habitats. Occurs in slow-moving sections of rivers, sloughs, and marshes. Species abundance is strongly tied to outflows because spawning occurs over flooded vegetation (Moyle et al. 2015).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.
Spirinchus thaleichthys pop. 2 longfin smelt - San Francisco Bay-Delta DPS	FE/ST/SSC	The longfin smelt is a pelagic, anadramous fish within the Sacramento-San Joaquin river delta, San Francisco bay, and Gulf of the Farallones. They spawn in lower freshwater reaches of Sacramento and San Joaquin rivers and then moves downstream to brackish water to rear. They usually live for 2 years, spawn, and then	**Will not occur.** There is no suitable aquatic habitat in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		die, although some individuals may spawn as 1- or 3-year-old fish before dying. The San-Francisco Bay-Delta DPS longfin smelt spend their first year in Suisun Bay, then their later years in San Francisco Bay or the Gulf of the Farallones. Longfin smelt in the Bay-Delta may spawn as early as November and as late as June, although spawning typically occurs from January to April (USFWS 2016).	
Amphibians			
Ambystoma californiense California tiger salamander	FT/ST/--/NBHCP Covered Species	California tiger salamanders are generally restricted to vernal pools and seasonal ponds, including many constructed stock ponds, in grassland and oak savannah plant communities from sea level to about 1,500 feet in central California. This species spends the majority of its life in upland areas in the vicinity of suitable breeding ponds, where it inhabits rodent burrows. In order to provide suitable habitat for this species, suitable breeding habitat must be present in combination with suitable upland habitat. In the Coastal region, populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County, and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (USFWS 2017b).	**Will not occur.** There is no suitable breeding habitat (vernal pools, seasonal ponds) in or adjacent to the Study Area. This species has not been documented in the Natomas Basin (TNBC 2025).
Spea hammondii western spadefoot	PT/--/SSC/NBHCP Covered Species	Amphibian that breeds in vernal pools and seasonal ponds or slow portions of streams in grasslands and woodlands. Adults spend most of their time in underground burrows in grasslands surrounding breeding pools	**Will not occur.** There is no suitable breeding habitat (vernal pools, seasonal ponds) in or adjacent to the Study Area. This species has not been documented in the Natomas Basin (TNBC 2025).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		(Jennings and Hayes 1994). Breeding is typically finished by the end of March. Tadpoles mature through late-spring and disperse as pools dry (Zeiner et al. 1990).	
Reptiles			
Actinemys (=Emys) marmorata northwestern pond turtle	PT/--/SSC/NBHCP Covered Species	Inhabits slow-moving water with dense submerged vegetation, abundant basking sites, gently sloping banks, and dry clay or silt soils in nearby uplands. Turtles will lay eggs up to 0.25-mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994).	**Will not occur.** There is no suitable aquatic habitat in or adjacent to the Study Area. The only suitable aquatic habitat in the vicinity of the Study Area is in Steelhead Creek, roughly 1,200 feet east of the Study Area. The land between Steelhead Creek and the Study Area is developed with a business park and Northgate Blvd., which represent an impassable barrier to dispersal for northwestern pond turtles.
Thamnophis gigas giant garter snake	FT/ST/--/NBHCP Covered Species	Endemic to the San Joaquin and Sacramento Valley floors. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs as well as slow-	**Will not occur.** There is no suitable aquatic habitat in or within 200 feet of the Study Area. The only suitable aquatic habitat in the vicinity of the Study Area is in Steelhead Creek, roughly 1,200 feet east of the Study Area. The land between Steelhead Creek and the Study Area is developed with a business park and Northgate Blvd., which represent an impassable barrier to dispersal for giant garter snake.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		moving creeks but absent from large rivers (USFWS 2017c).	
Birds			
Accipiter cooperii Cooper's hawk	--/--/WL	Nests in woodlands and urban trees. Preys on medium-sized birds and small mammals. Forages in open woodland and habitat edges (Zeiner et al. 1990).	**Will not occur.** There is no suitable nesting or foraging habitat in or adjacent to the Study Area.
Agelaius tricolor tricolored blackbird	--/ST/SSC/NBHCP Covered Species	Common locally throughout central California. Nests and seeks cover in emergent wetland vegetation and thorny vegetation such as Himalayan blackberry (*Rubus armeniacus*) as well as cattails and tules. Nesting area must be large enough to support a minimum colony of 50 pairs as they are a highly colonial species. Forages on ground in croplands, grassy fields, flooded land, and edges of ponds for insects (Shuford and Gardali 2008).	**Not expected.** This species could potentially forage in the Study Area, but there is no suitable nesting habitat for tricolored blackbird in or within 500 feet of the Study Area.
Ammodramus savannarum Grasshopper sparrow	--/--/SSC	A summer resident of foothills and lowlands west of the Cascade-Sierra Nevada crest. Occurs in grasslands with scattered shrubs or other tall structures which it utilizes as singing perches. Nests on the ground in dense grass with overhanging taller grasses and forbs (Zeiner et al. 1990).	**Will not occur.** There is no suitable habitat in or adjacent to the Study Area.
Athene cunicularia burrowing owl	/SCE/SSC/NBHCP Covered Species	Forages in grasslands, agricultural fields, and disturbed places where burrowing mammals are abundant. Nests in burrows, especially those of California ground squirrel (*Otospermophilus beecheyi*; CDFW 2012).	**May occur.** Ground squirrel burrows are present in the Study Area that provide potential nesting habitat for burrowing owls and foraging habitat is present in the Study Area and vicinity. The mammal burrows in the Study Area were searched for sign of owls (pellets, feathers, whitewash) and none was observed. This species has been

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
			documented roughly 1,500 feet northeast of the Study Area (CDFW 2025).
Ardea herodias Great blue heron	--/--/CSA/--	Occurs in a variety of freshwater and saltwater habitats including wetlands, swamps, rivers, estuaries, lakes, and tidal flats. Typically nests in a colony within large trees in isolated swamps, on islands, or in large trees near water. This species may also nest on the ground, in brush, or on artificial structures.	**Will not occur.** Suitable nesting habitat is not present in the Study Area.
Ardea alba Great egret	--/--/CSA/--	Occurs in a variety of habitats such as wetlands, lakes, flooded agricultural fields, estuaries, rivers, and tidal flats. Typically nest within a large tree over water but also may nest on the ground or on artificial platforms.	**Will not occur.** Suitable nesting habitat is not present in the Study Area.
Aquila chrysaetos Golden eagle	--/--/FP/--	Typically occurs in rolling foothills, mountain areas, deserts and other open habitats up to 3,822 m amsl. Typically nests on cliff ledges or large trees in open areas in canyons. Will occasionally use other tall structures for nesting, such as electrical transmission towers. Prey consists mostly of rodents, carrion, birds, reptiles and occasionally small livestock (Zeiner et al. 1990).	**Will not occur.** Suitable habitat is not present in the Study Area.
Branta hutchinsii leucopareia Aleutian cackling goose	--/--/NBHCP Covered Species	This species breeds off the coast of Alaska on the Aleutian and neighboring islands and winters in the Sacramento and San Joaquin Valleys. During the winter, Aleutian cackling geese require inland lakes and marshes that provide roosting areas protected from predators. Their winter foraging habitat consists mostly of agricultural lands such as flooded rice fields, pastures, and crop stubble where they consume grass, sprouted grain,	**Not expected.** Aleutian cackling goose could use the site for a brief stopover but would not be expected to utilize the site for an extended period of time due to a lack of quality foraging habitat and the level of disturbance.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		and waste crops following harvest. Their breeding habitat consists of tundra on grass-covered islands that are inaccessible to mammalian predators (TNBC 2025).	
Buteo regalis Ferruginous hawk	--/--/WL/	Found in arid and semi-arid open grasslands, sagebrush flats, desert scrub, low foothills and areas of pinyon and juniper habitat. Ferruginous hawks' nest in trees, large shrubs, utility poles and occasionally on the ground near river cut banks. Preys upon ground squirrels, rabbits, mice, and gophers (Zeiner et al. 1990).	**Will not occur.** There is no suitable nesting or foraging habitat for this species in the Study Area.
Buteo swainsoni Swainson's hawk	--/ST/--/NBHCP Covered Species	Forages in grasslands, suitable grain or alfalfa fields, or livestock pastures adjacent to nesting habitat. Nests on large trees in open areas (CDFW 1994).	**May occur**. There are no suitable nest trees in the Study Area, but suitable nest trees are present within 0.1 mile of the Study Area in the vicinity of the Northgate Blvd./Interstate 80 interchange and within 0.25 mile of the Study Area along Steelhead Creek. Swainson's hawk could occasionally forage in the Study Area. The closest reported occurrence of nesting Swainson's hawk is a documented occurrence of nesting Swainson's hawk from 2002 approximately 1.7 miles north of the Study Area in a narrow valley oak riparian corridor along Dry Creek (CDFW 2025).
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT/SE/--	Occurs at isolated sites in Sacramento Valley in northern California, and along Kern and Colorado River systems in southern California. Frequents valley foothill and desert riparian habitats. Inhabits open woodlands with clearings, and riparian habitats with dense understory foliage along slow-moving	**Will not occur.** There is no suitable riparian habitat in or adjacent to the Study Area.

Attachment F
Potential for Regionally-Occurring Special-Status Species and/or Sensitive Natural Communities to Occur in the Project Site

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		drainages, backwaters, or seeps. Prefers dense willows for roosting but will use adjacent orchard in the Sacramento Valley. Typically requires expansive riparian habitat for nesting (Zeiner et al. 1990).	
Elanus leucurus white-tailed kite	--/--/FP	Inhabits rolling foothills and valley margins with scattered oaks, as well as river bottomlands or marshes next to deciduous woodland. Nests in isolated, dense-topped trees in open areas. Forages in a variety of habitats including grassland, marshes, and agricultural fields (Zeiner et al. 1990).	**Not expected.** There is no suitable nesting habitat in or adjacent to the Study Area and the site is too small to provide any significant foraging habitat for this species.
Lanius ludovicianus Loggerhead shrike	--/--/SSC/NBHCP Covered Species	This species prefers open habitats with scattered shrubs, trees, posts, or other perches. It can be found in shrublands or open woodlands with bare ground, or sparse herbaceous cover. The loggerhead shrike is often found in open cropland (Zeiner et al. 1990).	**Not expected.** There is no suitable nesting habitat in or adjacent to the Study Area and the site is too small to provide any significant foraging habitat for this species.
Laterallus jamaicensis coturniculus California black rail	--/ST/FP	Inhabits brackish marsh, primarily in the upper marsh zone dominated by alkali heath (*Frankenia salina*), cattail, and rush (*Juncus* spp.); prefers lower salinity environments. In the Sierra Nevada foothills, black rail is a year-round resident along wetland edges where water is 1.2 inches or less (Richmond et al. 2010). Black rail is typically associated with perennial wetlands associated with flowing water such as irrigation canals, perennial streams and springs with dense vegetation in the Sierra Nevada foothills (Richmond et al. 2010). Forages on the ground, under cover of dense vegetation (Richmond et al. 2010).	**Will not occur.** Suitable marsh habitat is not present in the Study Area.

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Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Melospiza melodia song sparrow (Modesto Population)	--/--/SSC	Breeds in riparian thickets in shrubs or vines near fresh or saline emergent wetland. Nests are typically situated low to the ground or on the ground under dense riparian vegetation (Zeiner et al. 1990).	**Will not occur.** Suitable riparian habitat is not present in the Study Area.
Nycticorax nycticorax black-crowned night heron	--/--/CSA/--	Roosts in trees around fresh- and salt-water habitats including marshes, swamps, rivers, ponds, canals, and rice fields. Common year-round in the Central Valley. Once threatened by DDT, populations are recovering and considered stable (Audubon Society 2025).	**Will not occur.** Suitable nesting habitat is not present in or adjacent to the Study Area.
Plegadis chihi white faced ibis	--/--/SSC/NBHCP Covered Species	This species nests sporadically in the Sacramento-San Joaquin Valley but occurs as a transient throughout California. This species requires extensive marshes for nesting and forages in marshes, pastures, and croplands. It no longer nests regularly in the Central Valley (Zeiner et al. 1990).	**Will not occur.** There is no suitable nesting or foraging habitat for this species in the Study Area.
Progne subis purple martin	--/--/SSC	Nests in cavities in open areas with low canopy cover at the height of the nest, near large bodies of water that support high densities of large insects. Martins use a variety of cavities including in bridges, large tree snags, and collapsed lava tubes. The species is very sensitive to competition from European starlings and is extirpated from most low-elevation areas by starlings (Shuford and Gardali 2008).	**Will not occur.** Suitable nesting habitat is not present in the Study Area.
Riparia riparia Bank swallow	--/ST/--/NBHCP Covered Species	Found primarily in riparian and lowland habitat in California. Nests in colonies along cliffs or steep riverbanks in holes. In California, a majority of the population is situated along the Sacramento River and the Feather River.	**Will not occur.** There is no suitable riverbank habitat for nesting colonies.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		Other smaller populations persist near Monterey and north of Shasta counties (Zeiner et al. 1990).	
Vireo bellii pusillus Least bell's vireo	FE/SE/--	This species is an obligate riparian species during the breeding season that prefers early successional habitat (USFWS 1998). Typically found in structurally diverse habitat such as cottonwood-willow forests, oak woodlands, and mule fat scrub (USFWS 1998) that generally contains both canopy and shrub layers and includes some associated upland habitat. This species will winter in arroyos that contain mesquite scrub habitat and are not limited to willow dominated habitats. Previously considered to be limited to southern California, recent account of this species with successful breeding in Salinas Valley and in Yolo county show that this species is expanding back into its former range (CDFW 2025).	**Will not occur.** Suitable riparian habitat is not present in the Study Area.
Mammals			
Taxidea taxus American badger	--/--/SSC	Inhabits drier open stages of most shrub, forest, and herbaceous habitats with loose, friable soils. Preys on a wide variety of mammals, reptiles, birds, and carrion, and hunts mostly by digging out fossorial prey. Occasionally takes prey on the surface. Not tolerant of cultivation. No longer occur in the Central Valley except in the extreme western edge (Williams 1986).	**Will not occur.** There is no suitable habitat for this species on or near the Study Area.
Sensitive Natural Communities			
Alkali Meadow	--/--/--	Alkali meadows have a shallow water table and permanently moist alkaline soils. Low	**Not present.** This habitat type is not present in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		growing perennial grasses and sedges are characteristic of alkaline meadows (Holland 1986).	
Alkali Seep	--/--/--	Seeps scattered throughout the desert regions of California. Characterized by low-growing perennial herbs, usually forming fairly complete cover. Associated with Alkali Meadows (Holland 1986).	**Not present.** This habitat type is not present in the Study Area.
Great Valley Cottonwood Riparian Forest	--/--/--	Riparian forest in the Great Valley dominated by cottonwood (*Populus* spp.), primarily Fremont cottonwood (*Populus fremontii*).	**Not present.** This habitat type is not present in the Study Area.
Northern Claypan Vernal Pool	--/--/--	Found on lower terraces and basin rims. Distributed from the Central San Joaquin Valley, north through Glenn and Colusa Counties. Often saline soils (Holland 1986).	**Not present.** This habitat type is not present in the Study Area.
Northern hardpan vernal pool	--/--/--	Vernal pools are seasonal depressional wetlands that occur under the Mediterranean climate conditions of the West Coast and in glaciated areas of northeastern and midwestern states. They are covered by shallow water for variable periods from winter to spring but may be completely dry for most of the summer and fall. These wetlands range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland. Beneath vernal pools lies either bedrock or a hard clay layer in the soil that helps keep water in the pool (USEPA 2025). Northern hardpan vernal pools occur on old to moderately old acidic terraces. These terraces are the outwash of soils eroded from the high mountains to the east. The terraces have an underlying iron-silica cemented hardpan in the	**Not present.** This habitat type is not present in the Study Area.

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Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		subsoil that prevents water from draining out of the pool.	
Northern Volcanic Mud Flow Vernal Pool	--/--/--	Low growing vegetation restricted to depressions in Tertiary pyroclastic flows. Pools form from winter rains, and vegetation typically germinates in the fall, flowers in the winter and finishes in May. Vegetation typically consists of bristled downingia (*Downingia bicornuta*), smooth goldfields (*Lasthenia glaberrima*), and Rosy douglas' meadowfoam (*Limnanthes douglasii* ssp. *rosea*) and Marigold navarretia (*Navarretia tagetina*) (Holland 1986).	**Not present.** This habitat type is not present in the Study Area.
Elderberry savannah	--/--/--	This community is characterized by open, scattered stands of elderberry with an understory of annual grassland.	**Not present.** This habitat type is not present in the Study Area as no elderberry shrubs are present.

[1] Sensitive species reported in CNDDB or CNPS on the "Verona, Pleasant Grove, Roseville, Citrus Heights, Rio Linda, Taylor Monument, Sacramento West, Sacramento East, and Carmichael, Ca" USGS quads, or in the USFWS list for the Study Area.

[2] Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List; CSA=California Special Animal; SSHCP=South Sacramento Habitat Conservation Plan Covered Species.

[3] Status in the Study area is assessed as follows. **Not Present**: habitat type does not occur in the Study Area based on the results of biological surveys; **Will Not Occur**: Species is either sessile (*i.e.* plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur in the Study Area; **Not Expected**: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative; **May Occur**: Species was not observed on the site and breeding habitat is not present but the species has the potential to breed/nest in the project region and utilize the site for dispersal or foraging; **High**: Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; **Not Present**: the habitat does not occur in the Study Area; **Present**: The species or habitat was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere. Extension codes: .1 – seriously endangered; .2 – moderately endangered.