

**Appendix C:  
Biological Resources Supporting Information**

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## **C.1 - Biological Resources Assessment**

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## Biological Resources Assessment Tracy Alliance Project City of Tracy, San Joaquin County, California

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## SECTION 1: INTRODUCTION

At the request of the City of Tracy (City), FirstCarbon Solutions (FCS) prepared a Biological Resources Assessment (BRA) for the Tracy Alliance Project (proposed project). The purpose of the BRA is to analyze potential impacts of future site development related to the proposed project on sensitive biological resources, regional fish and wildlife movement corridors, and existing local, State, and federal natural resources laws. Additionally, the BRA describes on-site vegetation communities, and evaluates the potential for occurrence of special-status wildlife and plant species within the proposed project site.

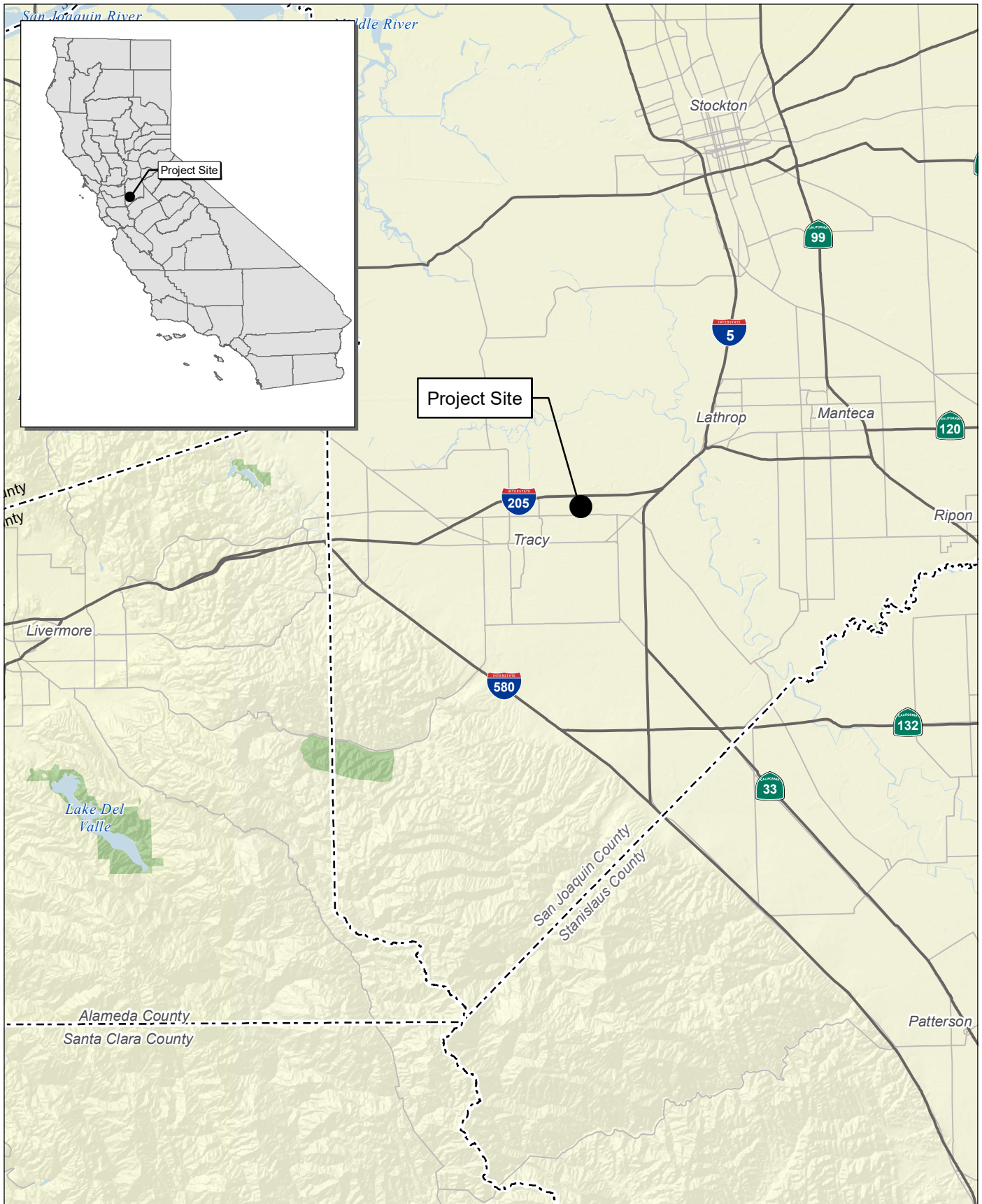
### 1.1 - Project Site Location and History

The proposed project site is located in unincorporated San Joaquin County, California, adjacent to the City of Tracy (Exhibit 1). The site is located at the northeast corner of the intersection of Grant Line Road and Paradise Road, and is bound by Interstate 205 (I-205) to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west (Exhibit 2). The site has a history of agricultural uses and associated agricultural infrastructure going back multiple decades.

### 1.2 - Project Description

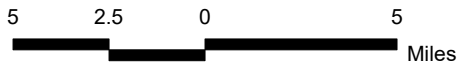
The Tracy Alliance Group, Suvik Farms, LLC, and Zuriakat (co-applicants) are proposing the Tracy Alliance Project (proposed project), which consists of the development of up to 3,352,320 square feet of warehouse development on 191.18 acres comprising six parcels. The six parcels consist of two Tracy Alliance parcels (totaling 122.44 acres), three Suvik Farms, LLC parcels (totaling 46.61 acres), and one Zuriakat parcel (22.17 acres) as shown in Exhibit 3. The proposed project would require approval of annexation into the City of Tracy, pre-zoning, an amendment to the NEI Specific Plan, and a Tentative Parcel Maps or Lot Line Adjustment to create final development lots. The proposed project also includes demolition of existing residential and agricultural buildings, removal of existing trees and crops, road improvements, and grading of approximately 500,000 cubic yards, which would be balanced on-site. Of the 500,000 cubic yards of material graded, approximately 300,000 cubic yards would occur on the Tracy Alliance parcels, approximately 150,000 cubic yards would occur in development of the Suvik Farms parcels, and approximately 50,000 cubic yards would occur in development of the Zuriakat parcel.

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Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

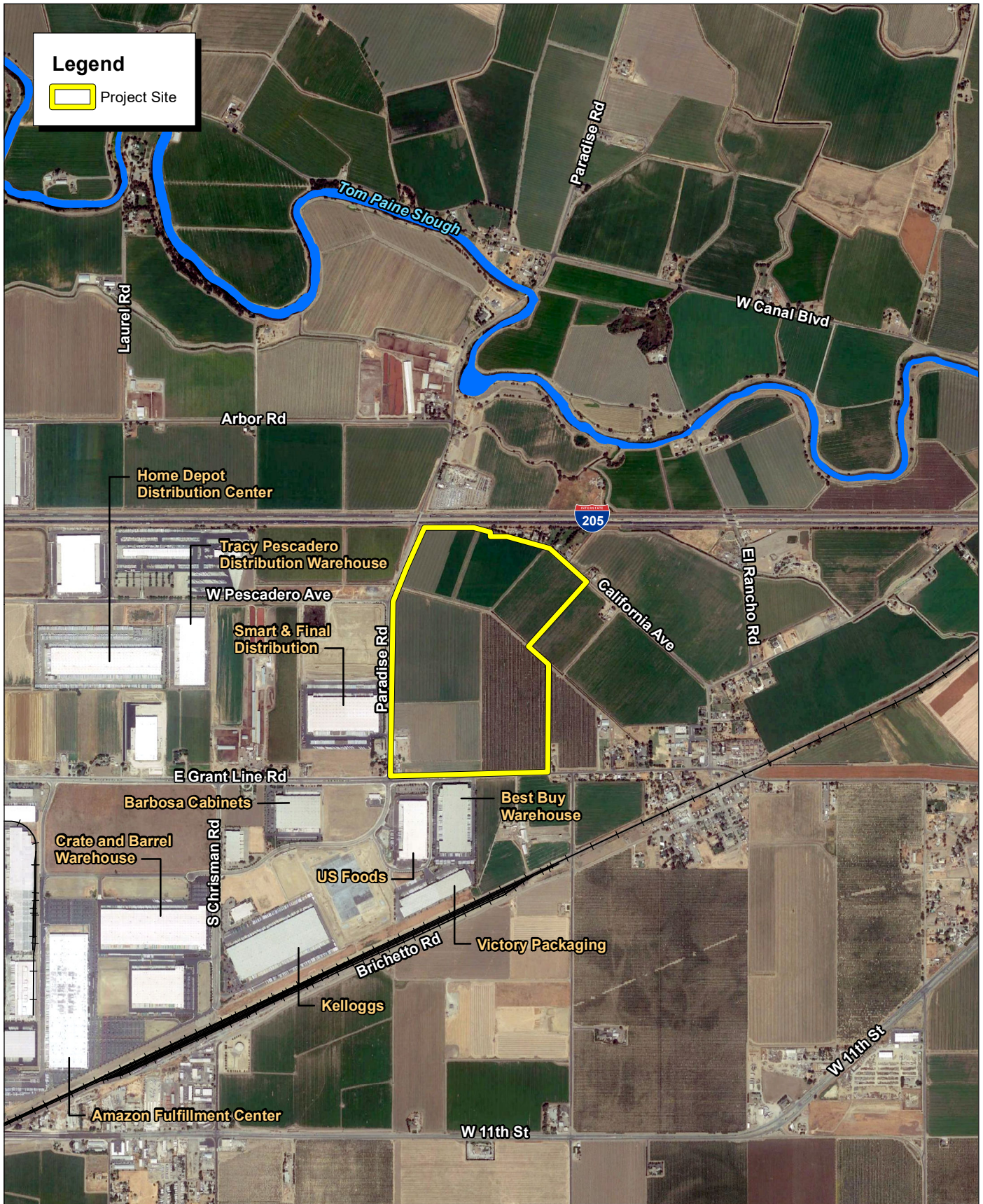
**FIRSTCARBON**  
SOLUTIONS™



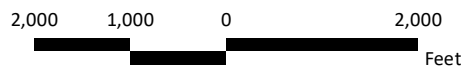
## Exhibit 1 Regional Location Map

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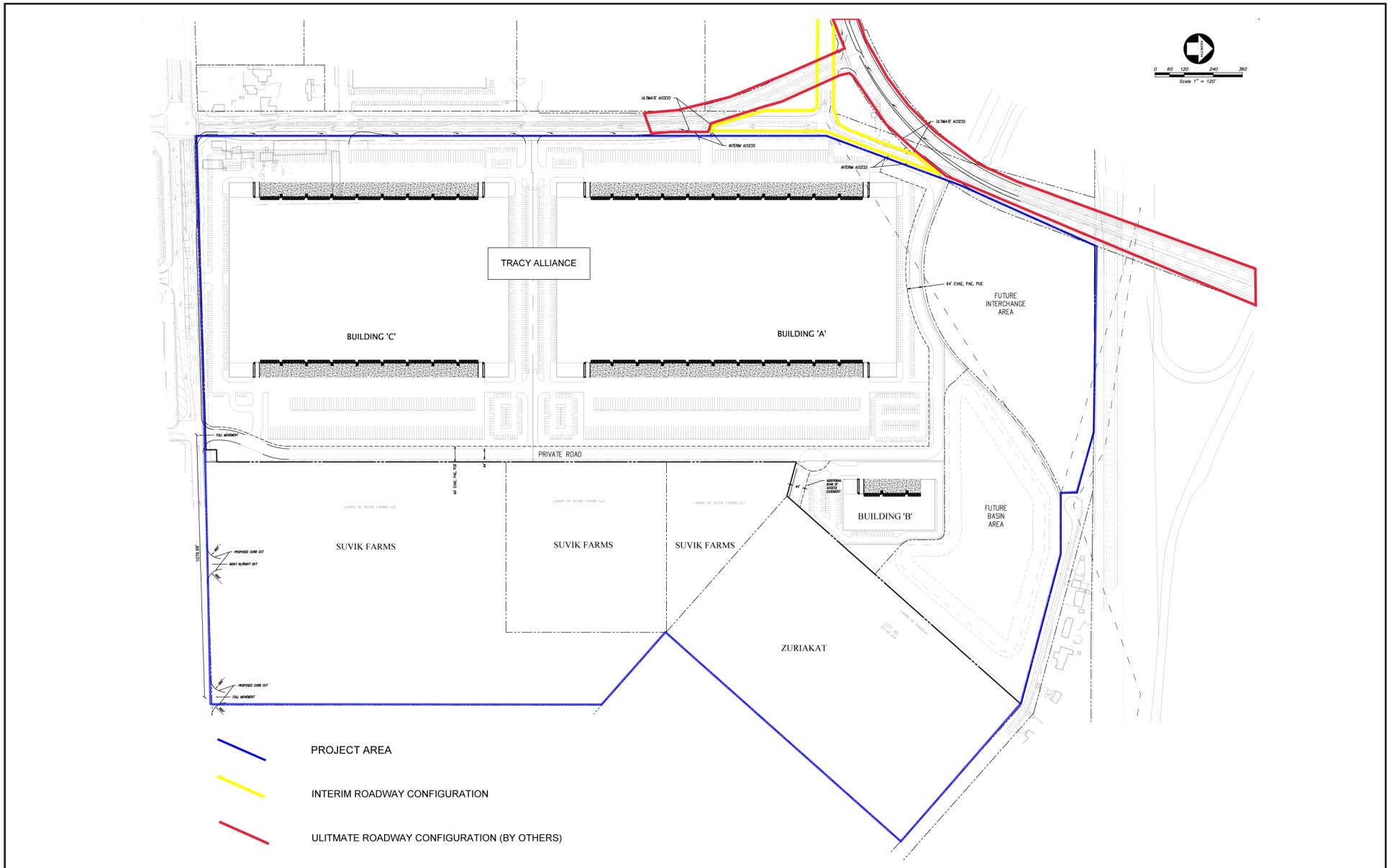


Source: Google Earth Aerial Imagery, August 2018.



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Source: KIER + WRIGHT, December 2019.



## Exhibit 3 Proposed Site Plan

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## SECTION 2: REGULATORY SETTING

### 2.1 - Federal

#### 2.1.1 - Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the Federal Endangered Species Act (FESA). Section 9 of FESA protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

#### 2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the US and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, et seq.).

#### 2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, et seq.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

#### 2.1.4 - Clean Water Act

##### Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The USACE has established a series of nationwide permits that authorize certain activities in waters of the United States if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the United States. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

## Section 401

As stated in Section 401 of the CWA, “any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

## 2.2 - State

### 2.2.1 - CEQA Guidelines

The following California Environmental Quality Act (CEQA) Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts to the biological resources identified in this report. Impacts are considered significant if a project would:

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

### 2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to

identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

### 2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under CESA. Fish and Game Code Section 2081 established an incidental take permit program for state-listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.” Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under FESA and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a “Species of Special Concern.” The CDFW maintains lists of “Species of Special Concern” that serve as species “watch lists.” Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society’s (CNPS’s) Lists 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. “Take” of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes waters that are episodic and perennial; and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

#### **2.2.4 - California Porter-Cologne Water Quality Control Act**

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act. “Waters of the State” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code § 13050(e)).

#### **2.2.5 - California Code of Regulations (Wetlands and Waters Definition)**

In accordance with the Porter-Cologne Water Quality Control Act (Water Code § 13000 *et seq.*), the State Water Resources Control Board (State Water Board) and RWQCBs are authorized to regulate discharges of waste, including discharges of dredged or fill material, that may affect the quality of waters of the State. As described below, waters of the State include some, but not all, features that are defined as wetlands, as well as other features, including the ocean, lakes, and rivers. The State

Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State<sup>1</sup> defines a wetland as follows:

An area is wetland 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.

Under State law, “waters of the State” means “any surface water or groundwater, including saline waters, within the boundaries of the state.” As such, water quality laws apply to both surface water and groundwater. After the United States Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC § 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State’s jurisdiction over isolated wetlands. The memorandum stated that under the Porter-Cologne Water Quality Control Act, discharges to wetlands and other waters of the State, including isolated wetlands, are subject to State regulation. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

The CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify the CDFW if a project or plan will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds. . . except when the department has been notified pursuant to Section 1601.” Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If the applicant agrees to these measures, the applicant may enter into an agreement with the CDFW identifying the covered activities, impacts to CDFW jurisdictional features, and compensatory mitigation.

### 2.2.6 - California Department of Fish and Wildlife Species of Concern

In addition to formal listing under FESA and CESA, species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of Species of Special Concern that is developed by the CDFW. The list tracks species in California whose numbers, reproductive success, or habitat may be threatened. In addition to Species of Special Concern, the CDFW identifies animals that are tracked by the California Natural Diversity Database (CNDDDB), but warrant no federal interest and no legal protection. These species are identified as California Special Animals. Appendix A provides the CNDDDB inventory results for the project site.

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<sup>1</sup> California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019.

### 2.2.7 - California Native Plant Society

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

- Rank 1A: Plants presumed Extinct in California
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- Rank 3: Plants about which we need more information—A Review List
- Rank 4: Plants of limited distribution—A Watch List

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, potential impacts to these species or their habitats should be analyzed during the preparation of environmental documents pursuant to CEQA, as they may meet the definition of Rare or Endangered under the CEQA Guidelines Section 15380 criteria. Appendix A provides the CNPS inventory results for the project site.

### 2.2.8 - Habitat Conservation Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) was adopted in 2000 to provide a strategy for balancing the need to conserve Open Space and the need to convert Open Space to non-Open Space uses while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish, and wildlife species, especially those that are currently listed, or may be listed in the future, under FESA or CESA; providing and maintaining multiple-use Open Spaces that contribute to the quality of life of the residents of San Joaquin County; and accommodating a growing population while minimizing costs to project applicants and society at large. The SJMSCP is administered by the San Joaquin Council of Governments (SJCOG). This BRA is intended to provide the information needed to evaluate the proposed project's compliance with the SJMSCP to make the SJCOG Biologist's review as efficient as possible. The proposed project is located within the Central Zone; Category C, Agriculture Habitat Open Spaces; Pay Zone B (Agricultural) of the SJMSCP.

## SECTION 3: METHODS

Analysis of the biological resources associated with the project site included a thorough review of relevant literature and a reconnaissance-level field survey. The survey area included the entire site and a buffer area around the site to accommodate potential minor changes to the project limits and project design that may occur during project development. The primary objectives of the survey were to document existing site conditions and determine the presence of biological resources, including special-status species.

### 3.1 - Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the site and in the surrounding area.

#### 3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist examined existing environmental documentation for the site and local vicinity. This documentation included biological studies for the area; literature pertaining to habitat requirements of special-status species potentially occurring in the project vicinity, including the SJMSCP; and federal register listings, protocols, and species data provided by the USFWS and CDFW.

#### 3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions on the site and in the immediate vicinity.<sup>2</sup> Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).<sup>3</sup> Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

#### 3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.<sup>4</sup> These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information

<sup>2</sup> United States Geological Survey (USGS). 2020. National Geospatial Program. Website: [https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science\\_support\\_page\\_related\\_con=4#qt-science\\_support\\_page\\_related\\_con](https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con). Accessed April 24, 2020.

<sup>3</sup> United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed September 21, 2020.

<sup>4</sup> Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed April 24, 2020



regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish whether the soil conditions on-site are suitable for special-status plant species.

### 3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the CNDDDB<sup>5</sup> and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California<sup>6</sup> for the *Tracy, California*, USGS 7.5-minute Topographic Quadrangle Map (Exhibit 4).

The CNDDDB Biogeographic Information and Observation System database was used to determine the distance between the known occurrences of special-status species and the site.<sup>7</sup>

### 3.1.5 - Trees

Prior to conducting the reconnaissance-level survey, the FCS's Biologist reviewed any applicable City ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required. Species identified on-site that were listed in any applicable ordinances identified on-site were noted, and the location was recorded using a handheld Global Positioning System (GPS) unit (if applicable) and identified on a topographic map.

### 3.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies. In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to state and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities, to aid in determining whether a formal delineation of waters of the United States or State is necessary.

## 3.2 - Field Survey

The reconnaissance-level field survey was conducted by FCS Biologists Bernhard Warzecha and Robert Carroll, on April 7, 2020, from 11:45 a.m. to 2:45 p.m. Weather conditions during the field survey were partly cloudy with a high temperature of 65°F (degrees Fahrenheit).

The objective of the survey was to ascertain site conditions and identify potentially suitable habitat areas for various special-status plant and wildlife species. Special-status or unusual biological

<sup>5</sup> California Department of Fish and Wildlife (CDFW). 2020 Rarefind. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

<sup>6</sup> California Native Plant Society (CNPS). 2020. Rare and Endangered Plant Inventory. Website: <http://rareplants.cnps.org/>. Accessed April 24, 2020.

<sup>7</sup> California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed April 24, 2020.



resources identified during the literature review were ground-truthed during the reconnaissance-level survey. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

### 3.2.1 - Vegetation

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.<sup>8,9</sup> Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.<sup>10</sup> Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software<sup>®</sup> ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat types are based on the Manual of California Vegetation (MCV) and cross-referenced with the CDFW Natural Communities List.<sup>11,12</sup>

### 3.2.2 - Wildlife

Wildlife species detected during the reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.<sup>13</sup> Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.<sup>14,15,16</sup> Online resources such as eBird and California Herps were also consulted, as necessary.<sup>17,18</sup>

### 3.2.3 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

<sup>8</sup> Jepson Flora Project (eds.) 2020. Jepson eFlora, <https://ucjeps.berkeley.edu/eflora/>. Accessed on October 22, 2020.

<sup>9</sup> Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: <http://www.calflora.org/>. October 22, 2020.

<sup>10</sup> Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).

<sup>11</sup> Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.

<sup>12</sup> California Department of Fish and Wildlife (CDFW). 2020. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. Accessed October 22, 2020.

<sup>13</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed October 22, 2020.

<sup>14</sup> Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

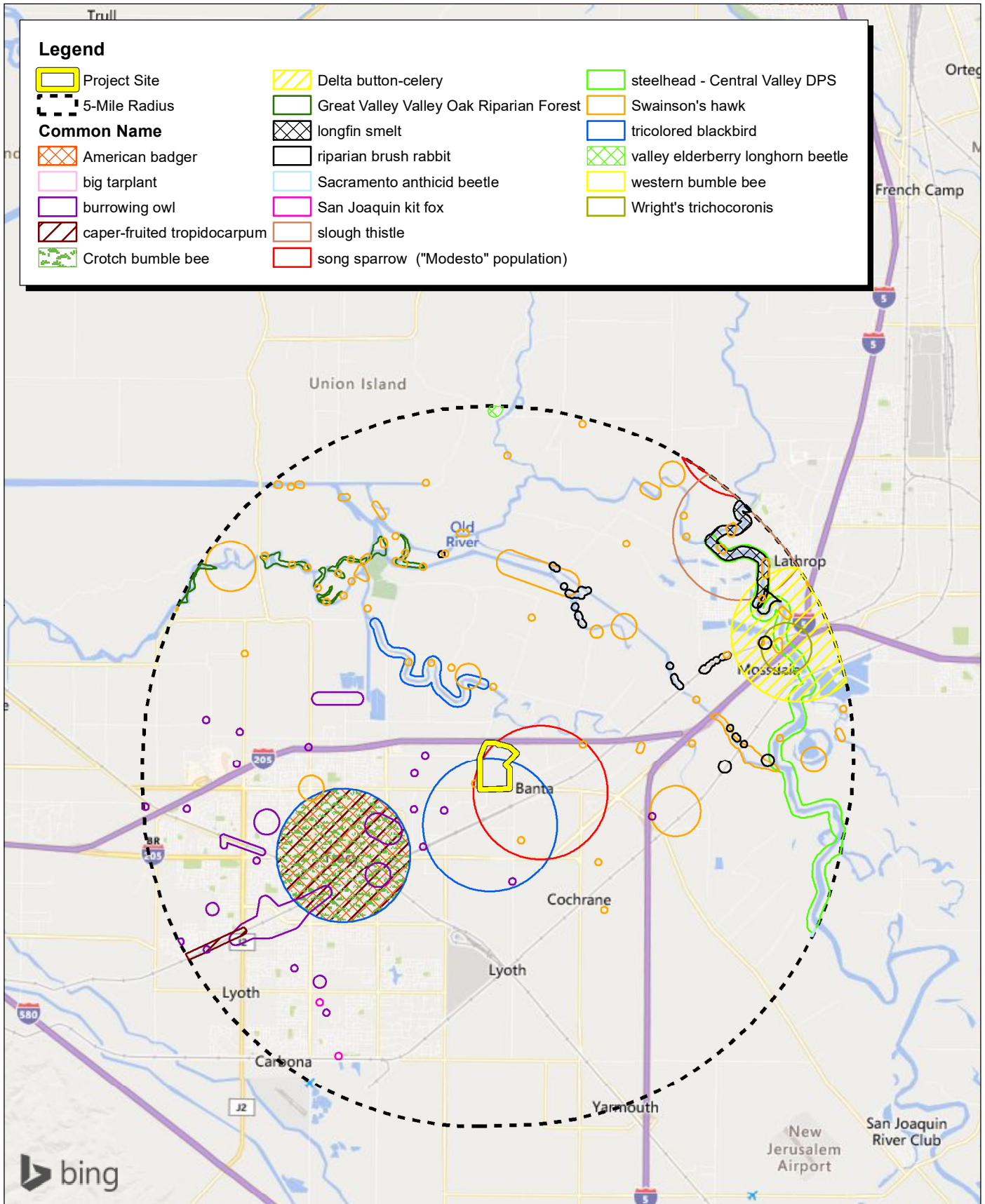
<sup>15</sup> Reid, F. 2006. A Field Guide to Mammals of North America, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

<sup>16</sup> Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

<sup>17</sup> eBird. 2020. Online bird occurrence database. Website: <http://ebird.org/content/ebird/>. October 22, 2020.

<sup>18</sup> California Herps. 2020. A Guide to the Amphibians and Reptiles of California. Website: <http://www.californiaherps.com/> Accessed October 22, 2020.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey. The scope of this BRA did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. Rather, the focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.



Source: Bing Street Imagery. California Natural Diversity Database (CNDDDB), April 2020.

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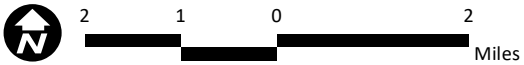


Exhibit 4  
CNDDDB-Recorded Occurrences  
Within 5-Mile Radius

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## SECTION 4: RESULTS

The reconnaissance-level field survey was conducted by FCS Biologists, Bernhard Warzecha and Robert Carroll, on April 7, 2020, from 11:45 a.m. to 2:45 p.m. Weather conditions during the field survey were partly cloudy with a high temperature of 65°F.

### 4.1 - Environmental Setting

The site is roughly bordered to the north by I-205, to the east by the unincorporated community of Banta and further unincorporated San Joaquin County, and to the south and west by a mix of agricultural fields and industrial warehouse developments. The greater site vicinity has historically been a relatively rural agricultural and residential community that currently houses many light industrial uses such as distribution facilities. Major roadway networks including I-580, I-205, and State Route 4 provide regional access to surrounding areas.

#### 4.1.1 - Topography

The site is relatively flat and low in elevation (15–30 feet above mean sea level) with a gentle topographic slope in the northeast direction.<sup>19</sup>

#### 4.1.2 - Soils

Soils on the site are predominantly Capay Clay, 0 to 1 percent slopes. The Capay series consists of moderately well-drained clay loams that have mainly clay loam subsoil formed in recent alluvium from a mix of sedimentary sources. This soil series can be found in large valleys and basin floors.

### 4.2 - Vegetation Communities and Land Cover Types

The site is composed almost entirely of active agricultural fields consisting of alfalfa, pecan tree orchards, and hay; associated agricultural structures and irrigation/drainage channels are interspersed throughout the site. Additionally, a ruderal/disturbed area that is located within the southwestern corner of the site along Grant Road Line shows evidence of previous development (Exhibit 5). A comprehensive list of plant species observed during the April 2020 site visit can be found in Appendix B.

#### 4.2.1 - Agricultural

Based on preliminary mapping, the site potentially includes approximately 187.88 acres of active agricultural fields. Alfalfa fields are located in the northern portion, with a pecan (*Carya illinoensis*) tree orchard in the eastern section, a hay field in the southwestern section, and irrigation/drainage channels spread throughout the site. These fields are frequently managed, including application of pesticides and herbicides, irrigation, and seasonal harvests. Plant species observed within areas not subject to active agriculture (e.g., narrow strips along field borders and access roads) are dominated by common ruderal species and non-native annual grasses, including field bindweed (*Convolvulus*

<sup>19</sup> Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.

*arvensis*), shortpod mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), seaside barley (*Hordeum marinum* ssp. *gussaneonum*), wall barley (*Hordeum murinum*), and others.

#### 4.2.2 - Ruderal/Disturbed

The Ruderal/Disturbed area of the site consists of approximately 0.63 acre along Grant Line Road. Species observed in this area include ryegrass (*Festuca perennis*), Bermuda grass (*Cynodon dactylon*), and other non-native and ruderal plants. Disturbed land is classified as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or it shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (e.g., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, and off-road vehicle trails.

#### 4.2.3 - Urban/Developed

Urban/Developed land is classified as areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and retains no soil substrate. Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident because a large amount of debris or other materials has been placed upon it may also be considered urban/developed (e.g., car recycling plant, quarry).

The urban/developed portion of the project site consists of approximately 4.08 acres at the intersection of Grant Line Road and Paradise Road and contains a combination of equipment storage sheds, active barns, parking, and residential structures.

#### 4.2.4 - Cattail Marsh

One occurrence of approximately 0.07 acre of cattail (*Typha* sp.) marsh was observed in the channel along California Avenue on the northern boundary of the site (Exhibit 5). The majority of the cattails consisted of broadleaf cattail (*Typha latifolia*). Most plants were senescent during the time of the survey, but intermixed live plants were observed. This vegetation type is classified as a California Natural Community by the CDFW (Type 52.050.04—*Typha (latifolia, angustifolia)*).<sup>20</sup>

### 4.3 - Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous local wildlife species. The agricultural fields, including the pecan orchard, are likely to provide cover and

<sup>20</sup> California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed April 24, 2020.

foraging opportunities for urban-adapted mammals such as raccoon (*Procyon lotor*) and Virginia opossum (*Didelphis virginiana*). California ground squirrel (*Otospermophilus beecheyi*) was observed only at the residential site. No California ground squirrel or ground squirrel burrows were observed on or near the agricultural fields, orchard, or channel. One jack rabbit (*Lepus californicus*) was observed on-site. Although these species were not physically observed during the field survey, FCS Biologists found numerous raccoon and great egret (*Ardea alba*) tracks throughout the site.

Because of a lack of suitable habitat, it is unlikely that amphibians and reptiles would regularly occur on-site. Potential species occurring on the site include western fence lizard (*Sceloporus occidentalis*), terrestrial garter snake (*Thamnophis elegans*), gopher snake (*Pituophis melanoleucus*), and Northern Pacific tree frog (*Pseudacris regilla*). Northern Pacific tree frog was the only amphibian observed on-site; no other amphibians or reptiles were observed during the field survey.

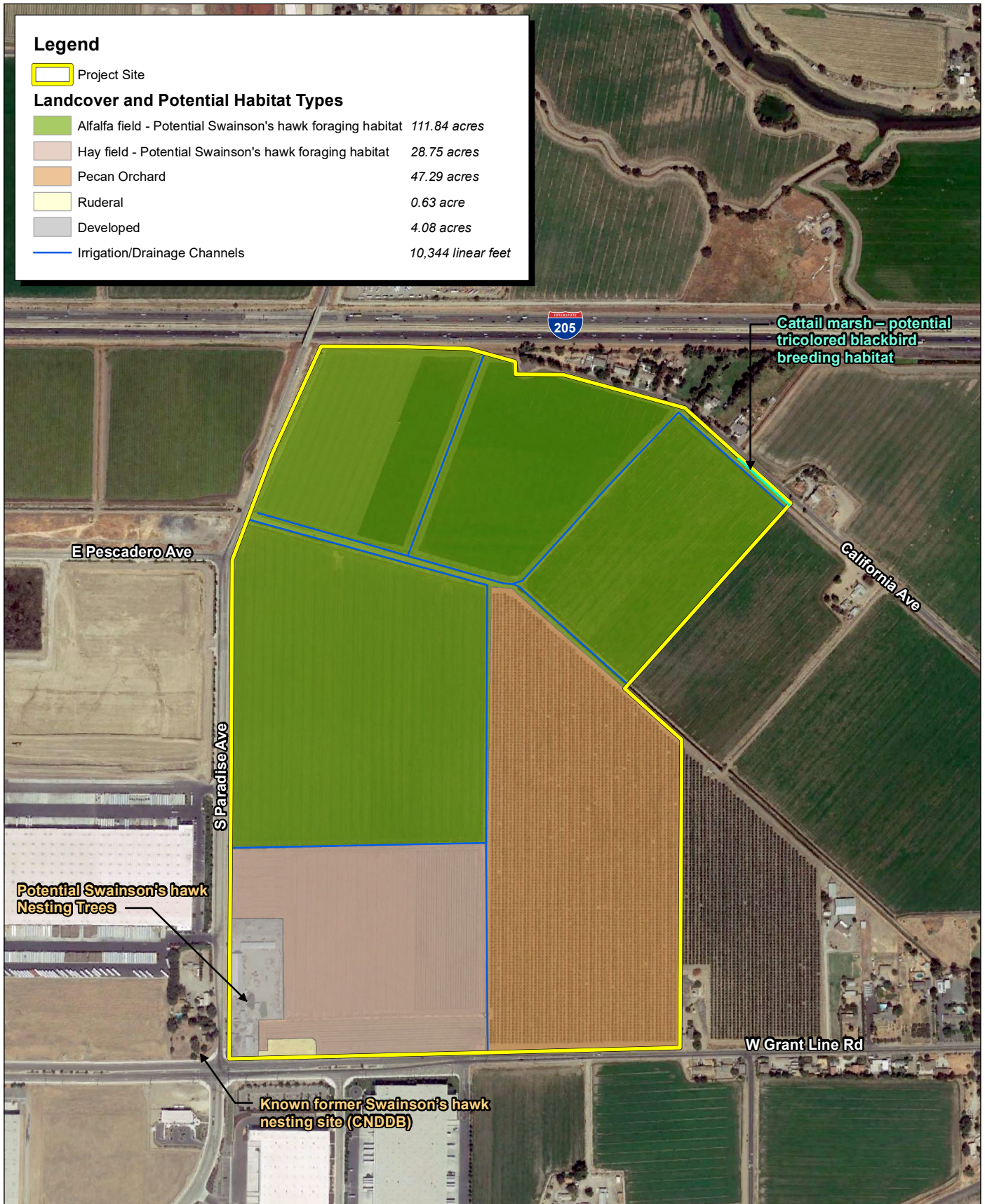
Ornamental trees within the urban/developed portion of the site and within the greater site vicinity also provide suitable habitat for nesting avian species. Avian species observed included, but are not limited to, Say's phoebe (*Sayornis saya*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), Swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamaicensis*), and killdeer (*Charadrius vociferus*). A comprehensive list of wildlife species observed during the April 2020 site visit can be found in Appendix B.

#### 4.4 - Trees

Many of the trees on the site are associated with the active pecan orchard. The developed portion of the site contains a variety of ornamental trees and bushes. Based on a review of aerial photographs, all trees currently found in the developed portion of the site were planted after 2004.

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Source: Google Earth Aerial Imagery, August 2018.



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## SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

This section discusses the existing site conditions and potential for special-status biological resources to occur on the project site.

### 5.1 - Special-status Plant Communities

Special-status plant communities are considered sensitive biological resources based on federal, State, or local laws regulating their development; limited distributions; and habitat requirements of special-status plant or wildlife species that occur within them. No special-status plant communities were found to occur on the site because of the lack of suitable habitat from previous disturbance events. As such, this resource category is not addressed in the impact analysis and recommendations section of this document.

### 5.2 - Special-status Plant Species

The Special-Status Plant Species Table (Appendix C, Table 1) identifies six special-status plant species and CNPS sensitive species that have been recorded to occur in the *Tracy, California, Topographic Quadrangle*, as recorded by the CNDDDB and CNPSEI.<sup>21,22</sup> The table also includes the species' status, required habitat, and potential to occur within the project site. Special-status plant species that have been determined unlikely to occur on-site, primarily based on the absence of suitable habitat and no recorded occurrence within 5 miles of the project site; these species have been included in the table to justify their exclusion from further discussion. As such, this resource category is not addressed in the impact analysis and recommendations section of this document.

### 5.3 - Special-status Wildlife Species

The Special-Status Wildlife Species Table (Appendix C, Table 2) identifies seven federal and State-listed threatened and/or endangered wildlife species, and 15 other non-listed species that have the potential to occur within the *Tracy, California, Topographic Quadrangle*.<sup>23</sup> Appendix C, Table 2, includes all special-status wildlife species that have been determined unlikely to occur on-site, primarily based on the absence of suitable habitat and the lack of recorded occurrence in the project vicinity, along with the justification for their exclusion from further discussion.

Relevant species (i.e., song sparrow [*Melospiza melodia*; "Modesto" population], tricolored blackbird [*Agelaius tricolor*], burrowing owl [*Athene cunicularia*], San Joaquin kit fox [*Vulpes macrotis mutica*], Swainson's hawk [*Buteo swainsoni*], pallid bat [*Antrozous pallidus*], Townsend's big-eared bat [*Corynorhinus townsendii*], and western mastiff bat *Eumops perotis californicus*) are discussed in further detail in Section 6.3 below.

<sup>21</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

<sup>22</sup> California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed April 24, 2020.

<sup>23</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

## 5.4 - Nesting Birds and Roosting Bats

The trees along the southwestern boundary of the project site and trees located within the immediate vicinity may provide suitable nesting habitat for birds protected under the MBTA and other special-status birds covered by Fish and Game Code Section 3503.5, and/or CESA. Nesting birds protected pursuant to the MBTA consist of all native nesting birds, including birds of prey and their nests.

Buildings located within the southwestern portion of the project site may provide suitable nesting habitat for bats. Sections 2000 and 4150 of the California Fish and Wildlife Code states that it unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To “harass” is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.”

## 5.5 - Wildlife Movement Corridors

FCS Biologists evaluated the project site for evidence of a wildlife movement corridor during the biological resources survey. The site is surrounded by industrial developments and situated in a semi-urban landscape with high amounts of traffic from local industrial operations. Further, I-205 separates the site from the closest wildlife corridor to the north, and I-5 and Business I-205 preclude wildlife movement from the east and southeast. The project site is not part of or within a wildlife movement corridor. As such, this resource category is not addressed in the impact analysis and recommendations section of this document.

## 5.6 - Trees

A pecan orchard and several ornamental trees were observed on the site. The proposed project would be annexed to the City of Tracy and included in the NEI Specific Plan prior to the implementation of the proposed project. The City Municipal Code<sup>24</sup> and the NEI Specific Plan do not contain any tree protection ordinance or provisions that regulate the existing trees present on the site. As such, this resource category is not addressed in the impact analysis and recommendations section of this document.

## 5.7 - Jurisdictional Waters and Wetlands

A preliminary assessment of potentially jurisdictional features was conducted as part of the literature review and reconnaissance-level survey for the site. There are several irrigation/drainage channels throughout the site, which appear to have a potential hydrological connection to the San Joaquin River, a traditional navigable water of the United States. The man-made channels on-site have all been excavated within upland habitat for on-site agricultural irrigation and drainage. These channels are mostly devoid of hydrophytic vegetation and provide little to no habitat value to

<sup>24</sup> Tracy, California Municipal Code. 2020. Chapter 7.08. City of Tracy. Accessed April 24, 2020. Website: [https://library.municode.com/ca/tracy/codes/code\\_of\\_ordinances?nodeId=TIT7PUWO\\_CH7.08TRSH](https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT7PUWO_CH7.08TRSH)



special-status species, except for a potential ditch wetland/cattail marsh (CDFW Natural Community 52.050.04).<sup>25</sup> This feature is located in the northeastern portion of the site adjacent to California Avenue. This potential wetland feature contained standing water during the field visit and contained dense stands of broadleaf cattail, which is rated an obligate wetland plant by the USACE. This potentially jurisdictional wetland feature is approximately 300 feet long by 8 feet wide.

The aquatic features on-site are typically excluded from jurisdiction under Section 404 of the CWA. However, the determination of whether an aquatic feature is regulated pursuant Section 404 can only be made by the USACE following a formal delineation of aquatic resources and proposed jurisdictional determination. Similarly, the RWQCB intends to follow jurisdictional exclusions of the USACE; however, the determination of whether parts of the irrigation/drainage ditches and/or the cattail marsh on-site are regulated as waters of the State will be made by the RWQCB.

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<sup>25</sup> CDFW. 2020. California Natural Community List. <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed April 24, 2020.

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## SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential impacts to special-status biological resources resulting from the proposed project and recommends mitigation measures, where appropriate, to minimize those impacts to a level of “less than significant” under CEQA.

### 6.1 - Special-status Wildlife Species

#### Song sparrow

Song sparrow (*Melospiza melodia*; Modesto population) is a State Species of Special Concern. This species has one recorded occurrence within the Tracy quadrangle. The exact location of the occurrence is unknown and is mapped to the nearest locality, unincorporated Banta. This observation was documented in 1896; however, no updated occurrences have been documented within the site vicinity since.<sup>26</sup>

As with all song sparrow subspecies, dense vegetation is required for nesting sites, song perches, and cover for refuge from predators. Where vegetation is too short and sparse, song sparrow nests are more likely to be exposed to predators. The cattail marsh vegetation within the northeastern area of the site may provide potentially suitable nesting for song sparrow. Although it is unlikely that this species will nest on-site, it cannot be ruled out. If the cattail marsh is proposed to be removed during the nesting season (February 1 through August 31), a preconstruction survey is recommended to clear the site (and setback area, if applicable) of song sparrow. If the species is found during the preconstruction survey, a setback of 75 feet shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback will apply whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. Implementation of these measures would reduce potential impacts to tricolored blackbird to a less than significant level under CEQA.

#### Tricolored blackbird

Tricolored blackbird has been listed as threatened under CESA. Nesting colonies of this species are addressed in the SJMSCP. Tricolored blackbird nests have typically been reported from extensive cattail marshes, willow canopies, or blackberry or thistle thickets. The species’ basic requirements for selecting breeding sites are open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few kilometers of the nesting colony. One recorded occurrence has been documented within the immediate site vicinity; a breeding colony was observed in 1936 within a slough containing cattails and willows at the current interchange of I-5 and Grant Line Road. This breeding

<sup>26</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

colony is presumed to be extirpated because the habitat that once supported the breeding colony is no longer present.<sup>27</sup>

Emergent vegetation within the drainage ditch adjacent to California Avenue represents potential nesting habitat, albeit marginal. No tricolored blackbirds were observed during the site visit. The presence of a tricolored blackbird nesting colony on the site before or during construction is highly unlikely, but cannot be ruled out. Minimization measures specific to tricolored blackbird nesting colonies as defined in SJMSCP Section 5.2.4.16 require that a setback of 500 feet from colonial nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback will apply whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests that are known to be occupied. Setbacks shall be marked by nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. Out of an abundance of caution, a preconstruction survey is also recommended to clear the site (and setback area, if applicable) of tricolored blackbird. Implementation of these measures would reduce potential impacts to tricolored blackbird to a less than significant level under CEQA.

### **Burrowing owl**

Burrowing owl is a California Species of Special Concern, and loss of habitat for this species is also addressed in the SJMSCP. Potential take of an active nest is not covered under the SJMSCP. Multiple recorded occurrences have been documented within the site vicinity. Specifically, two natal burrow complexes were reported in 2008 directly along Paradise Road between Skylark Way and Chrisman Road.<sup>28</sup> However, these areas have been developed since that time; the suitable burrowing owl habitat now consists of paved road and sidewalks, compacted and managed landscaped areas. The closest record of an active nest that is still suitable habitat is from approximately 1.5 miles to the south. Two California ground squirrel were observed in the developed residential area on the site during the field survey. No suitable burrows or signs of presence of burrowing owl were observed during the field survey. However, it cannot be ruled out that a burrowing owl may occupy the site before or during construction.

Minimization measures specific to this species as defined in SJMSCP Section 5.2.4.15 include discouraging ground squirrel occupancy by keeping vegetation tall. Other measures may also apply, depending on potential presence of San Joaquin kit fox. If burrows become occupied during breeding season (February 1 through August 31), a 75-meter protective buffer until and unless the Technical Advisory Committee (TAC), with the concurrence of the Permitting Agencies' representatives on the TAC, or unless a qualified Biologist approved by the Permitting Agencies verifies through noninvasive means that either: (1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed. No specific survey protocols or time frames are established in the SJMSCP; however, methods and survey times for burrowing owl can overlap with kit fox surveys. As such, FCS recommends the applicants for development on any

<sup>27</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

<sup>28</sup> Ibid.



project parcel conduct a burrowing owl survey prior to construction. If burrowing owls are found to inhabit the site, the applicants for development on any project parcel shall identify project-related impacts to burrowing owls and follow the steps outlined above, which include consulting with the CDFW to determine currently accepted avoidance and/or mitigation criteria. Implementation of these measures will ensure potential impacts to burrowing owl are less than significant under CEQA.

### **San Joaquin kit fox**

San Joaquin kit fox is listed under FESA as endangered and under CESA as threatened. This species is also covered under the SJMSCP.

San Joaquin kit fox has been reported sporadically from southern areas of Tracy, approximately 4 miles from the site.<sup>29</sup> Although San Joaquin kit fox is unlikely to occur on the site and no dens or other signs were observed during the field survey, it cannot be ruled out that a stray or migrating San Joaquin kit fox may be on-site before or during construction.

Measures to protect San Joaquin Kit Fox include, but are not limited, to the following measures. Surveys shall be conducted by qualified Biologists. When surveys identify potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored to determine whether occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the USFWS's published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* shall apply (except that preconstruction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the kit fox, keeping heavy equipment operating at safe speeds. Implementation of the mitigation and minimization measures listed above would reduce potential impacts to San Joaquin kit fox to a less than significant level under CEQA.

### **Swainson's hawk**

Swainson's hawk is listed as a threatened species under CESA and is also covered under the SJMSCP. Swainson's hawk nests have been observed within the greater site vicinity; the closest recorded occurrence is across Paradise Street, directly west of the site.<sup>30</sup> Additionally, this species was observed foraging during the field survey. The SJMSCP defines known or potential Swainson's hawk nest trees as trees "that hawks are known to have nested in within the past three years or trees, such as large oaks, which the hawks prefer for nesting." Trees present on the site are not known to have supported a Swainson's hawk nest in the last 3 years but could provide potential nesting opportunity for this species. It is likely that the species utilizes the site as foraging habitat during

<sup>29</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed April 24, 2020.

<sup>30</sup> Ibid.

harvesting activities because the site provides a small-mammal prey base for birds of prey, including Swainson's hawk.

The project site contains 111.84 acres of alfalfa and 28.75 acres of hay fields, respectively. These landcover types provide potential foraging habitat for Swainson's hawk. Project construction would result in the loss of this foraging habitat, approximately 140.59 acres. Prior to any activities that would result in ground disturbance to the project site, the applicants for development on any project parcel shall cover the project under the SJMSCP and purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement). Additionally, minimization measures specific to this species as defined in SJMSCP Section 5.2.4.11 depend on whether a known nest tree is going to be removed or retained. If a tree becomes occupied during construction activities, all construction activities shall remain a distance of two times the dripline of the tree, measured from the nest. This condition necessitates preconstruction surveys and potentially nesting surveys during construction if construction occurs during nesting season (February 1 through August 31). Implementation of the mitigation measures listed above would reduce potential impacts to Swainson's hawk to a less than significant level under CEQA.

## 6.2 - Nesting Birds and Roosting Bats

### Nesting birds

Potential direct and indirect impacts could occur to resident and migratory species during project construction, which would render the project site temporarily unsuitable for birds because of the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals.

Construction activities that occur during the nesting season (generally February 1 to August 31) would disturb nesting sites for birds protected by the MBTA and the Fish and Game Code. No action is necessary if no active nests are found or if construction occurs during the nonbreeding season (generally, September 1 through January 31; potential impacts to Swainson's hawk are addressed separately in Section 6.1).

Implementation of the following avoidance and minimization measures would minimize impacts to raptors and other nesting birds.

- To prevent impacts to MBTA-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only those necessary to construct the proposed project.
- If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31. If trees cannot be removed outside the nesting season, pre-

construction surveys shall be conducted prior to tree removal to verify the absence of active nests.

- If an active nest is located during preconstruction surveys, the USFWS and/or CDFW (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule.
- A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

### **Roosting bats (pallid bat, Townsend’s big-eared bat, and western mastiff bat)**

Potential direct and indirect impacts could occur to roosting bats during the construction of the proposed project because of removal of potential roosting habitat. These activities could potentially subject bats to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals. Implementation of the following avoidance and minimization measures would minimize impacts to roosting bats.

A qualified Wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat).

Visual surveys will include trees within 0.25 mile of project construction activities. Not more than 2 weeks prior to building demolition, the applicants for development on any project parcel shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on nonvolant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

### 6.3 - Jurisdictional Waters and Wetlands

As noted in Section 5.7, the site contains aquatic features that potentially qualify as jurisdictional waters of the United States and/or waters of the State. However, these features are artificial, they generally lack hydrophytic vegetation, and they are used for the sole purpose of agriculture. A vegetated ditch with bed and bank and ordinary high-water mark, including a 0.07 acre patch of cattail marsh, is present in the northeastern portion of the site adjacent to California Avenue. It is likely that this ditch wetland/cattail marsh formed because of the drainage patterns created as a result of surrounding agricultural production. Impacts to these features will require further evaluations; as such, it is recommended that the applicants for development on any project parcel complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters on the project site and coordinate with the applicable regulatory agencies (the USACE, RWQCB, and CDFW) to determine whether the irrigation/drainage ditches qualify for exclusion from protection under Sections 404 and 401 of the CWA and/or Section 1602 of the California Fish and Game Code.

### 6.4 - Habitat Conservation Plan

The project site is located within the SJMSCP planning area, and the City of Tracy is a signatory to the SJMSCP. Participation in the SJMSCP ensures that potential impacts are mitigated below a level of significance in compliance with CEQA. Furthermore, the proposed project would be subject to compliance to the SJMSCP, which may include payment of development fees for conversion of lands that may provide habitat for covered special-status species. Mitigation for loss of open space (agricultural fields) is met via habitat fees or endowment fees with in-lieu lands (conservation easements). Implementation of mitigation and minimization measures (as recommended above in Section 6) in conjunction with required compliance with the SJMSCP would reduce specific impacts to listed species to a less than significant level under CEQA.

**Appendix A:  
Inventory Results**

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**A.1 - CNDDDB Inventory Results**

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**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Query Criteria: Quad> IS <(Tracy (3712164))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Amsinckia grandiflora</i> large-flowered fiddleneck	PDBOR01050	Endangered	Endangered	G1	S1	1B.1
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Blepharizonia plumosa</i> big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eschscholzia rhombipetala</i> diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Madia radiata</i> showy golden madia	PDAST650E0	None	None	G3	S3	1B.1
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S2?	SSC
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Perognathus inornatus</i> San Joaquin Pocket Mouse	AMAFD01060	None	None	G2G3	S2S3	
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Rana boylei</i></b> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Spea hammondi</i></b> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Tropidocarpum capparideum</i></b> caper-fruited tropidocarpum	PDBRA2R010	None	None	G1	S1	1B.1
<b><i>Vireo bellii pusillus</i></b> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<b><i>Vulpes macrotis mutica</i></b> San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 27

## **A.2 - CNPS Inventory Results**

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\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

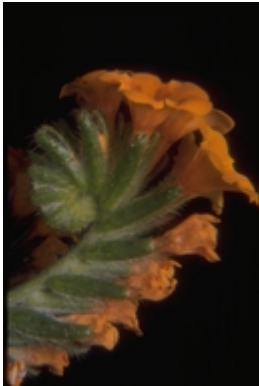

## Plant List

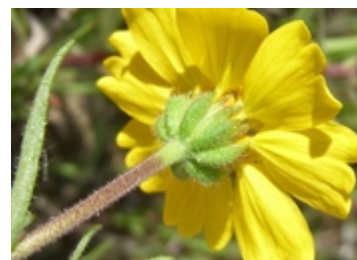
6 matches found. [Click on scientific name for details](#)

### Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2B, 3, 4], Found in Quad 3712164

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Remove Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank	Photo
<a href="#">Amsinckia grandiflora</a>	large-flowered fiddleneck	Boraginaceae	annual herb	(Mar)Apr-May	1B.1	S1	G1	 <p>J. E. (Jed) and Bonnie McClellan 2007 California Academy of Sciences</p>
<a href="#">Blepharizonia plumosa</a>	big tarplant	Asteraceae	annual herb	Jul-Oct	1B.1	S1S2	G1G2	 <p>2014 John Doyen</p>
<a href="#">Eschscholzia rhombipetala</a>	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	1B.1	S1	G1	no photo available
<a href="#">Madia radiata</a>	showy golden madia	Asteraceae	annual herb	Mar-May	1B.1	S3	G3	



2010 Neal Kramer

[Symphyotrichum lentum](#) Suisun Marsh aster Asteraceae perennial rhizomatous herb (Apr)May-Nov 1B.2 S2 G2



2015 John Doyen

[Tropidocarpum capparideum](#) caper-fruited tropidocarpum Brassicaceae annual herb Mar-Apr 1B.1 S1 G1



2004 Laura Ann Eliassen

### Suggested Citation

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#### Questions and Comments

[rareplants@cnps.org](mailto:rareplants@cnps.org)

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**Appendix B:  
List of Species Observed**



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## Fauna Compendium

Amphibians	
Species Name	Common Name
<i>Pseudacris regilla</i>	Pacific tree frog
Birds	
Species Name	Common Name
<i>Zenaida macroura</i>	Mourning dove
<i>Hirundo rustica</i>	Barn swallow
<i>Corvus brachyrhynchos</i>	American crow
<i>Buteo swainsoni</i>	Swainson’s hawk
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Buteo sp.</i>	Unknown
<i>Sayornis says</i>	Say’s pheobe
<i>Charadrius vociferus</i>	Killdeer
<i>Sturnus vulgaris</i>	Common starling
<i>Euphagus cyanocephalus</i>	Brewer’s blackbird
Mammals	
<i>Otospermophilus beecheyi</i>	California ground squirrel

## Flora Compendium

Species Name	Common Name
<i>Medicago sativa</i>	Alfalfa
<i>Bromus hordeaceus</i>	Soft brome
<i>Bromus diandrus</i>	Ripgut brome
<i>Salsola tragus</i>	Russian thistle
<i>Sonchus oleraceus</i>	Common sowthistle
<i>Hordeum marinum ssp. gussaneonum</i>	Seaside barley
<i>Hordeum murinum</i>	Wall barley
<i>Convolvulus arvensis</i>	Field bindweed
<i>Typha latifolia</i>	Broadleaf cattail
<i>Xanthium strumarium</i>	Rough cocklebur
<i>Bromus rubra</i>	Red brome
<i>Erigeron canadensis</i>	Horseweed
<i>Cynodon dactylon</i>	Bermuda grass
<i>Festuca perennis</i>	Italian wildrye
<i>Hirschfeldia incana</i>	Shortpod mustard
<i>Brassica nigra</i>	Black mustard
<i>Bromus tectorum</i>	Cheatgrass
<i>Rumex crispus</i>	Curly dock
<i>Anagallis arvensis</i>	Scarlet pimpernel
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife
<i>Carya illinoensis</i>	Pecan

**Appendix C:  
Special-status Species Tables**

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**Table 1: Special-status Plant Species Potentially Occurring within the Project**

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Amsinckia grandiflora</i> Large-flowered fiddleneck	FE	SE	1B.1	Dicot annual herb found in Cismontane woodland, valley and foothill grassland, extremely rare. Bloom period: (March) April–May	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site.	No
<i>Blepharizonia plumosa</i> Big tarplant	—	—	1B.1	Dicot annual usually found in clay soils; valley and foothill grasslands Bloom period: July–October	<b>Unlikely to Occur:</b> No suitable habitat is present within the Project. One recorded occurrence with 5 miles of the project site in 1935. The exact location of the occurrence is unknown and mapped generally within the Tracy quadrangle.	No
<i>Eschscholzia rhombipetala</i> Diamond-petaled California poppy	--	—	1B.1	Dicot annual herb found in valley and foothill grassland; usually within alkaline or clay soils. Bloom period: March–April	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site.	No
<i>Madia radiata</i> Showy golden madia	—	—	1B.1	Dicot annual herb found in valley and foothill grassland and cismontane woodlands. Bloom period: March–May	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site.	No
<i>Symphotrichum lentum</i> Suisun Marsh aster	—	—	1B.2	Dicot perennial herb found in marshes and swamps (brackish and freshwater) Bloom period: April–November	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site.	No
<i>Tropidocarpum capparideum</i> Caper-fruited tropidocarpum	—	—	1B.1	Dicot annual herb found in valley and foothill grasslands with alkaline soils Bloom period: March–April	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. Two recorded occurrences have been documented within 5 miles of the project site in 1937 and 1962, respectively. Species has not been observed since 1962. This species is presumed to be extirpated from the area	No

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<b>Code Designations</b>						
<sup>1</sup> Federal Status: 2020 USFWS Listing		<sup>2</sup> State Status: 2020 CDFW Listing			<sup>3</sup> CNPS: 2020 CNPS Listing	
<b>FE</b> = Listed as endangered under the Endangered Species Act <b>FT</b> = Listed as threatened under the Endangered Species Act <b>FC</b> = Candidate for listing (threatened or endangered) under Endangered Species Act <b>FD</b> = Delisted in accordance with the Endangered Species Act — = Not federally listed		<b>SE</b> = Listed as endangered under the California Endangered Species Act <b>ST</b> = Listed as threatened under the California Endangered Species Act <b>SSC</b> = Species of Special Concern as identified by CDFW <b>CFP</b> = Listed as fully protected under FGC <b>CR</b> = Species identified as rare by CDFW — = Not state listed			<b>Rank 1A</b> Plants presumed Extinct in California. <b>Rank 1B</b> Plants Rare, Threatened, or Endangered in California and elsewhere. <b>Rank 2</b> Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere. <b>Rank 3</b> Plants about which we need more information—A Review List. <b>Rank 4</b> Plants of limited distribution—A Watch List. <b>Blooming period:</b> Months in parentheses are uncommon.	
<sup>4</sup> <b>Habitat description:</b> Habitat description adapted from CNDDDB (CDFW 2020) and CNPS online inventory (CNPS 2020).						



**Table 2: Special-status Wildlife Species Potentially Occurring within the Project**

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<b>Invertebrates</b>					
<i>Bombus crotchii</i> Crotch bumble bee	—	SC	Inhabits grassland and scrub areas. Mostly observed in Southern California coastal areas.	<b>Unlikely to Occur:</b> no suitable habitat is present within the project site. One recorded occurrence within 5 miles of the project site in 1959. The exact location of the occurrence is unknown and mapped generally within the Tracy quadrangle.	No
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT	--	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ). Usually found in riparian scrub habitats.	<b>Unlikely to Occur:</b> no suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No
<b>Amphibians</b>					
<i>Ambystoma californiense</i> California tiger salamander	FT	ST	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. Postmetamorphic juveniles retreat to small-mammal burrows after spending a few hours or days in mud cracks near water or tunnels constructed in soft soil. Aquatic larvae seek cover in turbid water, clumps of vegetation, and other submerged debris.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No
<i>Rana boylei</i> Foothill yellow-legged frog	—	SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in forests, chaparral, and woodlands. Needs at least some cobble-sized substrate for egg-laying.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Rana draytonii</i> California red-legged frog	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No
<i>Spea hammondi</i> Western spadefoot	—	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580.	No
<b>Reptiles</b>					
<i>Arizona elegans occidentalis</i> California glossy snake	—	SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No
<i>Emys marmorata</i> Western pond turtle	—	SSC	This species is a thoroughly aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation below 6000 feet elevation. Requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 km from water for egg-laying.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580, associated with Corral Hollow Creek.	No
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	—	SSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580.	No

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Phrynosoma blainvillii</i> Coast horned lizard	—	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. No recorded occurrences are within 5 miles of the project site. All recorded occurrences are west of Interstate 580	No
<b>Birds</b>					
<i>Agelaius tricolor</i> Tricolored blackbird	— MBTA	ST SSC	Highly colonial species, most numerous in Central Valley and its vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey in the vicinity of the colony.	<b>Potential to Occur:</b> Marginal habitat is present within the northern portion of the project site in the form of a drainage ditch densely populated with cattails. Multiple recorded occurrences have been documented within 5 miles of the project site.	Yes
<i>Athene cunicularia</i> Burrowing owl	— MBTA	SSC FGC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	<b>Potential to Occur:</b> Marginal habitat is present within southwestern portion of the site within the hay field. Multiple recorded occurrences have been documented within 5 miles of the project site.	Yes
<i>Buteo swainsoni</i> Swainson's hawk	— MBTA	ST FGC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	<b>Potential to Occur:</b> Suitable foraging habitat is present within the entire project site and suitable nesting habitat is present within the immediate vicinity of the project site. This species was also observed foraging during the field survey. Multiple recorded occurrences have been documented within 5 miles of the project site.	Yes

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Eremophila alpestris actia</i> California horned lark	— MBTA	—	Occurs in coastal regions, primarily from Sonoma County to San Diego County, as well as the main part of the San Joaquin Valley and eastward to the foothills. Found in short-grass prairie, “bald” hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	<b>Potential to Occur:</b> Suitable foraging habitat is present within the entire project site and suitable nesting habitat is present within the immediate vicinity of the project site. All recorded occurrences are over 5 miles from the project site.	No
<i>Melospiza melodia</i> Song sparrow (“Modesto” population)	— MBTA	SSC	Occurs in emergent freshwater marshes dominated by cattails as well as riparian willow thickets. Species also nest in riparian forests of Valley Oak with a sufficient understory of blackberry along vegetated irrigation canals and levees.	<b>Potential to Occur:</b> Marginal habitat is present within the northern portion of the project site in the form of a drainage ditch densely populated with cattails. There has been one recorded occurrence within 5 miles of the project site.	Yes
<i>Vireo bellii pusillus</i> Least Bell’s vireo	FE MBTA	SE	A summer resident of Southern California in low riparian habitat in the vicinity of water or in dry river bottoms. Nests placed along margins of bushes or in twigs projecting into pathways, usually willows, coyote bush, mule fat, or mesquite. Occurs below 2,000 feet.	<b>Unlikely to Occur:</b> No riparian habitat is present within the project site. All recorded occurrences are over 5 miles from the project site, associated with Corral Hollow Creek.	No
<b>Mammals</b>					
<i>Antrozous pallidus</i> Pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	<b>Potential to Occur:</b> An active barn within the southwestern portion of the site provides marginal roosting habitat. All recorded occurrences are over 5 miles from the project site.	Yes
<i>Corynorhinus townsendii</i> Townsend’s big-eared bat	—	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	<b>Potential to Occur:</b> An active barn within the southwestern portion of the site provides marginal roosting habitat. All recorded occurrences are over 5 miles from the project site.	Yes

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Eumops perotis californicus</i> Western mastiff bat	—	SSC	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	<b>Potential to Occur:</b> An active barn within the southwestern portion of the site provides marginal roosting habitat. All recorded occurrences are over 5 miles from the project site.	Yes
<i>Perognathus inornatus</i> San Joaquin pocket mouse	—	—	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert. Associated with fine-textured, sandy, friable soils.	<b>Unlikely to Occur:</b> No suitable habitat is present within the project site. All recorded occurrences are over 5 miles from the project site.	No
<i>Taxidea taxus</i> American badger	—	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	<b>Unlikely to Occur:</b> The project site generally lacks any suitable habitat. The site lacks open, uncultivated ground and no badger burrows were observed during the field visit. One of four recorded occurrences have been documented with 5 miles of the project site; however this occurrence was from 1938.	No
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE	ST	Found in annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	<b>Unlikely to Occur:</b> The project site generally lacks suitable habitat. Two of the nine recorded occurrences have been documented within 5 miles of the project site. However, stray individuals migrating may cross project site.	Yes

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<b>Code Designations</b>					
<b><sup>1</sup> Federal Status: 2020 USFWS Listing</b>			<b><sup>2</sup> State Status: 2020 CDFW Listing</b>		
<b>FE</b> = Listed as endangered under the Endangered Species Act <b>FT</b> = Listed as threatened under the Endangered Species Act <b>FC</b> = Candidate for listing (threatened or endangered) under Endangered Species Act <b>FD</b> = Delisted in accordance with the Endangered Species Act — = Not federally listed			<b>SE</b> = Listed as endangered under the California Endangered Species Act <b>ST</b> = Listed as threatened under the California Endangered Species Act <b>SSC</b> = Species of Special Concern as identified by CDFW <b>CFP</b> = Listed as fully protected under FGC <b>SC</b> = Candidate for listing (threatened or endangered) under California Endangered Species Act. <b>CR</b> = Species identified as rare by CDFW — = Not state listed		
<sup>4</sup> <b>Habitat description:</b> Habitat description adapted from CNDDDB (CDFW 2020), and Holland (1986) and Oberbauer (1996).					