BIOLOGICAL RESOURCES ANALYSIS REPORT

FOR THE

KAISER – MANTECA ED EXPANSION PROJECT

SAN JOAQUIN COUNTY, CALIFORNIA



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SUMMARY

On December 11, 2024, Olberding Environmental, Inc. (Olberding Environmental) conducted a field reconnaissance survey of the Kaiser-Manteca ED Expansion Project Area (Project Area) for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints potentially occurring in the Project Area. The Project Area surveyed is comprised of approximately 33.22 acres located in Manteca, San Joaquin County, California.

The results from the initial wetland delineation indicate that the aquatic features identified within the Project Area would likely not fall under U.S. Army Corps of Engineers (Corps) jurisdiction. However, the features will likely fall under the jurisdiction of the Regional Water Quality Control Board (RWQCB) and/or the California Department of Fish and Wildlife (CDFW). Final determination of the jurisdiction of the aquatic features will be decided when the Corps verifies the delineation A jurisdictional delineation was conducted in conjunction with the site assessment on December 11, 2024. This delineation will be submitted to the Corps for verification upon completion.

A query of the California Natural Diversity Database (CNDDB) showed that four special-status plant species were noted within 5-miles of the Project Area. These species included: slough thistle (*Cirsium crassicaule),* Delta button-celery *(Eryngium racemosum),* Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), and caper-fruited tropidocarpum (*Tropidocarpum capparideum*). However, due to the lack of suitable habitat types, soil conditions, recent or nearby occurrences (>40 years) within the vicinity of the Project Area, no special status plant species have the potential to occur in the Project Area. Therefore, no special-status plant surveys are warranted.

The CNDDB listed one occurrence of western bumble bee (*Bombus occidentalis*) in the vicinity of the Project Area; however, suitable habitat is present for three *Bombus* species: American bumble bee (*Bombus pensylvanicus*), Crotch's bumble bee (*Bombus crotchii*), and western bumble bee. Western bumble bee and Crotch's bumble bee have only recently been designated as candidates for listing under the California Endangered Species Act (CESA), while the American bumble bee is listed as vulnerable by the IUCN (International Union for Conservation of Nature). Due to the lack of available data, the CNDDB may not show the accurate range for these species. The presence of open grassland, sandy soils for nesting, and the potential food plants available such as yellow star thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), and sweet clover (*Melilotus alba*) provide potential habitat for these bumble bee species within the Project Area. However, due to the American bumble bee not being observed within this portion of California in several decades and the Project Area being surrounded by development with regular disturbances occurring such as fire suppression and discing, Olberding Environmental has determined this

species does not have the potential to occur within the Project Area. Given this information, the only special status *Bombus* species determined to have the potential to occur within the Project Area are the western bumble bee and Crotch's bumble bee. A special-status invertebrate survey should be conducted by a qualified biologists and within the appropriate blooming period of their recognized food plants (February - October).

The CNDDB listed one occurrence of California tiger salamander (*Ambystoma californiense*) in the vicinity of the Project Area. This occurrence (Occurrence #290) is from 1996 and was located south of Highway 120. While the adjacent property contains ponds within a golf course that fall within the dispersal range of CTS, the Project Area itself lacks the essential habitat features, specifically mammal burrows, necessary to support this species. Furthermore, routine management and maintenance activities in the Project Area reduce its suitability as habitat by creating conditions that deter CTS. Given the absence of mammal burrows, presence of dispersal barriers (highways, roadways, etc.) between the Project Area and documented occurrence, and ongoing disturbances, CTS does not have the potential to occur in the Project Area.

A total of eight bird species were identified to have a potential to occur in the Project Area in a nesting and/or foraging capacity. The tri-colored blackbird (*Agelaius tricolor),* red-tailed hawk (*Buteo jamaicensis)*, red-shouldered hawk (*Buteo lineatus),* Swainson's hawk (*Buteo swainsoni),* white-tailed kite (*Elanus leucurus),* American kestrel (*Falco sparverius),* and loggerhead shrike (*Lanius ludovicianus)* all have the potential to occur in the Project Area in a foraging capacity within the annual grassland. The large trees adjacent to the northern boundary of the Project Area also offer potential nesting habitat for the previously mentioned raptor species. Although the trees are located outside of the Project Area boundary, their proximity to potential disturbance makes them noteworthy. Additionally, the ferruginous hawk (*Buteo regalis)* has the potential to occur in a wintering foraging capacity only within the annual grassland. It should be noted; an American kestrel and red-tailed hawk were both observed foraging within the Project Area boundaries during the December 2024 survey. The Project Area also offers suitable nesting and foraging habitat for various passerine species within the shrubs and tall grasses. If project construction-related activities such as tree and vegetation removal take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors are recommended.

1.0 INTRODUCTION

Olberding Environmental has conducted a biological resources analysis (biological constraints assessment) of the Kaiser-Manteca ED Expansion Project Area, located in Manteca, San Joaquin County, California. This biological resources analysis includes a review of pertinent literature on relevant background information and habitat characteristics of the site. Our review includes

researching existing information contained in an Information for Planning and Consulting (IPaC) report provided by the USFWS, occurrences within the California Natural Diversity Database (CNDDB) maintained by the CDFW, and the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*. Also included was a review of information related to species of plants and animals that could potentially utilize the described habitats identified in and immediately surrounding the Project Area. To assist in the assessment, a field reconnaissance investigation of the Project Area was conducted on December 11, 2024. This report documents the methods, results, and conclusions for the reconnaissance-level survey associated with the biological resources analysis for the Project Area.

2.0 LOCATION

The Project Area is located north of Highway 120 and east of Interstate 5, in the City of Manteca, California. The Project Area itself lies within the City Limits of Manteca Attachment 1, Figure 1 depicts the regional location of the Project Area in San Joaquin County, and Attachment 1, Figure 2 illustrates the vicinity of the Project Area in relationship to the City of Manteca. Attachment 1, Figure 3 identifies the location of the Project Area on the USGS 7.5 Quadrangle Map. An aerial photograph of the Project Area has been included as Attachment 1, Figure 4.

Access to the Project Area is provided from Highway 120. Take Exit 3 for Airport Way and turn north onto Airport Way. Continue for 1.1 miles and turn right onto West Yosemite Road and travel for 0.4 miles. Then turn left onto St. Dominics Drive and travel for 0.1 miles. After continuing for approximately 90 feet, the Project Area will be on your right-hand side.

3.0 PROJECT AREA DESCRIPTION

The Project Area encompasses approximately 33.22 acres in a polygon shape consisting of developed and undeveloped parcels predominantly of non-native grassland habitat with a seasonal wetland, ruderal component, and several drainages, both intermittent and ephemeral. The Project Area is bounded to the north by Manteca Park Golf Course, to the east and west by non-native annual grassland, and to the south by West Yosemite Avenue. The Project Area supports six habitat types consisting of annual grassland, ruderal grassland, developed, ephemeral drainage, intermittent drainage, and a seasonal wetland. Three drainages occur in the Project Area. One drainage is intermittent and flows along the north end of the Project Area (Drainage 5). There are also two ephemeral drainages located approximately in the center of the Project Area, to the north of the developed habitat and to the south of the annual grassland.

The topography is relatively flat with elevations ranging from 20 feet in Drainage 5 to 75 feet in the southwest corner. Plants observed during the December 2024 field survey can be viewed in Attachment 2.

The Project Area consists of mostly developed habitat with a portion of annual grassland to the north which was dominated by species such as wild oat (*Avena fatua),* black mustard (*Brassica nigra),* annual hairgrass (*Deschampsia danthonioides),* telegraph weed (*Heterotheca grandiflora),* and rose clover (*Trifolium hirtum).*There is a single seasonal wetland in the western portion of the Project Area and is characterized with species such as tall flatsedge (*Cyperus eragrostis),* salt grass (*Distichlis spicata),* and bare ground with moss covering. The vegetation within the two ephemeral drainages that bisect the Project Area consists of stinkwort (*Dittrichia graveolens*), common sunflower (*Helianthus annuus)*, prickly lettuce (*Lactuca serriola)*, giant wildrye (*Leymus condensatus)*, and Russian thistle (*Salsola tragus)*.

4.0 REGULATORY SETTING

4.1 Federal Regulatory Setting

4.1.1 Plants and Wildlife

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq., as amended) prohibits federal agencies from authorizing, permitting, or funding any action that would result in biological jeopardy to a plant or animal species listed as Threatened or Endangered under the Act. Listed species are taxa for which proposed and final rules have been published in the Federal Register (U.S. Fish and Wildlife Service [USFWS] 2024). If a proposed project may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. Federal Proposed species (USFWS, 2024) are species for which a proposed listing as Threatened or Endangered under ESA has been published in the Federal Register. If a proposed project may jeopardize proposed species, Section 7 of the ESA affords consideration of those species through informal conferences with USFWS. The USFWS defines federal Candidate species as "those taxa for which we have on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by other higher priority listing actions" (USFWS, 2024). Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning.

4.1.2 Wetlands/Waters

The federal government, acting through the Corps and the Environmental Protection Agency (EPA), has jurisdiction over all "waters of the United States" as authorized by §404 of the Clean Water Act (CWA) and §10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Properties that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Properties that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Waters of the United States are defined as territorial seas and traditionally navigable waters, tributaries, lakes and ponds, and impoundments of jurisdictional waters, and adjacent wetlands. Under federal regulation, wetlands are defined as areas that are inundated or saturated by surface of groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (33 CFR Part 328.3(c)(16)). Wetlands generally include swamps, marshes, bogs, and similar areas. In addition, portions of the riparian habitat along a river or stream may be a wetland where the riparian vegetation is at or below the ordinary high water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including the open ocean, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high water mark. "Other waters" refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The Corps regulates other waters to the outward limit of the ordinary high water mark. Streams should exhibit a defined channel, bed and banks to be delineated as other waters.

The Corps does not generally consider "non-tidal drainage and irrigation ditches excavated on dry land" to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the Corps (33 CFR Parts 320-330, November 13, 1986)). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland

habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states "the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories" can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

4.1.3 Migratory Bird Treaty Act

Raptors are migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that Project Area-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (generally February 1 – September 1, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend, is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

4.1.4 Federal Bald and Golden Eagle Protection Act

In addition to protection under the MBTA, both the bald eagle and the golden eagle are also protected by the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c). The Bald and Golden Eagle Protection Act, and amended several times since being enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs (USFWS 2007). The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" (USFWS 2007).

For purposes of these guidelines, "disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (USFWS 2007).

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment (USFWS 2007).

4.2 State Regulatory Setting

4.2.1 Plants and Wildlife

Project Area permitting and approval requires compliance with the California Environmental Quality Act (CEQA), the 1984 California Endangered Species Act (CESA), and the 1977 Native Plant Protection Act (NPPA). The CESA and NPPA authorize the California Fish and Game Commission to designate Endangered, Threatened and Rare species and to regulate the taking of these species (§§2050-2098, Fish & Game Code). The California Code of Regulations (Title 14, §670.5) lists animal species considered Endangered or Threatened by the State.

The Natural Heritage Division of the CDFW administers the state rare species program. The CDFW maintains lists of designated Endangered, Threatened, and Rare plant and animal species (CDFW 2024b and 2024). Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFW can afford interim protection to candidate species while they are being reviewed by the Fish and Game Commission.

The CDFW also maintains a list of animal species of special concern (CDFW 2024), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends considering them during analysis of proposed Project Area impacts to protect declining populations and avoid the need to list them as endangered in the future.

The California Fish & Game Code §3503, 3503.5, and 3513 cover native bird protection. Mitigation for avoidance of impacts to nesting birds are typically necessary to comply with these Sections of the Fish and Game Code in CEQA and other permitting documents.

Under provisions of §15380(d) of the CEQA Guidelines, the CEQA lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers plant species on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994) as qualifying for legal protection under §15380(d). Species on CNPS Lists 3 or 4 may, but generally do not, qualify for protection under this provision.

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDB working list of "high priority" habitats (i.e., those habitats that are rare or endangered within the borders of California) (Holland 1986).

4.2.2 Wetlands/Waters

The RWQCB regulates activities in wetlands and other waters through §401 of the Clean Water Act. and the Porter Cologne Act. Section 401 requires a state water quality certification for properties subject to 404 regulations. Requirements of the certification include mitigation for loss of wetland habitat. In the San Francisco Bay region, the RWQCB may identify additional wetland mitigation beyond the mitigation required by the Corps. California Fish and Game Code §§1600-1607 require the CDFW be notified of any activity that could affect the bank or bed of any stream that has value to fish and wildlife. Upon notification, the CDFW has the discretion to execute a Streambed Alteration Agreement. The CDFW defines a stream as follows:

> *"... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation."*
>
> (Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any "blue line" stream shown on a USGS topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

4.2.3 California Environmental Quality Act

According to Appendix G of the CEQA (CEQA 2024) Guidelines, a proposed project would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW and USFWS?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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

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

4.3 Local Regulatory Setting

4.3.1 San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

In November of 2000, San Joaquin County implemented the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) (SJCOG 2000). The plan was developed to provide a strategy for balancing the protection of Open Space and wildlife with the protection of local landowners and agricultural practices. The SJMSCP, in accordance with ESA Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the Conversion of Open Space to non-Open Space uses which affect the plant, fish and wildlife species covered by the SJMSCP.

4.3.2 The County of San Joaquin

9-400.080 – Trees on Private Property

(a) *Purpose and Applicability* - The purpose of this section is to preserve the County's tree resources by requiring replacement of protected trees where removal is allowed. It applies to all development projects requiring discretionary approval that have Native Oak Trees, Heritage Oak Trees, or Historical Trees on the property, unless otherwise exempt.

(b) *Exemptions* - This section does not apply to:

(1) Cases of emergency requiring the immediate removal of said trees for the safety of structures or human life, as determined by the Zoning Administrator, the Director of Public Works, the Director of Parks and Recreation, or the Chief of the applicable fire district.

(2) Removal of trees by the County or a public utility that are necessary.

(3) Removal of trees required by other County codes, ordinances, or State or federal laws.

(4) Removal of trees that are dead or diseased.

(5) Removal of Native Oak Trees on:

(A)Existing lots containing less than 10,000 square feet and an existing residential use, and

(B)Existing lots containing less than one acre and an existing commercial or industrial use.

(c) *Permit Required for Tree Removal* - A Zoning Compliance Review is required for the removal of a Heritage Oak Tree, Historical Tree or Native Oak Tree.

(d) *Replacement* - Trees removed shall be replaced as follows:

(1) Replacement Stock. Replacement stock shall be of healthy commercial nursery stock of the species removed or other species approved by the Zoning Administrator.

(2) Replacement Location. Replacement trees shall be planted as near as possible to the location of the removed tree or in an alternative location acceptable to the Zoning Administrator.

(3) Timing. Replacement stock shall be planted between October 1 and December 31, and no later than 18 months after the date of tree removal.

(4) Number.

(A) Each Heritage Oak Tree or Historical Tree that has been removed shall be replaced with five trees or acorns, or combination thereof.

(B) Each Native Oak Tree that has been removed shall be replaced with three trees or acorns, or combination thereof.

(C) The applicant shall be required to demonstrate to the satisfaction of the Zoning Administrator that replacement stock will be planted and maintained in such a manner as to ensure the survival of said stock at the end of a three-year period commencing from the date of planting.

5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES

A special-status plant and wildlife species database search and review was conducted using the CNDDB and other sources. An additional search was conducted for special-status plants using the CNPS on-line *Inventory*. Special-status species reports were accessed by searching the CNDDB database for the Mendenhall Springs, La Costa Valley, Cedar Mountain, Midway, Clifton Court Forebay, Livermore, Byron Hot Springs, Tassajara, and Altamont USGS 7.5-minute quadrangles which surround the Project Area, and by examining those species that have been identified in the vicinity of the Project Area. These quadrangles will be henceforth noted as surrounding quads. The database report identified special-status species known to occur in the region or those that have the potential to occur in the vicinity of the Project Area. The CNDDB report was used to focus special-status species analysis of the site prior to the reconnaissance surveys.

Olberding Environmental biologists conducted a reconnaissance-level survey of the Project Area on December 11, 2024. The survey consisted of walking throughout the Project Area and evaluating the site and adjacent lands for potential biological resources. The Project Area's existing conditions, observed plants and wildlife, adjacent land use, soils, and potential biological resource constraints were all recorded during the visit. Plant and wildlife species observed within and adjacent to the Project Area during the reconnaissance survey are listed in Attachment 2, Table 1. Site photographs are provided in Attachment 3 of this document. Attachment 1, Figure 9 shows where each site photo was taken.

The objectives of the field survey were to determine the potential presence or absence of special-status species habitat listed in the CNDDB database report and to identify any wetland areas that could be potentially regulated by the Corps, RWQCB, and/or CDFW (CNDDB 2024). In addition, the Olberding Environmental biologist looked for other potential sensitive species or habitats that may not have been obvious from background database reports or research. Surveys conducted after the growing season or conducted outside of the specific flowering period for a special-status plant

cannot conclusively determine the presence or absence of such plant species; therefore, site conditions and habitat type were used to determine potential for occurrence. When suitable habitat was observed to support a special-status plant or animal species, it was noted in the discussion for that particular species. Regulatory agencies evaluate the possibility of occurrence based on habitats observed on-site and the degree of connectivity with other special-status animal habitats in the vicinity of the Project Area. These factors are discussed in each special-status plant or animal section. Potential for occurrence of each special-status or protected plant and animal species was evaluated using the following criteria.

- **Present**: The species has been recorded by CNDDB or other literature as occurring in the Project Area and/or was observed in the Project Area during the reconnaissance survey or protocol surveys.

- **May Occur**: The species has been recorded by CNDDB or other literature as occurring within five miles of the Project Area, and/or was observed within five miles of the Project Area, and/or suitable habitat for the species is present in the Project Area or its immediate vicinity.

- **Not Likely to Occur**: The species has historically occurred on or within five miles of the Project Area but has no current records. The species occurs within five miles of the Project Area, but only marginally suitable habitat conditions are present. The Project Area is likely to be used only as an incidental foraging habitat or as an occasional migratory corridor.

- **Presumed Absent**: The species will not occur in the Project Area due to the absence of suitable habitat conditions, and/or the lack of current occurrences. Alternatively, if directed or protocol-level surveys were done during the proper occurrence period and the species was not found, it is presumed absent.

Sources consulted for agency status information include USFWS (2024) for federally listed species and CDFW (2024) for State of California listed species. Based on information from the above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Project Area (Attachment 2, Table 2).

5.1 Soils Evaluation

The soils present on a property may determine if habitat on the site is suitable for certain special-status plants and animals. The host plants of some special-status invertebrates may also require specific soil conditions. In the absence of suitable soil conditions, special-status plants or animals requiring those conditions would be presumed absent. Information regarding soil characteristics

for the Project Area was obtained by viewing the Natural Resources Conservation Service (NRCS) Web Soil Survey report for the Project Area (NRCS 2024).

5.2 Plant Survey Methods

The purposes of the botanical surveys were (1) to characterize the habitat types (plant communities) of the study area; (2) to determine whether any suitable habitat for any special-status plant species occurs within the study area; and (3) to determine whether any sensitive habitat types (wetlands) occur within the study area. Site conditions and plant habitat surveys are important tools in determining the potential occurrence of plants not recorded during surveys (e.g., special-status plants) because presence cannot conclusively be determined if field surveys are conducted after the growing season or conducted outside a specific flowering period.

5.2.1 Review of Literature and Data Sources

The biologist conducted focused surveys of literature and special-status species databases in order to identify special-status plant species and sensitive habitat types with potential to occur in the study area. Sources reviewed included the CNDDB occurrence records (CNDDB 2024) and CNPS *Inventory* (Skinner and Pavlik 1994) for the surrounding quads; and standard flora (Hickman 2012). From the above sources, a list of special-status plant species with potential to occur in the Project Area vicinity was developed (Attachment 2, Table 2).

5.2.2 Field Surveys

Biologists from Olberding Environmental conducted a reconnaissance-level survey to determine habitat types and the potential for special-status plants based on the observed habitat types. All vascular plant species that were identifiable at the time of the survey were recorded and identified using keys and descriptions in The Jepson Manual (Hickman 2012).

The habitat types occurring in the Project Area were characterized according to pre-established categories. In classifying the habitat types on the site, the generalized plant community classification schemes of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens 2009) were consulted. The final classification and characterization of the habitat types of the study area were based on field observations.

5.3 Wildlife Survey Methods

The purposes of the wildlife survey were to identify special-status wildlife species and/or potential special-status wildlife habitats within the study area.

5.3.1 Review of Literature and Data Sources

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species had potential to occur in the vicinity of the Project Area. Current agency status information was obtained from USFWS (2024) for species listed as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA; and from CDFW (2024b, 2024) for species listed as Threatened or Endangered by the state of California under the CESA or listed as "species of special concern" by CDFW. From the above sources, a list of special-status wildlife species with potential to occur in the Project Area vicinity was developed (Attachment 2, Table 2).

5.3.2 Field Surveys

General Wildlife Survey –Olberding Environmental biologists conducted a survey of species habitat within the entire study area, including visible portions of the adjacent properties. The purpose of the habitat survey was to evaluate wildlife habitats and the potential for any protected species to occur in or adjacent to the Project Area.

Reconnaissance-Level Raptor Survey – A reconnaissance-level raptor survey was conducted in the Project Area. Observation points were established on the periphery of the site to view raptor activity over a fifteen- to thirty-minute time period. This survey was conducted with the use of binoculars and notes were taken for each species occurrence. Additionally, utility poles and perch sites in the vicinity of the Project Area were observed. All raptor activity within and adjacent to the Project Area was recorded during the reconnaissance-level observation period.

Reconnaissance-Level Burrowing Owl (Athene cunicularia) Survey – A reconnaissance-level burrowing owl (*Athene cunicularia*) survey was also conducted in the Project Area to identify potential burrow sites or burrowing owl use of on-site habitat. The general presence and density of suitable burrow sites (e.g., rodent burrows) was evaluated for the Project Area.

6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES

The search and review of the CNDDB database reports revealed the occurrence of special-status plant and wildlife species that occur in the habitats found within the Project Area boundaries (CNDDB 2024). The CNDDB database and background data were reviewed for the surrounding quads. Plant occurrences shown on Attachment 1, Figure 5 and wildlife occurrences shown on Attachment 1, Figure 6 are located within 5 miles of the Project Area and were reviewed for their potential to occur in the Project Area based on general habitat types. Results of the species review

is tabulated on Attachment 2, Table 2. Critical habitat within the surrounding quads is shown on Attachment 1, Figure 7.

6.1 Soil Evaluation Results

The NRCS (2024) reports two soil types within the Project Area. A map of this soil type can be found in Attachment 1, Figure 8. The soil types mapped included the following:

- **255 – Tinnin loamy coarse sand, 0 to 2 percent slopes** – Tinnin soils are on low alluvial fans and narrow ridges and mounds, where wind modified. Slopes are 0 to 9 percent. The soils formed in predominantly granitic alluvium. Elevations are 5 to 110 feet. The climate is subhumid with hot dry summers and cool moist winters. Dense ground fog often occurs in winter months.

  The Tinnin series consists of very deep, well drained soils formed in predominantly granitic alluvium or eolian sands. Tinnin soils are on low alluvial terraces of fans and narrow ridges and mounds and have slopes of 0 to 9 percent.

- **266 – Veritas fine sandy loam, 0 to 2 percent slopes –** The Veritas series consists of deep to duripan, moderately well drained, soils that formed in alluvium derived from mixed rock sources. Veritas soils are on low fan terraces. Moderately well drained; slow runoff; moderately rapid permeability.

6.2 Plant Survey Results

6.2.1 Floristic Inventory and Habitat Characterization

In classifying the habitat types in the Project Area, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat type of the Project Area was based on field observations. Plant species that occurred within 5 miles of the Project Area are shown in Attachment 1, Figure 5.

The Project Area contains six habitat types: annual grassland, developed, seasonal wetland, ephemeral drainage, intermittent drainage, and ruderal. The habitat type and a description of the plant species present within the habitat types are provided below. The habitats found in the Project Area are mapped on Attachment 1, Figure 10. Dominant plant species are also noted. A complete list of plant species observed in the Project Area can be found within Attachment 2, Table 1.

Annual Grassland

The northern portion of the Project Area consists of non-native annual grassland habitat. This portion of the Project Area is disked regularly to reduce the risk of fire. Dominant grass species observed within this habitat includes: watermelon (*Citrullus lanatus* var. *citroides),* Bermuda grass (*Cynodon dactylon*), Jimson weed (*Datura stramonium*), brome fescue (*Festuca bromoides)*, white-stem filaree (*Erodium moschatum*), rose clover*,* black mustard, and telegraph weed*.*

Developed

The majority of the Project Area consisted of a developed habitat. This includes paved and gravel areas, buildings and structures, and ornamental plantings that are maintained as part of the landscaping. The ornamental species included: red maple (*Acer rubrum),* camphor tree (*Cinnamomum camphora),* hydrangea (*Hydrangea macrophylla*), golden rain tree (*Koelreuteria paniculata*), Peruvian peppertree (*Schinus molle),* and Chinese elm (*Ulmus parvifolia*). Native species within the developed habitat consisted of: coast live oak (*Quercus agrifolia)*, redwood (*Sequoia sempervirens),* Fremont cottonwood, and valley oak.

Seasonal wetland

There is one large seasonal wetland located in the northern portion of the Project Area. This linear feature consists of an artificially constructed bio-retention basin that sits approximately three feet below the surrounding landscape. Historic aerial imagery suggests that the feature was constructed in 2022. Dominant vegetation within this feature includes silvergreen bryum moss (*Bryum argenteum*), alfalfa (*Medicago sativa*), cotton-batting plant (*Pseudognaphalium stramineum*), tall flat sedge, and salt grass.

Ephemeral drainage

There is one ephemeral drainage that occurs within the Project Area that is split into two parts by a box culvert. The ephemeral drainages occur along the north side of the developed portion of the Kaiser property. The drainages flow to the west and exit the Project Area before flowing into a box culvert and continuing underground. The ephemeral drainages include dense vegetation throughout bed and banks of the features including ripgut brome (*Bromus diandrus*), blue wildrye (*Elymus glaucus*), tall willow herb (*Epilobium brachycarpum*), Russian thistle, telegraph weed, Jimson weed, prickly lettuce, stinkwort, common sunflower, watermelon, and black mustard.

Intermittent drainage

There is a large intermittent drainage feature that occurs along the northern boundary of the Project Area. This feature is part of the City of Manteca flood control project and is named Manteca Drainage 5. This feature is located within an excavated channel, and the OHWM sits approximately 10 feet below the surrounding landscape. The banks of the feature are completely unvegetated and there is sparse vegetation along the bed of the feature. This vegetation was dominated by barnyard grass (*Echinochloa crus-galli*), weeping lovegrass (*Eragrostis curvula*), watercress (*Nasturtium officinale*), annual bluegrass (*Poa annua*), black mustard, and curly dock.

The northern bank of the drainage, which is outside of the Project Area boundary, contained several large trees such as blue gum eucalyptus (*Eucalyptus globulus)*, English oak (*Quercus robur)*, foothill pine (*Pinus sabiniana*), valley oak, coast live oak, and redwood.

Ruderal

A large ruderal area occurs in the eastern portion of the Project Area. This area appears to be used for parking and storage by the Kaiser facility and consists of gravel and hard-packed soil with sparse vegetation. The vegetation that is present within this area includes black mustard, stinkwort, and telegraph weed.

Special-Status Plant Species

Special-status plant species include species listed as Rare, Threatened, or Endangered by the USFWS (2024) or by the State of California (CDFW 2024b). Federal Proposed and Candidate species (USFWS, 2024) are also special-status species. Special-status species also include species listed on List 1A, List 1B, or List 2 of the CNPS Inventory (Skinner and Pavlik, 1994; CNPS 2024). All species in the above categories fall under state regulatory authority under the provisions of CEQA, and may also fall under federal regulatory authority. Considered special-status species are species included on List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*. These species are considered to be of lower sensitivity and generally do not fall under specific state or federal regulatory authority. Specific mitigation considerations are not generally required for List 3 and List 4 species.

Attachment 2, Table 2 includes a list of special-status plants with the potential to occur within or in the immediate vicinity of the Project Area based on a review of the surrounding quads. The special-status plant species identified by the CNDDB as potentially occurring in the Project Area are known to grow only from specific habitat types. The specific habitats or "micro-climate" necessary for many of the plant species to occur are not found within the boundaries of the Project Area. The habitats necessary for the CNDDB reported plant species consist of valley and foothill grassland, cismontane woodlands, clay soils, alkaline soils, riparian, chaparral, vernal pools,

riparian and foothill woodlands, meadows and seeps, chenopod scrub, freshwater marshes, and swamps. Occurrences of special-status plants within a five-mile radius of the Project Area are described in detail. (Attachment 1, Figure 5).

The CNDDB lists four species with occurrences within five-miles of the Project Area (Attachment 1, Figure 5). However, given the available habitat, soil types, elevation range, and regular disturbance of the Project Area, it is unlikely any of these four special-status plant species will occur in the Project Area.

6.3 Wildlife Survey Results

6.3.1 General Wildlife Species and Habitats

A complete list of wildlife species observed within the Project Area can be found in Attachment 2, Table 1. Wildlife species commonly occurring within habitat types present in the Project Area are discussed below:

Annual Grassland

The annual grassland habitat provides many foraging opportunities for a wide range of species. Passerine species observed during the survey include California scrub jay (*Aphelocoma californica),* rock dove (*Columba livia),* gull (*Larinae* sp.) and Say's phoebe (*Sayornis saya*). Other avian species observed include the Canada goose (*Branta canadensis),* American kestrel, and red-tailed hawk.

While no burrowing mammals were observed, several mammal burrows were identified and may belong to species such as Botta's pocket gopher (*Thomomys bottae*) or various vole species (*Microtus* spp.). There were no mammal burrows of sufficient size, such as those created by California ground squirrel (*Otospermophilus beecheyi)*, to house any special-status species such as burrowing owl (*Athene cunicularia)* or California tiger salamander.

While not observed during the 2024 survey, there are additional special-status species that may utilize this grassland as habitat in a foraging or nesting capacity. This includes Crotch's bumble bee, western bumble bee, white-tailed kite, red-tailed hawk, red-shouldered hawk, Ferruginous hawk, Swainson's hawk, tri-colored blackbird, and loggerhead shrike.

Developed

The trees located throughout this habitat may provide nesting and foraging habitat for a variety of passerine species such as the Anna's hummingbird (*Calypte annas)*, California scrub jay, yellow-rumped warbler, and rock doves. Anna's hummingbird along with California scrub jay were both observed foraging within the ornamental trees during the December 2024 survey. Additionally, various other raptor species may utilize the large trees as potential nesting sites including the red-tailed hawk and loggerhead shrike.

Seasonal Wetland

The seasonal wetland located in the Project Area was dry at the time of the 2024 survey; therefore, it did not contain any habitat-specific wildlife. In the winter and spring, this feature is likely used as a water source for the many species that utilize the annual grassland habitat. During this time, the feature may also provide habitat for amphibians such as the Sierran tree frog (*Pseudacrissierra*).

Ephemeral Drainage

The ephemeral drainages which bisect the Project Area east to west could provide potential habitat for various species. Passerine species observed within this habitat during the 2024 survey consisted of yellow-rumped warbler (*Setophaga coronata)* and Anna's hummingbird. Species with the potential to occur within the ephemeral drainages consist of loggerhead shrike, Crotch's bumble bee, and western bumble bee.

Intermittent Drainage

The large intermittent drainage feature located at the northern boundary of the Project Area could provide potential habitat for various passerine and raptor species within the large trees located along the Project Area boundary. A single red-tailed hawk was observed perched atop one of the eucalyptus trees during the December 2024 survey. Although the trees are located outside of the Project Area boundary, their proximity to potential disturbance makes them relevant. Additionally, the large trees offer nesting and habitat for several other species such as the red-shouldered hawk, white-tailed kite, and Swainson's hawk.

Ruderal

Due to the heavily disturbed and unvegetated nature of this habitat and its small size, there were a limited number of wildlife species observed during the survey. The only wildlife observed was several feral cats (*Felis catus*) that traversed the Project Area. It is likely that other "urban"

mammals such as racoon (*Procyon lotor*) or striped skunk (*Mephitis mephitis*) would utilize the habitat in the Project Area. No reptiles were observed in the Project Area, but it is possible that common species such as the western fence lizard (*Sceloporus occidentalis*) may occur in the Project Area.

INVERTEBRATES

Western bumble bee (*Bombus occidentalis*). California Candidate for Endangered.

This species of bee occurs in Canada and the USA from southern British Columbia to central California, northern Arizona and northern New Mexico, and east into southern Saskatchewan and northwestern Great Plains. This species is found in a range of habitats including mixed woodlands, farmlands, urban areas, montane meadows, and into the western edge of the prairie grasslands. This species usually nests underground. Food plants include *Ceanothus, Centaurea, Chrysothamnus, Cirsium, Geranium, Grindellia, Lupinus, Melilotus, Monardella, Rubus, Solidago*, and *Trifolium* (Koch, et al 2012).

There is one CNDDB occurrence of this species within five miles of the Project Area. This occurrence (Occurrence #234) is located approximately 2.1 miles southwest of the Project Area. This occurrence was recorded in 1962, but the occurrence is presumed extant. As this species has only recently been listed for Candidate status, there has been a lack of available data collected over the last 40 years, and the CNDDB may not accurately show the species' current range. Due to the presence of open grassland and the presence of potential food plants including sweet clover and rose clover, there is a potential for this species to occur in the Project Area.

Crotch's bumble bee (*Bombus crotchii*). California Candidate for Endangered.

The Crotch's bumble bee is found almost exclusively in California, occurring only rarely in Nevada and Baja California, Mexico. Although it occurs primarily in grassland, scrub, and chaparral habitats, it has also been found in woodlands, agricultural lands, and some urban areas. The few nests of this species that have been found have all been in old mammal burrows, underground. The Crotch's bumble bee has been recorded using a wide variety of floral resources for food and pollen (Koch et al. 2012).

The Crotch's bumble bee historically occurred in much of the southern two-thirds of California. Although its abundance has apparently declined in recent decades, recent survey efforts have detected the species in widely scattered locations throughout much of its former range. The CNDDB records closest to the project site are a 1959 record from Tracy approximately 11 miles away and a 1968 record from Modesto approximately 16 miles away. The nearest recent record to

the project is from the Tracy area, approximately 14 miles from the Kaiser Manteca project site, in 2023 (Bumble Bee Watch 2025). Although development, a long history of agricultural land use, and other factors could possibly have extirpated the Crotch's bumble bee from the Manteca area, it is the special-status bumble bee most likely to occur near Manteca. Due to the presence of open grassland with small mammal burrows and floral resources on the project site, there is at least a small probability that the Crotch's bumble bee may be present on the site.

BIRDS

Tricolored Blackbird (*Agelaius tricolor*). State Threatened, California Species of Special Concern.

A close relative of the red-winged blackbird (*Agelaius phoeniceus*), the tricolored blackbird is distinguished by a white patch underscoring the bright red epaulettes that are prominent in the males of both species. Often found in large flocks of red-winged blackbirds, this species is highly colonial. They breed near fresh water, preferably in emergent wetlands with tall, dense tules (*Scirpus* spp.) or cattails (*Typha* spp.), but also in thickets of willow (*Salix* sp.), blackberry, wild rose, and tall herbs. Nests may be located a few feet over freshwater or hidden on the ground among low vegetation. They forage among annual grassland, seasonal wetlands, and cropland habitats (Zeiner, et al 2008).

There are two CNDDB occurrences of this species within five miles of the Project Area. The closest and most recent occurrence (Occurrence #95), from 1974, is located 0.6 miles southeast of the Project Area. Since these occurrences, the surrounding city of Manteca has been greatly developed. Additionally, there is no suitable nesting habitat (dense shrubs which can support large colonies) located within the Project Area. However, the tri-colored blackbird may occur in a foraging capacity within the annual grassland. Given this information, the tri-colored blackbird may occur within the Project Area in a foraging capacity only.

Burrowing Owl (*Athene cunicularia*). California Candidate for Endangered.

Burrowing owls are ground dwelling members of the owl family and are small brown to tan colored birds with bold spots and barring. Burrowing owls generally require open annual grassland habitats in which to nest, but can be found on abandoned lots, roads, airports, and other urban areas. Burrowing owls generally use California ground squirrel holes for their nesting burrow, but are also known to use other mammal burrows, pipes, or other debris for nesting purposes. Burrowing owls prefer annual grassland habitats with low vegetative cover (Zeiner, et al. 1999). The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The

female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old.

There are three occurrences of burrowing owl within five miles of the Project Area. The closest occurrence (Occurrence #251) is located approximately 0.8 miles northwest of the Project Area within a newly-created detention basin which contained mammal burrows. Although there are recent occurrences of burrowing owl in the vicinity, the Project Area itself lacks suitable habitat features that would support this species. Burrowing owls typically depend on the presence of California ground squirrels or similar burrowing species to create and maintain burrows, which they use for nesting and shelter. However, regular disturbances in the Project Area such as ongoing human activity or other disruptions, likely deter ground squirrels from establishing and maintaining burrow systems. This absence of ground squirrel activity directly limits the availability of burrowing owl habitat.

Additionally, the presence of raptors in or near the Project Area further reduces the suitability of the area for burrowing owls. Raptors are known predators of burrowing owls, and their presence could create an additional deterrent, making the Project Area less attractive to owls seeking nesting or roosting sites. Given these factors, the lack of suitable habitat due to frequent disturbances, the absence of ground squirrels, and the potential threat posed by raptors, it is unlikely that burrowing owls would occur in the Project Area

Ferruginous hawk (*Buteo regalis*). CDFW Watch List.

This species is a large, broad-winged hawk sometimes mistaken for an eagle due to its size, proportions, and behavior. This is the largest hawk species within the *Buteo* family. It is an uncommon winter resident and migrant at lower elevation and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges. However, it is a fairly common winter resident of grasslands and agricultural areas in southwestern California. It frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. They roost in open areas, usually in a lone tree or utility pole. But there are no breeding records from California (Zeiner et al. 1990).

There are no CNDDB occurrences of this species within five miles of the Project Area. Additionally, there have been no records of this species breeding in California. Therefore, Ferruginous hawk does not have the potential to utilize the Project Area in a nesting capacity. However, due to the suitable foraging habitat present within the Project Area and surrounding parcels, including annual grassland, this species may utilize the site in a wintering foraging capacity only.

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected.

The white-tailed kite is falcon-shaped with a long white tail. This raptor has black patches on the shoulders that are highly visible while the bird is flying or perching. White-tailed kites forage in annual grasslands, farmlands, orchards, chaparral, and at the edges of marshes and meadows. They are found nesting in trees and shrubs such as willows (*Salix* sp.), California sycamore (*Platanus racemosa*), and coast live oak often near marshes, lakes, rivers, or ponds. This raptor often hovers while inspecting the ground below for prey. The white-tailed kite eats small mammals as well as some birds, lizards, and insects. Annual grasslands are considered good foraging habitat for white-tailed kites, which will forage in human-impacted areas (Zeiner, et al 1990).

There are no CNDDB occurrences of this species within five miles of the Project Area. However, the Project Area offers potential nesting and foraging habitat for white-tailed kite. The annual grassland present within the Project Area and the neighboring properties could be utilized by the white-tailed kite in a foraging capacity while the large trees adjacent to the northern boundary could offer nesting habitat. Given this information, white-tailed kite has the potential to occur within the Project Area in a foraging and nesting capacity

Loggerhead shrike (*Lanius ludovicianus*). CDFW Species of Special Concern.

The loggerhead shrike is a black and white perching bird with a black face mask that extends over the bill. A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. In the Great Basin, from Inyo Co. north, population declines markedly from November through March. Rare on coastal slope north of Mendocino Co., occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. This species hunts large insects, small rodents and even small birds. Loggerhead shrikes are known for their habit of impaling their food on thorns or barb wire for future consumption. The range and habitat for the loggerhead shrike has steadily shrunk due to human development within grasslands; however, this species is often found on lands grazed by cattle that are fenced with barb wire. These birds use shrubs, dense trees, and thickets of vegetation for nesting sites. Builds nest on stable branch in densely-foliaged shrub or tree, usually well-concealed. In California, lays eggs from March into May, and young become independent in July or August (Zeiner et al 1990).

There is one CNDDB occurrence of this species within five miles of the Project Area. The nearest occurrence (Occurrence #112) is located approximately 2.1 miles southeast of the Project Area when a pair of adults were observed feeding four fledgling in April of 2016. The annual grassland

offers suitable nesting habitat while the trees adjacent to the northern boundary and within the developed portion offer potential nesting habitat. Given this information, the loggerhead shrike has the potential to occur in the Project Area.

Swainson's Hawk (*Buteo swainsoni*). State Threatened.

The Swainson's hawk is a raptor that is slightly smaller than the red-tailed hawk with wings that taper slightly toward the outer wing tip. This hawk has a brown bib that covers its head and extends down the chest. The leading portion of the wing is light in color. In flight, this bird has an inverse color pattern in comparison to a red-tailed hawk. This hawk has three potential color morphs: light, intermediate, and dark. Swainson's hawks are summer migrants to the Central Valley and Delta region.

Commonly, the Swainson's hawk builds platform nests in tall mature trees, often in the first fork of the tree: built with sticks, twigs, and branches with green leaves (blue gum, valley oak, live oak, pine, or similar tall tree stands). These raptors require nearby foraging habitat such as annual grasslands, alfalfa fields, grain fields, and row crops. They often nest in peripheral to riparian systems. They will use lone trees in agriculture fields or pastures and roadside trees when available and adjacent to suitable foraging habitat (CDFW 2024).

There are 33 CNDDB occurrences of this species within five miles of the Project Area. The nearest occurrence (Occurrence #697), from 1998, is located approximately 0.9 miles southwest of the Project Area. There are two occurrences (Occurrences #937 and #1110) which are more recent, from 2015, when multiple nest sites were observed. The Project Area boundary offers potential nesting habitat within the large trees adjacent to the northern boundary while the annual grassland offers suitable foraging habitat. Given the numerous occurrences and the nesting and foraging habitat present, the Swainson's hawk has potential to occur in the Project Area.

Other Raptor Species

In addition to the special-status raptor species discussed above, the following raptor species protected under the Migratory Bird Treaty Act, also have a potential to occur in the Project Area in a foraging and/or nesting capacity.

- Red-tailed hawk
- Red-shouldered hawk
- American kestrel

CNDDB does not track occurrences of the red-tailed hawk, red-shouldered hawk, or the American kestrel; however, the red-tailed hawk and American kestrel species were observed foraging over

the Project Area during the 2024 survey event. The large trees adjacent to the northern boundary of the Project Area offer suitable nesting habitat while the annual grassland and neighboring properties offer suitable foraging habitat for these species.

MAMMALS

Riparian brush rabbit (S*ylvilagus bachmani riparius*). Federally Endangered. State Endangered

The riparian brush rabbit is a medium to small cottontail rabbit. Its body color varies from dark brown to gray with a white belly. When viewed from above, its cheeks protrude outwards rather than being straight or concave, as in the other brush rabbit species. This species can be distinguished from desert cottontails by their smaller tail and uniformly colored ears, meaning that they do not have black tips (USFWS 2024).

The riparian brush rabbit (*Sylvilagus bachmani riparius)* is found in riparian habitat which contain thickets of willow, California rose, blackberry, grape, coyote brush (*Baccharis* sp.) and various grasses. The rabbits have small home ranges that are limited by the size of available brushy habitat. Today, their range is contained within San Joaquin County and northern Stanislaus County, California. The only known populations of the species are located at the Caswell Memorial State Park and the Oxbow Preserve, as well as the South Delta at the San Joaquin River National Wildlife Refuge. Riparian brush rabbits typically breed from January to May, and they can have multiple litters per year with three to four young per litter and gestation usually lasts 27 days. Their nests are rarely observed due to the nests typically being hidden within large clumps of dense, thorny vegetation.

The CNDDB listed 10 occurrences of riparian brush rabbit (*Sylvilagus bachmani riparius)* in the vicinity of the Project Area. The closest and most recent occurrence (Occurrence #3), from 2020, was located approximately 3.3 miles south of the Project Area within a riparian forest dominated by Fremont cottonwood (*Populus fremontii)*, valley oak (*Quercus lobata)*, and thickets of California rose (*Rosa californica),* and California blackberry (*Rubus ursinus)*. The Project Area does not provide suitable habitat for this species due to the lack of riparian habitat and dense shrubs. Given the lack of dense riparian forest and thickets of shrubs offering suitable nesting habitat within the Project Area, the riparian brush rabbit does not have the potential to occur within the Project Area.

7.0 CONCLUSIONS

7.1 Wetlands

Results of the biological resource analysis survey conducted by Olberding Environmental indicate that the Project Area does contain a single artificially constructed seasonal wetland along with a large intermittent drainage (Drainage 5) and two ephemeral drainages. However, the constructed seasonal wetland may fall under the Corps Exemption 5, the ephemeral drainages may fall under Corps Exemption 3 and 8, while the intermittent drainage was previously determined to not fall under Corps jurisdiction. The results from the initial wetland delineation indicate that the aquatic features identified within the Project Area would likely not fall under Corps jurisdiction. However, the features will likely fall under the jurisdiction of the RWQCB and/or CDFW. Final determination of the jurisdiction of the aquatic features will be decided when the Corps verifies the delineation. A jurisdictional delineation was conducted concurrently with the biological resource assessment site visit in December 2024. and will be submitted to the Corps for verification.

7.2 Special-status Plants

There were four special-status plants species identified within five miles of the Project Area; however, due to the regular disturbance of the habitats present and the absence of suitable habitat types, it is unlikely any of the four special-status plants species will occur in the Project Area.

7.3 Special-status Wildlife

Special–Status Invertebrates – There are two special-status invertebrate species, the western bumble bee and Crotch's bumble bee, that have the potential to occur in the Project Area. The annual grassland and ephemeral drainage habitats contain potential food plants of these species, and there is potential nesting habitat among the soil and plant litter.

Special–Status Fish – Due to a lack of permanent water features in the Project Area and the disconnect between the drainages and suitable habitats, all special-status fish species are presumed absent.

Special-Status Amphibians – Due to the lack of suitable habitat and no recent or nearby occurrences, all special-status amphibians are absent from the Project Area.

Special-Status Reptiles – Due to the lack of suitable habitat and no recent or nearby occurrences, all special-status reptiles are presumed absent from the Project Area.

Foraging or Nesting Bird Species – There are eight special-status bird species with the potential to occur in the Project Area. A red-tailed hawk and an American kestrel were both observed foraging within the Project Area during the December 2024 site assessment. The large trees adjacent to the northern boundary and within the developed portion of the Project Area offer suitable habitat for a variety of raptor species including the red-tailed hawk, red-shouldered hawk, Swainson's hawk, white-tailed kite, American kestrel, and loggerhead shrike. Additionally, the annual grassland offers foraging habitats for all of these species including the tri-colored blackbird which would forage during the spring and summer months and the Ferruginous hawk which may utilize the Project Area in a wintering foraging capacity only.

Special-Status Mammals – Due to the lack of suitable habitats such a dense riparian corridor or thick dense shrubs and the regular disturbance throughout the Project Area, the riparian brush rabbit is presumed absent.

7.4 Local Ordinances

Results of the biological resource analysis survey conducted by Olberding Environmental indicate the Project Area contains waters/wetland potentially considered jurisdictional by the RWQCB and/or CDFW. A wetland delineation was conducted in conjunction with the December 2024 biological resource assessment site visit and will be submitted to the Corps for verification upon completion.

8.0 RECOMMENDATIONS

- **Invertebrate Survey –** An invertebrate survey shall be conducted prior to initiation of ground disturbing project activities to identify all the species of bumble bees that utilize the Project Area. These surveys shall be conducted simultaneously with the blooming period of their recognized food plants (March –September), as the special-status bumble bee species are active during this time. The surveying biologist shall be familiar with the primary identification characteristics of each potential bumble bee and be proficient in the methodology produced by the Xerces Society The Invertebrate Survey shall include the following components:

- **Habitat Assessment** – A habitat assessment evaluating the likelihood of the *Bombus* occurring within and adjacent to the Project Area shall be prepared by a qualified biologist prior to initiation of ground disturbing project activities. The assessment should include historical and current species occurrences, data from site visits on potential foraging, nesting, and/or overwintering resources, and blooming plant species present and their percent cover. These resources shall be quantified across multiple site visits, corresponding

with the Colony Active Season for Bombus species (April – August). If it is determined that there is potential for the species to forage, nest, and/or overwintering on the Project Site, then on-site surveys shall commence. If it is determined that there is no potential for the special-status *Bombus* species to forage, nest, and/or overwinter on the Project site, no further measures will be necessary.

- **Focused On-Site Surveys** – Survey efforts shall occur prior to initiation of ground disturbing project activities. Three on-site surveys shall take place prior to project implementation. Each survey shall be spaced 2-4 weeks apart, corresponding with the Colony Active Season for *Bombus* species (April –August). The qualified biologist shall utilize a telephoto lens or a sufficiently long macro lens to obtain high-quality photos of bumble bees, sufficient for species identification, without having to capture and potentially harm the bumble bees.

- **Interpreting Survey Results** – If no special-status *Bombus* species have been detected during the multiple rounds of focused surveys, no further measures will be necessary. If special-status *Bombus* species are identified, then site-specific measures will be implemented to avoid take unless an Incidental Take Permit (ITP) for the species is obtained from CDFW. Such measures will include biological monitoring during vegetation or ground disturbing activities that take place during any portion of the Queen and Gyne Flight Period and Colony Active Period for these species (February – October). If special-status *Bombus* are detected using floral resources, a no-disturbance buffer of at least 25 feet around the individual(s) will be established, and the individual(s) will be monitored by a biological monitor, until all special-status *Bombus* are confirmed to have left the area on their own. If a special-status *Bombus* nest is detected where ground disturbance is proposed to occur, then a minimum 30-foot no-disturbance buffer (with a buffer of up to 60 feet if disturbance is substantial) around the nest will be established. This buffer will remain in place until the nest senesces; senescence would be determined by observation of no nest activity for three (3) sequential days. A qualified biologist will discuss the buffer with the contractor to ensure that tree removal areas, including ingress and egress routes, will avoid the special-status *Bombus* and/or their nest. The applicant will coordinate with CDFW to ensure that maintenance of this buffer is adequate for take avoidance, and thus compliance with CESA.

- **Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the Project Area and the large trees within the adjacent parcels should be conducted by a competent biologist 14 days prior to the commencement of the tree removal or site grading activities. The SJMSCP

includes specific minimization measures for many individual species of nesting birds. If any active nests of these species are identified, then the minimization measures discussed in the SJMSCP will be implemented. If any bird listed under the Migratory Bird Treaty Act but not covered by the SJMSCP is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 250 feet from the project activities for passerine birds, and a minimum of 1,000 feet for large raptors such as *Buteos* and 500 feet for smaller raptors such as *Accipiters.* The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

- **Erosion Control** – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the Project Area could adversely affect aquatic life within the adjacent water features (including storm drains). Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. Mitigation measures may include best management practices (BMP's) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

9.0 LITERATURE CITED

California Department of Fish and Wildlife (CDFW) Natural Diversity Data Base. 2024. Computer listings and map locations of historic and current recorded occurrences of special-status species and natural communities of special concern for USGS 7.5 minute quadrangle map: Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena on December 14, 2024.

_____.2024a. California Wildlife Habitat Relationships. https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats

_____.2024b. State and federally listed Endangered, Threatened, and Rare plants of California. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline

_____.2024. Special animals. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline

_____.2024. Swainson's Hawks in California. Wildlife Branch – Wildlife Diversity Program. West Sacramento, CA. Available online at https://wildlife.ca.gov/Conservation/Birds/Swainsons-Hawk. Accessed on December 13, 2024.

California Native Plant Society (CNPS), Rare Plant Program. 2024. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org Accessed December 14, 2024.

CEQA. 2024. The California Environmental Quality Act. Appendix G, Environmental Checklist Form. Accessed on December 14, 2024. Available online at https://www.califaep.org/statute_and_guidelines.php

Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The Birder's Handbook: a field guide to the natural history of North American birds. Simon & Schuster, Inc., New York. 785 pp.

Hickman, James C., Ed. 2012. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, CA. 1400 pp.

Holland (1986) Preliminary Description of the Natural Communities of California. CDFW.

Koch, J., J. Strange, and P. Williams. 2012. *Bumble Bees of the Western United States*. A product of the U.S. Forest Service and the Pollinator Partnership with funding from the National Fish and Wildlife Foundation. Available online at https://www.xerces.org/sites/default/files/2018-05/12-053_01_Western_BB_guide.pdf. Accessed December 14, 2024.

Mayer, K. E. and Laudenslayer W.F. 1988. A Guide to Wildlife Habitats of California. California.

Natural Resources Conservation Service (NRCS). 2019. United States Department of Agriculture. Web Soil Survey. Accessed December 14, 2024. Available on-line at http://websoilsurvey.nrcs.usda.gov

Pierce, Robert J. 1995. Wetland Delineation Lecture Notes. Wetland Training Institute, Inc., Poolesville, MD. WTI 95-2. 200pp.

San Joaquin Council of Governments (SJCOG). 2000. San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Stockton, California. Accessed on December 17, 2024. Available online at https://ca-sjcog2.civicplus.com/173/Plan-Documents

Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. A manual of California vegetation. 2nd Ed. California Native Plant Society, Sacramento, CA.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Sibley, D.A. 2000. The Sibley Guide to Birds. Alfred Knopf, New York.

Sibley, C.G., and B.L. Munroe, Jr. 1990. Distribution and taxonomy of birds of the world. Yale University Press, New Haven and London. 1111 pp.

Skinner, M. W. and B. M. Pavlik (eds.). 1994. Inventory of rare and endangered vascular plants of California. California Native Plant Society Special Publication No. 1 (5th edition). California Native Plant Society, Sacramento, CA. 338 pp.

United States Fish and Wildlife Service (USFWS). 2024. Endangered and threatened plant and animal species. Accessed December 14, 2024. https://www.fws.gov/program/endangered-species/species

_____. 2024. Endangered and threatened wildlife and plants; review of plant and animal taxa that are Candidates or Proposed for listing as Endangered or Threatened; annual notice of findings on recycled petitions; annual description of progress on listing actions; proposed rule. Federal Register 68: 54732-54757.

_____. 2007. Bald Eagle Management Guidelines and Conservation Measures. The Bald and Golden Eagle Protection Act. Accessed December 14, 2024. Available on-line at http://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf.

Zeiner, D.C., W.F. Laudenslayer, Fr., K.E. Mayer, and M. White, eds. 1988- 1990. California's Wildlife. Vol I -III. California Department of Fish and Wildlife, Sacramento, California

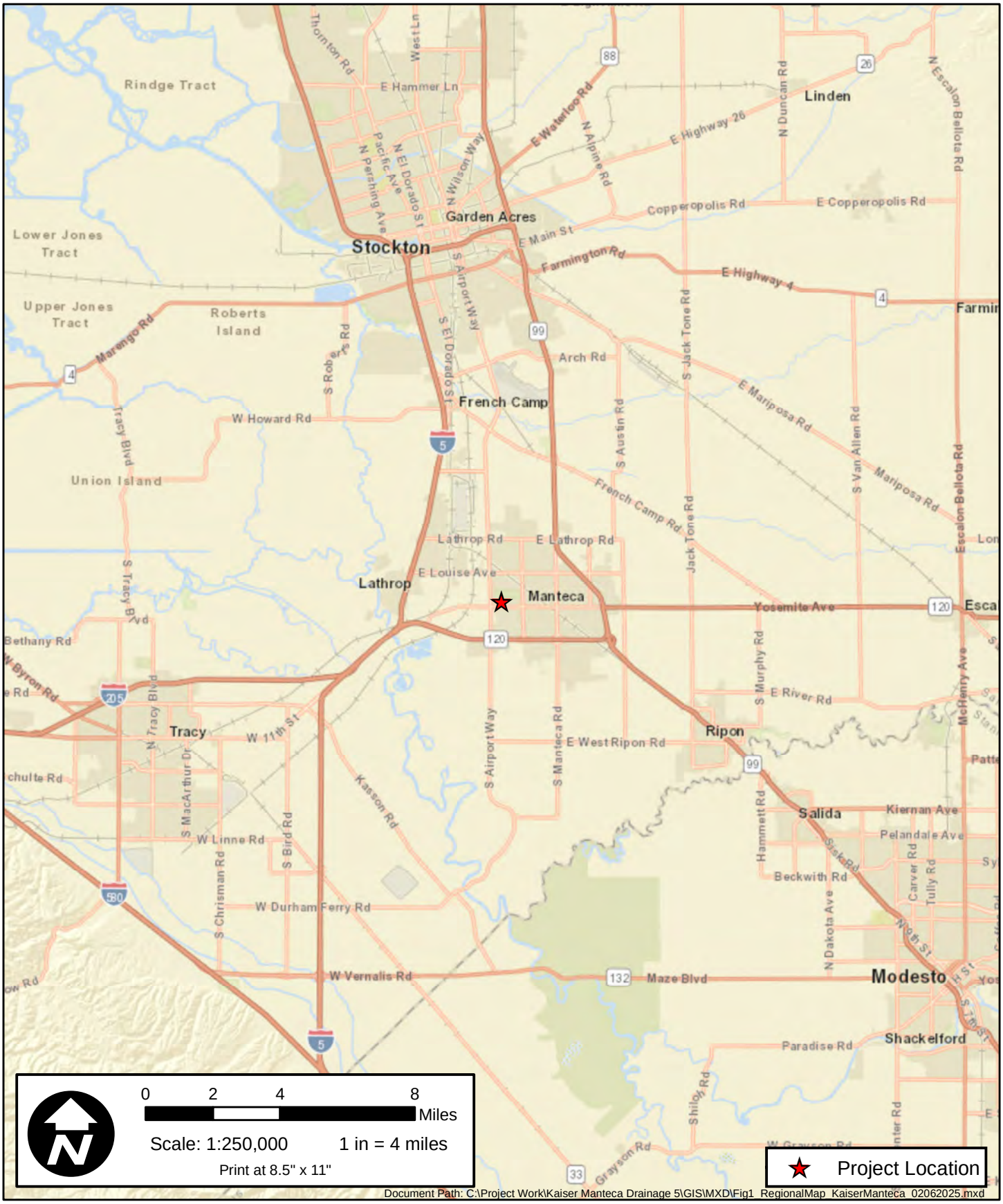
_____:1988- 1990. California's Wildlife. Vol I -III. California Department of Fish and Wildlife, Sacramento, California. "Ferruginous Hawk (*Buteo regalis*)". Written by S. Granholm.

_____:1988- 1990 (Updated 1999). California's Wildlife. Vol I -III. California Department of Fish and Wildlife, Sacramento, California. "Burrowing Owl (*Athene cunicularia*)". Written by C. Polite. Updated by CWHR Program Staff, September 1999.

ATTACHMENTS

ATTACHMENT 1

FIGURES



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OLBERDING -ENVIRONMENTAL-
193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 1: Regional Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

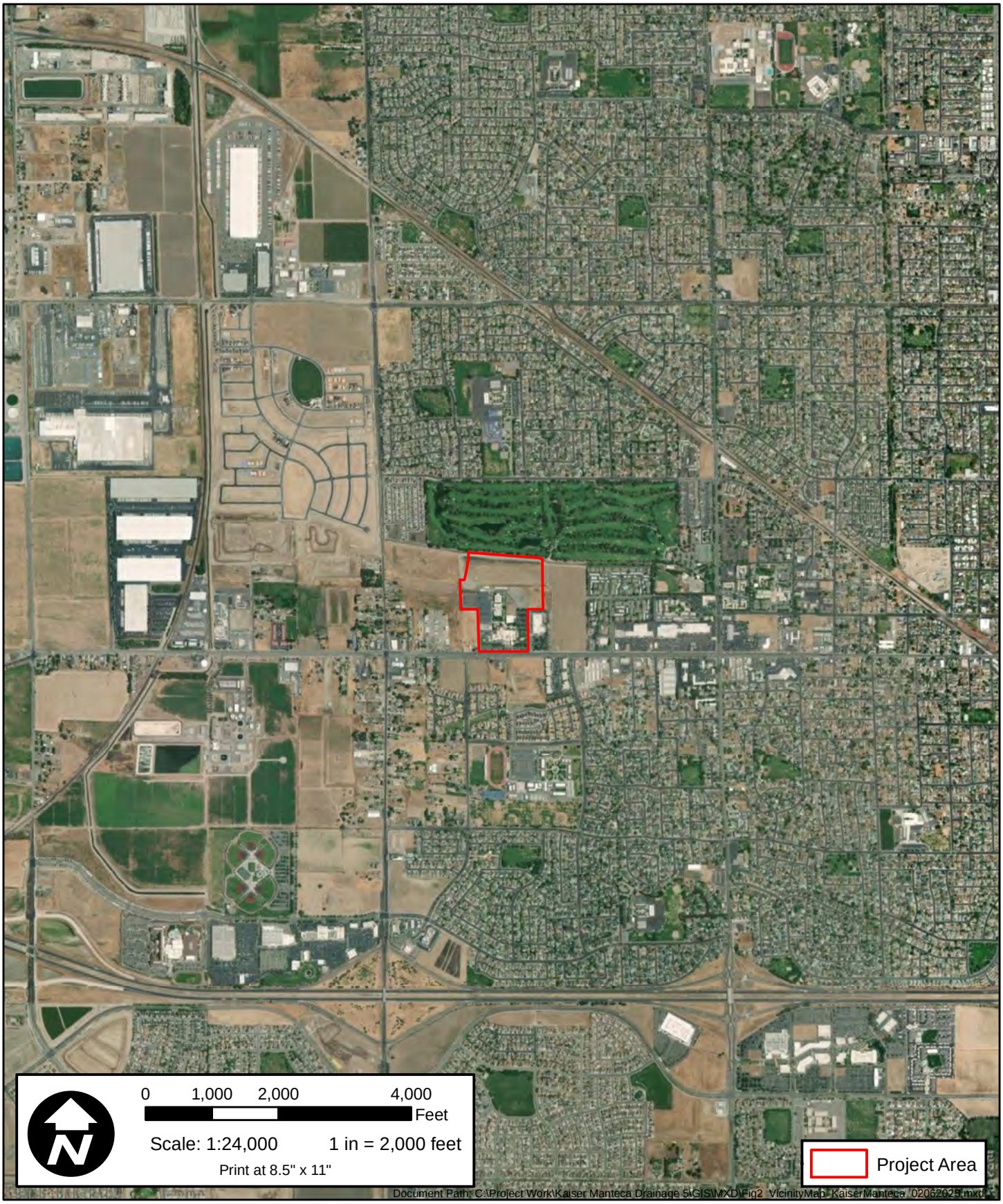

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Figure 2: Vicinity Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

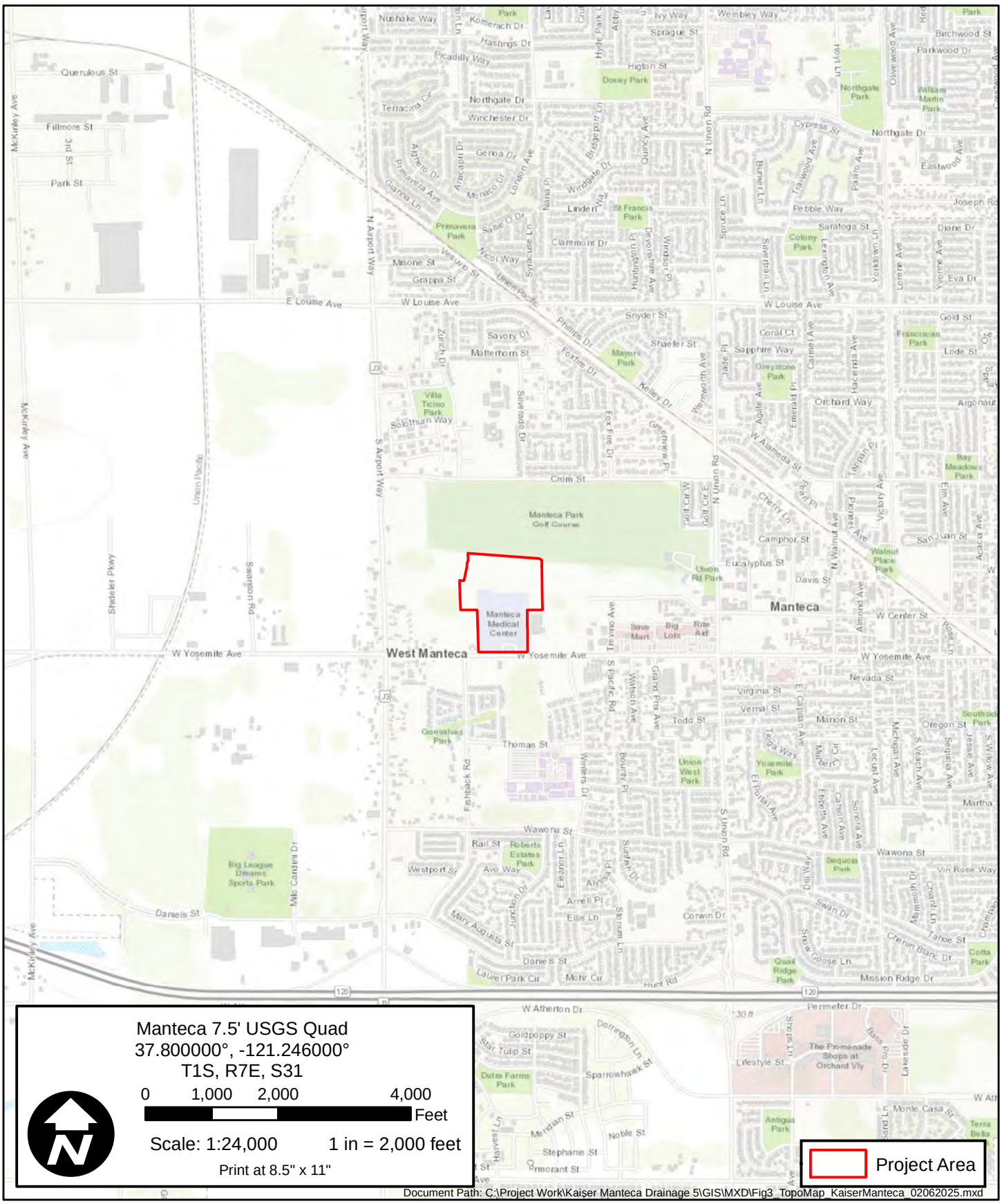

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Figure 3: USGS Topographic Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

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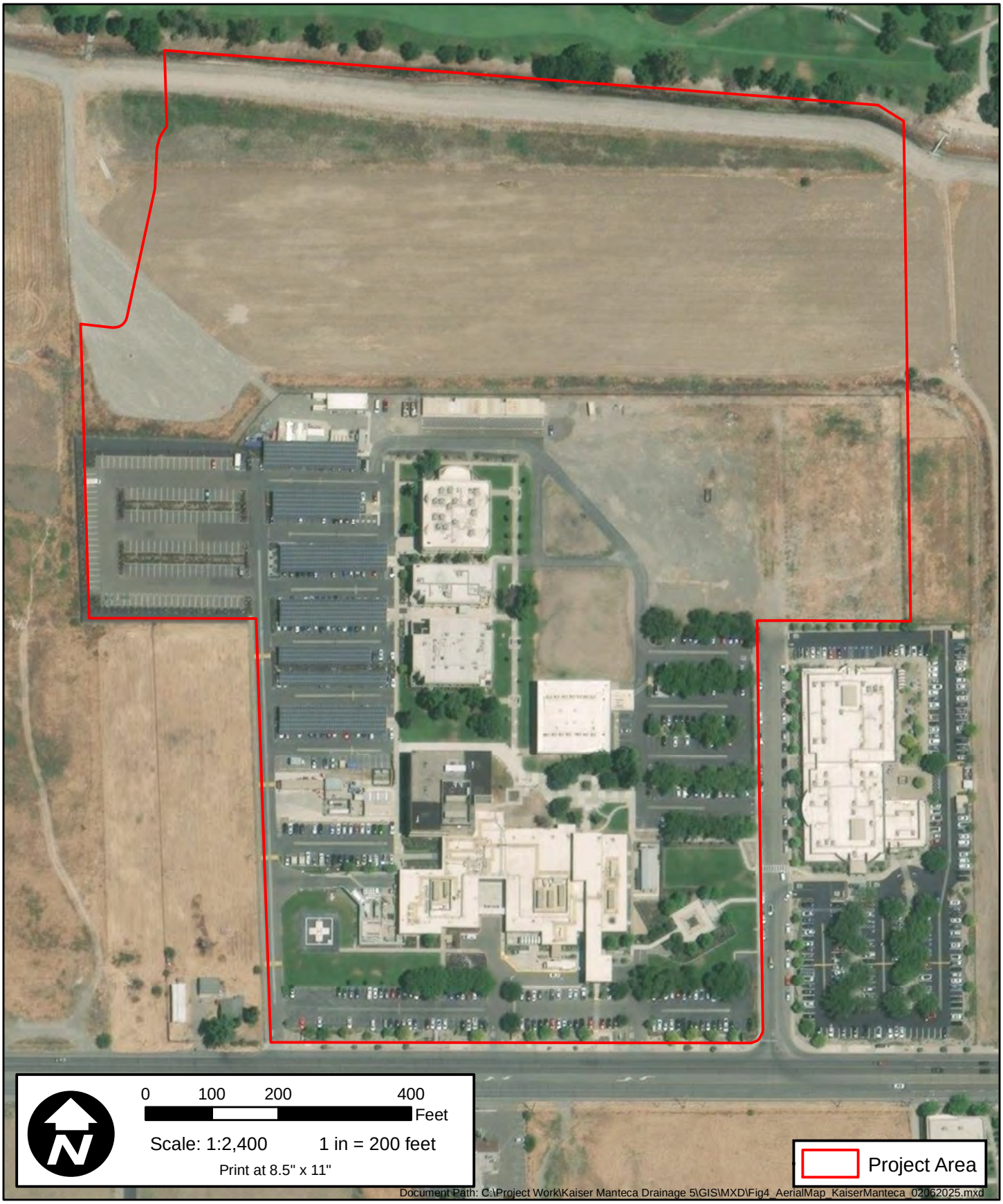

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Figure 4: Aerial Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

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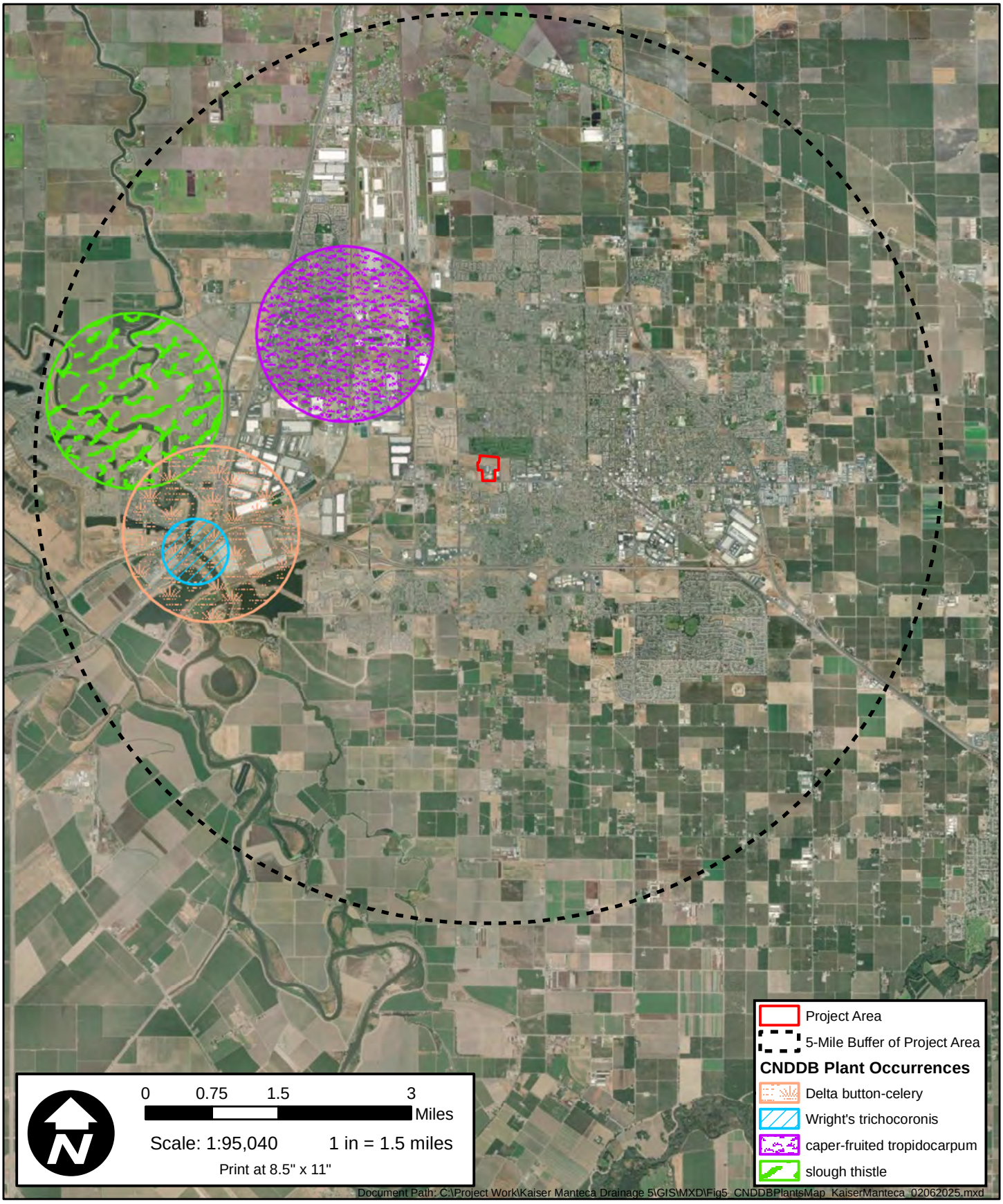

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Figure 5: CNDDB Plants Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

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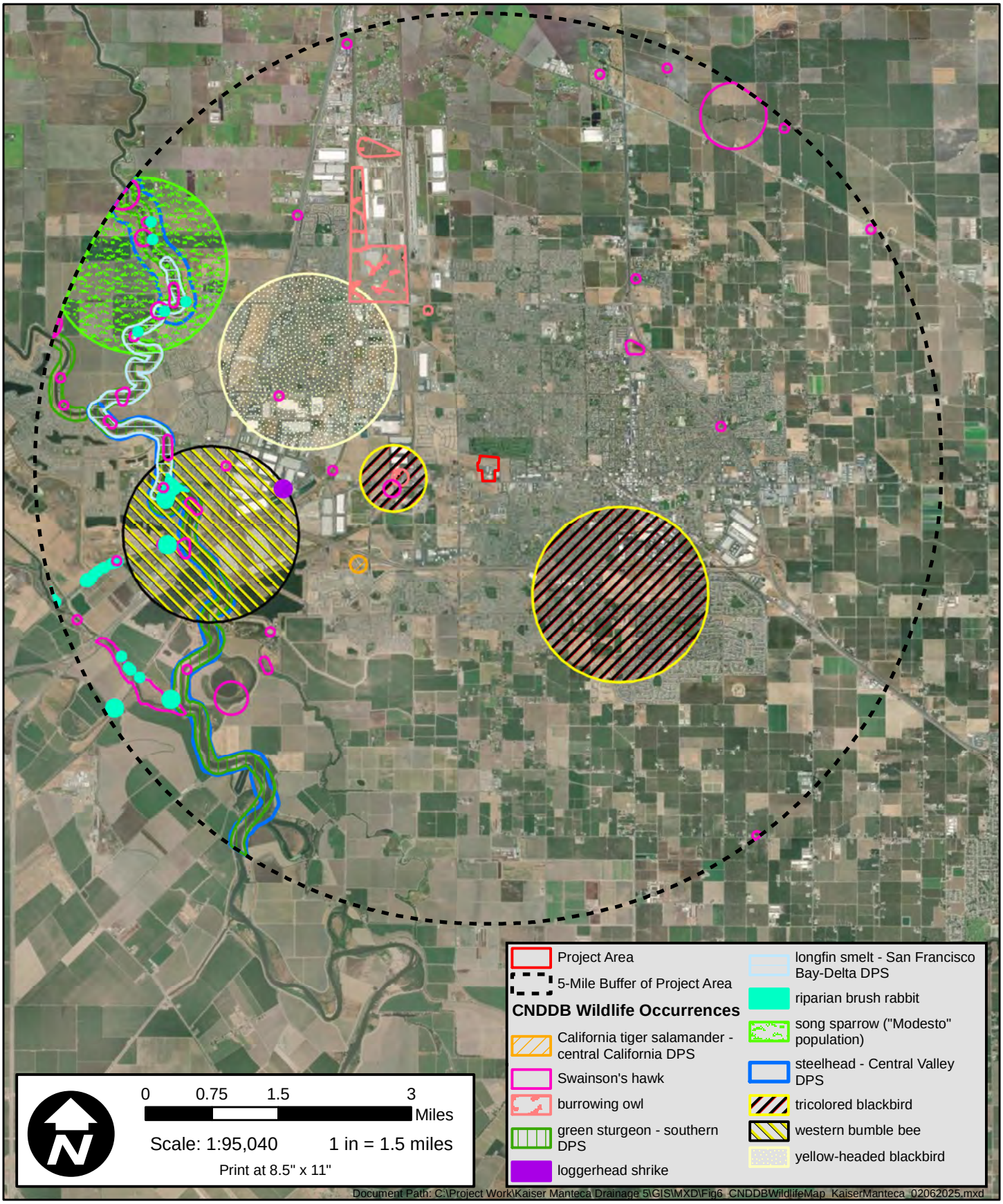

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Figure 6: CNDDB Wildlife Map
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San Joaquin County, California

Revision Date: 02/06/2025

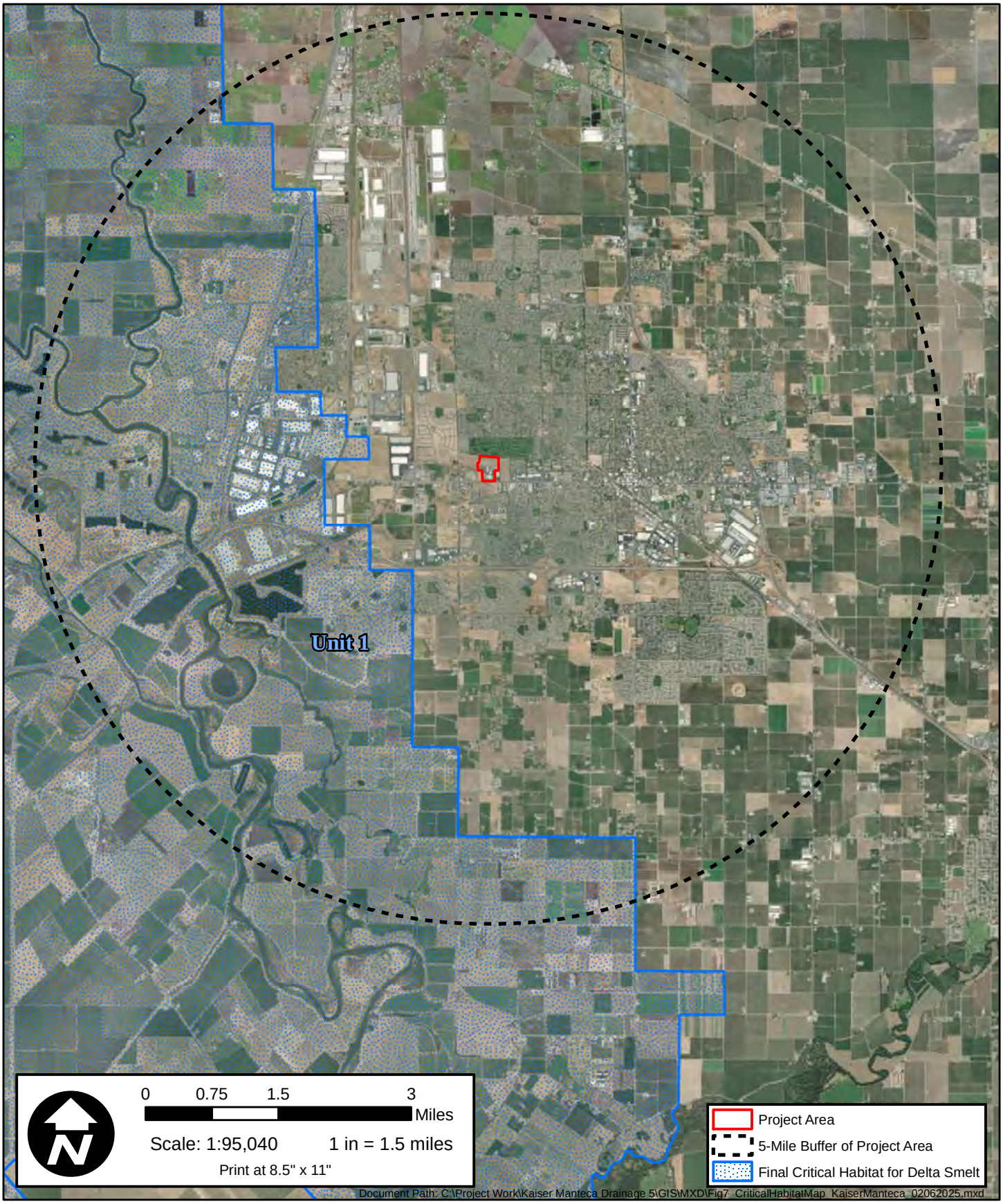

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Figure 7: Critical Habitat Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

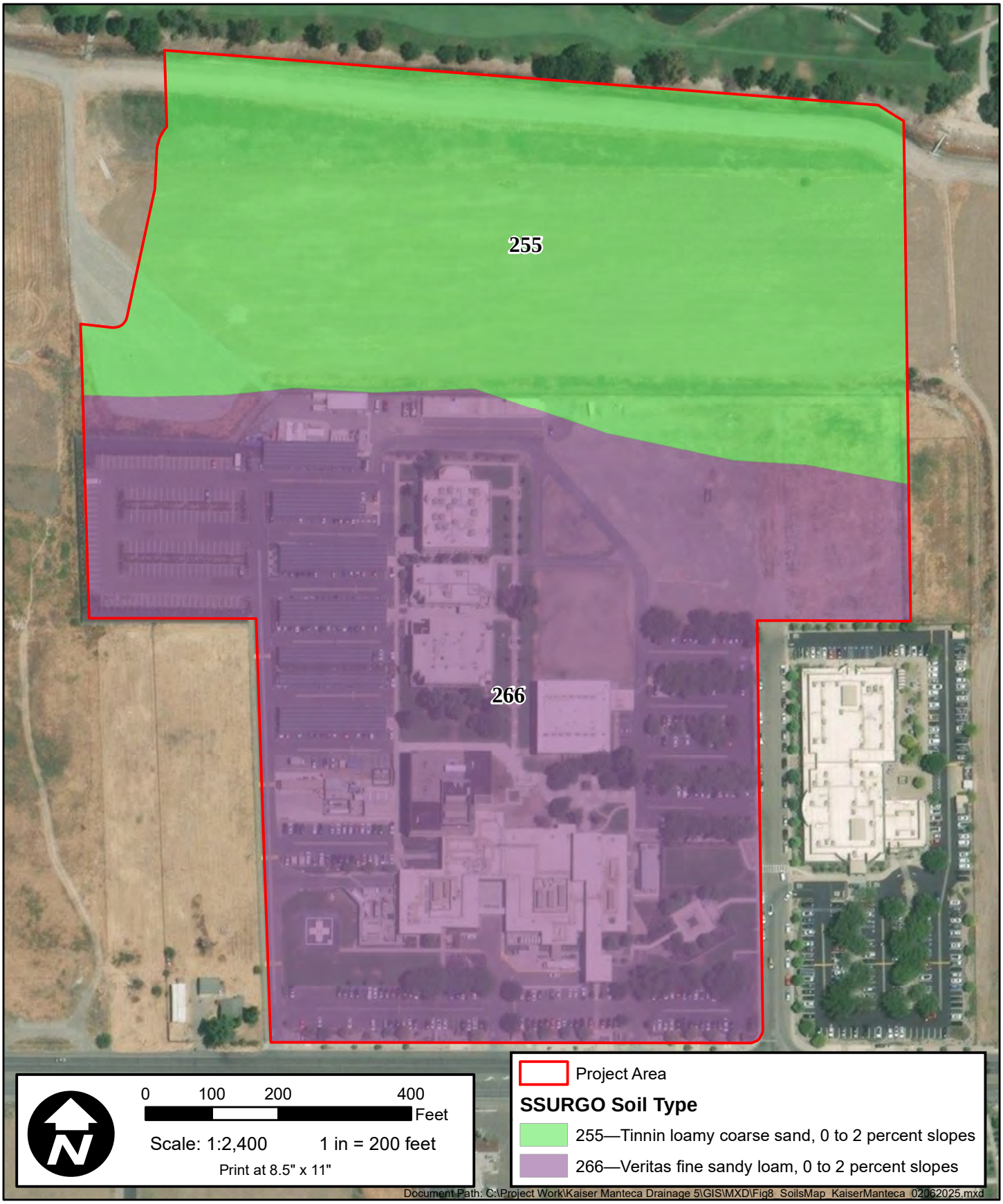

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Figure 8: Soils Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

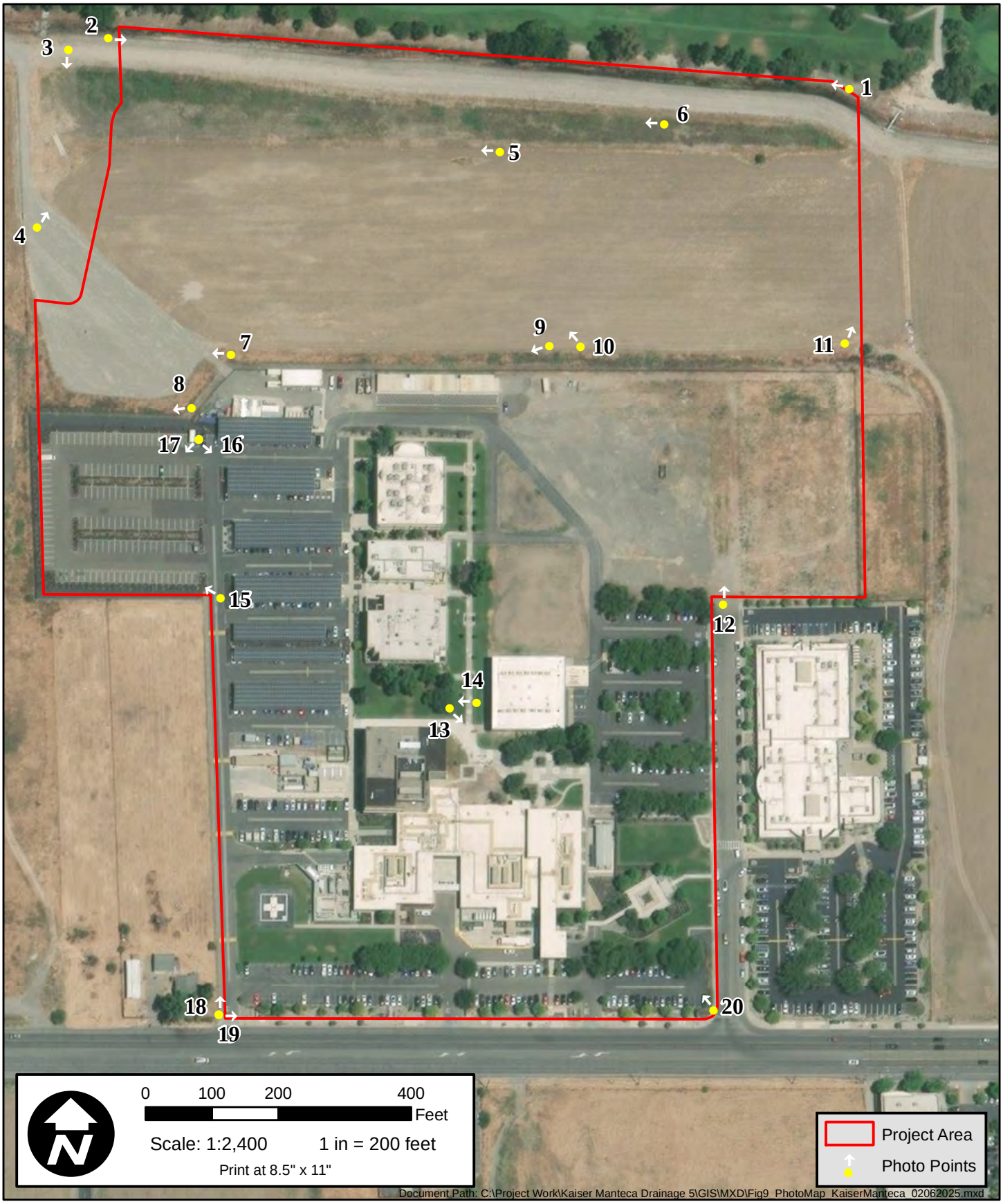

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Figure 9: Photo Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

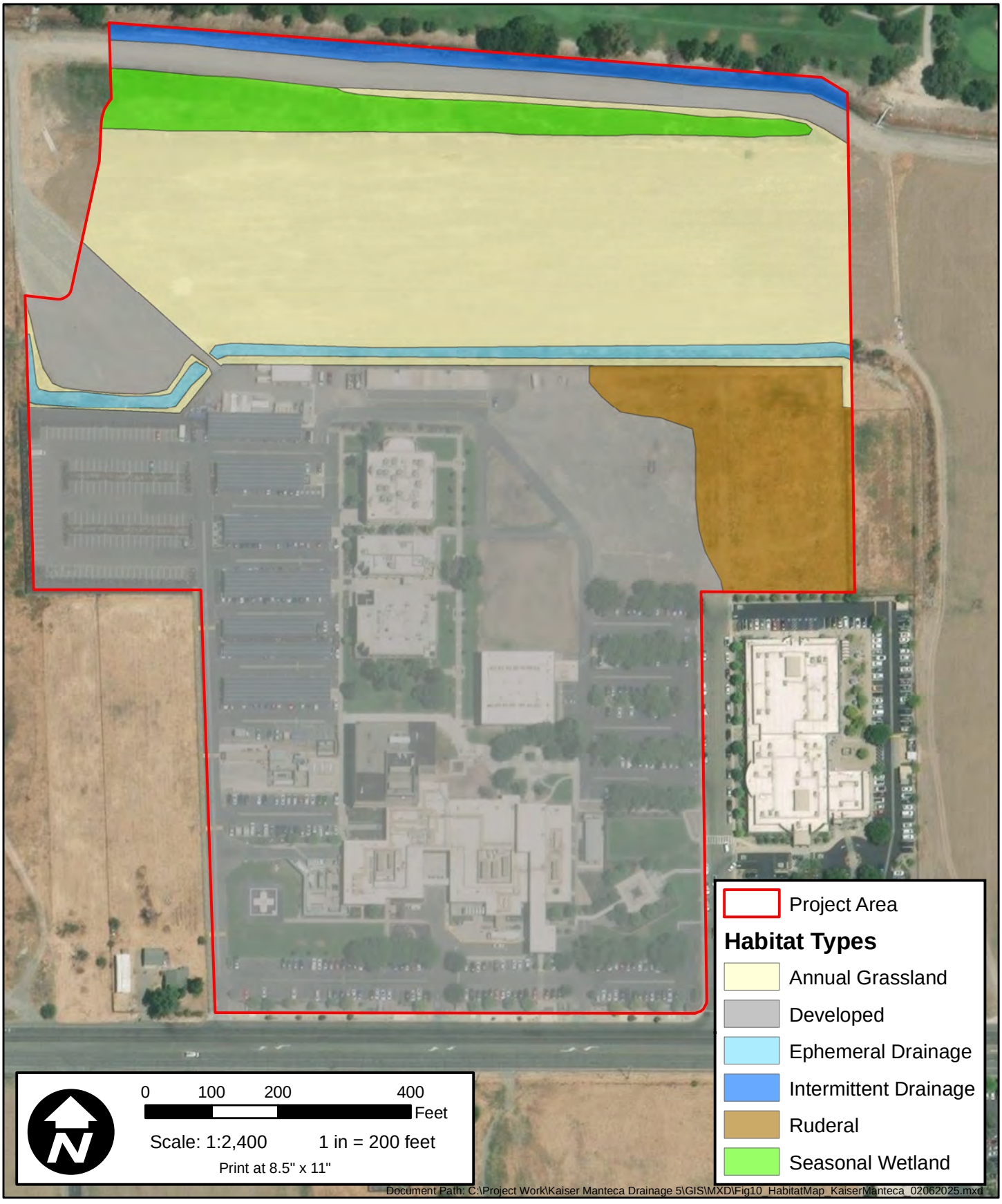

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Figure 10: Habitat Map
Kaiser Manteca ED Expansion Project
San Joaquin County, California

Revision Date: 02/06/2025

ATTACHMENT 2

TABLES

Table 1

Wildlife and Plant Species Observed Within/Adjacent to the Project Area

Scientific Name	Common Name
Plant Species Observed	
Acer rubrum	red maple
Amaranthus sp.	amaranth
Avena fatua	wild oat
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Bryum argenteum	silvergreen moss
Centaurea solstitialis	yellow star thistle
Cinnamonomum camphora	camphor tree
Citrullus lanatus var. *citroides*	watermelon
Cynodon dactylon	Bermuda grass
Cyperus eragrostis	tall flat sedge
Datura stramonium	Jimson weed
Deschampsia danthonioides	annual hair grass
Distichlis spicata	salt grass
Dittrichia graveolens	stinkwort
Echinochloa crus-galli	barnyard grass
Elymus glaucus	blue wild rye
Epilobium brachycarpum	tall willow herb
Eragrostis curvula	weeping lovegrass
Erigeron canadensis	Canada horseweed
Erodium moschatum	white-stem filaree
Eucalyptus globulus	blue gum
Festuca bromides	brome fescue
Helianthus annuus	common sunflower
Heterotheca grandiflora	telegraph weed
Hydrangea macrophylla	hydrangea
Juglans nigra	black walnut
Koelreuteria paniculata	golden rain tree
Lactuca serriola	prickly lettuce
Medicago sativa	alfalfa
Melilotus albus	white sweetclover
Nasturtium officinale	watercress

Table 1

Wildlife and Plant Species Observed Within/Adjacent to the Project Area

Scientific Name	Common Name
Pinus sabiniana	gray pine
Poa annua	annual blue grass
Populus fremontii	Fremont cottonwood
Pseudognaphalium stramineum	cotton-batting plant
Quercus agrifolia	coast live oak
Quercus lobata	valley oak
Quercus robur	English oak
Rumex crispus	curly dock
Salsola tragus	prickly Russian thistle
Schinus molle	Peruvian pepper tree
Sequoia sempervirens	coast redwood
Trifolium hirtum	rose clover
Ulmus parvifolia	Chinese elm
Wildlife Species Observed	
Birds	
Aphelocoma californica	California scrub jay
Branta canadensis	Canada goose
Buteo jamaicensis	red-tailed hawk
Calypte annas	Anna's hummingbird
Columba livia	rock dove
Falco tinnunculus	American kestrel (foraging)
Larinae sp	gull
Sayornis saya	Say's phoebe
Setophaga coronata	yellow-rumped warbler

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
PLANTS					
alkali milk-vetch (*Astragalus tener* var. *tener*)	-/-/1B	March – June	Playas, valley and foothill, and vernal pools in alkaline soils. Micro habitat consists of low ground, alkali flats, and flooded lands	Low No suitable habitat Present	Presumed absent
heartscale *(Atriplex cordulata* var. *cordulata)*	-/-/4.3	April – October	Annual herb found among chenopod scrub, meadows and seeps, and valley and foothill grassland with sandy soil. Sometimes found in saline or alkaline soils. Located from 0 – 1,835 ft. elevation.	Low No suitable habitat Present	Not likely to occur
crownscale (*Atriplex coronata* var. *coronata*)	-/-/1B.2	March – October	Chenopod scrub, meadows and sinks, playas, valley and foothill grasslands, and alkaline vernal pools with clay substrate. Located from 5 – 1,935 ft. elevation.	Low No suitable habitat present No suitable soil present	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
lesser saltscale *(Atriplex minuscula)*	-/-/4.2	May – October	Chenopod scrub, meadows and seeps, playas, valley grassland and alkaline sinks. Located from 50 – 655 ft. elevation.	Low No suitable habitat present	Presumed absent
big tarplant (*Blepharizonia plumosa)*	-/-/1B.1	July - October	Valley grassland, foothill woodland, chaparral, usually among clay soils. 100 – 1,655 ft. elevation.	Low No suitable habitat or soil present Out of elevation range	Presumed absent
watershield (*Brasenia schreberi*)	-/-/2B.3	June-September	Aquatic perennial rhizomatous herb that is found among freshwater marshes and swamps from 0 – 7,220 feet in elevation.	Low No suitable habitat present	Not likely to occur
Parrys rough tarplant (pappose tarplant) (*Centromadia parryi* ssp. *rudis)*	-/-/4.2	May – October	An annual herb found in wetland-riparian habitats and occurs in wetlands and non-wetlands in sandy loam soil from 0 – 130 feet in elevation.	Low No suitable habitat present	Not likely to occur

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
palmate-bracted birds-beak (*Chloropyron palmatum*)	-/-/1B.1	July – November	Annual hemiparasitic herb found among marshes and swamps with coastal salt. Located from 0 – 10 ft. elevation.	Low No suitable habitat present	Presumed absent
slough thistle *(Cirsium crassicaule)*	-/-/1B.1	May –April	An annual perennial herb found in wetlands, riparian habitat, and fresh water marsh.	Low No suitable habitat present. No recent occurrences (>20 years)	Presumed absent
recurved larkspur (*Delphinium recurvatum*)	-/-/1B.2	March – May	Alkaline areas of chenopod scrub, cismontane woodland, and valley and foothill grasslands. Located from 10 – 2,590 ft. elevation.	Low No suitable habitat present	Presumed absent
Delta button celery (*Eryngium racemosum*)	-/E/1B.1	March – October	Annual and/or perennial herb found among vernally mesic clay depressions from 10 – 100 feet in elevation.	Low No suitable habitat or soil present No recent occurrences (>20 years)	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
San Joaquin spearscale (Ex*triplex joaquiniana)*	-/-/4.2	April-October	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland in seasonal alkali wetlands or alkali sink scrub with *Distichlis spicata, Frankenia,* etc.	Moderate Suitable habitat present	Presumed absent
hogwallow starfish (*Hesperevax caulescens*)	-/-/4.2	March – June	Valley and foothill grasslands with mesic, clay soils. Shallow vernal pools. Sometimes in alkaline environments. Located from 0 – 1,655 ft. elevation.	Low Suitable habitat present	Presumed absent
woolly rose-mallow (*Hibiscus lasiocarpos* var. *occidentalis*)	-/-/4.2	June - September	Freshwater marshes and swamps, often in riprap on the sides of levees. Located from 0 – 395 ft. elevation	Low No suitable habitat present	Presumed absent
alkali goldfields (*Lasthenia chrysantha*)	-/-/1B.1	February - June	Valley grassland, alkali sink, and wetland-riparian areas. 0 – 655 ft. elevation	Low No suitable habitat present	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Ferris goldfields (*Lasthenia ferrisiae)*	-/-/1B.2	February – May	Annual herb found among alkaline and clay soils of vernal pools. Located from 65 – 2,295 ft. elevation	Low No suitable habitat present	Presumed absent
Delta tule pea (*Lathyrus jepsonii var. jepsonii*)	-/-/1B.2	May – July	Freshwater wetlands, wetland-riparian, freshwater marsh, brackish marsh. Located from 0 – 15 ft. elevation.	Low No suitable habitat present	Presumed absent
California alkali grass (*Puccinellia simplex*)	-/-/1B.2	March – May	Annual herb found in alkaline sinks, flats, lake margins, and vernally mesic areas of chenopod scrub, meadows and seeps, valley and foothill grasslands, and vernal pools. Located from 5 – 3050 ft. elevation.	Low No suitable habitat present	Presumed absent
Sanford's arrowhead (*Sagittaria sanfordii*)	-/-/1B.2	May – November	Emergent perennial rhizomatous herb found among shallow, freshwater marshes and swamps. Located from 0 – 2,135 ft. elevation.	Low No suitable habitat present	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Suisun Marsh aster (*Symphyotrichum lentum*)	-/-/1B.2	March – November	Freshwater and brackish marsh. Located from 0 – 10 ft. elevation.	Low No suitable habitat present	Presumed absent
Wrights trichocornis (*Trichocoronis wrightii* var. *wrightii)*	-/-/2B.1	May – October	An annual herb found in freshwater wetlands, meadows, and riparian habitats along with vernal pools.	Low Marginally suitable habitat present No recent occurrences (<20 years)	Not likely to occur
saline clover (*Trifolium* hydrophilum)	-/-/1B	April – June	Marshes and swamps, valley and foothill grasslands with mesic, alkaline soils, and vernal pools.	Low No suitable habitat present	Presumed absent
caper-fruited tropidocarpum (*Tropidocarpum capparideum*)	-/-/1B.1	March – April	Valley and foothill grasslands on alkaline hills. Located from 5 – 1,495 ft. elevation.	Low No suitable habitat or soil present No recent occurrence (>100 years)	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Greenes tuctoria (*Tuctoria greenei)*	E/R/1B.1	May – July	An annual grasslike herb that occurs in freshwater wetlands and vernal pools in elevation ranges from 165 – 7,480 feet.	Low No suitable habitat present Outside elevation range	Presumed absent
INVERTEBRATES					
California floater (*Anodonta californiensis)*	-/-/-	Resident	This species is known to occur in Arizona, California, Idaho, Nevada, Utah, Oregon, Washington, and Wyoming. The species is found in fine sediments in low-gradient stream reaches and still waters. Adult length is up to five inches.	Low No suitable habitat present	Presumed absent
Oregon floater (*Anodonta oregonensis)*	-/-/-	Resident	This species is known to occur in California, Idaho, Oregon, Washington, Nevada, and British Columbia. They can be found in different water types but most commonly in still waters in silty and sandy substrates. The shell is thin and lightweight, and the species grows to about five to seven inches long.	Low No suitable habitat present	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Sacramento anthicid beetle (*Anthicus sacramento)*	-/-/-	Resident	This species somewhat resemble ants in general appearance and have a strongly deflexed head which is narrowly constricted behind the eyes. Adults are 3.18-3.63 mm long. They are found in several locations along the Sacramento and San Joaquin rivers, from Shasta to San Joaquin counties, and at one site along the Feather River at Nicolaus. Their preferred habitat is interior sand dunes and sand bars; has also been found in dredge spoil heaps.	Low No suitable habitat present	Presumed absent
obscure bumble bee (*Bombus caliginosus*)	-/-/-	Resident	This species occurs along the Pacific Coast, from southern California to southern British Columbia, with scattered records from the east side of California's Central Valley. Habitats include open grassy coastal prairies and coast range meadows. Nests are often loateded underground in abandoned rodent nests, or above ground in tufts of grass, old birds nests, rock piles, or cavities in dead trees. Food plants include *Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium,* and *Vaccinium*.	Low No suitable habitat present No nearby occurrences Moderate preferred food present	Not likely to occur
Crotch's bumble bee (*Bombus crotchii)*	-/CE/-	Resident	Occurs primarily in grassland, scrub, and chaparral habitats, though it has also been found in woodlands, agricultural lands, and some urban areas. Nests underground in old mammal burrows. Occurs in the southern two-thirds of California. Uses a wide variety of floral resources for food and pollen.	Moderate Habitat and preferred food plants present	May occur

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
western bumble bee (*Bombus occidentalis*)	-/CE/-	Resident	Found in a range of habitats including mixed woodlands, farmlands, urban areas, montane meadows, and prairie grasslands with abundant flora resources that provide pollen and nectar throughout their flight period. Usually nests underground. Occurs in Canada and USA from southern British Columbia to central California. Foodplants include: *Ceanothus, Centaurea, Chrysothamnus, Cirsium, Geranium, Grindellia, Lupinus, Melilotus, Monardella, Rubus, Solidago,* and *Trifolium*	Moderate Habitat and preferred food plants present	May occur
American bumble bee (*Bombus pensylvanicus)*	-/-/-	Resident	Found in open farmland and fields, they feed on several food plants, favoring *Helianthus* and T*rifolium*. This species utilizes bundles of hay or long grass to create sheltered nests above ground. Some nest in established crevices and burrows such as old bird nests, rodent burrows, and have been noted to nest in human-made objects such as baskets and barns.	Low Habitat and preferred food plants present, but may no longer occur in this part of CA.	Presumed absent
Conservancy fairy shrimp *(Branchinecta conservation)*	E/-/-	November – Early April (dependent on the timing of winter and spring rains)	Rather large, moderately turbid cool-water vernal pools.	Low No suitable habitat present.	Presumed absent
vernal pool fairy shrimp *(Branchinecta lynchi)*	T/-/-	December – May (dependent on the timing of winter and spring rains)	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Low No suitable habitat present.	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

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midvalley fairy shrimp *(Branchinecta mesovallensis)*	-/-/-	December – May (dependent on the timing of winter and spring rains)	Midvalley fairy shrimp is endemic to California Central Valley grassland vernal pools (Belk and Fugate 2000). Known occurrences include scattered populations from the Mather Field area of Sacramento south through Galt from Sacramento County; the Jepson Prairie, Travis Air Force Base, and Vacaville areas in Solano County; from Lodi north to the county border in San Joaquin County; the Byron Airport in Contra Costa County; the Virginia Smith Trust (Haystack Mountain) and Arena Plains National Wildlife Reserve in Merced County; 1 location in central Madera County; and 1 in northern Fresno County. This species most commonly occurs in small to medium grassy or clay-bottomed vernal pools, roadside ditches, and railroad toe-drains. The midvalley fairy shrimp is adapted to habitats that are inundated for short periods and can complete its life cycle (cyst to adult with fertilized eggs) in as little as 4 days, especially under extreme circumstances, such as years with below-average rainfall.	Low No suitable habitat present.	Presumed absent
valley elderberry longhorn beetle (*Desmocerus californicus dimorphus)*	T/-/-	Resident	Only found in association with its host plant, elderberry (*Sambuscus* spp.). Most occurrences are found below 500 feet in elevation.	Low No suitable habitat present.	Presumed absent

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western ridged mussel *(Gonidea angulata)*	-/-/-	Resident	This species occurs in California, Oregon, Washington, Nevada, Idaho, and British Columbia. They are found more commonly in streams than lakes and prefer constant water flow and well-oxygenated stable substrates in areas of low gradient. They can be found in substrates ranging in size from silt, clay, and sand to boulders. They are rarely found in waters that are continuously turbid such as glacial streams.	Low No suitable habitat present.	Presumed absent
California linderiella *(Linderiella occidentalis)*	-/-/-	December – May (dependent on the timing of winter and spring rains)	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity and conductivity.	Low No suitable habitat present.	Presumed absent
vernal pool tadpole shrimp *(Lepidurus packardi)*	E/-/-	Once every two weeks within two weeks of pool inundation, continuing until pool has been inundated for 120 continuous days (usually December – May)	Turbid vernal pools and swales in Sacramento Valley. Grass bottomed swales of unplowed grasslands.	Low No suitable habitat present.	Presumed absent

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Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

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moestan blister beetle (*Lytta moesta)*	-/-/-	Resident	Little is known about this species, they have been collected from March to September in Central California with known historical distributions in Fresno, Madera, Santa Cruz, and Stanislaus County. Adults mate end-to-end. Females excavate shallow burrows in which to oviposit. They are nest parasites of solitary bees; the beetle larvae feed on pollen stores that the female bee provided for her own larvae.	Low No suitable habitat present.	Presumed absent
San Joaquin Valley giant flower-loving fly (*Rhapiomidas trochilus*)	-/-/-	Resident	This species is one of the largest flies in North America, with a body length of over an inch. Their color is gray, brown with pale yellow bands on its abdominal segment. It has transparent wings and a protruding slender proboscis approximately 0.35 inches in length that extends from its head. They inhabit the arid or semi-arid regions of California's San Joaquin Valley and thrives in sand dunes with relatively sparse native vegetation. The larvae live in moist sandy soil, approximately six to ten feet below the surface.	Low No suitable habitat present.	Presumed absent
Callippe silverspot butterfly (*Speyeria callippe callippe*)	E/-/-	May – July	Native grasslands and associated habitats in the San Francisco Bay Area with proper topography (hilltops) for mating congregations; larval host plants (California golden violet), and nectar plants for adults (diverse native and non-native, including thistles).	Low No host plants or suitable habitat present	Presumed absent

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FISH					
green sturgeon – southern DPS (*Acipenser medirostris* pop. 1)	T/-/SSC	Resident	Southern DPS ranges from the Eel River south including the Sacramento and San Joaquin Rivers. Most of its lifecycle is spend in coastal marine waters, estuaries, and lower reaches of large rivers. Ascend rivers to spawn, but specific spawning and rearing habitat is unknown.	Low No suitable habitat present.	Presumed absent
white sturgeon (*Acipenser transmontanus)*	-/CT/SSC	Resident	Native to the West coast where they can be found in coastal waters from Ensenada, Mexico to Alaska. Although they are found in the ocean, they primarily reside in large rivers and associated estuaries.	Low No suitable habitat present.	Presumed absent
Sacramento perch (*Archoplites interruptus*)	-/-/SSC	Resident	Their range included the Tulare and Buena Vista basins to the south, the San Joaquin River basin, the San Francisco Estuary and its tributaries, and the Sacramento Valley. Sacramento perch are adapted for life in sloughs, slow moving rivers, and large lakes, including floodplain lakes, of the Central Valley. These habitats often become very warm and alkaline during periods of drought or in late summer.	Low No suitable habitat present.	Presumed absent
riffle sculpin (*Cottus gulosus)*	-/-/	Resident	This species is found in headwater streams with cold water and rocky or gravelly substrate. They prefer permanent streams where ample flow keeps the dissolved oxygen level near saturation. They may occupy riffles or pools, though they tend to favor areas that have adequate cover in the form of rocks, logs, or overhanging banks.	Low No suitable habitat present.	Presumed absent

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Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

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Pacific lamprey *(Entosphenus tridentatus)*	-/-/SSC	Resident	Pacific lamprey are one of the most widely distributed anadromous species along the Pacific Rim. They have been found in streams from Hokkaido Island, Japan, and around the Pacific Rim including Alaska, Canada, Washington, Oregon, Idaho and California to Punta Canoas, Baja California, Mexico. Their distribution includes major river systems such as the Fraser, Columbia, Klamath-Trinity, Eel and Sacramento-San Joaquin rivers. Historically, Pacific lampreys are thought to be distributed wherever salmon and steelhead have occurred. They use different habitats during different life stages., including both riverine and oceanic environments. Young lampreys can be found in burrows in sandy river bottoms	Low No suitable habitat present.	Presumed absent
central California roach *(Hesperoleucus symmetricus symmetricus)*	-/-/SSC	Resident	A small minnow fish found in small streams and are well adapted to life in intermittent watercourses. Most abundant in mid-elevation streams in the Sierra Nevada foothills and in lower reaches of some San Franscico Bay streams	Low No suitable habitat present.	Presumed absent
Sacramento-San Joaquin tule perch *(Hysterocarpus traskii traski)*	-/-/-	Resident	Range includes Clear Lake; and the Russian, Sacramento-San Joaquin, and Pajaro-Salinas river drainages, California. Habitat includes small to large, low-elevation rivers; lake; and estuarine sloughs. This species is found in a wide variety of habitats, including slow or swift-flowing water where conditions are clear or turbid, but usually it occurs in cool, well-oxygenated water with emergent aquatic vegetation, deep pools, and banks with complex cover.	Low No suitable habitat present.	Presumed absent

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Delta smelt (*Hypomesus transpacificu*)	T/E/-	Resident	Endemic to upper SF Estuary and Delta. Inhabits open waters of bays, tidal rivers, channels, and sloughs, but rarely occurs in water with salinity of more than 10-12 ppt. Spawning occurs in freshwater, primarily in tidal dead-end sloughs and channel edgewaters.	Low No suitable habitat present.	Presumed absent
western river lamprey (*Lampetra ayresii)*	-/-/-	Resident	They occur in coastal streams from just north of Juneau, Alaska, south to San Francisco Bay. In California, they have been recorded from the Sacramento and San Joaquin Delta while migrating, tributaries to the San Francisco Estuary (Napa River, Sonoma Creek, Alameda Creek), and tributaries to the Sacramento and San Joaquin rivers.	Low No suitable habitat present.	Presumed absent
Sacramento hitch *(Lavinia exilicauda exilicauda)*	-/-/SSC	Resident	They inhabit warm, lowland, waters including clear streams, turbid sloughs, lakes and reservoirs. Spawning takes place over gravel riffles and vegetation.	Low No suitable habitat present.	Presumed absent
hardhead *(Mylopharodon conocephalus)*	-/-/SSC	Resident	Typically found in small to large streams in a low to mid-elevation environment. They may also inhabit lakes or reservoirs. Spawning occurs in spring between April and May and may last as late as August.	Low No suitable habitat present.	Presumed absent

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Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

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chum salmon (*Oncorhynchus keta)*	T/-/-	Resident	They are an anadromous Pacific salmon species that spend their adult lives in the ocean and migrate from their marine environment back to their freshwater natal streams to spawn. Like other Pacific salmon, chum salmon spawn only once and then die. During the ocean phase of their life history, chum salmon look remarkably similar to both coho and sockeye salmon.	Low No suitable habitat present.	Presumed absent
steelhead - Central Valley DPS (*Oncorhynchus mykiss irideus* pop. 11)	T/-/SSC	Resident	Cool, clear, well-oxygenated water preferred. Prefer complex structured river systems with large boulders, etc.	Low No suitable habitat present.	Presumed absent
Chinook salmon – Sacramento River winter run -ESU (*Oncorhynchus tshawytscha* pop. 7*)*	E/E/-	Resident	Chinook are anadromous fish native to the North Pacific Ocean and the river systems of western North America, ranging from California to Alaska.	Low No suitable habitat present.	Presumed absent

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chinook salmon - Central Valley fall / late fall-run ESU *(Oncorhynchus tshawytscha* pop. 13)	-/-/SSC	Resident	The basic life history of late fall-run Chinook salmon is intermediate to the "ocean type" fall-run and the "stream type" spring-run, because adults arrive in fresh water already mature and spawn quickly after arriving (similar to fall-run) but juveniles regularly over-summer, out-migrating in their second year of life (similar to spring-run). Late fall-run Chinook salmon migrate upstream in December and January as mature fish, although their migration has been documented from November through April. Currently, late fall-run Chinook are found primarily in the Sacramento River, where most spawning and rearing of juveniles takes place in the reach between RBDD and Redding (Keswick Dam).	Low No suitable habitat present.	Presumed absent
Sacramento splittail *(Pogonichthys macrolepidotus)*	-/-/SSC	Resident	Habitat includes backwaters and pools of rivers, lakes, slow-moving waters, and dead-end sloughs of main rivers and Delta. Formerly found throughout much of the Sacramento/San Joaquin River system. Spawning habitat includes the natural and newly restored floodplains of the Cosumnes River, managed floodplains such as the Yolo and Sutter bypasses, and disjunct segments of floodplain adjacent to the Sacramento and San Joaquin rivers and tributaries. These areas approximate the large, open, shallow-water areas which once existed throughout the Delta.	Low No suitable habitat present.	Presumed absent

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longfin smelt - San Francisco Bay-Delta DPS *(Spirinchus thaleichthys* pop. 2)	E/-/-	Resident	Juvenile and adult longfin smelt have been found throughout the year in salinities ranging from pure freshwater to pure seawater, although once past the juvenile stage, they are typically collected in waters with greater salinity. They will move down the estuary (seaward) and into deeper water during the summer months, when water temperatures in the Bay-Delta are higher. Longfin smelt in the Bay-Delta may spawn as early as November and as late as June, although spawning typically occurs from January to April.	Low No suitable habitat present.	Presumed absent
AMPHIBIANS					
California tiger salamander (*Ambystoma californiense*)	T/T/-	Aquatic Surveys - Once each in March, April, and May with at least 10 days between surveys. Upland Surveys - 20 nights of surveying under proper conditions beginning October 15 and ending March 15.	Inhabit rolling grassland and oak savanna wither vernal pools or similar wetlands. Adults spend most of the year in subterranean retreats such as rodent burrows, but may be found on the surface during dispersal to and from breeding sites. The preferred breeding sites are vernal pools and other temporary ponds. However, CTS may use permanent manmade ponds as breeding habitat.	Low No breeding or upland refuge habitat present. No recent occurrences (>20 years)	Not likely to occur
western spadefoot (*Spea hammondii)*	CT/-/SSC	Year-round resident	Sandy or gravelly habitats in a variety of cismontane habitats, particularly vernal pools, grasslands, alkali flats, and playas. Breeds in rain pools, puddles, vernal pools, tire ruts, etc.	Low No suitable habitat due to the constant disturbance onsite	No likely to occur

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REPTILES					
Northwestern pond turtle (*Actinemys marmorata)*	CT/-/SSC	March – October	Aquatic turtles need permanent water in ponds, streams, irrigation ditches. Nests on sandy banks or grassy fields.	Low No suitable habitat present.	Presumed absent
northern California legless lizard (*Anniella pulchra*)	-/-/SSC	Summer and early fall.	Sandy or loose loamy soils under sparse vegetation; soil moisture is essential; they prefer soils with a high moisture content.	Low Suitable habitat present No nearby or recent occurrences	Not likely to occur
coast horned lizard (*Phrynosoma blainvillii*)	-/SSC/-	Year-round resident	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.	Low No suitable habitat present.	Presumed absent
giant garter snake (*Thamnophis gigas*)	T/T/-	Year-round resident	Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands.	Low No suitable habitat present.	Presumed absent

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BIRDS					
Cooper's hawk (*Accipiter cooperii*)	-/-/WL	February – August	Oak woodlands, coniferous forests, riparian corridors. Often hunts on edges between habitats.	Low No suitable habitat present.	Presumed absent
sharp-shinned hawk (*Accipiter striatus*)	-/-/WL	February – August	Oak woodlands, coniferous forests, riparian corridors. Often hunts on edges between habitats. (Nesting) Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 feet of water.	Low No suitable habitat present.	Presumed absent
tricolored blackbird (*Agelaius tricolor*)	-/T/SSC	February – August	Nesting within seasonal wetland marshes, blackberry brambles or other protected substrates. Forages in annual grassland and wetland habitats.	Low No suitable nesting habitat present. Foraging capacity only within the annual grassland	May occur in a foraging capacity only

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great blue heron (*Ardea herodias*) ROOKERIES	-/-/-	February – August	(Rookery) Nests in tall trees in close proximity to foraging areas such as marshes and streams.	Low No suitable habitat present.	Presumed absent
short-eared owl (*Asio flammeus*)	-/-/SSC	February – August	Fresh and saltwater swamp lands, lowland meadows, irrigated alfalfa fields. Tule patches or tall grasses required for nesting and roosting. Nests on ground in dense vegetation.	Low No suitable habitat present.	Presumed absent
burrowing owl (*Athene cunicularia*)	-/C/SSC	February – August	Dry open annual or perennial grassland, desert and scrubland. Uses abandoned mammal burrows for nesting.	Low No suitable habitat present No suitable mammal burrows present	Not likely to occur
Cackling goose (*Brants hutchinsii leucopareia)*	-/-/-	October – April	During breeding season, they are found in a variety of tundra habitats where they nest is near elevated water. They typically arrive in California in mid-October to its primary wintering areas in the Central Valley. Around late December, the wintering geese begin moving north and by mid-April they are in the Aleutian Islands.	Low No suitable habitat	Not likely to occur

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red-tailed hawk (*Buteo jamaicensis*)	-/-/-	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	High Individuals observed foraging. Nesting habitats present within the large trees north of Drainage 5.	Present
red-shouldered hawk (*Buteo lineatus*)	-/-/-	February – August	Forages in variety of semi-developed habitats including orchards. Forages in woodlands and riparian areas. Nests in riparian habitat but also eucalyptus groves.	High Nesting and foraging habitat present.	May occur
ferruginous hawk (*Buteo regalis*)	-/-/WL	Late Fall – Winter	Open country such as semiarid grasslands with few trees, rocky outcrops, and open valleys. Also along streams or in agricultural areas during migration.	Low Suitable wintering foraging habitat present only.	May occur in a wintering foraging capacity only.
Swainson's hawk (*Buteo swainsoni*)	-/T/-	February – October	Nests in riparian areas and in oak savannah near foraging areas. Forages in alfalfa and grain fields with rodent populations.	High Nesting and foraging habitat present.	May occur
Vaux's swift (*Chaetura vauxi)*	-/-/SSC	April – October	In California, occurs primarily as a migrant and summer resident from mid-April to mid-October; breeds from early May to mid-August. Occurs rarely and irregularly in winter in southern California. These swifts nest in cavities in a variety of trees and less frequently in artificial structures,	Low No suitable habitat present.	Presumed absent

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mountain plover (*Charadrius montanus)*	-/-/-	February – August	Nesting in shortgrass prairies and in grassy semidesert in elevations ranging from 2,100 to 10,663 feet. Feeding on mostly insects, they occasionally eat scorpions and centipedes, rarely seeds.	Low No suitable habitat present.	Presumed absent
western yellow-billed cuckoo (*Coccyzus americanus*)	T/E/-	May – September	Nest in riparian systems from British Columbia south to Mexico. Current nesting sites are almost exclusively low to mid elevation riparian woodlands with native broadleaved trees and shrubs that are at least 50 acres or more in extent. In California, habitat is often willows with cottonwood. They have not been found nesting in isolated patches, or narrow, linear patches smaller than 30-60 feet wide. But may be present in such habitats during migration or early in the breeding season.	Low No suitable habitat present.	Presumed absent
white-tailed kite (*Elanus leucurus*)	-/-/FP	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging. Nests in trees, often near a marsh.	High Suitable habitat present	May occur
California horned lark (*Eremophila alpestris actia*)	-/-/WL	February – August	Short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats. Prefer open terrain where they construct nests on the ground, often in sparsely vegetated areas.	Low No suitable habitat present.	Not likely to occur

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merlin (*Falco columbarius*)	-/-/WL	September – May	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches, near water. Clumps of trees or windbreaks are required for roosting in open country.	Low No suitable habitat present.	Not likely to occur
American kestrel (*Falco sparverius)*	-/-/-	February – August	Nesting in cavities, natural tree holes, rock crevices, and nooks in buildings and other human made structures. Nest sites are typically along wood edges or in the middle of open ground.	High Suitable habitat present	Present
yellow-breasted chat (*Icteria virens*)	-/-/SSC	February – August	In summer, inhabits riparian thickets of willow and other brushy tangles near water. Nests in willow, blackberry, and wild grape.	Low No suitable habitat present.	Presumed absent
loggerhead shrike (*Lanius ludovicianus*)	-/-/SSC	February – August	Open grassland habitats, grazed grasslands. Uses shrubs for nesting.	Moderate Suitable habitat present	May occur

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Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
song sparrow (Modesto population) (*Melospiza melodia* pop.1)	-/-/SSC	Breeding: Mid-March – Early August Year-round resident	This population has an affinity for emergent freshwater marshes dominated by tules (*Scirpus* spp.) and cattails (*Typha* spp.) as well as riparian willow (*Salix* spp.) thickets. These Song Sparrows also nest in riparian forests of Valley Oak with a sufficient understory of blackberry (*Rubus* spp.), along vegetated irrigation canals and levees, and in recently planted Valley Oak restoration sites.	Low No suitable habitat present. No recent occurrences (>100 years).	Not likely to occur
black-crowned night heron (*Nycticorax nycticorax*) [ROOKERIES]	-/-/-	February – August	Inhabits wetlands including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, canals and tidal mudflats.	Low No suitable habitat present.	Presumed absent
yellow-billed magpie (*Pica nuttalli)*	-/-/-	February – August	Builds a large, bulky nest of twigs, lined with mud, rootlets, and grasses; domed with a loose network of twigs. Nest placed 30-80 ft above ground. Prefers open oak and riparian woodland, and farm and ranchland with tall trees in the vicinity of grassland, pasture, and cropland.	Low No suitable habitat present.	Not likely to occur
purple martin (*Progne subis*)	-/-/SSC	March – September	Uncommon to rare summer resident in low-elevation woodland habitats. Absent from CA in the winter. Found in valley foothill and montane hardwood and conifer forests, and riparian habitats. Nests in old woodpecker cavities, under bridges, etc.	Low No suitable habitat present.	Not likely to occur

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
yellow warbler (*Setophaga petechia*)	-/-/SSC	February – August	(Nesting) Riparian plant associations, prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging. Also nests in montane shrubbery in open conifer forests. Frequents open to medium-density woodlands and forests with a heavy brush understory in breeding season. In migration, found in a variety of sparse to dense woodland and forest habitats.	Low No suitable habitat present.	Not likely to occur
Lawrence's goldfinch (*Spinus lawrencei*)	-/-/-	March-July	Nest and forage in coastal scrub, suburbs, ranches, pine–juniper woodlands, open oak woodlands , and streamside habitats. Feed in weedy fields and perch in ornamental cypresses or conifers. After breeding, utilize desert arroyos, river floodplains, mesquite bosques, roadsides, cultivated fields, orchards, gardens, and park habitats.	Low No suitable habitat present.	Not likely to occur
least Bell's vireo *(Vireo bellii pusillus)*	E/E/-	end of March – late July to September	Dense brush, mesquite, willow-cottonwood forest, streamside thickets, and scrub oak, in arid regions but often near water. Historically widespread throughout the Central Valley and Sierra foothills and Coastal Ranges. Now essentially extirpated from the Central Valley. Small range in southern CA and Baja CA.	Low No suitable habitat present.	Not likely to occur

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
yellow-headed blackbird (*Xanthocephalus xanthocephalus*)	-/-/SSC	February – August	Breed in wetlands in prairies, mountain meadows, and shallow areas of marshes, ponds and rivers. Nest in cattails, bulrush, or reeds often alongside red-winged blackbirds. Forage in grasslands, croplands, or savannah.	Low No suitable habitat present. No recent occurrences (>100 years).	Not likely to occur
MAMMALS					
pallid bat (*Antrozous pallidus*)	-/-/SSC	N/A	Forages in grasslands, shrublands, deserts, forests, and woodlands. Most common in open, dry habitats. Roosts in rock crevices, caves, tree hollows, and buildings. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.	Low No suitable habitat present.	Presumed absent
northern California ringtail (*Bassariscus astutus raptor)*	-/FP/-	Resident	Most carnivorous, they feed on insects, lizards, and small mammals. They prefer rocky areas with water such as caved, riparian canyons, and mine shafts. During the day they hide in hollows of trees or logs.	Low No suitable habitat present.	Presumed absent
San Joaquin long-tailed weasel (*Mustela frenata xanthogenys)*	-/-/-	Resident	A small burrowing mammal that is primarily nocturnal but may be active at night. Feeding mostly on small rodents like mice and voles. Females produce one litter of three to nine kits per year during the spring.	Low No suitable habitat present.	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
riparian woodrat -San Joaquin Valley (*Neotoma fuscipes riparius)*	E/-/-	Resident	A rather large rodent, their hind feet are white rather than dusky. Building stick nest lodges near rivers and streams in riparian woodland habitats. Feeding on leaves, fruit, twigs, flower, nuts and fungi.	Low No suitable habitat present.	Presumed absent
riparian bush rabbit (*Sylvilagus bachmani riparius)*	E/E/-	Resident	Restricted to native riparian habitat along the San Joaquin River and its tributaries. Typically found among old-growth riparian forests dominated by valley oak with a thick understory and riparian communities dominated by willows (*Salix* spp.) with blackberry (*Rubus* spp.) and wild rose (*Rosa californica*).	Low No suitable habitat present.	Presumed absent
American badger (*Taxidea taxus*)	-/-/SSC	Resident	Shrub, forest, and herbaceous habitats with friable soils to dig burrows. Need open, uncultivated ground. Prey on fossorial mammals.	Low No suitable habitat present.	Presumed absent
San Joaquin kit fox (*Vulpes macrotis mutica*)	E/T/-	Resident	Annual grasslands or grassy stages with scattered shrubby vegetation. Needs loose soils for burrowing.	Low No suitable habitat present.	Presumed absent

Table 2

Special-Status Species for the Salida, Ripon, Vernalis, Stockton West, Peters, Lathrop, Stockton East, Manteca, and Avena 7.5 Minute Quadrangle Maps[1]

Common Name/Scientific Name	Status (Fed/State/ Other)[2]	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**

1. Special-status plants and animals as reported by the California Natural Diversity Data Base, California Native Plant Society, and other background research December 2024
2. Order of Codes for Plants - Fed/State/CNPS
   Order of Codes for Animals - Fed/State/CDFW

Codes:
E - Federally/State Listed as an Endangered Species
T - Federally/State Listed as a Threatened Species
C - Species listed as a Candidate for Federal Threatened or Endangered Status
CE - Species listed as a Candidate for State Endangered Status
CT - Species listed as a Candidate for State Threatened Status
SSC - California Species of Special Concern
WL – CDFW Watch List
R - Rare
D - Delisted
CP- California protected
FP - State Fully Protected

1B - California Native Plant Society considers the plant Rare, Threatened, or Endangered in California and elsewhere.
1A - CNPS Plants presumed extinct in California.
2 - CNPS Plants Rare, Threatened or Endangered in California, but more common elsewhere.
3 - CNPS Plants on a review list to find more information about a particular species.
4 - CNPS Plants of limited distribution - a watch list.

ATTACHMENT 3

SITE PHOTOGRAPHS



1. Facing west, the photo shows the northern intermittent drainage (Drainage 5); there was 0-6inches of water present during the time of the December 11, 2024, site assessment. The large trees along the northern bank of this feature can be seen in the middle-ground.



2. Facing east, the photo shows Drainage 5 along with the large trees to the left of the photo, the gravel access road in the middle, and the seasonal wetland to the right of the photo.



3. Facing southwest, the photo shows the west end of the seasonal wetland: this portion of the feature is outside of the Project Area boundary. The neighboring open grassland is observed in the background of the photo.



4. Facing north, the photo shows the stand of large trees adjacent to the northern boundary of the Project Area along the bank of Drainage 5. Although these trees are outside of the Project Area boundary, their proximity is significant.



5. Facing west, the photo shows the seasonal wetland and the transition into the annual grassland.



6. Facing west, the photo shows the bottom of the seasonal wetland where the vegetation was dominated by saltgrass (*Distichlis spicata*). The photo also represents one of the wetland delineation data samples taken during the site assessment.



7. Facing west, the photo shows the gravel access road along with the western boundary of the Project Area.



8. Facing southwest, the photo shows the western portion of the ephemeral drainage which bisects the Project Area east to west.



9. Facing west, the photo shows the eastern portion of the ephemeral drainage: the transition to annual grassland is visible to the right of the image.



10. Facing northwest, the photo shows the annual grassland located within the northern portion of the Project Area. Again, the stand of large trees along the northern boundary is in the background.



11. Facing north, the photo shows the annual grassland along the eastern boundary of the Project Area.



12. Facing the north, the photo shows the ruderal habitat located in the eastern portion of the Project Area.



13. Facing southeast, the photo shows large ornamental trees and the developed hospital buildings.



14. Facing west, the photo shows several large native redwoods located within the developed portion of the Project Area.



15. Facing west, the photo shows nectar producing plants such as bottlebrush (*Callistemon)*.



16. Facing east, the photo shows the developed parking lot along with solar structures and buildings in the background.



17. Facing west, the photo shows the open developed parking area along the western boundary of the Project Area.



18. Facing north, the photo shows the western boundary of the Project Area.



19. Facing east, the photo shows the southern boundary of the Project Area along West Yosemite Avenue. Several ornamental trees are visible in the middle ground.



20. Facing north, the photo shows the eastern boundary within the developed habitat along with a large elm tree (*Ulmus* sp.).



21. The photo shows a red-tailed hawk perched atop a eucalyptus tree within the stand of large trees adjacent to the northern boundary of the Project Area.



22. The photo shows the American kestrel observed during the site assessment.