APPENDIX B: BIOLOGICAL RESOURCES ASSESSMENT REPORT

BIOLOGICAL RESOURCES TECHNICAL REPORT

RIVER OAKS PUMP STATION REGIONAL STORMWATER CAPTURE PROJECT

SAN JOSE, SANTA CLARA COUNTY, CALIFORNIA

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DEFINITIONS

Study Area: The area throughout which the assessment was performed, inclusive of approximately 33 acres spanning across the majority of the parcel of APN 09-706-037 and a portion of APN 09-706-28. Inclusive of the 6-acre Project Area and associated 250-foot buffer.
Project Area: The 6-acre area encompassing the proposed project; the area evaluated for potential impacts to sensitive biological resources

LIST OF ACRONYMS

BGEPA	Bald and Golden Eagle Protection Act
BIOS	Biogeographic Information and Observation System
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
City	City of San Jose
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
County	County of Santa Clara
Corps	U.S. Army Corps of Engineers
CSRL	California Soils Resources Lab
CWA	Clean Water Act
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation & Management
MBTA	Migratory Bird Treaty Act
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
NWPL	National Wetland Plant List
OHWM	Ordinary High Water Mark
Rank	California Rare Plant Ranks
RWQCB	Regional Water Quality Control Board
SCVHCP	Santa Clara Valley Habitat Conservation Plan
SSC	Species of Special Concern
SWRCB	State Water Resource Control Board
TOB	Top of Bank
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WRA	WRA, Inc.

1.0 INTRODUCTION

This Biological Technical Report evaluates existing biological resources, potential impacts, and mitigation measures (if required) for the River Oaks Pump Station Regional Stormwater Capture Project located in San Jose, Santa Clara County, CA (Figure 1, Appendix A). The proposed project (Project) involves the development of an existing detention basin into a recreational area.

1.1 Overview and Purpose

This report provides an assessment of biological resources within the Project Area and immediate vicinity. The assessment included a special-status plant survey for Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) and a wetland delineation. The purpose of the assessment was to develop and gather information on sensitive biological communities and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Study Area for: (1) the presence of sensitive biological communities, special status plant species, and special status wildlife species, (2) the potential for the site to support special-status plant and wildlife species. Based on the results of the site assessment, potential impacts to sensitive biological communities and special status species resulting from the proposed project were evaluated. If the project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. Additional focused studies (such as protocol level species surveys or a wetland delineation) may be required to support regulatory permit applications or to implement mitigation measures included in this report. This assessment is based on information available at the time of the study and on site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The City is implementing green stormwater infrastructure (GSI) project at its existing River Oaks Pump Station and Retention Basin to improve water quality prior to discharging the water to the Guadalupe River. The River Oaks Stormwater Capture Project (Project or proposed Project) would capture and treat stormwater and dry weather runoff from a 344-acre drainage area in the River Oaks community of San Jose. The project site is located between Riverview Parkway and the Guadalupe River, and consists of an existing retention basin and pump station that discharges untreated stormwater via an outfall to the Guadalupe River. The purpose of the project is to convert the existing facility into a regional large-scale stormwater and dry weather runoff capture and treatment project.

The proposed Project would convert the existing River Oaks Pump Station and Retention Basin facility to provide treatment via bioretention prior to discharge to the Guadalupe River. The proposed Project would also include park-like setting enhancements to provide recreational, aesthetic, and educational benefits for the community. Proposed park-like features would include a walking trail around the basin composed of permeable pavement, a boardwalk and viewing platform over the basin, two deck overlooks with seating, exercise equipment, interpretive signage, a demonstration bioretention planter, and public art

(mural on the pump station and educational sculpture). The area surrounding the basin would be planted with new trees, native grasses, and a pollinator garden.

Construction activities anticipated for the proposed Project include grading, shoring, concrete work, paving, drilling (for dewatering and monitoring wells), electrical installation, storm/underdrain infrastructure (e.g. pipelines, cleanouts), waterproof liner installation, landscaping (both biotreatment and aesthetic), and park amenities installation (e.g. sculptures, exercise equipment, etc.). Excavation would generally occur to a depth of up to approximately seven feet below the existing bottom of the detention basin, with the exception of the potential permanent dewatering well, which would require drilling to a depth of approximately 15 feet below the existing grade. Dewatering may be necessary during construction. During construction, it is assumed that 100 percent of the site would be disturbed.

It is anticipated that all storage/staging would occur in the Project Area. Construction access to the site would be provided through: (1) the existing access point at the intersection of Skytop Street and Riverview Parkway; and (2) the existing maintenance pathway on the south side of Riverview Park in order to allow for one-way traffic at the site.

The majority of construction is expected to occur over a period of approximately seven months during one dry season, beginning in February 2022 and concluding in September 2022. Site work, basin modifications, pump station modifications, park construction, and perimeter trail work would occur during this timeframe. Installation of plantings may be seasonally dependent, and would likely occur during the 2022/2023 wet season

1.3 Summary of Results

Two sensitive land cover types are present in the Study Area: stream and riparian woodland. The Project and associated activities will not have direct impacts to these communities; however, unintentional indirect impacts may occur. Avoidance measures are provided to prevent unintentional impacts. A 0.05 acre area that meets criteria of seasonal wetland is located in the detention basin at the end of a French drain designed to drain the basin; however, this wetland feature is determined to not be jurisdictional under the Corps, RWQCB or CDFW regulations; therefore no significant impacts to wetlands are expected.

One special-status plant, Congdon's tarplant was initially determined to have moderate potential to occur in the Study Area. A protocol-level rare plant survey resulted in no detection of this plant or of any other special-status plant species.

Two special-status birds, as well as non-status birds with baseline legal protections, have the potential to occur in the Project Area, or near enough to it to be potentially impacted by the project. Mitigation measures and best management practices have been developed and provided herein that will reduce impacts to these resources to a less than significant level.

Table 1. Summary of Biological Resources Evaluation

CEQA Assessment Category[1] IV. -Biological Resources	Biological Resources Considered	Relevant Laws and Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section[2]
Question A. Special-status species	Special-status Plants; Special-status Wildlife; Designated Critical Habitat;	Federal Endangered Species Act (ESA); California Endangered Species Act (CESA); California Native Plant Protection Act (CNPPA); Migratory Bird Treaty Act (MBTA); Bald and Golden Eagle Protection Act (BGEPA)	U.S. Fish and Wildlife Service (USFWS); National Marine Fisheries Service (NMFS); California Department of Fish and Wildlife (CDFW)	Potentially significant impacts were identified and mitigation measures included that reduce those impacts to a level that is less than significant. **See Section 7.1 for more information**
Question B. Sensitive natural communities & Riparian habitat	Sensitive Natural Communities; Streams, Lakes, & Riparian Habitat	California Fish and Game Code (CFGC); Oak Woodland Conservation Act; Porter-Cologne Act; Clean Water Act (CWA)	California Department of Fish and Wildlife (CDFW); U.S. Army Corps of Engineers (Corps); U.S. Environmental Protection Agency (EPA); State Water Resources Control Board; Regional Water Quality Control Board	Potentially significant impacts were not identified and no mitigation measures are needed. **See Section 7.2 for more information**
Question C. State and federally protected wetlands and waters	Wetlands; Unvegetated surface waters	Clean Water Act (CWA); Sections 404/401; Rivers and Harbors Act; Section 10; Porter Cologne Act;	U.S. Army Corps of Engineers (Corps); U.S. Environmental Protection Agency (EPA); State Water Resources Control Board; Regional Water Quality Control Board	Potentially significant impacts were not identified and no mitigation measures are needed. **See Section 7.3 for more information**

[1] *CEQA Questions have been summarized here; see Section 6.2 for details.*
[2] *As given in this report; see Section 5.0 subheadings*

CEQA Assessment Category1IV. -Biological Resources	Biological Resources Considered	Relevant Laws and Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section2
Question D. Fish & wildlife corridors	Essential Fish Habitat; Wildlife Corridors	California Fish and Game Code; Magnuson-Stevens Fishery Conservation & Management Act	California Department of Fish and Wildlife (CDFW); National Marine Fisheries Service (NMFS)	Potentially significant impacts were not identified and no mitigation measures are needed. **See Section 7.4 for more information**
Question E. Local policies	Protected Trees; Coastal zone resources; Other biological protections	Local Tree Ordinance; General Plan (e.g., Stream & Wetland Setbacks); Local ordinances	Local and regional agencies; California Coastal Commission; San Francisco Bay Conservation and Development Commission	Potentially significant impacts were not identified and no mitigation measures are needed. **See Section 7.5 for more information**
Question F. Local, state, federal conservation plans	Habitat Conservation Plans; Natural Community; Conservation Plans	Federal Endangered Species Act (ESA); Natural Community Conservation Planning Act (NCCPA)	U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Wildlife (CDFW)	Potentially significant impacts were not identified and mitigation measures are needed. **See Section 7.6 for more information**

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2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Game (CDFW), and aquatic communities protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFG 2010, CDFW 2018a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2018a). CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2018) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act.

Waters of the United States, Including Wetlands: The United States Army Corps of Engineers (Corps) regulates “Waters of the United States” under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands. (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the Corps Wetlands Delineation Manual (Environmental Laboratory 1987), are identified by the presence of (1): hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

Waters of the State, Including Wetlands: The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards

(RWQCB) protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit, but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

2.1.2 Special-status Species

Endangered and Threatened Plants, Fish and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of "endangered" and "threatened" plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing, and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. Take under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in "take" of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species". Protections afforded to

designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (California Fish and Game Code 2050 et seq.) prohibits a "take" of any plant and animal species that the California Fish and Game Commission determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to "candidate species" which are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in California Fish and Game Code (CFGC) as protected even if not listed under CESA or the ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*)] that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Essential Fish Habitat. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g. eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special Status Species under CEQA. To address additional species protections afforded under CEQA, CDFW has developed a list of special species

as “a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory) with California Rare Plant Ranks (Rank) of 1, 2, and 3 are also considered special-status plant species and must be considered under CEQA. Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within Santa Clara Valley Habitat Conservation Plan (SCVHCP) area, local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Regulatory Setting

City of San Jose Ordinances and Policies**.** The City of San Jose (City) Riparian Corridor Protection and Bird-Safe Design Council Policy (City 2016) provides guidance consistent with the goals, policies, and actions of the City’s Envision San Jose 2040 General Plan (General Plan; City 2011). New buildings in existing urban infill areas are required to have a minimum 100-foot setback from riparian corridors. Additionally, new development should use materials and lighting that are designed and constructed to reduce light and glare impacts to riparian corridors and should be directed away from riparian corridors.

Bird-Safe Design Guidance includes: (1) the design of buildings and structures should avoid mirrors and large areas of reflective glass, (2) avoidance of transparent glass skyways, walkways, or entryways, (3) free-standing glass walls, and transparent building corners, (4) avoidance of funneling open space to a building façade.

The General Plan (City 2011) was written to serve as a guide for future development and growth in the City. Included in the General Plan is guidance pertaining to environmental resources and encourages the restoration of diked historic wetlands to their natural state by opening them to tidal action. New development projects that create 10,000 square feet or more of impervious surface area must comply with the City Post-Construction Urban Runoff Management Policy (City 2006). This policy requires all these development and redevelopment projects to implement post-construction best management practices and treatment control measures to the maximum extent practicable.

Santa Clara Valley Habitat Plan. The Santa Clara Valley Habitat Plan (SCVHP) (County of Santa Clara 2015) is intended to provide an effective framework to protect, enhance, and restore natural resources in specific areas of Santa Clara County, while improving and streamlining the environmental permitting process for impacts on threatened and endangered species. Projects located within the SCVHP area may obtain permits and mitigation coverage through payment of in-lieu fees. Projects receiving permits through the SCVHP must also implement avoidance and minimization measures included in the SCVHP to reduce the potential for take of covered species and potential impacts to sensitive resources. These measures are outlined in Chapter 6 of the SCVHP.

3.0 ASSESSMENT METHODOLOGY

On September 11, 2019 and July 15, 2020, WRA biologists visited the Study Area to map vegetation, aquatic communities, unvegetated land cover types, document plant and wildlife species present, and evaluate habitat on site for the potential to support special status species as defined by the California Environmental Quality Act (CEQA). Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- *Soil Survey of Santa Clara Area, Western Part* (USDA 1958, 2015)
- Milpitas 7.5-minute quadrangle (USGS 2018)
- Contemporary aerial photographs (Google Earth 2020)
- Historical aerial photographs (Historical Aerials 2020)
- National Wetlands Inventory (USFWS 2020)
- California Aquatic Resources Inventory (SFEI 2020)
- California Natural Diversity Database (CNDDB, CDFW 2020)
- California Native Plant Society Electronic Inventory (CNPS 2020)
- Consortium of California Herbaria (CCH 2020)
- USFWS List of Federal Endangered and Threatened Species (USFWS 2020)
- eBird Online Database (eBird 2020)
- CDFW Publication, California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation Online (CNPS 2020b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2018)
- Santa Clara Valley Habitat Conservation Plan Geodatabase (SCVHP 2020).

Database searches (i.e., CNDDB, CNPS) focused on the Milpitas and eight surrounding USGS 7.5-minute quadrangles for special-status plants. The special-status wildlife evaluation was based on CNDDB database searches that covered the Study Area and the surrounding five miles.

Following the remote assessment, WRA biologists completed a field review over the course of two days to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) are present, and (4) if special-status species are present[3].

3.1 Vegetation Communities and Other Land Cover Types

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized

[3] *Due to the timing of the assessment, it may or may not constitute protocol-level species surveys; see Section 4.2 if the site assessment would constitute a formal or protocol-level species survey.*

and mapped based on distinct shifts in plant assemblage (vegetation), and follow the California Natural Community List (CDFW 2018), Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), and A Manual of California Vegetation, Online Edition (CNPS 2018b). These vegetation manuals cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled (S1/G1), imperiled (S2/G2), or vulnerable (S3/G3), were evaluated as sensitive as part of this evaluation.

The site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* ("Corps Manual"; Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* ("Arid West"; Corps 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008). Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. Aquatic communities, if documented in the Project Area, and are mapped in the NMFS Essential Fish Habitat Mapper (NMFS 2018), or otherwise meet criteria for designation as Essential Fish Habitat are indicated as such in the community description below in Section 5.1. The presence of riparian habitat was evaluated based on woody plant species meeting the definition of riparian provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607, California Fish and Game Code* (CDFG 1994) and based on best professional judgement of biologists completing the field surveys.

3.2 Special-status Species

3.2.1 General Assessment

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. Presence of suitable habitat for special-status species was evaluated during the site visit(s) based on physical and biological conditions of the site, as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

- Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

- Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

- High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- Present. Species is observed on the site or has been recorded (i.e. CNDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was conducted or recommended as a future study because of seasonal timing. If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.2.2 Special-status Plants

A general assessment for special-status plants was conducted within the Study Area September 11, 2019. The survey assessed the habitat within the Study Area to determine if any special-status plants have the potential to occur. Plants observed were noted. Plants were identified using The Jepson Manual, 2nd Edition (Baldwin et. al. 2012), and Jepson Flora Project (eFlora 2020), to the taxonomic level necessary to determine whether or not they were sensitive. Plant names follow those of Jepson Flora Project (eFlora 2020), unless otherwise noted.

To determine the presence or absence of special-status plant species determined to have potential and are identifiable in bloom in the month of September, a protocol-level survey was conducted concurrently with the assessment site visit on September 11, 2019. The September survey corresponds to the period sufficient to observe and identify those special-status plants determined to have the potential to occur which are identifiable in September. The field surveys were conducted by botanist familiar with the flora of Santa Clara and surrounding counties. The surveys were performed in accordance with those described by resource experts and agencies (CNPS 2001, CDFW 2018c, USFWS 1996).

3.2.3 Special-status Wildlife

The study evaluated the likelihood for each special-status species wildlife species to be present in Study Area based on the suitability of habitat observed (Appendix C). No special field studies (e.g., protocol level) were conducted as part of this study. As such, any conclusions reached as to presence and absence of a special status species may be subject to modification should such studies be undertaken by the agencies or other consultants.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2020a). Additionally, aerial imagery (Google 2020) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly).

4.0 ECOLOGICAL SETTING

The approximately 33-acre Study Area is located in the City of San Jose between Riverview Parkway and Guadalupe River Trail, 0.5 miles north of Montague Expressway. The Study Area includes all areas affected by the Project (Project Area), as well as a 250-foot buffer outside of the Project footprint. Additional details of the local setting are provided below.

4.1 Soils and Topography

The overall topography of the Study Area is a basin with a gently sloping bottom and steep walls as well as steep levees with elevations ranging from approximately 8 to 15 feet above sea level. According to the *Soil Survey of Santa Clara Area Western Part* (USDA 1958, 2015), the Study Area is underlain by four soil mapping units: Elder fine sandy loam, protected, 0 to 2 percent slope, Elder fine sandy loam, 0 to 2 percent slopes, rarely flooded, Urban land, 0 to 2 percent slopes, alluvial fans, and Urban-Elder complex, 0 to 2 percent slopes, protected. The parent soil series of all the Study Area's mapping units are summarized below.

Elder Series: This series consists deep and very deep fine sandy loam formed in alluvial material derived from mixed rock sources, and is situated on alluvial fans and flood plains ranging from 20 to 1,500 feet (CSRL 2020, USDA 2015). These soils are not considered hydric, and are well drained with negligible to low runoff and moderately rapid permeability (USDA 2020). Typical naturalized vegetation consists of grasslands.

4.2 Climate and Hydrology

The Study Area is located in the fog incursion zone of Santa Clara County. The average monthly maximum temperature in the area is 71 degrees Fahrenheit, while the average monthly minimum temperature is 49 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 14.5 inches.

The local watershed is Guadalupe River-Frontal San Francisco Bay Estuaries (HUC 12: 180500030305) and the regional watershed is Coyote Creek (HUC 8: 1805003). The Study Area is located in the lower portion of the Coyote Creek watershed. Guadalupe River, a blue-line stream, is situated in the Study Area (USGS 2015). This feature is also mapped as excavated riverine (R2UBHx) and fluvial channel and Category 1 stream in available database (NWI; USFWS 2020; SFEI 2020; SCVHP 2020). A wetland mapped as excavated emergent wetland (PEM1Cx) and pond is mapped within the Project Area (NWI; USFWS 2020; CARI; SFEI 2018). Additionally, the vegetation associated with the stream is mapped as freshwater forested scrub (PSS1C) and willow riparian forest and scrub (USFWS 2020; SCVHP 2020). Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land-use

The majority of the Study Area is developed and disturbed from past development. Undeveloped areas consist of non-native grassland. Developed areas include paved trails, parking lots, buildings, and landscaped parks. Detailed plant community descriptions are included in Section 5.1 below, and all observed plants are included in Appendix B. Surrounding land uses include residential and recreation (Google Earth 2020). Historically, the Study Area was in agriculture prior to 1980; the detention basin was constructed between 1968 and 1980 as well as surrounding residential areas (Historic Aerials 2020).

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed four land cover types within the Study Area: developed, non-native grassland, stream, riparian woodland, and seasonal wetland. Land cover types within the Study Area are illustrated in Figure 2 (Appendix A) and listed in Table 2 below. Representative photos of land cover types are depicted in Appendix D. The non-sensitive land cover types in the Study Area and Project Area include non-native grasslands and developed areas, while the sensitive communities include the stream, riparian woodland, and seasonal wetland. The Project Area has been intentionally sited to avoid the stream and riparian woodland.

Table 2. Land Cover Types

COMMUNITY/LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA	ACRES WITHIN PROJECT AREA
Terrestrial Community/Land Cover				
Developed	Non-sensitive	n/a	17.45	1.69
Non-native annual grassland	Non-sensitive	No Rank	8.05	4.07
Riparian woodland	Sensitive	G4 S4	7.30	0.0
Aquatic Resources				
Stream	Sensitive	n/a	3.65	0.0
Seasonal Wetland	Non-Sensitive	No Rank	0.05	0.05

5.1.1 Terrestrial Land Cover

Developed Area (no vegetation alliance). CDFW Rank: None. In the developed areas, the vegetation is composed of landscaped areas dominated by non-native species which require regular maintenance (i.e. irrigation, pruning, fertilizing, mowing).

Non-native grassland-Wild Oats Grassland (*Avena* spp. Herbaceous Semi-Natural Alliance, CDFW Rank: None; Bermuda Grass flats (*Cynodon dactylon* Herbaceous Semi-Natural Alliance, CDFW Rank: None). The non-native grasslands within the Study Area best fit the wild oats grassland alliance (CNPS 2020b) and the pending Bermuda grass flats (CNPS 2020b). Wild oats grasslands are a ubiquitous vegetation type, where wild oat is dominant in the herbaceous layer, which occurs throughout California on all topographic positions (CNPS 2020b). Bermuda grass flats occur in irrigated or otherwise seasonally mesic areas. Within the Study Area, wild oat grasslands are located along the slopes of the levee and detention basin, while the Bermuda grass flats are located in the bottom of the basin. These grasslands are dominated by non-native grasses and forbs, including brome fescue (*Festuca bromoides*), birdsfoot trefoil (*Lotus corniculatus*), perennial pepperweed (*Lepidium latifolium*), and foxtail barley (*Hordeum murinum*).

Riparian Woodland- (no vegetation alliance) CDFW Rank: None. Within the Study Area, the riparian woodland is located along the Guadalupe River, situated along the TOB and OHW line. The dominant canopy tree is weeping willow (*Salix babylonica*) and California bay (*Umbellularia californica*) and doesn't fit any described vegetation alliance. The canopy is continuous with some openings where herbaceous understory vegetation is present. Understory species include curly dock (*Rumex crispus*), dallis grass (*Paspalum dilatatum*), and bristly ox tongue (*Helminthotheca echioides*). Scattered patches of tule (*Schoenoplectus acutus*) are in the stream OHW.

5.1.2 Aquatic Resources

Seasonal Wetlands- Bent Grass Meadow (*Agrostis* spp. Herbaceous Semi-Natural Alliance). CDFW Rank: None. Seasonal wetlands include areas which are saturated withwater for part of the year, typically during the rainy season (between October and March) and which are dominated by hydrophytic vegetative cover. Plant species observed in seasonal wetlands in the Study Area include bent grass (*Agrostis stolonifera*), dallis grass, tule, and cattail (*Typha latifolia*). Soils were observed depleted around living roots and were moist during the September site visit. The single seasonal wetland is located at the lowest topographic position, in a French drain, immediately adjacent to the pump station outflow. No ponding water was observed at the time of the site visit..

Stream (no vegetation alliance). The Guadalupe River is located approximately 90 feet to the southwest of the edge of the Project Area. This is a perennial stream which flows the entire year. The stream top of bank (TOB) has been excavated and leveed to prevent upland flooding. The TOB is approximately 280 feet, while the ordinary high water (OHW) line is approximately 60 feet. Vegetation along the stream is arroyo willow thicket as described above.

5.2 Special-status Species

5.2.1 Special-status Plants

Based upon a review of the resource databases listed in Section 4.0, 60 special-status plant species have been documented in the vicinity of the Study Area. Figure 3 in Appendix A contains observations of special-status plant species documented within a five-mile radius of the Study Area. One of these plants have the potential to occur in the Study Area. The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., volcanic tuff, serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., interior chaparral, perennial wetland) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Study Area were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;

- Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

One special-status plant, Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*, Rank 1B) was determined to have potential to occur in the Study Area. WRA biologists conducted the protocol-level surveys during a period sufficient to identify the special-status plant species with the potential to occur (Appendix C). No special-status plants were observed in the Study Area.

5.2.2 Special-status Wildlife

Of the special-status wildlife species documented in the vicinity of the Study Area, most are excluded from the Study Area based on a lack of habitat features. Figure 4 in Appendix A contains observations of special-status wildlife species documented within a five-mile radius of the Study Area. Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools
- Perennial aquatic habitat (e.g. streams, rivers or ponds)
- Oceans
- Tidal Marsh areas
- Coniferous forest
- Chaparral
- Rocky outcrops or similar structures to support nesting or roosting
- Sandy beaches or alkaline flats
- Presence of specific host plants
- Caves, mine shafts, or abandoned buildings

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. In addition, the developed nature of the area surrounding the Study Area precludes most special-status wildlife from being able to access the Study Area. Given the Study Area's relative proximity to sensitive habitats on the San Francisco Bay, many species documented nearby are additionally obligates to marine or tidal marsh habitats which are not present on or in the immediate vicinity of the Study Area.

Two special-status bird species have potential to occur in the immediate vicinity of or in portions of the Study Area: white-tailed kite (*Elanus leucurus*), burrowing owl (*Athene cunicularia*), these species are discussed in greater detail below. Several bat species, whose maternity roosts are considered under CEQA, including two special-status species (pallid bat, *Antrozous pallidus* and western red bat, *Lasiurus blossevillii*) were determined to have potential to occur in the Study Area, though not in the Project Area, in association with riparian areas located along the Guadalupe River. Special-status bats and their roosts are not discussed further because the Project Area is too far from their potential habitat in the Study Area and positioned behind a large berm, which would further reduce the potential for noise to impact bats. All special-status wildlife species with potential to occur in the vicinity of the Study Area are individually evaluated in Appendix C.

Table 3. Potential Special-status Wildlife

Scientific Name	Common Name	Conservation Status	Potential Habitat in the Study Area
Other Special-status Wildlife (CEQA, other)			
Elanus leucurus	white-tailed kite	CFP	Nearby trees may support nesting. This species has been observed in the vicinity
Athene cunicularia	burrowing owl	SSC	Open habitats with short vegetation and suitable burrows

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. Moderate Potential. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities. Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall. This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

No white-tailed kites were observed during the site visit, but this species is common in the area and is anticipated to occasionally forage over the Study Area, including the Project Area. Trees in the Study Area could support nesting white-tailed kite.

Burrowing owl (*Athene cunicularia*). CDFW Species of Special Concern. Moderate Potential. Burrowing owl occurs as a year-round resident and winter visitor in much of California's lowlands, inhabiting open areas with sparse or non-existent tree or shrub canopies. Typical habitat is annual or perennial grassland, although human-modified areas such as agricultural lands and airports are also used. This species is dependent on burrowing mammals to provide the burrows that are characteristically used for shelter and nesting, and in northern California, it is typically found in close association with California ground squirrels (*Otospermophilus beecheyi*). Manmade substrates such as pipes or debris piles may also be occupied in place of burrows.

No burrowing owls were observed within the Study Area. However, burrows are prevalent within the site and the site is open enough to potentially support the species. In addition, numerous records of burrowing owl are documented within a few miles of the Study Area.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms "landscape linkage" and "wildlife corridor" are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas. It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat.

The Guadalupe River, and potentially its adjacent riparian habitat, may function as a wildlife movement corridor, particularly for aquatic species such as salmonids that may use it to transit from ocean habitats to the north to headwater streams to the south. Some bird species may use the riparian corridor to transit from one place to another. However, the Project Area does not provide connectivity and does not function as a wildlife corridor.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

c) 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;

d) 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;

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a "substantial adverse effect" is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, *deminimis*, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.0 above, the following section describes potential significant impacts to sensitive resources within the Project Area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species and Nesting Birds

Potential impacts and mitigation for potentially significant impacts are discussed below

Burrowing Owl. The Project may affect burrowing owl if present during Project development. Potential impacts to burrowing owl could occur during the removal of burrow-like structures. These activities could result in the direct removal or destruction of active nests or occupied refugia or may create audible, vibratory, and/or visual disturbances that cause birds to abandon active nests. Because burrowing owl are a CDFW SSC, harming a burrowing owl is a **potentially significant impact** under CEQA.

> **Potential Impact BIO-1:** The Proposed Project's construction activities in the Project Area could result in harm to burrowing owl, if present, which would be considered a potentially significant impact.

To reduce potential impacts to burrowing owl to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-1: Fee payments into the Santa Clara Valley Habitat Conservation Plan have been made. Participation in the plan allows for participating projects to move forward without additional mitigation, though the terms of the plan must be followed, and the terms are species specific. With respect to burrowing owl, projects occurring within mapped burrowing owl breeding habitat require preconstruction surveys and subsequent measures to protect burrowing owls, if detected. However, the Project Area is not in an area mapped as burrowing owl breeding habitat and may proceed without additional mitigation.

White-tailed Kite and Common Nesting Birds. The Project may affect special-status white-tailed kite. In addition to special-status species, non-special-status native birds that are protected by the CFGC may also be impacted. Potential impacts to these species and their habitats could occur during the removal of vegetation or during ground-disturbing activities. These activities could result in the direct removal or destruction of active nests or may create audible, vibratory, and/or visual disturbances that cause birds to abandon active nests. Because nesting birds are protected by CDFC, destruction of an active nest or mortality of dependent young would be considered a **significant impact** under CEQA.

> **Potential Impact Bio-2**: The Proposed Project may directly or indirectly impact nesting birds, including special-status species.

To reduce impacts to nesting birds to less than significant level, the following measures shall be implemented:

> **Mitigation Measure Bio-2:** A survey for active bird nests shall be conducted by a qualified biologist no more than 14 days prior to the start of Project activities (vegetation removal, grading, or other

initial ground-disturbing activities) if ground disturbing activities commence during the nesting season (February 1 through August 31). The survey shall be conducted in a sufficient area around the Project Area to identify the location and status of any nests that could potentially be directly or indirectly affected by vegetation removal, or grading activities. For white-tailed kite, the survey area shall extend at least 0.25 miles from the area of potential disturbance. Based on the results of the pre-construction breeding bird survey, the following measure should apply:

- If active nests of protected species are found within the Project Area, or close enough to the area that nesting success would be adversely affected, a work exclusion zone should be established around each nest. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes vary dependent upon bird species, nest location, existing visual buffers, ambient sound levels, and other factors; an exclusion zone radius may be as small as 25 feet (for common, disturbance-adapted species) or more than 250 feet (for raptors). Listed species are typically provided more extensive exclusion zones, which may be specific to the species and/or follow CDFW guidance. Exclusion zone size may also be reduced from established levels if supported with nest monitoring by a qualified biologist indicating that work activities are not adversely impacting the nest.

7.2 Sensitive Land Cover Types

This section addresses the question:

> *b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*

Sensitive natural communities within the Study Area include riparian woodland. The entirety of riparian woodland is located within the TOB of Guadalupe River and no direct impacts are expected to occur within the TOB and associated 50-foot buffer. Furthermore, as the Project Area is sited below the top of the levee within the detention basin, approximately 100-feet from the edge of riparian woodland, indirect impacts are unlikely. Based on these factors, the Project will result in a **no impact** to riparian woodland.

7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

> *c) Does the Project have the potential to 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;*

The seasonal wetland present within the Study Area is located at the bottom of a constructed detention basin. On September 18, 2019, the EPA announced repeal of the 2015 WOTUS Rule and reverted to the 1986 WOTUS definition along with guidance handed down in the Rapanos court decision in 2007. In 2019

the EPA proposed another WOTUS rule which went into effect in June 2020. Under the 1986/2007 and 2019 Rule, the detention basin is considered non-jurisdictional because the following would not be considered a WOTUS:

> *c. Artificial lakes [basins] created by excavating and/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 (1986/2007 Rule).*
>
> *(ix) Stormwater control features excavated or constructed in upland to convey, treat, infiltrate or store stormwater run-off (2019 Rule).*

Furthermore, the New Wetlands Policy affecting waters of the state (WOTS) was adopted by SWRCB in April 2019 and it took effect on May 28, 2020. The New Wetlands Policy differs from previous regulations by including a specific list of features not considered WOTS, and under the New Wetlands Policy, the detention basin will not be considered jurisdictional because it is:

- a man-made, artificial feature created in uplands
- subject to ongoing regular maintenance and operations
- not used as mitigation for any other WOTS impacts
- used and maintained for exempt purposes which include: (1) settling of sediment, (2) detention, retention, infiltration, or treatment of stormwater runoff and other pollutants, and/or (3) treatment of surface waters

Because the seasonal wetland formed unintentionally within a detention basin which receives regular maintenance, it is non-jurisdictional. No direct impacts to jurisdictional wetlands are anticipated from the Project. It should be noted that the RWQCB, Corps, and EPA have responsibility for making jurisdictional determinations in their areas of jurisdiction, these agencies reserve the right to review information on a case-by-case basis to determine if a particular feature is a jurisdictional waters of the State, of the United States, or not.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

Within the Study Area, the Guadalupe River potentially provides connectivity between areas of suitable habitat for aquatic species. Mammals and birds may travel along the riparian corridor along the Guadalupe River. However, the Project Area itself does not provide means of transit for wildlife due to its position within a greater context of urban development. No permanent impact will occur to migratory corridors for terrestrial and aquatic species as a result of the Project. Any temporary impact that could occur would be related to noise that would be temporary and likely to be minimized to a very low level due to the Project Area's position behind a berm that separates it from the Guadalupe River.

Based on these factors, the Project will result in a **less than significant impact** to migratory corridors and habitat linkages.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

> *e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*

Local plans and policies related to biological resources examined in this analysis are:

- The City of San Jose (City) Riparian Corridor Protection and Bird-Safe Design Council Policy
- City General Plan requires all development and redevelopment projects creating 10,000 square feet or more of impervious surface to implement post-construction best management practices and treatment control measures to the maximum extent practicable.

The local policies and ordinances pertain to construction elements of buildings and other structures. No buildings are proposed as part of the Project and the existing paved access road south of the basin will be redeveloped to an impervious surface, which would be considered a beneficial impact. Therefore, **no impact** will occur related to these local policies.

7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

> *f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

All projects within the Santa Clara Valley Habitat Plan area are required by the City of San Jose to comply with the requirements of the HCP prior to issuance of a grading permit, including application for a permit and payment of all applicable habitat conservation fees. The western boundary of the Project Area is located outside the Category 1 Stream Setback and mapped as Urban Park land cover (SCVHP 2020). The Project Area is over 50 feet from riparian vegetation and 100 feet from the top of bank of the Guadalupe River, separated by a levee. No development will occur within 100 feet of riparian vegetation or stream TOB. Thus, the proposed project meets the SCVHP Condition 11 requirements.

SCVHP Condition 12 requirements do not apply to the Project as no wetlands mapped by SCVHCP are present within the Study Area. Further, the seasonal wetland within the Project Area developed unintentionally and is not under Corps or RWQCB or CDFW jurisdiction. Thus, the proposed project meets SCVHP Condition 12 requirements.

As determined by the biological assessment, through implementation of Mitigation Measure BIO-1 identified above, the project meets the SCVHP Condition 15, to minimize potential impacts to burrowing owl.

The Project will comply with all requirements of the SCVHP, and will not conflict with the plan's provisions. Therefore, there is **no impact** to the function of the SCVHP.

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Appendix A
Figures

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Sources: National Geographic, WRA | Prepared By: njander, 7/17/2020

Figure 1. Study Area Regional Location Map

Biological Resource Assessment
River Oaks
San Jose, California

0 0.25 0.5 Miles

N

wra
ENVIRONMENTAL CONSULTANTS

Sources: CARI, USDA NAIP Imagery 2018, WRA | Prepared By: njander, 7/17/2020

Figure 2. Land Cover Types in the Study Area

Biological Resource Assessment
River Oaks
San Jose, California

0 250 500 Feet

N

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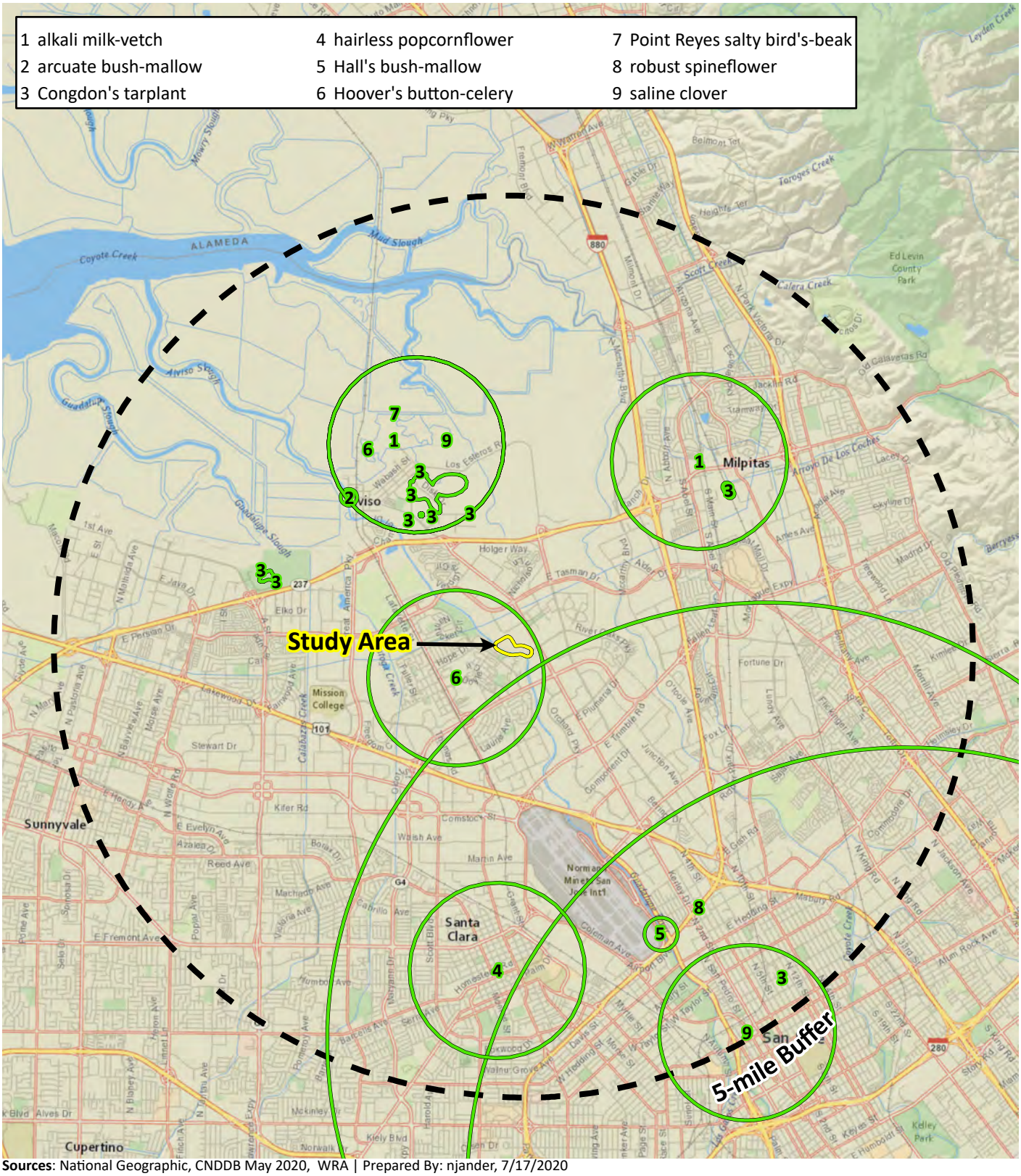
ENVIRONMENTAL CONSULTANTS



Sources: National Geographic, CNDDB May 2020, WRA | Prepared By: njander, 7/17/2020

Figure 3. Special-Status Plant Species Documented within 5-miles of the Study Area

Biological Resource Assessment
River Oaks
San Jose, California

0 1 2 Miles

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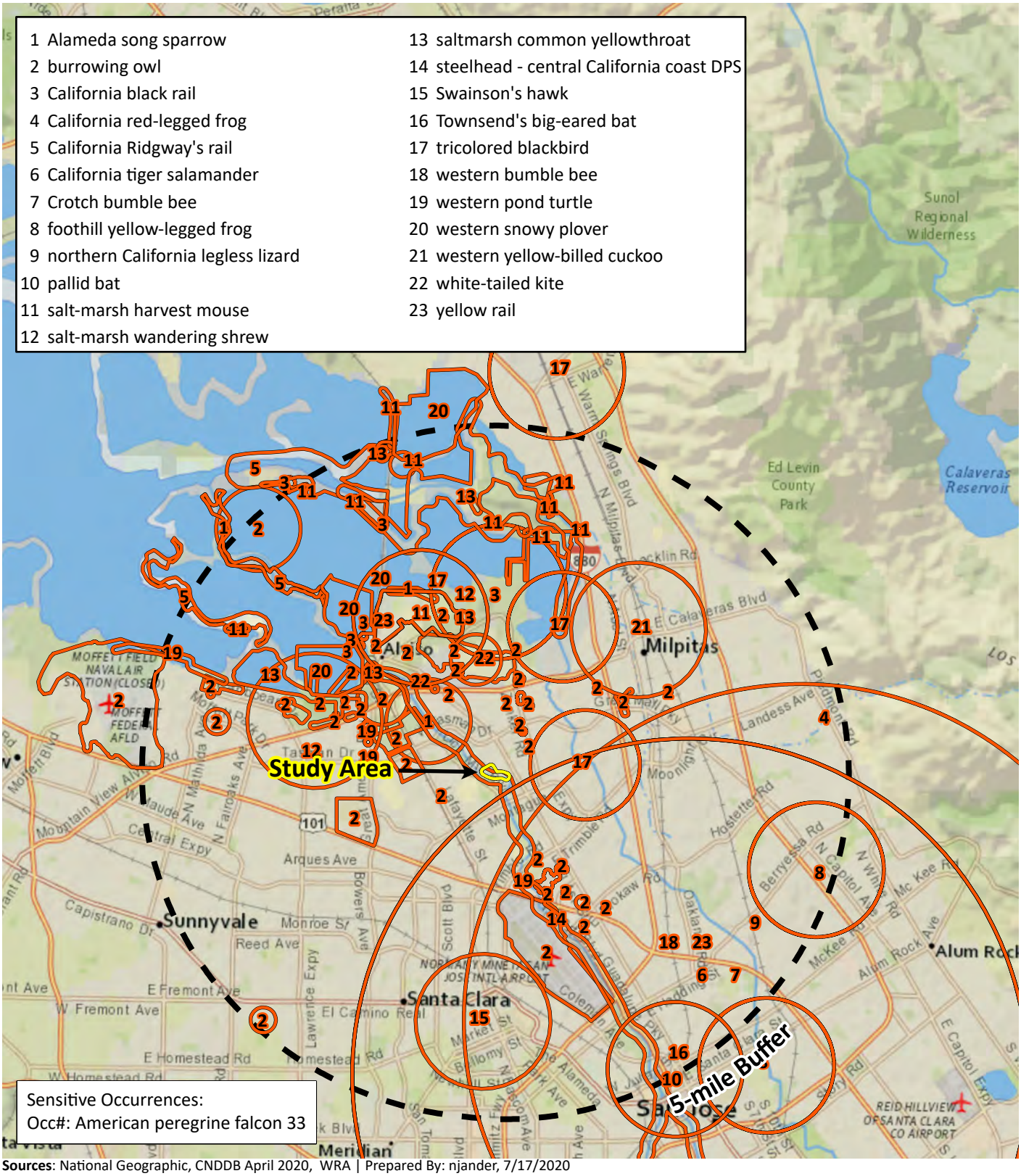
ENVIRONMENTAL CONSULTANTS



Sources: National Geographic, CNDDB April 2020, WRA | Prepared By: njander, 7/17/2020

Figure 4. Special-Status Wildlife Species Documented within 5-miles of the Study Area

Biological Resource Assessment
River Oaks
San Jose, California

0 1 2 Miles

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ENVIRONMENTAL CONSULTANTS

Appendix B
Observed Species

Appendix B. Plant Species Observed in the Study Area.

Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	Wetland Status (AW 2016)
Agrostis avenacea	Pacific bentgrass	non-native (invasive)	perennial grass	-	Limited	FACW
Agrostis stolonifera	Redtop	non-native (invasive)	perennial grass	-	Limited	FACW
Avena barbata	Slim oat	non-native (invasive)	annual, perennial grass	-	Moderate	-
Baccharis pilularis	Coyote brush	native	shrub	-	-	-
Carduus pycnocephalus ssp. pycnocephalus	Italian thistle	non-native (invasive)	annual herb	-	Moderate	-
Cirsium vulgare	Bullthistle	non-native (invasive)	perennial herb	-	Moderate	FACU
Cynodon dactylon	Bermuda grass	non-native (invasive)	perennial grass	-	Moderate	FACU
Cyperus eragrostis	Tall cyperus	native	perennial grasslike herb	-	-	FACW
Datura sp.	-	-	-	-	-	-
Dittrichia graveolens	Stinkwort	non-native (invasive)	annual herb	-	Moderate	-
Elymus ponticus	Tall wheat grass	non-native	perennial grass	-	-	-
Epilobium brachycarpum	Willow herb	native	annual herb	-	-	-
Erigeron sumatrensis	Tropical horseweed	non-native	annual herb	-	-	-
Euthamia occidentalis	Western goldenrod	native	perennial herb	-	-	FACW
Festuca arundinacea	Reed fescue	non-native (invasive)	perennial grass	-	Moderate	FACU
Festuca bromoides	Brome fescue	non-native	annual grass	-	-	FACU
Festuca perennis	Italian rye grass	non-native (invasive)	annual, perennial grass	-	Moderate	FAC
Heliotropium curassavicum var. oculatum	Seaside heliotrope	native	perennial herb	-	-	FACU
Hordeum murinum	Foxtail barley	non-native (invasive)	annual grass	-	Moderate	FACU
Lepidium latifolium	Perennial pepperweed	non-native (invasive)	perennial herb	-	High	FAC
Lotus corniculatus	Bird's foot trefoil	non-native	perennial herb	-	-	FAC

Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	Wetland Status (AW 2016)
Malvella leprosa	Alkali mallow	native	perennial herb	-	-	FACU
Paspalum dilatatum	Dallis grass	non-native	perennial grass	-	-	FAC
Persicaria punctata	Dotted smartweed	native	perennial herb	-	-	OBL
Raphanus sativus	Wild radish	non-native (invasive)	annual, biennial herb	-	Limited	-
Ricinus communis	Castor bean	non-native (invasive)	shrub	-	Limited	FACU
Rumex crispus	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC
Salix babylonica	Weeping willow	non-native	tree	-	-	FAC
Salsola sp.	-	-	-	-	-	-
Schoenoplectus acutus var. occidentalis	Tule	native	perennial grasslike herb	-	-	OBL
Symphyotrichum chilense	Pacific aster	native	perennial herb	-	-	FAC
Typha latifolia	Broadleaf cattail	native	perennial herb (aquatic)	-	-	OBL
Umbellularia californica	California bay	native	tree	-	-	FAC
Xanthium strumarium	Cocklebur	native	annual herb	-	-	FAC

All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2020]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2020]

Appendix C
Species
Potentials

Appendix C. Potential for special-status plant and wildlife species that may occur, or are known to occur within the vicinity of the Study Area. List compiled from a search of the California Department of Fish and Wildlife Natural Diversity Database (CDFW 2020), U.S. Fish and Wildlife Service Information for Planning and Conservation Database (2020b), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2020a) for the Calaveras Reservoir, Cupertino, La Costa Valley, Newark, Niles, Mountain View, Milpitas, San Jose East, and San Jose West USGS 7.5' quadrangles.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Plants				
Santa Clara thorn-mint *Acanthomintha lanceolata*	Rank 4.2	Chaparral (often serpentine), cismontane woodland, coastal scrub. Elevation ranges from 260 to 3935 feet (80 to 1200 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain chaparral, cismontane woodland, or coastal scrub habitats or serpentine substrate.	No further action recommended for this species.
California androsace *Androsace elongata ssp. acuta*	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 490 to 4280 feet (150 to 1305 meters). Blooms Mar-Jun.	**Unlikely.** The Study Area does not contain chaparral, cismontane woodland coastal scrub, meadows and seeps, or pinyon and juniper woodland. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
alkali milk-vetch *Astragalus tener var. tener*	Rank 1B.2	Playas, valley and foothill grassland (adobe clay), vernal pools. Elevation ranges from 0 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain playa or vernal pool habitats or adobe clay substrate.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
brittlescale *Atriplex depressa*	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1050 feet (1 to 320 meters). Blooms Apr-Oct.	**Unlikely.** The Study Area does not contain chenopod scrub, meadows and seeps, playas or venal pool habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species	No further action recommended for this species.
lesser saltscale *Atriplex minuscula*	Rank 1B.1	Chenopod scrub, playas, valley and foothill grassland. Elevation ranges from 45 to 655 feet. Blooms May - October.	**No Potential.** The Study Area does not contain chenopod scrub and playa habitats. In addition, this species is known to occur in sandy soils (CDFW 2020), which are not present within the Study Area.	No further action recommended for this species.
big-scale balsamroot *Balsamorhiza macrolepis*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 145 to 5,100 feet. Blooms March - June.	**Unlikely.** The Study Area does not contain chaparral or cismontane woodland habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species. In addition, this species is often known from serpentine and volcanic-influenced substrates, which are not present within the Study Area.	No further action recommended for this species.
Brewer's calandrinia *Calandrinia breweri*	Rank 4.2	Chaparral, coastal scrub. Elevation ranges from 30 to 4,005 feet. Blooms (January) March - June.	**Unlikely.** The Study Area does not contain chaparral or coastal scrub habitats.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
chaparral harebell *Campanula exigua*	Rank 1B.2	Chaparral (rocky, usually serpentine). Elevation ranges from 900 to 4,100 feet. Blooms May - June.	**No Potential.** The Study Area does not chaparral habitat or rocky or serpentine substrates and is outside the known elevation range for this species.	No further action recommended for this species.
Congdon's tarplant *Centromadia parryi ssp. congdonii*	Rank 1B.1	Valley and foothill grassland (alkaline). Elevation ranges from 0 to 755 feet. Blooms May – October (November).	**Moderate Potential.** This disturbance-adapted species has moderate potential to occur in mesic, ruderal herbaceous areas and along the fringe of the non-wetland waters feature.	**Not Observed**. This species was not observed during the September site visit. Species determined absent. No further action recommended.
Point Reyes bird's-beak *Chloropyron maritimum ssp. palustre*	Rank 1B.2	Marshes and swamps (coastal salt). Elevation ranges from 0 to 35 feet. Blooms June - October.	**Unlikely.** This species is known tidally influenced salt marsh habitat, which is not present within the Study Area.	No further action recommended for this species.
robust spineflower *Chorizanthe robusta var. robusta*	FE, Rank 1B.1	Chaparral (maritime), cismontane woodland (openings), coastal dunes, coastal scrub. Elevation ranges from 5 to 985 feet. Blooms April - September.	**No Potential.** The Study Area does not contain chaparral, cismontane woodland, coastal dunes, or coastal scrub habitats.	No further action recommended for this species.
Mt. Hamilton fountain thistle *Cirsium fontinale var. campylon*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 325 to 2,920 feet. Blooms (February) April - October.	**No Potential.** This species is known to occur only on serpentine substrate (CDFW 2020), which is not present within the Study Area.	No further action recommended for this species.
Santa Clara red ribbons *Clarkia concinna ssp. automixa*	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 295 to 4,920 feet. Blooms (April) May – June (July).	**No Potential.** The Study Area does not contain chaparral or cismontane woodland habitats.	No further action recommended for this species.
Lewis' clarkia *Clarkia lewisii*	Rank 4.3	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub. Elevation ranges from 95 to 3,920 feet. Blooms May - July.	**No Potential.** The Study Area does not contain broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, or coastal scrub habitats.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
San Francisco collinsia *Collinsia multicolor*	Rank 1B.2	Closed-cone coniferous forest, coastal scrub. Elevation ranges from 95 to 820 feet. Blooms (February) March - May.	**No Potential.** The Study Area does not contain closed-cone coniferous forest or coastal scrub habitats.	No further action recommended for this species.
clustered lady's-slipper *Cypripedium fasciculatum*	Rank 4.2	Lower montane coniferous forest, North Coast coniferous forest. Elevation ranges from 325 to 7,990 feet. Blooms March - August.	**No Potential.** The Study Area does not contain lower montane coniferous forest or North Coast coniferous forest habitats.	No further action recommended for this species.
Hospital Canyon larkspur *Delphinium californicum ssp. interius*	Rank 1B.2	Chaparral (openings), cismontane woodland (mesic), coastal scrub. Elevation ranges from 635 to 3,595 feet. Blooms April - June.	**No Potential.** The Study Area does not contain chaparral, cismontane woodland or coastal scrub habitats and is outside the elevation range for this species.	No further action recommended for this species.
western leatherwood *Dirca occidentalis*	Rank 1B.2	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1,395 feet. Blooms January – March (April).	**No Potential.** The Study Area does not contain broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, or riparian woodland habitats.	No further action recommended for this species.
Santa Clara Valley dudleya *Dudleya abramsii ssp. setchellii*	FE, Rank 1B.1	Cismontane woodland, valley and foothill grassland. Elevation ranges from 195 to 1,495 feet. Blooms April - October.	**No Potential**. This species occurs on rocky outcrops (CDFW 2020), which are not present within the Study Area.	No further action recommended for this species.
Jepson's woolly sunflower *Eriophyllum jepsonii*	Rank 4.3	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 655 to 3,365 feet. Blooms April - June.	**No Potential**. The Study Area does not contain chaparral, cismontane woodland, or coastal scrub habitats and is outside the elevation range for this species.	No further action recommended for this species.
Hoover's button-celery *Eryngium aristulatum var. hooveri*	Rank 1B.1	Vernal pools. Elevation ranges from 5 to 150 feet. Blooms (June) July (August).	**No Potential.** The Study Area does not contain vernal pool habitat.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
San Joaquin spearscale *Extriplex joaquinana*	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. Elevation ranges from 0 to 2,740 feet. Blooms April - October.	**Unlikely.** No alkali wetlands or scrub is present and known associated species are absent.	No further action recommended for this species.
stinkbells *Fritillaria agrestis*	Rank 4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 30 to 5,100 feet. Blooms March - June.	**Unlikely.** The Study Area does not contain chaparral, cismontane woodland, or pinyon and juniper woodland habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
fragrant fritillary *Fritillaria liliacea*	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 5 to 1,345 feet. Blooms February - April.	**Unlikely.** The Study Area does not contain cismontane woodland, coastal prairie, or coastal scrub habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Diablo helianthella *Helianthella castanea*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4,265 feet. Blooms March - June.	**Unlikely.** The Study Area does not contain broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, or riparian woodland habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species. In addition, this species is usually known from chaparral/oak woodland interface habitat on rocky soils (CDFW 2020), and such habitats and substrate are not present within the Study Area.	No further action recommended for this species.
Loma Prieta hoita *Hoita strobilina*	Rank 1B.1	Chaparral, cismontane woodland, riparian woodland. Elevation ranges from 95 to 2,820 feet. Blooms May – July (August - October).	**No Potential.** The Study Area does not contain chaparral, cismontane woodland, and riparian woodland habitats.	No further action recommended for this species.
coast iris *Iris longipetala*	Rank 4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps. Elevation ranges from 0 to 1,970 feet. Blooms March - May.	**No Potential.** The Study Area does not contain coastal prairie, lower montane coniferous forest or meadows and seeps habitats.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Contra Costa goldfields *Lasthenia conjugens*	FE, Rank 1B.1	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1,540 feet. Blooms March - June.	**Unlikely.** The Study Area does not contain cismontane woodland, playa, or vernal pool habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
bristly leptosiphon *Leptosiphon acicularis*	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4,920 feet. Blooms April - July.	**Unlikely.** The Study Area does not contain chaparral, cismontane woodland, or coastal prairie habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
serpentine leptosiphon *Leptosiphon ambiguus*	Rank 4.2	Cismontane woodland, coastal scrub, valley and foothill grassland. Elevation ranges from 390 to 3,705 feet. Blooms March - June.	**No Potential.** This species is only known from serpentine substrate (CDFW 2020), which is not present within the Study Area.	No further action recommended for this species.
woolly-headed lessingia *Lessingia hololeuca*	Rank 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 45 to 1,000 feet. Blooms June - October.	**Unlikely.** The Study Area does not contain broadleafed upland forest, coastal scrub, or lower montane coniferous forest habitats. This species is known from serpentine and upland clay substrates, which are not present within the Study Area.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
smooth lessingia *Lessingia micradenia var. glabrata*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 390 to 1,380 feet. Blooms (April - June) July - November.	**No Potential.** This species is only known from serpentine substrate (CDFW 2020), which is not present within the Study Area.	No further action recommended for this species.
arcuate bush-mallow *Malacothamnus arcuatus*	Rank 1B.2	Chaparral, cismontane woodland. Elevation ranges from 45 to 1,165 feet. Blooms April - September.	**Unlikely.** The Study Area does not chaparral or cismontane woodland habitats.	No further action recommended for this species.
Hall's bush-mallow *Malacothamnus hallii*	Rank 1B.2	Chaparral, coastal scrub. Elevation ranges from 30 to 2,495 feet. Blooms (April) May – September (October).	**No Potential.** The Study Area does not contain chaparral or coastal scrub habitats.	No further action recommended for this species.
Mt. Diablo cottonweed *Micropus amphibolus*	Rank 3.2	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 145 to 2,705 feet. Blooms March - May.	**Unlikely.** The Study Area does not contain broadleafed upland forest, chaparral, or cismontane woodland habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
elongate copper moss *Mielichhoferia elongata*	Rank 4.3	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Elevation ranges from 0 to 6,430 feet.	**No Potential.** The Study Area does not contain broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, or subalpine coniferous forest habitats. This species is typically known from metamorphic substrate in fens, and this substrate and habitat are not present within the Study Area.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
San Antonio Hills monardella *Monardella antonina ssp. antonina*	Rank 3	Chaparral, cismontane woodland. Elevation ranges from 1,045 to 3,280 feet. Blooms June - August.	**No Potential.** The Study Area does not contain chaparral or cismontane woodland habitats and is outside the elevation range for this species.	No further action recommended for this species.
woodland woolythreads *Monolopia gracilens*	Rank 1B.2	Broadleafed upland forest (openings), chaparral (openings), cismontane woodland, north coast coniferous forest (openings), valley and foothill grassland. Elevation ranges from 325 to 3,935 feet. Blooms (February) March - July.	**No Potential.** The Study Area does not contain broadleafed upland forest, chaparral, cismontane woodland, or North Coast coniferous forest habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
Patterson's navarretia *Navarretia paradoxiclara*	Rank 1B.3	Meadows and seeps. Elevation ranges from 490 to 1,410 feet. Blooms May – June (July).	**No Potential.** The Study Area does not contain meadows and seeps habitat. This species is known from serpentine substrate (CDFW 2020), which is not present within the Study Area.	No further action recommended for this species.
prostrate vernal pool navarretia *Navarretia prostrata*	Rank 1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. Elevation ranges from 5 to 3,970 feet. Blooms April - July.	**Unlikely.** The Study Area does not contain coastal scrub, meadows and seeps, or vernal pool habitats. The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
hairless popcornflower *Plagiobothrys glaber*	Rank 1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt). Elevation ranges from 45 to 590 feet. Blooms March - May.	**Unlikely.** The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
California alkali grass *Puccinellia simplex*	Rank 1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 3,050 feet. Blooms March - May.	**Unlikely.** The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
chaparral ragwort *Senecio aphanactis*	Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 45 to 2,625 feet. Blooms January – April (May).	**Unlikely.** The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
maple-leaved checkerbloom *Sidalcea malachroides*	Rank 4.2	Broadleafed upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland. Elevation ranges from 0 to 2,395 feet. Blooms (March) April - August.	**No Potential.** The Study Area does not contain broadleafed upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, or riparian woodland habitats.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
long-styled sand-spurrey *Spergularia macrotheca* var. *longistyla*	Rank 1B.2	Meadows and seeps, marshes and swamps. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May(Jun).	**Unlikely.** While the Study Area contains wetland habitat, perennial wetlands are absent.	No further action recommended for this species.
Metcalf Canyon jewelflower *Streptanthus albidus ssp. albidus*	FE, Rank 1B.1	Valley and foothill grassland (serpentine). Elevation ranges from 145 to 2,625 feet. Blooms April - July.	**No Potential.** The Study Area does not contain serpentine substrate.	No further action recommended for this species.
most beautiful jewelflower *Streptanthus albidus ssp. peramoenus*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 310 to 3,280 feet. Blooms (March) April – September (October).	**No Potential.** This species is known only from serpentine outcrops, which are not present within the Study Area.	No further action recommended for this species.
slender-leaved pondweed *Stuckenia filiformis ssp. alpina*	Rank 2B.2	Marshes and swamps (assorted shallow freshwater). Elevation ranges from 980 to 7,055 feet. Blooms May - July.	**No Potential.** The Study Area does not contain freshwater marsh and swamp habitat and is outside the elevation range for this species.	No further action recommended for this species.
California seablite *Suaeda californica*	FE, Rank 1B.1	Marshes and swamps (coastal salt). Elevation ranges from 0 to 50 feet. Blooms July - October.	**No Potential.** This species is only known from tidally influenced marsh habitat, which is not present within the Study Area.	No further action recommended for this species.
saline clover *Trifolium hydrophilum*	Rank 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation ranges from 0 to 985 feet. Blooms April - June.	**Unlikely.** The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
caper-fruited tropidocarpum *Tropidocarpum capparideum*	Rank 1B.1	Valley and foothill grassland (alkaline hills). Elevation ranges from 0 to 1,495 feet. Blooms March - April.	**Unlikely.** The Study Area has been heavily altered and disturbed by historic and modern land management activities (e.g. agriculture, grading, levee construction) and is very weedy; as a result, it provides poor quality habitat for and is unlikely to support this species.	No further action recommended for this species.
Wildlife				
Mammals				
fringed myotis *Myotis thysanodes*	WBWG	Associated with a wide variety of habitats including mixed coniferous-deciduous forest and redwood/sequoia groves. Buildings, mines and large snags are important day and night roosts.	**Unlikely Onsite, may occur in Study Area.** The Study Area contains potentially suitable day roosting habitat but the subject site does not.	No further action recommended for this species. See section 5.2.2 for more discussion about bats.
long-legged myotis *Myotis volans*	WBWG	Primarily found in coniferous forests, but also occurs seasonally in riparian and desert habitats. Large hollow trees, rock crevices and buildings are important day roosts. Other roosts include caves, mines and buildings.	**Unlikely Onsite, may occur in Study Area.** The Study Area contains potentially suitable day roosting habitat but the subject site does not.	No further action recommended for this species. See section 5.2.2 for more discussion about bats.
Townsend's big-eared bat *Corynorhinus townsendii*	SSC, WBWG	Associated with a wide variety of habitats from deserts to mid-elevation mixed coniferous-deciduous forest. Females form maternity colonies in buildings, caves and mines and males roost singly or in small groups. Foraging occurs in open forest habitats where they glean moths from vegetation.	**Unlikely Onsite, may occur in Study Area.** The Study Area contains potentially suitable day roosting habitat but the subject site does not.	No further action recommended for this species. See section 5.2.2 for more discussion about bats.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
pallid bat *Antrozous pallidus*	SSC, WBWG	Found in deserts, grasslands, shrublands, woodlands, and forests. Roost sites include old ranch buildings, rocky outcrops and caves within sandstone outcroppings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Unlikely Onsite, may occur in Study Area.** The Study Area contains potentially suitable day roosting habitat but the subject site does not.	No further action recommended for this species. See section 5.2.2 for more discussion about bats.
western red bat *Lasiurus blossevillii*	SSC, WBWG	Highly migratory and typically solitary, roosting primarily in the foliage of trees or shrubs. Roosts are usually in broad-leaved trees including cottonwoods, sycamores, alders, and maples. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.	**Unlikely Onsite, may occur in Study Area.** The Study Area contains potentially suitable day roosting habitat but the subject site does not.	No further action recommended for this species. See section 5.2.2 for more discussion about bats.
salt-marsh wandering shrew *Sorex vagrans halicoetes*	SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among *Salicornia*.	**No Potential.** The Study Area does not contain tidal marsh.	No further action recommended for this species.
salt marsh harvest mouse *Reithrodontomys raviventris*	FE, SE, CFP	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	**No Potential.** The Study Area does not contain tidal marsh habitat.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	SSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	**No Potential Onsite.** The portion of the Study Area along the Guadalupe River may have suitable habitat for this species, but the subject site does not.	No further action recommended for this species.
San Joaquin kit fox *Vulpes macrotis mutica*	FE, ST, RP	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**No Potential.** The Study Area does not contain sandy soil suitable for denning. Additionally, this site is surrounded by development and lacks connectivity to potential source areas.	No further action recommended for this species.
American badger *Taxidea taxus*	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**No Potential.** The Study Area does not have connectivity to expansive grasslands needed to support badgers.	No further action recommended for this species.
ringtail *Bassariscus astutus*	CFP	The Ringtail is widely distributed throughout most of California, absent from some portions of the Central Valley and northeastern California. Found in a variety of habitats throughout the western US including riparian areas, semi-arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands and montane conifer forests usually under 1400m in elevation. Typically uses cliffs or large trees for shelter.	**No Potential.** The Study Area does not contain forest habitat this species requires for denning and foraging.	No further action recommended for this species.
Birds				

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
California brown pelican *Pelecanus occidentalis californicus*	SE, CFP	(Nesting colony) colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators.	**No potential to nest.** The Study Area does not provide suitable nesting habitat this species requires. This species may be observed foraging in adjacent bodies of water adjacent to the Study Area.	No further action recommended for this species.
American white pelican *Pelecanus erythrorhynchos*	SSC	Non-breeding visitor in most of California. Nests colonially on large interior lakes or rivers; breeding restricted to portions of eastern California. Winters on sheltered inland and estuarine waters with abundant small fishes for forage.	**Unlikely.** The Study Area does not provide suitable nesting habitat this species requires. This species may be observed foraging in adjacent bodies of water adjacent or soaring around the Study Area.	No further action recommended for this species.
white-tailed kite *Elanus leucurus*	CFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	**Moderate Potential.** Although the Study Area is surrounded by development, open grassland habitat for foraging and suitable vegetation to support nesting exist within the Study Area. The nearest documented nest location is less than a mile east of the Study Area (CDFW 2018).	Work windows and/or preconstruction surveys. See Section 7.1 for more information.
northern harrier *Circus cyaneus*	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	**Unlikely.** The Study Area is surrounded mostly by development, and habitat suitable for nesting is mostly absent within the Study Area.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
golden eagle *Aquila chrysaetos*	CFP	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas.	**No Potential.** The Study Area does not contain large trees, cliff walls, or platforms to provide support nesting of this species.	No further action recommended for this species.
bald eagle *Haliaeetus leucocephalus*	SE, CFP	Occurs year-round in California, but primarily a winter visitor; breeding population is growing. Nests in large trees in the vicinity of larger lakes, reservoirs and rivers. Wintering habitat somewhat more variable but usually features large concentrations of waterfowl or fish.	**Unlikely.** The Study Area is in an urban environment and trees near the Study Area are not near enough to large open water to be likely to attract nesting bald eagle. This species may be observed foraging in the area occasionally.	No further action recommended for this species.
American peregrine falcon *Falco peregrinus anatum*	CFP	Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on artificial structures including buildings and bridges. Preys on birds, especially waterbirds.	**Unlikely.** Although the Study Area may provide forging habitat, suitable nesting does not exist on-site or within the Study Area.	No further action recommended for this species.
Swainson's hawk *Buteo swainsoni*	ST	Summer resident in California's Central Valley and limited portions of the southern California interior. Nests in tree groves and isolated trees in riparian and agricultural areas, including near buildings. Forages in grasslands and scrub habitats as well as agricultural fields, especially alfalfa. Preys on arthropods year-round as well as smaller vertebrates during the breeding season.	**Unlikely.** There are no recent documented nesting occurrences for Swainson's hawk near the Study Area and the amount of foraging habitat nearby is not sufficient to support the species.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
black skimmer *Rynchops niger*	SSC	Found primarily in southern California; South San Francisco Bay has a small resident population. Nests colonially on gravel bars, low islets, and sandy beaches.	**No Potential.** The Study Area and immediately adjacent areas do not contain gravel bars or sandy beaches this species requires for nesting and forging.	No further action recommended for this species.
California Ridgway's (clapper) rail *Rallus obsoletus obsoletus*	FE, SE, CFP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on molluscs and crustaceans.	**Unlikely.** The Study Area does not contain tidal marsh with mud flats or dense marsh vegetation this species requires for nesting and foraging.	No further action recommended for this species.
California black rail *Laterallus jamaicensis coturniculus*	ST, CFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	**Unlikely.** The Study Area does not contain tidal marsh with mud flats or dense marsh vegetation this species requires for nesting and foraging.	No further action recommended for this species.
yellow rail *Coturnicops noveboracensis*	SSC	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state.	**No Potential.** The Study Area does not contain shallow freshwater marsh vegetation.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
western snowy plover *Charadrius alexandrinus nivosus*	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No Potential.** The Study Area does not contain suitable beaches, salt ponds or alkali flats to support this species. Nesting is documented at the salt pond evaporators to the north.	No further action recommended for this species.
California least tern *Sterna antillarum browni*	FE, SE, CFP	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	**No Potential.** The Study Area does not contain suitable beaches, alkali flats or any other appropriate nesting habitat.	No further action recommended for this species.
burrowing owl *Athene cunicularia*	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**Moderate Potential.** The Study Area does contain burrow complexes constructed by ground squirrels. Nesting and wintering is known in areas adjacent to the Study Area (CNDDB 2020).	See Section 7.1 for recommendations.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
short-eared owl *Asio flammeus*	SSC	Occurs year-round, but primarily as a winter visitor; breeding very restricted in most of California. Found in open, treeless areas (e.g., marshes, grasslands) with elevated sites for foraging perches and dense herbaceous vegetation for roosting and nesting. Preys mostly on small mammals, particularly voles.	**Unlikely.** The Study Area does not contain suitable marsh habitat. Marginal foraging habitat exist is areas adjacent to the Study Area, however regular disturbance of the site reduce the potential for this species to occur.	No further action recommended for this species.
bank swallow *Riparia riparia*	ST	Migrant in riparian and other lowland habitats in western California. Colonial nester in riparian areas with vertical cliffs and bands with fine-textured or fine-textured sandy soils near streams, rivers, lakes or the ocean.	**No Potential.** The Study Area does not contain riparian vegetation or cliffs this species requires for nesting.	No further action recommended for this species.
loggerhead shrike *Lanius ludovicianus*	SSC	Year-round resident in open woodland, grassland, savannah and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	**Unlikely**. This species requires large open areas for foraging, the Study Area is surrounded by development and riparian areas.	No further action recommended for this species.
San Francisco common yellowthroat *Geothlypis trichas sinuosa*	SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Unlikely.** The Study Area does not contain dense stands of cattails and tules to support nesting.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
yellow-breasted chat *Icteria virens*	SSC	Summer resident, occurring in riparian areas with an open canopy, very dense understory, and trees for song perches. Nests in thickets of willow, blackberry, and wild grape.	**Moderate Potential in the Study Area, no Potential in the Project Area.** The Study Area has some dense riparian thickets that this species requires. However, these are located about 75 feet or more from where the project impacts will occur and on the other side of a steep berm and so would not be affected by the project.	No further action recommended for this species.
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT, SE	Summer resident, breeding in dense riparian forests and jungles, typically with early successional vegetation present. Utilizes densely-foliaged deciduous trees and shrubs. Eats mostly caterpillars. Current breeding distribution within California very restricted.	**Unlikely.** The Study Area does not support the extent of dense riparian thickets that this species requires and there are no documented occurrences of the species in this part of the Guadalupe River watershed.	No further action recommended for this species.
Alameda song sparrow *Melospiza melodia pusillula*	SSC	Year-round resident of salt marshes bordering the south arm of San Francisco Bay. Inhabits primarily pickleweed marshes; nests placed in marsh vegetation, typically shrubs such as gumplant.	**Unlikely.** The Study Area lacks salt marsh habitat.	No further action recommended for this species.
tricolored blackbird *Agelaius tricolor*	ST	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	**Unlikely.** The Study Area does not contain dense stands of emergent vegetation this species requires for nesting.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Reptiles and Amphibians				
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT, ST	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	**No Potential.** The Study Area is out of this species range and devoid of rock outcrops and does not contain chaparral or foothill habitat.	No further action recommended for this species.
California giant salamander *Dicamptodon ensatus*	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	**No Potential.** The Study Area and adjacent areas do not contain moist coniferous forests. Additionally, the Study Area does not contain freshwater stream habitat to support breeding.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
western pond turtle *Actinemys marmorata*	SSC	Occurs in perennial ponds, lakes, rivers and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter.	**Unlikely.** The Study Area lacks suitable stream and river habitat. This species may be seen adjacent to the Study Area within the Guadalupe River.	No further action recommended for this species.
California red-legged frog *Rana aurora draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Unlikely.** The Study Area does not contain freshwater habitat to support breeding of this species. Additionally, the Study Area does not contain emergent riparian vegetation. The nearest documented occurrence is almost 5 miles east of the Study Area (CDFW 2020).	No further action recommended for this species.
foothill yellow-legged frog *Rana boylii*	SSC	Found in or near rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	**No Potential.** The Study Area does not contain suitable rocky stream habitat. The nearest documented occurrence is almost 5 miles east of the Study Area (CDFW 2020).	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
California tiger salamander *Ambystoma californiense*	FT, ST	Populations in Santa Barbara and Sonoma counties currently listed as endangered; threatened in remainder of range. Inhabits grassland, oak woodland, ruderal and seasonal pool habitats. Adults are fossorial and utilize mammal burrows and other subterranean refugia. Breeding occurs primarily in vernal pools and other seasonal water features.	**No Potential.** The Study Area is surrounded by development and the Guadalupe River, preventing any transit into the site. There are no documented occurrences of this species near the site (CDFW 2020).	No further action recommended for this species.
Santa Cruz black salamander *Aneides flavipunctatus niger*	SSC	Climbing salamanders of the genus *Aneides* frequent damp woodlands and are usually found hiding under various debris (i.e. bark, woodrat nests, logs). The Santa Cruz black salamander exists south of the San Francisco Bay, in the Santa Cruz Mountains and its foothills. Santa Cruz black salamander is highly sedentary, preferring to stay hidden under riparian debris.	**No Potential.** The Study Area and adjacent areas do not contain moist coniferous forests and is outside the documented range of occurrence for the species.	No further action recommended for this species.
northern California legless lizard *Anniella pulchra*	SSC	Fossorial species, inhabiting sandy or loose loamy soils under relatively sparse vegetation. Suitable habitat includes dunes, stream terraces, and scrub and chaparral. Adequate soil moisture is essential.	**Unlikely.** The Study Area does not contain loose soils to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Fish				
Delta smelt *Hypomesus transpacificus*	FT, SE	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	**No Potential.** The Study Area does not contain estuarine habitat connecting to the San Francisco Bay.	No further actions are recommended for this species.
green sturgeon *Acipenser medirostris*	FT, SSC	Spawn in the Sacramento River and the Klamath River. Spawn at temperatures between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	**No Potential.** The Study Area does not contain estuarine habitat connecting to the San Francisco Bay.	No further actions are recommended for this species.
tidewater goby *Eucyclogobius newberryi*	FE, SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**No Potential.** The Study Area has no brackish habitat and the subject site has no connection to the San Francisco Bay.	No further action recommended for this species.
longfin smelt *Spirinchus thaleichthys*	ST, SSC	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	**No Potential.** The Study Area does not contain estuarine habitat connecting to the San Francisco Bay.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
steelhead, Central California Coast DPS *Oncorhynchus mykiss irideus*	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**No Potential Onsite.** The Study Area includes the Guadalupe River, but the site of any future project does not. This species may occur within the Guadalupe River.	No further actions are recommended for this species.
Chinook salmon - central valley fall/late fall-run ESU *Oncorhynchus tshawytscha*	SSC, NMFS	Populations spawning in the Sacramento and San Joaquin Rivers and their tributaries. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**No Potential Onsite.** The Study Area includes the Guadalupe River, but the site of any future project does not. This species may occur within the Guadalupe River.	No further actions are recommended for this species.
Invertebrates				
monarch butterfly *Danaus plexippus*	SSI	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	**Unlikely.** Suitable roost habitat is not present within the Study Area.	No further action recommended for this species.
Callippe silverspot butterfly *Speyeria callippe callippe*	FE, SSI	Two populations in San Bruno mountain and the Cordelia Hills are recognized. Hostplant is *Viola pedunculata,* which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**No Potential.** Suitable habitat is not present for this species in the Study Area. The Study Area is outside the accepted range for the species	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT, SSI	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Orthocarpus densiflorus* and *O. purpurscens* are the secondary host plants.	**No Potential.** Suitable habitat is not present for this species in the Study Area.	No further action recommended for this species.
San Bruno elfin butterfly *Callophrys mossii bayensis*	FE, SSI	Limited to the vicinity of San Bruno Mountain, San Mateo County. Colonies are located on in rocky outcrops and cliffs in coastal scrub habitat on steep, north-facing slopes within the fog belt. Species range is tied to the distribution of the larval host plant, Sedum spathulifolium.	**No Potential.** The Study Area lacks rocky outcrops and north-facing slopes of coastal scrub. The Study Area is outside the accepted range of occurrence for this species.	No further action recommended for this species.
conservancy fairy shrimp *Branchinecta conservatio*	FE, SSI	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	**No Potential.** The Study Area does not contain vernal pool habitat to support this species.	No further action recommended for this species.
vernal pool fairy shrimp *Branchinecta lynchi*	FT, SSI	Endemic to the grasslands of the central valley, central coast mountain, and south coast mountains. Inhabit small, clear- water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**No Potential.** The Study Area does not contain vernal pool habitat to support this species.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS
vernal pool tadpole shrimp *Lepidurus packardi*	FE, SSI	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	**No Potential.** The Study Area does not contain vernal pool habitat to support this species.	No further action recommended for this species.
western bumble bee *Bombus occidentalis*	SC	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2018). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	**Unlikely.** This species has undergone extirpations in most of California, including the Study Area.	No further action recommended for this species.
Crotch bumble bee Bombus crotchii	SC	Primarily occurring in California and Baja, Mexico, this species of bumblebee has declined dramatically and is considered extirpated throughout much of its historic range.	**Unlikely.** This species has undergone extirpations in most of California, including the Study Area.	No further action recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE**	RECOMMENDATIONS

*** Key to status codes:**

BCC	U.S. Fish & Wildlife Service (USFWS) Birds of Conservation Concern
CFP	CDFW Fully Protected Animal
FE	Federal Endangered
FT	Federal Threatened
RP	Sensitive species included in a USFWS Recovery Plan or Draft Recovery Plan
SE	State Endangered
SSC	California Department of Fish and Game (CDFG) Species of Special Concern
ST	State Threatened
SSI	California Department of Fish and Wildlife (CDFW) Special Status Invertebrate
NMFS	National Marine Fisheries Service (NMFS) Protected species
Rank 1A	California Native Plant Society (CNPS) Rank 1A: Plants presumed extirpated in California and rare or extinct elsewhere
Rank 1B.1	California Native Plant Society (CNPS) Rank 1B.1: Plants rare, threatened or endangered in California and elsewhere (seriously threatened in California)
Rank 1B.2	California Native Plant Society (CNPS) Rank 1B.2: Plants rare, threatened, or endangered in California and elsewhere(moderately threatened in California)
Rank 2B.2	California Native Plant Society (CNPS) Rank 2B.2: Plants rare, threatened, or endangered in California, but more common elsewhere (moderately threatened in California)
Rank 4.3	California Rare Plant Rank 4.3: Plants of Limited Distribution - A Watch List (not very threatened in California)
WBWG	Western Bat Working Group Priority Species

****Potential species occurrence definitions:**

Present. Species was observed on the site during site visits or has been recorded (i.e. CNDDB, other reports) on the site recently.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species has a low probability of being found on the site.

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Appendix D
Photos

Photo 1. Photo showing small seasonal wetland located at pump station opening.

Photo 2. Looking north, showing the French drain in the middle of the basin.

Photo 3. Looking south from the northern portion of the basin. Non-native grassland is visible in the foreground.

Photo 4. Looking southeast across the detention basin from the pump station.

Photo 5. Ground squirrel burrows present in the Project Area.

Photo 6. Looking north along the Guadalupe River Trail. Riparian vegetation is seen on the left and the Project Area on the right.

Photo 7. Portion of riparian vegetation along the Gudalupe River. Weeping willow and California bay can be seen.

Photo 8. Close up of Guadalupe River OHW line and riparian understory.