# Biological Resources Assessment

# Maverik Store Project, Sacramento County, California

**MAY 2022** 

Prepared for:

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#### **ATTACHMENTS**

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- Special-Status Wildlife with Potential To Occur В
- С Representative Site Photographs
- D Plants and Wildlife Observed On Site During the Site Visit

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# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APN	Assessor's Parcel Number
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
FESA	federal Endangered Species Act
IPaC	USFWS Information, Planning, and Conservation Trust Resource Report
MBTA	Migratory Bird Treaty Act
PSA	Project Study Area
RWQCB	Regional Water Quality Control Board
SSC	California Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	Unites States Fish and Wildlife Service
USGS	United States Geological Survey





# Summary of Findings

On October 4 2021, Dudek biologist Anna Touchstone conducted a biological field survey at the Maverik Store Project (project) Study Area (PSA) in Sacramento County, California. The focus of the survey was to characterize existing conditions of on-site biological resources and to identify potential biological resource constraints to the project. This document describes the methods and results of the biological survey and provides recommendations to avoid and minimize constraints.

The PSA is comprised of one natural vegetation community type, non-native grassland, and one land cover type, developed. Two aquatic features, a drainage ditch and a freshwater emergent wetland, occur along the eastern and southern boundaries of the PSA. These features may meet the definition of jurisdictional waters of the U.S. and/or State, regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife through Sections 401 and 404 of the Clean Water Act and/or Fish and Game Code Sections 1600–1602.

No special-status plant species were documented on site. There are six special-status plant species with potential to occur in the PSA: watershield (*Brasenia schreberi*), bristly sedge (*Carex comosa*), Bolander's water-hemlock (*Cicuta maculate* var. *bolanderi*), Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), and Sanford's arrowhead (*Sagittaria sanfordii*).

No special-status wildlife species were documented on site. There are three special-status wildlife species with potential to occur in the PSA: burrowing owl (*Athene cunicularia*), a California Species of Special Concern (SSC), state-threatened Swainson's hawk (*Buteo swainsoni*), and state-threatened and SSC tricolored blackbird (*Agelaius tricolor*). The PSA provides potential habitat for migratory birds and birds of prey protected by Fish and Game Code Sections 3503 and 3513 and/or the federal Migratory Bird Treaty Act. However, land covers on site provide poor quality habitat for most of these species due to regular human disturbance and/or a lack of suitable microhabitat features.





# 1 Project Location and Description

# 1.1 Project Location

The Maverik Store Project (project) proposes to develop a vacant property (Assessor's Parcel Number [APN] 117-0220-019) located at the intersection of Sheldon Road and West Stockton Boulevard with a small convenience store, gas station, and other associated amenities (Figure 1, Project Location). The 3.66-acre Project Study Area (PSA) includes an existing drainage ditch along the southern and eastern boundaries. The PSA is located in the southeast corner of City of Sacramento limits and is surrounded by the City of Elk Grove to the south and east.

The PSA is located in Township 7 North, Range 5 East, Section 23 of the *Florin* U.S. Geological Survey (USGS) 7.5-minute quadrangle. The approximate center of the PSA corresponds to 38° 26' 20.8824" north latitude and - 121° 24' 15.6996" west longitude.

# 1.2 Project Description

The proposed project includes a 5,637 square foot (sf) single-story convenience store with a small outdoor dining area, a covered 16-pump gas station, parking for up to 41 vehicles including two Americans with Disabilities Act (ADA) spaces, space for two high-speed Level III electric vehicle (EV) charging stations, and bike storage. The proposed project also includes two side-by-side underground fuel storage tanks and landscaping. The convenience store and gas station would be open 24 hours a day, seven days a week (24/7) and would employ 15 to 18 people. Five to eight employees would be on shift at a given time. The convenience store would offer food to order. Project access would be via driveways along Sheldon Road and West Stockton Boulevard. The driveway along Sheldon Road would be limited to right in and right out only.

#### **Utilities**

Existing water and sewer utility mains would need to be extended to the project site for the project to tie into. An existing sewer line is located approximately 400 feet north of the site in West Stockton Boulevard. Existing water mains are located approximately 1,340 feet north of the site in West Stockton Boulevard and 1,150 feet west of the site in Sheldon Road. The water mains would be required to be extended and connected at the intersection of the two roadways. Existing storm drain infrastructure is in the Caltrans-owned drainage swale running along the southerly and easterly sides of the project site. The project also involves relocation of existing overhead power poles and streetlights along Sheldon Road.

#### Landscaping, Lighting and Signage

The project would include removal of two trees along the western boundary of the site. The project's landscaping plan includes planting a mix of trees along the perimeter of the project site including nine Redbud, ten Red Crape Myrtle, nine Valley Oak, six Cork Oak, and three Northern Red Oak along with a mix of shrubs and groundcover. A total of approximately 37 new trees would be planted per the project's Landscape Plan.

The project would include seven freestanding light poles evenly distributed throughout the parking and driveway areas. These light fixtures would be downward facing, light-emitted diode (LED), and mounted to poles



approximately 17 feet tall. Other light fixtures are proposed along the perimeter of the convenience store building and recessed within the fueling canopy. Signage would include building wall signage and one dual-face single pole sign approximately 35 feet in height at the southeastern corner of the site along the intersection of Sheldon Road and West Stockton Boulevard.

#### Off-Site Improvements

Road widening for Sheldon Road and West Stockton Boulevard would be required by the City of Sacramento. Widening for a deceleration lane to the proposed driveway including new curb, gutter and sidewalk are required for Sheldon Road. Widening for a dual left-turn lane including new curb, gutter and sidewalk are required for West Stockton Boulevard. Driveway construction would also involve the installation of two new culverts within a drainage swale along Sheldon Road and West Stockton Boulevard. The project also includes the relocation of a bus stop pad approximately 100 feet west of the site, along Sheldon Road.

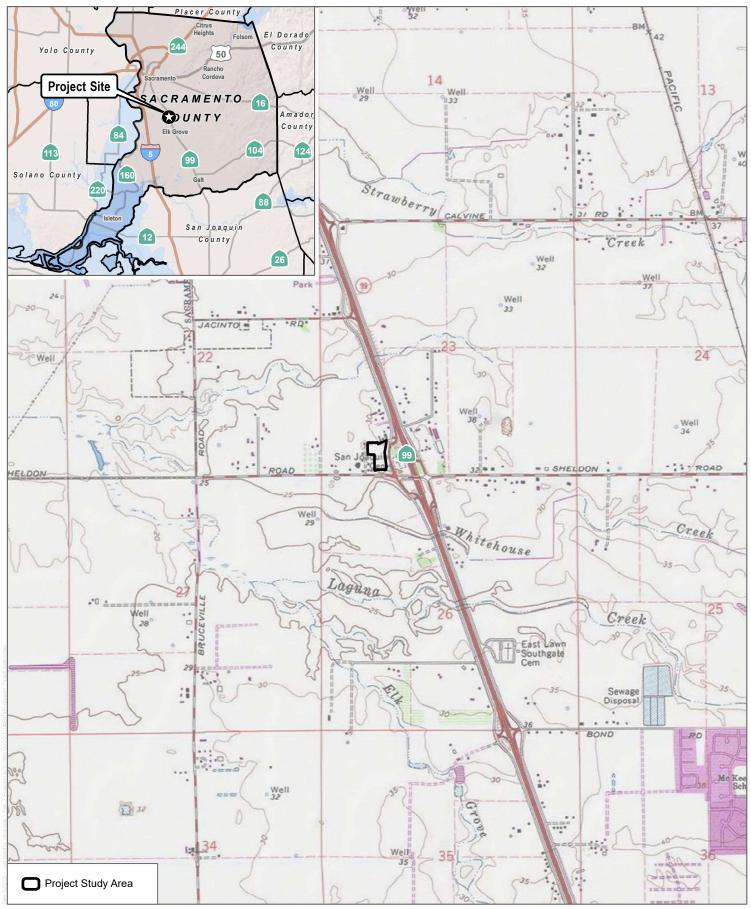
#### **Project Construction**

If the project is approved construction would take approximately nine months to complete. Construction of the underground fuel storage tank would require excavating an area 10 to 12-feet deep. The earthwork would be balanced on site and is estimated at approximately 5,000 cubic yards (cy) of cut and 5,000 cy of fill. The project would also include signage that would be permitted under a future ministerial permit.

#### **Required Project Approvals**

The project includes a Conditional Use Permit for the gas station and a variance for the driveway location near the property line along Sheldon Road, which are discretionary approvals, along with a variety of ministerial permits including a tree permit relating to the tree removal and a sign permit. Permits from other agencies may be required. These include a permit to construct and operate the gas station from the Sacramento Metropolitan Air Quality Management District (SMAQMD) and an encroachment permit for work in the Caltrans right of way that would be issued by Caltrans District 3.





SOURCE: USGS 7.5-Minute Series Florin Quadrangle



0	1,000	2,000 Feet
0	250	500 Meters
	1:24,000	.410(013

FIGURE 1
Project Location





SOURCE: Bing Maps (Accessed 2021), Sacremento County 2019



FIGURE 2 Project Site



# 2 Project Setting

This report evaluated resources present within the approximately 3.66-acre PSA (Figure 2, Project Site), which comprises a large portion of APN 117-0220-019.

## 2.1 Environmental Setting

The PSA is currently unoccupied, undeveloped, and vacant. Topography in the PSA is generally flat, within an elevation of approximately 31 feet above mean sea level. There is an existing drainage ditch located between a separated sidewalk and electrical power poles along the southern and eastern perimeter of the PSA. The PSA contains three small (less than six inches in diameter at breast height) Callery pear (*Pyrus calleryana*) trees along the western boundary and within the drainage ditch. Adjacent land uses include a mix of residential, retail, and semi-public uses. Residences are located directly to the north, south, and west of the site; retail businesses are across Sheldon Road to the southwest of the site; and the San Joaquin Cemetery is located across West Stockton Boulevard to the east of the site.

#### 2.1.1 Soils

Two soil types occur in the PSA: San Joaquin silt loam, leveled, 0 to 1 percent slopes, and San Joaquin-Galt complex, 0 to 3 percent slopes (Figure 3, Soils).

## 2.1.2 Hydrology

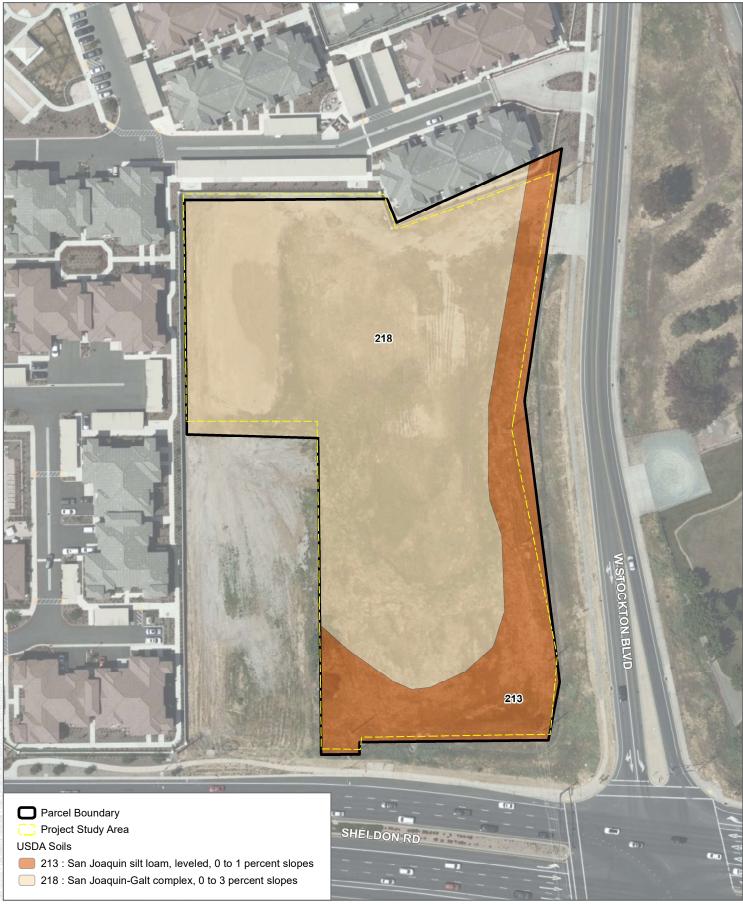
The PSA is within the Laguna Creek subwatershed (Hydrologic Unit Code 180201630403; Figure 4, Hydrologic Setting) of the Morrison Creek watershed, which drains approximately 48 square miles of Sacramento County (CDFW 2021a).

The PSA appears to have experienced decades of disturbance by mowing, discing, and other ground disturbance activities, interrupting any natural hydrology that may have previously existed. Surface run-off in the PSA is directed in a southeasterly direction to an unnamed drainage ditch that flows south and then west along the perimeter of the PSA. An inundated portion within the southeast corner of the drainage ditch supports a freshwater emergent wetland that appears to have been created by regular irrigation runoff from the San Joaquin Cemetery via a culvert under West Stockton Boulevard. The drainage ditch continues off-site to the south via a culvert under Sheldon Road, and may have indirect downstream connectivity to Laguna Creek, which flows from east to west approximately 0.5-mile south of the PSA. Laguna Creek terminates into the Sacramento River approximately 5 miles west of the PSA.

The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory and the United States Geological Survey (USGS) do not identify any waters of the U.S. or state, including wetlands, within the PSA (USFWS 2021; USGS 2021). However, these datasets are mapped at a coarse scale, providing only reconnaissance-level data on the presence, location, and size of waters.



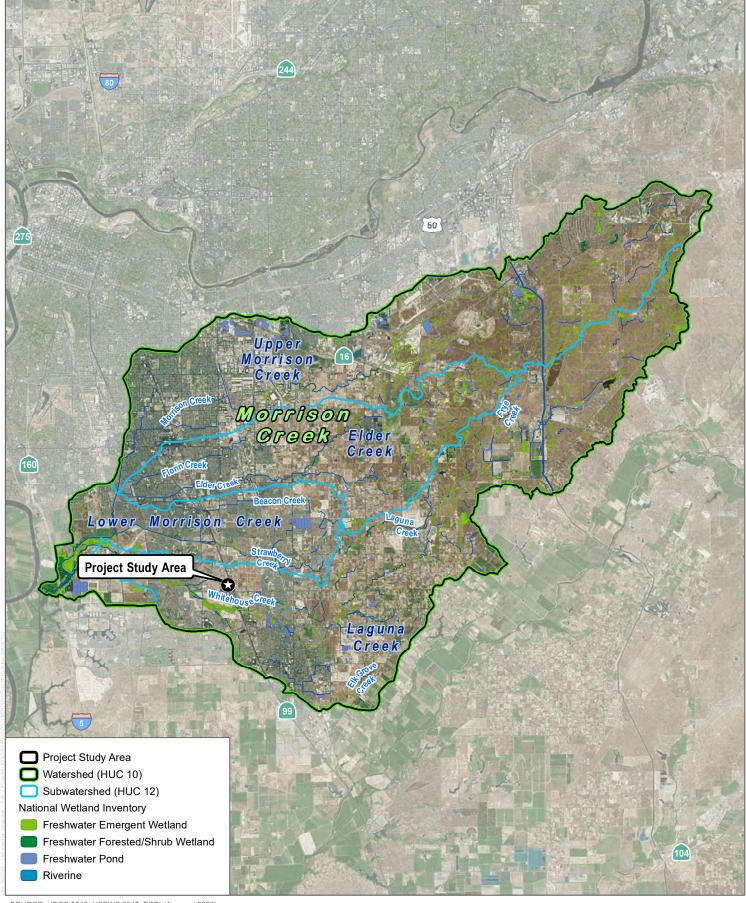




SOURCE: Bing Maps (Accessed 2021), Sacremento County 2019, USDA 2019







SOURCE: USGS 2019, USFWS 2019, ESRI (Accssed 2020)



0	7,000	14,000 Feet
0	2,000	4,000 Meters
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FIGURE 4
Hydrologic Setting



# 2.2 Regulatory Setting

#### 2.2.1 Federal

#### Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973, as amended, (16 USC 1531 et seq.) serves as the enacting legislation to list, conserve, and protect threatened and endangered species, and the ecosystems on which they depend, from extinction. In addition, for those wildlife species listed as federally endangered, FESA provides for the ability to designate critical habitat, defined as that habitat considered "essential to the conservation of the species" and that "may require special management considerations or protection." Under FESA Section 7, if a project that would potentially result in adverse impacts to threatened or endangered species includes any action that is authorized, funded, or carried out by a federal agency, that agency must consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any such action is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat for that species. FESA Section 9(a)(1)(B) prohibits the taking, possession, sale, or transport of any endangered fish or wildlife species. "Take" is defined to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC 1532 (19)). With respect to any endangered species of plant, Sections 9(a)(2)(A) and 9(a)(2)(B) prohibit the possession, sale, and import or export, of any such species, and prohibits any action that would "remove and reduce to possession any such species from areas under federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law." Pursuant to FESA Section 10(a)(1)(B), the USFWS may issue a permit for the take of threatened or endangered species provided that such taking is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50, Section 10.13 of the Code of Federal Regulations. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the U.S. Fish and Wildlife Service. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50, Section 20 of the Code of Federal Regulations. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). On December 22, 2017, the Department of Interior issued a legal opinion (M-Opinion 37050) that interpreted the above prohibitions as only applying to direct and purposeful actions of which the intent is to kill, take, or harm migratory birds; their eggs; or their active nests. Incidental take of birds, eggs, or nests that are not the purpose of such an action, even if there are direct and foreseeable results, was not prohibited. On January 7, 2021, the USFWS published a final rule (the January 7th rule) that codified the previous administration's interpretation, which after further review was determined to be inconsistent with the majority of relevant court decisions and readings of the MBTA's text, purpose, and history. However, a final rule revoking the January 7th rule was published on October 4, 2021 and went into effect on December 3, 2021. In their summary of the October 4, 2021 final rule, the USFWS explained that "the immediate effect of this final rule is to return to implementing the MBTA as prohibiting incidental take and applying enforcement discretion, consistent with judicial precedent and longstanding agency practice prior to 2017" (86 FR 54642).



#### Federal Clean Water Act (Section 404)

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Under Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) has the authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function.

#### Federal Clean Water Act (Section 401)

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine regional boards. The Central Valley Regional Water Quality Control Board (RWQCB) has authority for Section 401 compliance in the project area. A request for certification is submitted to the regional board at the same time that an application is filed with the USACE.

#### 2.2.2 State

#### California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Fish and Wildlife Commission has the responsibility of maintaining a list of threatened species and endangered species. The California Department of Fish and Wildlife (CDFW) also maintains lists of species of special concern. A Species of Special Concern is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- Is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role
- Is listed as threatened or endangered federally, but not by the state
- Meets the state definition of threatened or endangered, but has not formally been listed
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for threatened or endangered status by the state
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for threatened or endangered status by the state

The CESA prohibits the take of state-listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of the CESA, a state agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present on the property and determine whether the project would have a potentially significant impact on such species.

#### Fish and Game Code Sections 3503, 3511, 3513

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section



3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

#### Fish and Game Code Section 4150

California Fish and Game Code Section 4150 states a mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a non-game mammal. A non-game mammal may not be taken or possessed under this code. All bat species occurring naturally in California are considered non-game mammals and are therefore prohibited from take as stated in California Fish and Game Code Section 4150.

#### California Department of Fish and Wildlife Lake and Streambed Alteration Agreement

Under Sections 1600–1616 of the California Fish and Game Code, the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "... bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit ..." (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

#### California Department of Fish and Wildlife Wetlands Protection Regulations

CDFW derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600–1616 of the Fish and Game Code (lake and streambed alteration agreements), the California Endangered Species Act (protection of state-listed species and their habitats, which could include wetlands), and the Keene–Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement). In general, the CDFW asserts authority over wetlands within the state through any of the following: review and comment on ACOE Section 404 permits, review and comment on California Environmental Quality Act (CEQA) documents, preservation of state-listed species, or through lake and streambed alteration agreements.

#### **Sensitive Natural Communities**

Section 1940 of the California Fish and Game Code requires CDFW to develop and maintain a vegetation mapping standard for the state. More than half of the vegetation communities in the state have been mapped through the Vegetation Classification and Mapping Program.

Natural vegetation communities are evaluated by CDFW and are assigned global (G) and state (S) ranks based on rarity of and threats to these vegetation communities in California. Natural communities with ranks of S1-S3 are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents. Sensitive natural communities are defined by CDFW as vegetation alliances with state ranks of S1-S3 (S1: critically imperiled; S2: imperiled; S3: vulnerable), as identified in the 2010 List of Vegetation Alliances and Associations and subsequent updates. Additionally, all vegetation associations within the alliances with ranks of S1-S3 are considered sensitive habitats. CEQA requires that impacts to sensitive natural communities be evaluated and mitigated to the extent feasible.

Sensitive natural communities are communities that have a limited distribution and are often vulnerable to the environmental effects of projects. These communities may or may not contain special-status species or their habitats. For purposes of this assessment, sensitive natural communities are considered to include vegetation



communities listed in CDFW's California Natural Diversity Database and communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

#### Porter-Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and each RWQCB as the principal state agencies responsible for the protection of water quality in California. The Central Valley RWQCB has regulatory authority over the project area.

The RWQCB regulates discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act. The SWRCB defines a waters of the State as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050(e)). As of April 2019, the SWRCB has narrowed their definition of a waters of the state to include the following:

- 1. Natural wetlands,
- 2. Wetlands created by modification of a surface water of the state,
- 3. Artificial wetlands that meet any of the following criteria:
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
  - d. Greater than or equal to one acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater run-off and other pollutants or run-off subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

All waters of the U.S. are waters of the state. Wetlands such as isolated seasonal wetlands that are not generally considered waters of the U.S. are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation." (State Water Resources Control Board 2019).

Before USACE will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the RWQCB. If a CWA Section 404 permit is not required for the project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter-Cologne Water Quality Control Act.



# 3 Methods

#### 3.1 Literature Review

Special-status biological plant and wildlife species present or potentially present on the PSA were identified through a desktop literature search using the following sources: USFWS Information, Planning, and Conservation (IPaC) Trust Resource Report; CDFW California Natural Diversity Database (CNDDB); and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants. Additionally, the Natural Resources Conservation Service's Web Soil Survey was queried to determine soil types that exist within the boundary of the study area (USDA 2021a).

The above-referenced databases were searched for the *Florin* and eight surrounding USGS 7.5-minute quadrangles: *Clarksburg, Elk Grove, Sacramento West, Sacramento East, Carmichael, Courtland, Bruceville,* and *Galt.* CNDDB search results within three miles of the PSA were overlain on aerial imagery to assess proximity of known occurrences to the study area (Figure 5, CNDDB Map). Special-status species include those that are considered threatened, endangered, or species of special concern by CDFW, USFWS or the CNPS. California Rare Plant Rank 1 and 2 plant species were analyzed from the CNPS search. Following a review of these resources, Dudek also reviewed relevant life history information on those species documented as occurring in the region, including habitat type, soils, and elevation preferences.

### 3.2 Field Assessment

On October 4, 2021, Dudek biologist Anna Touchstone performed a biological field survey of the PSA and surrounding area. The survey consisted of walking throughout the PSA and along its periphery to map and characterize vegetation communities; collect data on the relative quality of existing habitats and their potential to support the special-status species identified during the preliminary database and resources review; and to identify any other sensitive biological resources present or potentially present. An aerial photograph (Google 2021) and georeferenced mobile map with an overlay of the property boundary were used in the field to map the vegetation communities and record any special-status or sensitive biological resources.

All plant species encountered during the field surveys were identified to the lowest taxonomic group possible and recorded directly into a field notebook. Common and scientific names for plant species with a California Rare Plant Rank (formerly CNPS List) follow the CNPS online Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2021). Latin names for all other plant species observed follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2021), and common names follow the U.S. Department of Agriculture's Natural Resources Conservation Service PLANTS Database (USDA 2021c).

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. A list of plant and wildlife species with potential to occur within the PSA is included in



Attachments A and B, respectively. Representative photographs of the PSA are provided in Attachment C. A list of plant and wildlife species identified within the PSA during the October 2021 fieldwork is included in Attachment D.

Dudek's field survey did not include an aquatic resources delineation or focused surveys for special-status plant or animal species. The field survey was sufficient to generally describe those features of the PSA that could be subject to the jurisdiction of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or the Regional Water Quality Control Board.





SOURCE: Bing Maps (Accessed 2021), Sacremento County 2019

FIGURE 5



# 4 Results

# 4.1 Vegetation Communities and Land Cover Types

The land covers within the PSA includes one natural vegetation community, one non-natural land cover type, and two aquatic land cover types (Figure 6, Project Vegetation Communities and Land Cover Types). The vegetation communities and land covers have been adapted from the California Wildlife Habitat Relationships System (CDFW 2021b). The following vegetation communities and land cover types were documented on site and are described in further detail later in this section: non-native grassland, developed, ditch, and freshwater emergent wetland (see Table 1). Refer to Attachment C for representative photographs of on-site vegetation communities and land cover types.

Table 1. Vegetation Communities and Land Cover Types in the Project Study Area

Macrogroup	Vegetation Community/ Land Cover Type	Acres	Linear Feet		
Terrestrial	Terrestrial				
Natural Land Cover	Annual Grassland	3.62	NA		
Non-Natural Land Cover	Disturbed	<0.01	NA		
	Total	3.63	NA		
Aquatic					
Potential Non-Wetland Water	Ditch	0.03	302		
Potential Wetland	Freshwater Emergent Wetland	<0.01	3.5		
	Total	0.03	305.5		

## 4.1.1 Terrestrial Land Cover Types

**Non-native Grassland.** Nearly all the PSA is highly disturbed annual grassland dominated by non-native wild oats (*Avena* spp.) and bromes (*Bromus* spp.). Although undeveloped, this community has experienced regular disturbance for decades from mowing and discing. Small Callery pear trees are present along the margins of this community. A drainage ditch and freshwater emergent wetland occur along the eastern and southern boundary of this community and is described in more detail in Section 4.1.3.

**Developed.** A small portion of a paved driveway is located within the northeastern corner of the PSA. This area is devoid of vegetation and was being used for vehicle parking associated with the adjacent apartment complex at the time of the survey.

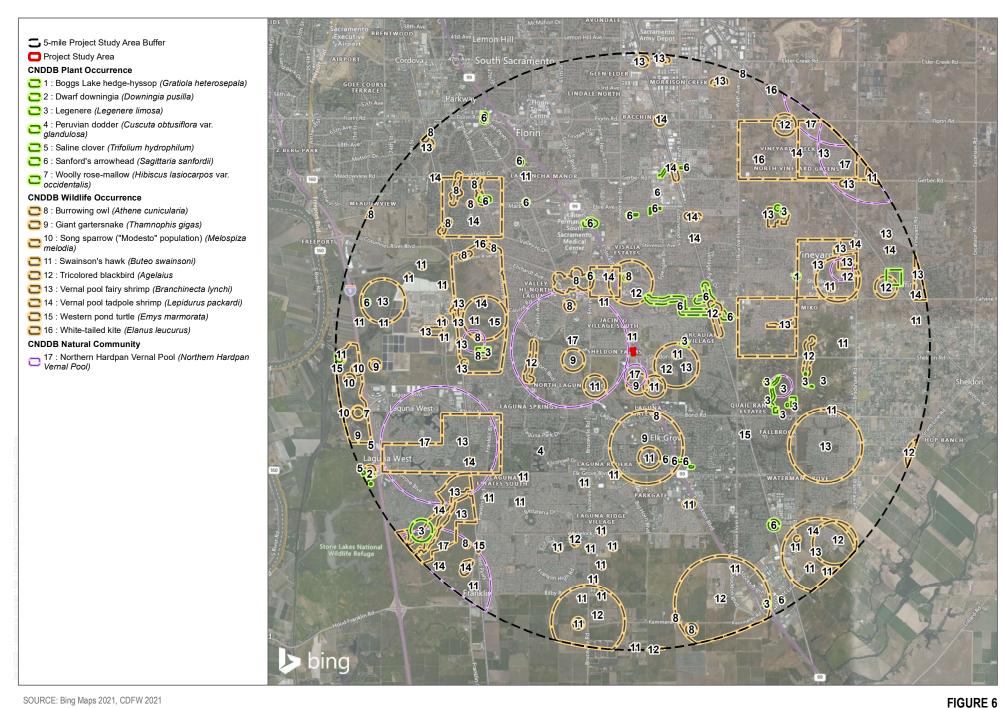
## 4.1.2 Aquatic Land Cover Types

**Ditch.** One drainage ditch flows to the southwest along the eastern and southern perimeter of the PSA. This unnamed drainage ditch varies in depth and width along the perimeter of the PSA but is generally four feet deep and 20 feet wide. The feature supported annual grassland species consistent with the surrounding upland, but also

includes facultative species along its bed and banks, including perennial pepper weed (*Lepidium latifolium*), fennel (*Foeniculum vulgare*), Italian rye grass (*Festuca perennis*), and curly dock (*Rumex crispus*). Ponded water, approximately 2 inches deep, was present within the southeastern corner of the drainage at the location of the freshwater emergent wetland (described below). Evidence of an OHWM included bed and bank, soil cracks, and a change in plant community and cover.

Freshwater Emergent Wetland. This community is characterized by frequent flooding that supports erect, rooted herbaceous hydrophytes, including umbrella plant (*Cyperus involucre*) and narrowleaf cattail (*Typha angustifolia*). This community occurs within the southeastern corner of the drainage ditch, which appears to receive regular irrigation runoff from the San Joaquin Cemetery to the east via a culvert under West Stockton Road.





**DUDEK** 

4,350

8,700 Feet

**CNDDB Occurrences** 



## 4.2 Plant and Wildlife Species Observed

A total of 20 species of vascular plants, including 4 native (20%) and 16 non-native (80%) plant species were recorded during the October 4, 2021 field survey (see Attachment D). Two (2) native wildlife species were also recorded. The lack of species diversity and presence of non-native species reflect the disturbed conditions of the PSA.

# 4.3 Special-Status Species Potentially Occurring on within the Project Study Area

This section discusses special-status plant and wildlife species determined to have the potential to occur within the PSA based on the literature review and field assessment of existing habitats. Tables summarizing the potential occurrence of special-status plant and wildlife species are included in Attachment A and B, respectively. Species are not expected to occur if the property is clearly outside the known geographic range of the species, or if no suitable habitat for the species is present on or adjacent to the site.

# 4.3.1 Special-Status Plants

Results of the CNDDB and CNPS searches revealed 23 special-status plant species that have potential to occur in the 9-quad search area (see Attachment A). An abbreviated list of those special-status species with potential to occur within the PSA was then produced based on habitat suitability, elevation, soils, geographic range, and past occurrence data in the region (listed in the following paragraph). Plants with no potential to occur within the PSA due to lack of suitable soils or habitat, or because the PSA is outside their known elevation or geographic ranges, are not discussed further in this document.

Of the 23 special-status plant species, one has moderate potential to occur within the PSA, Sanford's arrowhead (Sagittaria sanfordii, CNPR rank 1B.2), and five have low potential to occur within the PSA, including watershield (Brasenia schreberi, CNPR rank 2B.3), bristly sedge (Carex comosa, CNPR rank 2B.1), Bolander's water-hemlock (Cicuta maculata var. bolanderi, CNPR 2B.1), Peruvian dodder (Cuscuta obtusiflora var. glandulosa, CNPR 2B.2), and Delta tule pea (Lathyrus jepsonii var. jepsonii, CNPR 1B.2). The PSA provides low to marginal quality habitat for these species due to regular disturbance and the overall dominance of non-native plants. None of these species were observed during the October 2021 field survey; however, the timing of this visit was outside the bloom period for most species.

## 4.3.2 Special-Status Wildlife

Results of the CNDDB and USFWS searches revealed 25 listed or special-status wildlife species, or species proposed for listing as rare, threatened, or endangered by either the CDFW or the USFWS that have potential to occur in the nine-quad database search area. Of these, 22 were removed from consideration due to lack of suitable habitat within or adjacent to the PSA, or due to the PSA being outside of the species' known range (see Attachment B).

The PSA provides potential habitat for birds of prey and migratory birds, including the burrowing owl (*Athene cunicularia*), a California Species of Special Concern (SSC), and the state-threatened Swainson's hawk (*Buteo swainsoni*). Additionally, the PSA provides potential foraging habitat for the state-threatened and SSC tricolored blackbird (*Agelaius tricolor*) and native bats, although nesting/roosting habitat is absent. Land covers on site

provide poor to marginal quality habitat for these species due to regular human disturbance, surrounding development, and/or a lack of suitable microhabitat features. None of these species were detected during the October 2021 field survey, except for common and migratory birds protected by California Fish and Game Code and/or the MBTA. Special-status species with a potential to occur on site are discussed in detail below.

Nesting and Migratory Birds and Birds of Prey, including the Burrowing Owl and Swainson's Hawk. Small trees and annual grassland provide potential nesting habitat for numerous native bird species, including the burrowing owl. Although the Swainson's hawk would not be expected to nest on-site, suitable nesting trees are located immediately adjacent to the PSA. Migratory bird species are protected by the federal MBTA and native birds of prey are protected by Section 3503.5 of the California Fish and Game Code. The Swainson's hawk is protected by the California Endangered Species Act.

Species that Would Use the PSA for Foraging Only, Including Tricolored Blackbird and Native Bats. The tricolored blackbird and native bats could forage within the PSA but would not nest on site. These species are highly mobile while foraging. Although a small area of annual grassland would no longer be available as foraging habitat for these species following project development, these species are expected to use this parcel infrequently under existing conditions given the PSA's location within a matrix of generally unsuitable urban development. Moreover, similar or higher quality habitats are regionally abundant.

# 4.4 Potentially Jurisdictional Aquatic Resources

As previously described in Section 4.1.3, Aquatic Habitat Types, two aquatic resources were identified within the PSA, although a formal delineation of jurisdictional aquatic resources was not conducted. Both of these features may be subject to the jurisdiction of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and/or the Regional Water Quality Control Board.

## 4.5 Sensitive Natural Communities

The PSA contains a portion of a freshwater emergent wetland, which may be considered a sensitive natural community regulated by CDFW under California Fish and Game Code Section 1600.

One CNDDB Natural Community that may be considered sensitive, Northern Hardpan Vernal Pool, is mapped within the western portion of the PSA (Occ. No. 97; CDFW 2021). However, this 1983 occurrence mapped using aerial imagery is described in CNDDB as being located south of Cosumnes River College and west of Bruceville Road. Therefore, this habitat was documented outside of the PSA.

# 4.6 Wildlife Corridors and Habitat Linkages

The PSA is an isolated undeveloped parcel bound on all sides by development and is not considered a wildlife corridor or habitat linkage.



# 5 Literature Cited

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## **Attachment A**

Special-Status Plants with Potential To Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Astragalus tener var. tener	alkali milk- vetch	None/None/1B.2	Playas, Valley and foothill grassland (adobe clay), Vernal pools; alkaline/annual herb/Mar–June/3–195	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only CNDDB record of this species within the 9-quad search area is located within alkaline sink habitat over 13 miles northwest of the PSA from 1954. Moreover, alkaline soils are absent from the PSA.
Brasenia schreberi	watershield	None/None/2B.3	Marshes and swamps (freshwater)/perennial rhizomatous herb (aquatic)/June-Sep/98-7,215	Low potential to occur. Suitable habitat is present within the freshwater emergent wetland. The only CNDDB record of this species within the 9-quad search area is located within Stone Lakes National Wildlife Refuge approximately 7 miles southwest of the PSA from 1976.
Carex comosa	bristly sedge	None/None/2B.1	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland/perennial rhizomatous herb/May-Sep/0-2,050	Low potential to occur. Suitable habitat is present within the freshwater emergent wetland. The CNDDB lists several occurrences located within Stone Lakes National Wildlife Refuge approximately 7 miles southwest of the PSA, the closest of which is from 2009.
Centromadia parryi ssp. parryi	pappose tarplant	None/None/1B.2	Chaparral, Coastal prairie, Meadows and seeps, Marshes and swamps (coastal salt), Valley and foothill grassland (vernally mesic); often alkaline/ annual herb/May-Nov/0-1,375	Not expected to occur. Suitable habitat is present within the freshwater emergent wetland. However, alkaline soils often



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				required by this species are absent from the PSA, and the only CNDDB record of this species within the 9-quad search is believed to be extirpated.
Cicuta maculata var. bolanderi	Bolander's water-hemlock	None/None/2B.1	Marshes and swamps Coastal, fresh or brackish water/perennial herb/July-Sep/0-655	Low potential to occur. Suitable habitat is present within the freshwater emergent wetland. The only CNDDB record of this species within the 9-quad search area is located along Snodgrass Slough approximately 13 miles southwest of the PSA from 1993.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	None/None/2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July-Oct/49-920	Low potential to occur. Suitable habitat is present within the freshwater emergent wetland. The only CNDDB record of this species within the 9-quad search area is located along Laguna Lake approximately 2 miles southwest of the PSA from 1995.
Downingia pusilla	dwarf downingia	None/None/2B.2	Valley and foothill grassland (mesic), Vernal pools/ annual herb/Mar-May/3-1,455	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The closest CNDDB occurrences are located within a natural vernal pool complex north of Laguna Creek,



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				approximately 2 miles east of the PSA from 1991 and 2002.
Gratiola heterosepala	Boggs Lake hedge-hyssop	None/SE/1B.2	Marshes and swamps (lake margins), Vernal pools; clay/annual herb/Apr-Aug/33-7,790	Not expected to occur. Suitable vernal pool and lake margin habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The closest CNDDB occurrence is located within a natural vernal pool complex north of Laguna Creek, approximately 2 miles east of the PSA from 1995.
Hibiscus lasiocarpos var. occidentalis	woolly rose- mallow	None/None/1B.2	Marshes and swamps (freshwater); Often in riprap on sides of levees./perennial rhizomatous herb (emergent)/June-Sep/0-395	Not expected to occur. Suitable riverbank habitat is absent from the PSA. All CNDDB occurrences within the vicinity occur along the Sacramento River and adjacent Stone Lakes National Wildlife Refuge, located approximately 5 miles west of the PSA.
Juncus leiospermus var. ahartii	Ahart's dwarf rush	None/None/1B.2	Valley and foothill grassland (mesic)/annual herb/ Mar-May/98-750	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only CNDDB occurrence within the 9-quad search area is located within vernal pool complex, habitat approximately 10 miles northeast of the PSA from 2006.



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Lasthenia chrysantha	alkali-sink goldfields	None/None/1B.1	Vernal pools; alkaline/annual herb/Feb-Apr/0-656	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only CNDDB record of this species within the 9-quad search area is located within Stone Lakes National Wildlife Refuge approximately 6 miles southwest of the PSA from 2009. Moreover, alkaline soils are absent from the project site and PSA.
Lathyrus jepsonii var. jepsonii	Delta tule pea	None/None/1B.2	Marshes and swamps (freshwater and brackish)/ perennial herb/May-July(Aug-Sep)/0-15	Low potential to occur. Suitable habitat is present within the freshwater emergent wetland. All CNDDB occurrences within the vicinity occur within the waterways between the Sacramento River and Stone Lakes National Wildlife Refuge, located approximately 10 miles southwest of the PSA.
Legenere Iimosa	legenere	None/None/1B.1	Vernal pools/annual herb/Apr-June/3-2,885	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The closest CNDDB occurrence of this species is located less than one mile east of the PSA from 1993, and has since been



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				extirpated by residential development.
Lepidium latipes var. heckardii	Heckard's pepper-grass	None/None/1B.2	Valley and foothill grassland (alkaline flats)/annual herb/Mar-May/7-655	Not expected to occur. Suitable habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only two CNDDB records within the 9-quad search area are located within Stone Lakes National Wildlife Refuge approximately 6 miles southeast of the PSA from 2010. Moreover, alkaline soils are absent from the project site and PSA.
Lilaeopsis masonii	Mason's lilaeopsis	None/SR/1B.1	Marshes and swamps (brackish or freshwater), Riparian scrub/perennial rhizomatous herb/ Apr-Nov/0-35	Not expected to occur. Suitable tidal wetlands are absent from the PSA.
Limosella australis	Delta mudwort	None/None/2B.1	Marshes and swamps (freshwater or brackish), Riparian scrub; Usually mud banks/perennial stoloniferous herb/May-Aug/0-10	Not expected to occur. Suitable tidal mudflats are absent from the PSA.
Orcuttia tenuis	slender Orcutt grass	FT/SE/1B.1	Vernal pools; Often gravelly./annual herb/ May-Sep(Oct)/115-5,770	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only two CNDDB records within the 9-quad search area are located within a vernal pool complex approximately 6 miles northeast of the PSA from 2010.



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Orcuttia viscida	Sacramento Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr-July(Sep)/98-330	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. Any suitable habitat that may have been present has been eliminated by intensive human disturbance. The only CNDDB record within the 9-quad search area is located within a vernal pool complex approximately 7 miles northeast of the PSA from 1998.
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	Marshes and swamps (assorted shallow freshwater)/ perennial rhizomatous herb (emergent)/ May-Oct(Nov)/0-2,130	Moderate potential to occur. Suitable habitat is present within the freshwater emergent wetland. The CNDDB lists numerous occurrences within artificial and natural waterways in the vicinity, the closest of which is located within Strawberry Creek approximately 0.8-mile northeast of the PSA from 1996.
Scutellaria galericulata	marsh skullcap	None/None/2B.2	Lower montane coniferous forest, Meadows and seeps (mesic), Marshes and swamps/perennial rhizomatous herb/June-Sep/0-6,885	Not expected to occur. Suitable marsh and swamp habitat is absent from the PSA. Moreover, the only two CNDDB records are located along Snodgrass Slough approximately 12 miles southwest of the PSA from 2009.
Scutellaria lateriflora	side-flowering skullcap	None/None/2B.2	Meadows and seeps (mesic), Marshes and swamps/ perennial rhizomatous herb/July-Sep/0-1,640	Not expected to occur. Suitable marsh and swamp habitat is absent from the PSA. Moreover, all CNDDB records in the vicinity are located along



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				Snodgrass Slough approximately 12 miles southwest of the PSA.
Symphyotrichum lentum	Suisun Marsh aster	None/None/1B.2	Marshes and swamps (brackish and freshwater)/ perennial rhizomatous herb/(Apr)May-Nov/0-10	Not expected to occur. Suitable slough habitat is absent from the PSA. The only CNDDB record within the 9-quad search area is located on the margin of Greens Lake approximately 13 miles northwest of the PSA from 2013.
Trifolium hydrophilum	saline clover	None/None/1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools/annual herb/Apr–June/0–985	Not expected to occur. Suitable vernal pool habitat is absent from the PSA. However, alkaline soils required by this species are absent. Moreover, all CNDDB records in the vicinity are located within Stone Lakes National Wildlife Refuge approximately 5 miles west of the PSA.

#### Status Legend:

FE = Federally endangered

FT = Federally threatened

SE = State endangered

ST = State threatened

CRPR = California Rare Plant Rank

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere

- .1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- .2 Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
- .3 Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)



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# **Attachment B**

Special-Status Wildlife with Potential To Occur

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
Ambystoma californiense	California tiger salamander	FT/ST, WL	Annual grassland, valley-foothill hardwood, and valley-foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and man-made pools if predatory fishes are absent	Not expected to occur. No suitable aquatic habitat present within the PSA. No burrows observed during October 2021 survey.
Rana draytonii	California red- legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. No suitable aquatic habitat present within the PSA.
Spea hammondii	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur. No suitable aquatic habitat present within the PSA.
Reptiles				
Actinemys marmorata	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. Although marginally suitable freshwater emergent wetland habitat is present within the PSA, this wetland has been created by stormwater and irrigation runoff and is hydrologically isolated from other natural water features by culverts under major roadways. The closest suitable habitat for this species is Laguna Creek, located approximately 0.5-mile south of the PSA, where the CNDDB lists two records for this species.
Thamnophis gigas	giant garter snake	FT/ST	Freshwater marsh habitat and low-gradient streams; also uses canals and irrigation ditches	Not expected to occur. Although marginally suitable freshwater emergent wetland habitat is present within the PSA, this wetland has been created by stormwater and



Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				irrigation runoff and is hydrologically isolated from other natural water features by culverts under major roadways. The closest suitable habitat for this species is Laguna Creek, located approximately 0.5-mile south of the PSA, where the CNDDB lists multiple records for this species.
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Low potential to occur. No suitable nesting habitat is present, and ground disturbance from regular mowing and discing activities is expected to discourage use of the PSA by this species for foraging. There are multiple CNDDB records occurrences of this species within 3 miles of the PSA, the closest of which is located 0.5-mile southeast from 2014.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Low potential to occur. No burrows were present during the October 2021 survey, although it is at least theoretically possible that California ground squirrels and subsequently burrowing owls could move onto the undeveloped PSA if maintenance activities ceased before the start of construction. There are multiple CNDDB records of this species within 3 miles of the PSA, the closest of which is located approximately 1 mile south of from 2007.



Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Moderate potential to occur. Although suitable nesting trees are absent from the PSA itself, numerous suitable nesting trees are located within the immediately vicinity, and the PSA is located within the species' known geographic range. There are numerous CNDDB records within 3 miles of the project site, the closest of which is a nesting occurrence in a Valley oak located approximately 0.2-mile to the north.
Coccyzus americanus occidentalis (nesting)	western yellow- billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. No suitable nesting habitat is present.  Vegetation within the adjacent freshwater emergent wetland is too sparse to support nesting by this species.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. No suitable nesting habitat is present.  Vegetation within the adjacent freshwater emergent wetland is too sparse to support nesting by this species.
Melospiza melodia ("Modesto" population)	song sparrow ("Modesto" population)	None/SSC	Nests and forages in emergent freshwater marsh, riparian forest, vegetated irrigation canals and levees, and newly planted valley oak (Quercus lobata) restoration sites.	Not expected to occur. No suitable nesting habitat is present. Vegetation within the adjacent freshwater emergent wetland is too sparse to support nesting by this species.
Progne subis (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways	Not expected to occur. No suitable nesting habitat present.



Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to occur. No suitable nesting habitat present.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. No suitable nesting habitat is present. Vegetation within the adjacent freshwater emergent wetland is too sparse to support nesting by this species.
Xanthocephalus xanthocephalus (nesting)	yellow-headed blackbird	None/SSC	Nests in marshes with tall emergent vegetation, often along borders of lakes and ponds; forages in emergent wetlands, open areas, croplands, and muddy shores of lacustrine habitat	Not expected to occur. No suitable nesting habitat is present. Vegetation within the adjacent freshwater emergent wetland is too sparse to support nesting by this species.
Fishes				
Archoplites interruptus (within native range only)	Sacramento perch	None/SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley	Not expected to occur. No suitable aquatic habitat is present.
Hypomesus transpacificus	Delta smelt	FT/SE	Sacramento-San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay	Not expected to occur. No suitable aquatic habitat is present.
Oncorhynchus mykiss irideus pop. 10	southern steelhead - southern California DPS	FE/None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	Not expected to occur. No suitable aquatic habitat is present.
Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	FT/None	Populations spawning in the Sacramento and San Joaquin Rivers and their tributaries	Not expected to occur. No suitable aquatic habitat is present.
Pogonichthys macrolepidotus	Sacramento splittail	None/SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay, and associated marshes	Not expected to occur. No suitable aquatic habitat is present.
Spirinchus thaleichthys	longfin smelt	FC/ST	Aquatic, estuary	Not expected to occur. No suitable aquatic habitat is present.



Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur		
Mammals	Mammals					
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. No suitable grasslands present and the site is located in an area of regular human disturbance. No suitable burrows were observed during the fieldwork.		
Invertebrates						
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. The PSA lacks vernal pools and/or connectivity to other suitable aquatic habitat.		
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT/None	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus nigra ssp. caerulea)	Not expected to occur. There are no elderberry shrubs present.		
Lepidurus packardi	vernal pool tadpole shrimp	FE/None	Ephemeral freshwater habitats including alkaline pools, clay flats, vernal lakes, vernal pools, and vernal swales	Not expected to occur. The PSA lacks vernal pools and/or connectivity to other suitable aquatic habitat.		

#### **Status Abbreviations**

FE: Federally Endangered FT: Federally Threatened

FDL: Federally Delisted

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

SSC: California Species of Special Concern

FP: California Fully Protected Species

WL: California Watch List Species SE: State Endangered

ST: State Threatened

PSE: Proposed State Endangered



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# **Attachment C**

Representative Site Photographs



Photo 1. Recently mowed non-native grassland.

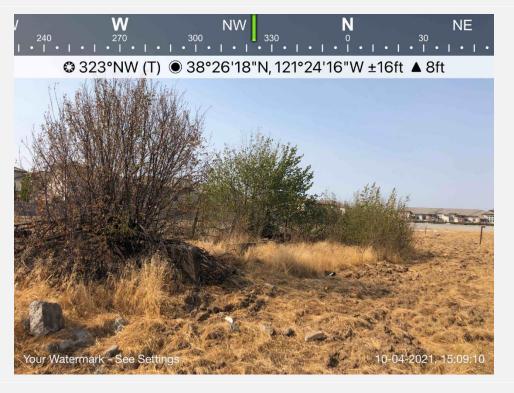


Photo 2. Ornamental sapling thicket along western boundary.



Photo 3. Drainage ditch along eastern boundary.



Photo 4. Freshwater emergent wetland within drainage ditch along eastern and southern boundaries.

## **Attachment D**

Plants and Wildlife Observed On Site During the Site Visit

## Vascular Species

### **Eudicots**

#### APIACEAE—CARROT FAMILY

\* Foeniculum vulgare—fennel

#### APOCYNACEAE—DOGBANE FAMILY

Asclepias fascicularis-Mexican whorled milkweed

#### ASTERACEAE—SUNFLOWER FAMILY

- \* Centaurea solstitialis—yellow star-thistle
- Cichorium intybus—chicory
- \* Dittrichia graveolens—stinkwort

#### BRASSICACEAE—MUSTARD FAMILY

- \* Hirschfeldia incana—shortpod mustard
- \* Lepidium latifolium—perennial pepper weed

#### CONVOLVULACEAE—MORNING-GLORY FAMILY

Convolvulus arvensis—field bindweed

#### GERANIACEAE—GERANIUM FAMILY

\* Geranium dissectum—cutleaf geranium

#### ONAGRACEAE—EVENING PRIMROSE FAMILY

Epilobium brachycarpum-tall annual willowherb

#### POLYGONACEAE—BUCKWHEAT FAMILY

Rumex crispus—curly dock

#### ROSACEAE—ROSE FAMILY

Pyrus calleryana—flowering pear

### Monocots

#### CYPERACEAE—SEDGE FAMILY

\* Cyperus involucratus—umbrella plant

#### POACEAE-GRASS FAMILY

- \* Avena fatua—wild oat
- Bromus diandrus—ripgut brome



Elymus glaucus—blue wildrye

- \* Festuca perennis—perennial rye grass
- \* Hordeum murinum—mouse barley
- Phalaris aquatica—Harding grass

#### TYPHACEAE—CATTAIL FAMILY

Typha angustifolia—narrowleaf cattail

# Wildlife Species

### Birds

### **Mockingbirds and Thrashers**

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—northern mockingbird

### **Mammals**

### **Hares and Rabbits**

LEPORIDAE—HARES AND RABBITS

Lepus californicus—black-tailed jackrabbit

\* signifies introduced (non-native) species

