

BIOLOGICAL ASSESSMENT

OF THE

TRACT 6050, APN 556-050-11

CLOVIS, FRESNO COUNTY, CALIFORNIA



ARGONAUT
ECOLOGICAL
CONSULTING, INC.



September 1, 2016

APPENDIX C

BIOLOGICAL ASSESSMENT

OF THE

Tract 6050

Clovis, Fresno County, California

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Argonaut Ecological, Inc. conducted a biological review of the Tract 6050 northwest of the intersection of N. Clovis Avenue and Shepherd Avenue in Clovis, California. The parcel totals approximately 39.1 acres (See Figure 1). This report presents the findings of a field review conducted to assess the biological resources present and potential biological impacts of site development.

1.1 STUDY OBJECTIVES

This review identifies biological resources within the Study Area and describes the suitability of the Study Area to support species of special concern. This review does not, nor was it designed to include exhaustive surveys for special status plant and animal species. Instead the review included a field survey designed to determine the potential for the site to support habitat that may be used or occupied by special status plant and animal species. The study also is designed to determine the approximate extent of potential wetland habitat on the site. “Wetland habitat” includes those areas that may be considered both “Waters of the U.S., as defined by the U.S. Army Corps of Engineers, and/or wetlands as defined by the Army Corps and the State of California. As described in Section 1.2, wetlands are a subset of “Waters of the U.S.” under the Federal Clean Water Act.

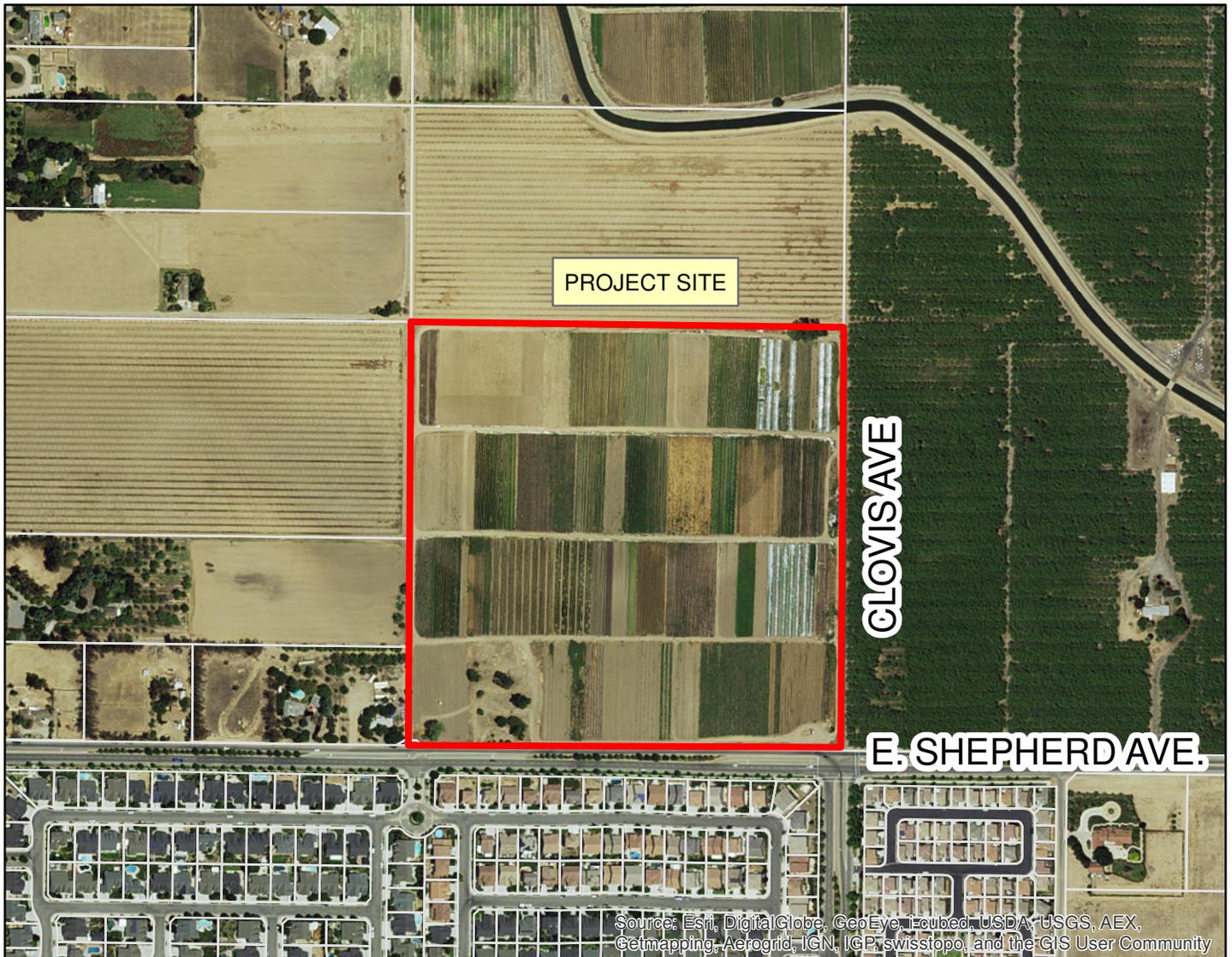
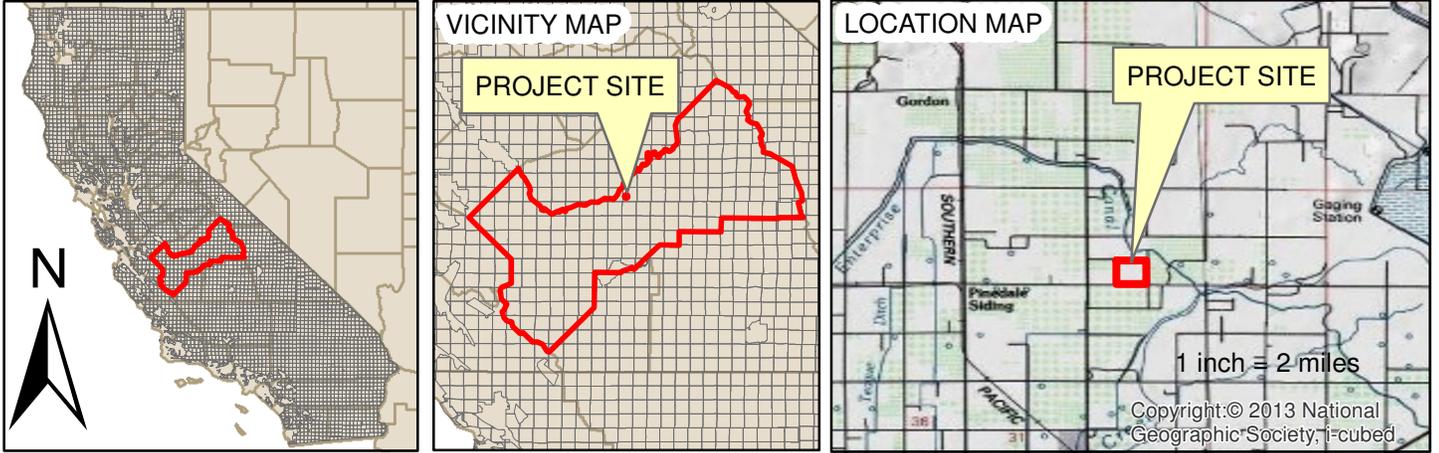
This report can be used to assess the potential effects on biological resources if the current land use changes. The specific type of land use change would dictate the type of regulatory approvals or permits required. This review focused on the extent of the Waters of the U.S., including any wetlands that would potentially be subject to regulation under Section 404 of the Clean Water Act or by the State of California Wetland Policy (Resolution 2008-0026) which is designed to protect all waters of the State, including wetlands dredge and fill discharges. These reviews also focused on assessing and identify any potential impacts site development may have on species protected by the Federal Endangered Species Act or protected under the California Environmental Quality Act.

1.2 REGULATORY JURISDICTION AND BACKGROUND

Regulatory jurisdiction over biological resources within the Study Area is shared by several agencies. The following is a brief description of the primary agencies and their respective jurisdiction.

VICINITY AND LOCATION MAP

CLIENT NAME: 6050 Enterprise, LP PROJECT NAME: Tract 6050,
 PROJECT LOCATION: Section 20, T. 12S., R. 21E., Mount Diablo Base and Meridian
 City of Clovis, Fresno County California,



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

 Approximate boundary (+/-39.1AC.)

1 in = 500 ft

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Wetland Protection

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Army Corps) and the U.S. Environmental Protection Agency regulates placement of fill into the Waters of the U.S under Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbor Act. The term “Waters of the U.S.” Include wetlands, special aquatic sites, and other non-wetland waters such as bays, rivers, and lakes. The jurisdictional limit of tidal Waters of the U.S. under Section 10 of the Rivers and Harbor Act is the Mean High Water line. However, Section 404 of the Federal Clean Water Act extends the jurisdictional limit to the High Tide line. The High Tide Line is the highest elevation of the tide in a normal year, excluding storm events. Wetlands adjacent to the Mean High Water line or High Tide Line are also under the USACE jurisdiction. For purposes of this document, the term “Waters of the U.S.” is legally defined under Section 404 of the Federal Clean Water Act. It includes seasonal drainages that have a defined channel and support wetland species, but lack positive indicators of wetland soils.

As previously stated Waters of the U.S. includes wetlands. The Army Corps defines wetland as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (Environmental Laboratory 1987). Seasonally inundated areas that meet the criteria of all three wetland parameters as defined in the recently issued Wetland Delineation Manual for the Arid West (USACE 2006) are also considered jurisdictional wetlands. However, drainage ditches excavated on dry land that do not convey flows from historical streams and/or channels are usually considered non-jurisdictional as defined in Title 33 CFR Part 328.3 (a). A determination of whether any particular area is considered non-jurisdictional varies on a case-by-case basis.

Since 2001, the U.S. Supreme Court found in several court rulings that regulation of isolated intrastate waters by the Army Corps under the Migratory Bird Rule and other arguments is unconstitutional and impinges on state rights to regulate intrastate commerce. The decisions, which include both *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) and *Rapanos v. United States* (Rapanos) limited the scope of federal jurisdiction under the Federal Clean Water Act and excluded many California wetlands from federal regulation.

In May 2015 the U.S. Environmental Protection Agency and the U.S. Army finalized the “Clean Water Rule” with the intent of clarifying what constitutes a waters of the U.S., and presumably, acts to more precisely define and making permitting more predictable, thus less costly and easier. According to the U.S.EPA, the rule was not intended to create any new permitting requirements for agriculture and maintains all previous exemptions and exclusions. However, many individuals in the regulated community disagree. The new Clean Water Rule went in effect at the end of August, 2015. On October 9, 2015 the Sixth U.S. Circuit Court of Appeals issued a nationwide stay of the rule pending further court action. Therefore, currently, application of the Clean Water Rule is not enforced and the current regulatory definition of waters of the U.S. remains.



Executive Order 11990

Executive Order 11990 (signed May 24, 1977) directs all federal agencies to refrain from assisting in or giving financial support to projects that encroach on publicly or privately owned wetlands. It further requires that federal agencies support a policy to minimize the destruction, loss, or degradation of wetlands. A project that encroaches on wetlands may not be undertaken unless the agency in question has determined that: (1) there are no practicable alternatives to such construction; (2) the project includes all practicable measures to minimize harm to wetlands that would be affected by the project; and (3) the resulting impact will be minor.

The Executive Order, the Order does not apply to issuance by Federal Agencies of permits, licenses, or allocation to private parties for activities involving wetland on non-Federal property. Executive Order 1190 is also not intended to be applied on a project by project basis. Section 1 of the order states the following: *“This Order does not apply to the issuance by Federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-Federal property.”*

California State Water Resources Control Board

Since 1993, California has had a Wetlands Conservation Policy (a.k.a., the Executive Order W-51 59-93). Commonly referred to as the *No Net Loss Policy* for wetlands, this order establishes for the State the mandate that it develops and adopts a policy framework and strategy to protect the State’s wetland ecosystems.

The State Water Board’s Policy is only proposed and no new regulatory authority has been granted to the State of California to regulate wetlands other than what currently exists. Bring a uniform regulatory approach between the State Water Resources Control Board, other agencies involved in aquatic resource protection and the federal Clean Water Act Section 404 program for dredge and fill discharges by establishing procedures and criteria for the application, review and approval of permits to discharge dredged or fill material to waters of the State.

Under the State’s 401 Water Quality Certification and Wetland Program, the state provides certification for any proposed fill of waters of the U.S.. Although the State has not historically regulated fills of wetlands/waters of the state, they have boldly asserted they have the regulatory authority to regulate fills of isolated wetlands/waters under the Porter-Cologne Water Quality Control Act.

Under California's Porter-Cologne Water Quality Control Act (Porter-Cologne), the regional boards regulate the "discharge of waste" to "waters of the state". All parties proposing to discharge waste that could affect waters of the state must file a report of waste discharge with the appropriate regional board. The regional board will then respond to the report of waste discharge by issuing waste discharge requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge.

Both of the terms "discharge of waste" and "waters of the state" are broadly defined in Porter-Cologne, such that discharges of waste include fill, any material resulting from human activity, or any other "discharge" that may directly or indirectly impact "waters of the state". While all "waters of the United States" that are within the borders of California are also "waters of the



state", the converse is not true - "waters of the United States" is a subset of "waters of the state."

It is important to note that, while Section 404 permits and 401 certifications are required when the activity results in fill or discharge directly below the ordinary high water line of waters of the United States, any activity that results or may result in a discharge that directly or indirectly impacts waters of the state or the beneficial uses of those waters are subject to waste discharge requirements (WDRs). In practice, most regional boards rely on applications for 401 certification to determine whether WDRs need also be issued for a proposed project.

Listed Protected Species and Habitat Protection

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), Bald and Golden Eagle Protection Act (16 United States Code [USC] Section 668), and Federal Endangered Species Act (FESA; 16 USC § 153 *et seq.*). Projects that would result in "take" of any federally-listed threatened or endangered species are required to obtain authorization from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The authorization process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

"Take" under the federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Candidate species" do not have the full protection of FESA. However, the USFWS advises project applicants that it is prudent to address these species since they could be elevated to "listed status" prior to completion of projects with long planning or development schedules.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), formally known as the California Department of Fish and Game, is a Trustee Agency with responsibility under the CEQA for commenting on projects that could impact plant and wildlife resources. In addition, pursuant to the Fish and Game Code Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species. The California Fish and Game Code also provide authority for the CDFW to regulate projects that could result in the "take" of any species listed by the State as threatened or endangered (Section 2081).

Perennial and intermittent streams also fall under the jurisdiction of CDFW pursuant to Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements). The CDFW's jurisdiction over work within the stream zone includes, but is not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake. Prior to issuing a 1601 or 1603 Streambed Alteration Agreement, the CDFW must demonstrate compliance with CEQA. In most cases, CDFW relies on the CEQA review performed by the local lead agency. However, in cases where no CEQA review was required for the project, CDFW would act as the lead agency under CEQA.



The CDFW also has authority for protection state-listed species issues Section 2081 Incidental Take Permit if a project has the potential to negatively affect state-protected plant or animal species or their habitats, either directly or indirectly. Protected species include those “listed” by the state as endangered or threatened. Besides listed species, there are other categories of species protection, including “fully protected” and California Species of Special Concern (CSC). Adverse impacts to species that have the “fully protected” designation are prohibited.

Under current California Fish & Game Code (FGC Section 3503) “it is unlawful to take, possess or needlessly destroys the nest or eggs of any bird...” Birds of prey (falcons, hawks, owls and eagles) get extra protection under the law (FGC Section 3503.5). To help clarify the state nesting bird laws, California Department of Fish and Wildlife (CDFW) proposed to “clarify” its regulations, and in doing so, would expand regulatory reach to all nesting birds. Following a lengthy comment period, on August 5, 2016 CDFW issued a notice that they were not going to proceed with this proposed regulation (Notice of Decision Not Proceed for Proposed Nest Regulations (Section 681, Title 14, CCR).

California Endangered Species Act

The California Endangered Species Act (CESA) provides protection for candidate plants and animal species as well as those listed as rare, threatened, or endangered by the California Department of Fish and Game (CDFG). This act prohibits the take of any such species unless authorized. Section 2081 authorizes the state to issue incidental take permits. The state definition of take applies only to acts that result in the death of or adverse impacts to protected species.

California Environmental Quality Act

The CEQA Guidelines require review of projects to determine their environmental effects and to identify mitigation for significant effects. The Guidelines state an effect may be significant if it affects rare and endangered species. Section 15380 of the Guidelines defines *rare* to include listed species, and allows agencies to consider rare species other than those designated as State or federal threatened or endangered, but that meet the standards for rare under the federal or State endangered species acts. On this basis, plants designated as rare by non-regulatory organizations (e.g., California Native Plant Society), species of special concern as defined by CDFW, candidate species as defined by USFWS and other designations may need to be considered in CEQA analyses.

City of Clovis

The Study Area falls within the limits of the City of Clovis, California. The City is responsible for all local land use decisions within its jurisdictional boundary. For any project review, the City would serve as the local land use agency as defined by CEQA.



The following section describes the methods used to assess the Study Area, which includes a combination of data review and evaluation, field studies, and aerial photograph interpretations.

2.1 DATA AND LITERATURE REVIEW

The approximately 39.1-acre project area is located within an historically agricultural area. The following documents and/or sources were used in preparing this report.

- U.S. Department of Agricultural, Natural Resources Conservation Service, Soil Survey of Fresno Area (Soils mapper).
- Aerial photography (Google Earth®, Bing®, and historic aerials dating back to 1983).
- The California Department of Fish and Game, California Natural Diversity Database (CNDDDB/RareFind - Recent version with updates).
- U.S. Fish and Wildlife Service National Wetland Inventory Map
- U.S. Geologic Survey, Historic topographic Map, Clovis Quadrangle, 1919, University of Texas, Austin, Perry-Castañeda Map Collection

2.2 AERIAL PHOTOGRAPHY AND WETLAND MAPPING

A series of aerial photographs of the Study Area were reviewed to assess changes in land use over time, dating back to 1998. Specifically, black and white and color aerial photographs ranging in resolution from 0.5 meters to 1.0 meters. We also reviewed wetland mapping and the aerials to determine if the Study Area recently supported wetlands.

2.3 FIELD RECONNAISSANCE

Prior to conducting a site review, we reviewed the California Natural Diversity Database/Rarefind (CNDDDB/Rarefind). The CNDDDB includes records of reported observations for special status plant and animal species. A search radius that included two USGS quadrangles was performed. The results of the CNDDDB/RareFind were reviewed to identify which species would present the greatest likelihood of being present on the site based on the distance of the site from known records and the similarity in habitats between the Study Area and the habitats that the species required and/or preferred. Also prior to the field work, a high resolution aerial was reviewed to determine if there are any areas on the site that appear to support waters of the U.S., or other water features.

On August 3, 2016 a site review was conducted. The site was walked in meandering transects for full coverage. The primary objective of the field work was to identify any areas on the site, or immediately adjacent to the site, that potentially supports habitat for sensitive species or aquatic habitat.

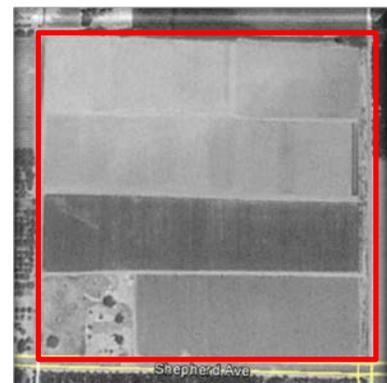


The following section describes the physical (i.e., topography, drainage, and soils) and the biological resources present, or potentially present, within the Study Area. Section 3.1 describes the physical components (i.e., soils, hydrology, etc.) of the Study Area. The physical components strongly influence the types of plants and animals present. Section 3.2, is an overview of the resources and habitats present within the Study Area, including descriptions of the specific biological resources observed. The information presented is not an exhaustive inventory of plants or animals present. Rather it is designed to provide sufficient information to identify what, if any, biological resources are present that may be considered unique, sensitive, or protected by current law and the potential impacts to those resources if the site is developed.

3.1 PHYSICAL RESOURCES AND ELEMENTS

Land Use and Habitat Types

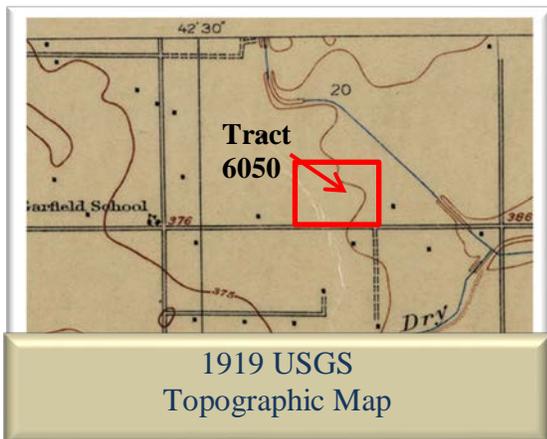
The property was in full agricultural production since at least 1998 till 2015 in row crops. There is home parcel within southwest corner of the property that has been there since at least 1998.. Between 1998 and 2015 the site appears to have been in continuous agricultural production with periodic years when the ground was fallow. Cropping patterns changed but at no time was the land taken out of production.



Tract 6050
1998

Site Topography

The property lies within the Central Valley. The Study Area site has historically been nearly level. Historically elevations within the area ranged from 372 ft msl just west of the Enterprise Canal (within the Study Area) to 390 msl just west of Minniwawa Avenue based on a 1919 topographic map. Current conditions do not appear to have significantly changed.



1919 USGS
Topographic Map

Drainage and Watershed and Wetlands

The project site historically drained to the southeast, toward the direction of Dry Creek. There is somewhat of a road ditch fronting the property along Shepherd Avenue. A query of the National Wetland Inventory Map does not show any stream, creeks, or wetland on or near the Study Area (within roughly a ½ mile) other than Dry Creek to the southeast. There are no ephemeral drainages or creeks in this area of the City, nor were there any mapped on a 1919 topographic map (see previous) other than the Enterprise Canal and Dry Creek. Over many decades portions of Dry Creek has been realigned, channelized and piped underground. Dry Creek is managed by Fresno Metropolitan Flood Control District as part of their responsibilities to provide stormwater and flood flow conveyance. The Enterprise Canal is used for irrigation delivery and some storm water conveyance/storage as needed.

Climate/Soils

Climate in the Study Area is typical of the central San Joaquin Valley with summers that are long, hot, and dry and winters that are cool and mild. Rainfall in the winter averages approximately 10.9 inches per year, falling mainly between November and April (Western Regional Climate Center, 2004).

The Natural Resources Conservation Service (NRCS) soil survey mapped five types of soils within the Study Area. Table 1 shows the mapped soil units. Only one mapped soil is considered predominantly hydric (Alamo clay). This soil type occurs in the extreme northwest corner of the Study Area and only makes up 0.2% of the site. A hydric soil is readily formed under ponded condition and is a strong indicator of areas experiencing prolonged ponding (e.g., wetlands). The presence of mapped hydric soils may indicate that the soils could support wetlands; but, there is no a direct correlation. Wetlands can occur in areas where no hydric soil are mapped and may be absent in areas mapped as hydric soils.

Table 1 Tract 6050 Study Area - Mapped Soil Units			
Soil Series	Map Symbol	Hydric Soil	% of Study Area
Alamo clay	AM	Y	0.2
Exeter sandy loam	ES	N	14
Hanford fine sandy loam, hard substratum	HR	N	8.6
Tujunga loamy sand, 0 to 3 % slopes	TZBA	N	6.3
Visalia sandy loam, 0 to 3% slopes	VaA	N	63

3.2 RESULTS OF SITE INVESTIGATION

Our field investigation confirmed the accuracy of the U.S. Fish and Wildlife Service's Wetland Inventory Map. No wetlands, waters, or any aquatic habitat is present within the Study Area. The site is dominated by an upland plant community that is indicative of non-native grassland/agricultural land.

Habitats and Waters of the U.S. and Waters of the State

The entire site is dominated by a non-native grassland habitat intermixed with some agricultural crop types (wheat, barley, oats, etc.). The plant community includes mustard, rip gut (*Bromus mollis*), wild oats (*Avena* sp.), filaree (*Erodium* sp.), fiddleneck (*Amsinckia* sp.), and numerous other upland grasses. There are several old orchard trees planted along the northern edge of the site and that persist on the east side of the site.

Based on a review of historical records, readily available wetland mapping databases, and a site review, there are no waters of the U.S., including wetlands or waters of the state present within the Study Area.

Special Status Species

A search of the California Natural Diversity Database (CNDDDB, 2016) was reviewed to determine which special status species could be present within the Study Area. Table 2 provides a summary of the species identified in the CNDDDB that would have the highest likelihood of being present based on habitat requirements. Species that are dependent on the presence of seasonal water bodies, such as vernal pool or other seasonal wetlands, for breeding or completion of their life cycle are not present because no wetland, vernal pools, or seasonal wetland are present within the Study Area. The species most likely potentially present is the Western burrowing owl. This species relies on using underground burrows excavated by ground squirrels, culverts, or other manmade structures to nest. The site does support a ground squirrel population and may be considered suitable habitat. The potential for any other species of concern to be present or to use the site is extremely low. There is no critical habitat for any listed species present within or near the Study Area.

Although the database did not include migratory birds/ and raptors, such species could use the site to forage for food or nest in large trees in the southwest corner of the Study Area. No nests were observed but raptors could occupy the trees during future breeding periods.

**Table 2 Tract 6050
Summary of Special Status Species Impacts**

<i>Common Name</i>	<i>Scientific Name</i> ¹	<i>Status</i>	<i>Habitat Present</i> ²	<i>Occurrence in the Study Area</i> ³
Birds				
Western burrowing owl	<i>Athene cunicularia</i>	MB	No	Potentially Present: Some suitable habitat may be present.
Swainson's hawk	<i>Buteo swainsoni</i>	FT	Yes	Potentially Present: Hawk may use the farmland for foraging and potentially nesting
Mammals				
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE,ST	No	Absent. No suitable habitat present. Recurring disking precludes occupation.
Reptiles				
Blunt-nosed leopard lizard	<i>Gambelia silva</i>	FE, SE	No	Absent. Occurs in valley and foothill grassland, brush scrubland, habitat. Burrow in pond loam in sparsely vegetated areas. The site does not support suitable habitat required by this species.
Invertebrates				
Valley elderberry longhorn beetle	<i>Desocerus californicus dimorphus</i>	FT	No	Absent. This species is dependent upon the of mature elderberry species (<i>Sambucus sp.</i>). No elderberry shrubs are present.

1 Status= Listing of special status species, unless otherwise indicated

CE: California listed as Endangered

CT: California listed as Threatened

FE: Federally listed as Endangered

FT: Federally listed as Threatened

MB: Migratory Bird

3 Definition Of Occurrence Indicators

Potentially Present: Species recorded in area and suitable habitat appears to be present.

Absent/Likely Absent: Species not recorded in study area and/or habitat requirements not met

4 CNDDDB = California Natural Diversity Database provided by CDFG 2016

There may be numerous migratory birds present within the Study Area at any given time. Suitable nesting habitat is present for small migratory bird species. This list does not include all the migratory birds potentially present.

There is no aquatic habitat (creeks, ponds, ditches, seasonal wetlands, etc.), present within the Study Area, therefore, any species that requires aquatic habitat for breeding or nesting is not included in this table.

3.3 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The Tract 6050 Study Area has been in continuous intensive agricultural production since at least the 1990s and was still production up until sometime between 2015 and 2016. The Study Area also does not support any aquatic habitat, wetlands, or waters of the U.S., nor is there any historical evidence to suggest the property supported any waters of the U.S. and/or wetland habitat. No evidence of any raptor nest(s) was observed. However, there are a few potential nest trees located in the southwest corner of the property and the ground nesting burrowing owl could occupy the site at some point in the future. We did not observe any evidence of current occupation by the owl.

Our recommendations for protection of nesting birds if this property is developed is as follows:

- Conduct a preconstruction survey for burrowing owl or signs of owl occupation within 30 days prior to ground disturbance, regardless of the time of year construction commences. If evidence of current occupation is discovered, the biologist should implement passive relocation in accordance with the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation¹
- If any trees or shrubs are to be removed during the nesting season (commences approximately February 1 and ends around August 31th) then a preconstruction survey should be conducted within 30-15 days of commencement of construction. This survey can be performed concurrent with the burrowing owl survey.

¹ State of California, Natural Resources Agency, Department of Fish and Game, March 7, 2012