
APPENDIX I

Biological Resources Reconnaissance Survey and CEQA Analysis

This page intentionally
left blank.

Report of Findings

Biological Resources Reconnaissance Survey and CEQA Analysis

Oliveira Dairy Expansion Project

Location:

4235 Oak Avenue

Merced, CA 95340

37°16'47.91"N, 120°33'51.48" W

Permit Sought: Conditional Use Permit Application No. CUP16-005

Prepared for: Environmental Planning Partners, Inc.

3110 Gold Canal Drive

Rancho Cordova, CA 95670

Prepared by: Padre Associates, Inc. 555 University Avenue, Suite 110

Sacramento, CA 95825

Dates of Biological Resources Reconnaissance Survey: August 2, 2018

Date of Report: August 27, 2018

CONTENTS

1 Summary	1
2 Introduction	1
2.1 Purpose of the Study.....	1
2.2 Applicable Laws and Regulations	1
2.3 Project Location	4
2.4 Project Description	4
3 Methods and Survey Limitations	5
3.1 Methods	5
3.2 Limitations	6
4 Survey Results	6
4.1 Physical Characteristics	6
4.2 Vegetation and Wildlife	6
4.3 Sensitive Habitats, Special-Status Plants, and Special-Status Wildlife	8
4.4 Potentially Jurisdictional Waters/wetlands	20
5 Project Impact Analysis	20
5.1 Standards of Significance	21
5.2 Impacts to Biological Resources	21
6 References	32

Figures

Figure 1	Regional Location
Figure 2	Project Site Location
Figure 3	Sensitive Species Near Oliveira Dairy Expansion Project
Figure 4	Site Photographs

Appendices

Appendix A	Biological Resource Policies from the 2030 Merced County General Plan
Appendix B	Species Lists

1 SUMMARY

The existing Oliveira Dairy and the site of the proposed expansion are located on an approximate 22-acre portion of a 290-acre site. Conditional Use Permit CUP16-005 would expand the dairy to house 4,400 cows. This would represent an increase of 2,182 animals from existing numbers. The proposed dairy expansion project would include construction of supporting buildings and structures, including two new shade barns, two new freestall barns, and a new milking parlor. Construction of the proposed structures would convert approximately seven acres of cropland to active dairy facilities on APN 059-190-025, -026 and -027.

2 INTRODUCTION

2.1 PURPOSE OF THE STUDY

The purpose of this report is to describe the findings of a biological resources reconnaissance survey and California Environmental Quality Act (CEQA) Analysis conducted for the Oliveira Dairy Expansion project in Merced County, California. The Biological Reconnaissance Survey was conducted August 2, 2018 to describe and map biological resources at the project site and surrounding areas, and determine whether suitable habitat is present for special status or sensitive species. The CEQA Analysis included a review of current biological resources databases, previous studies and current conditions to evaluate the project's potential impact to biological resources pursuant to CEQA standards.

2.2 APPLICABLE LAWS AND REGULATIONS

Relevant federal, state and local regulations that govern the biological resources of the project area are briefly explained in this section.

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

According to CEQA Guidelines §15380, a special-status species is a plant or animal species that is:

Listed endangered, threatened, or a candidate species under the federal Endangered Species Act (FESA) (Consultation Code: 08ESMF00-2018-SLI-2954);

- Listed endangered, threatened, or a candidate species under the California Endangered Species Act (CESA);
- Listed as a species of special concern by the California Department of Fish and Game (CDFW) or the Department of Forestry (CDF);
- A plant species that is on the California Native Plant Society's (CNPS) List 1 or 2; and/or

- Considered rare, threatened, or endangered under CEQA Guidelines 15380(d) as the species survival is in jeopardy due to loss or change in habitat.

In addition, species protected by specific federal or state acts or local ordinances are considered special-status species.

FEDERAL

Endangered Species Act. FESA was passed to protect species threatened with extinction and provides measures to prevent and alleviate the loss of species and their habitats. The FESA prohibits take of a listed species, as well as trade in endangered or threatened species. If potential exists for a proposed project to adversely affect federally listed, proposed, or candidate species, then consultation with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) is required.

If there is no federal involvement in a proposed project, the applicant must consult with USFWS and/or NMFS under Section 10 of the FESA. Section 10 of the FESA allows USFWS and/or NMFS to issue a permit for take of a listed species incidental to, and not for the purpose of, carrying out an otherwise lawful activity. The action may not jeopardize the continued existence of a listed species or its critical habitat. A Habitat Conservation Plan (HCP) must be prepared and approved by USFWS prior to issuing a permit under Section 10.

Migratory Bird Treaty Act (MBTA) of 1918. The MBTA protects migratory birds and their nests. Under the Act, it is unlawful to take, import, export, possess, buy, sell, purchase, or barter any migratory bird. Feathers or other parts, nests, eggs, and products made from migratory birds are also covered by the MBTA. Take is defined as pursuing, hunting, shooting, poisoning, wounding, killing, capturing, trapping, or collecting.

Section 404 of the Clean Water Act. The U.S. Army Corps of Engineers (ACOE) and the U. S. Environmental Protection Agency (EPA) regulate the discharge of dredge and fill material into jurisdictional “waters of the United States” (WoUS) and wetlands under Section 404 of the Clean Water Act.

The Corps is responsible for the issuance of permits for the placement of dredged or fill material into WoUS pursuant to Section 404 of the Clean Water Act (33 USC 1344). As defined by the Corps at 33 CFR 328.3(a)(3), WoUS are those waters that are used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; interstate waters including interstate wetlands; and, territorial seas.

The Corps asserts jurisdiction over traditional navigable waters (TNW) and adjacent wetlands. The Corps will have jurisdiction over a water body that is not a TNW if that water body is “relatively permanent.” Jurisdiction will be asserted over tributaries that are not relatively permanent on a case-by-case basis applying a “significant nexus” analysis to determine whether there is a significant nexus between the tributary and a TNW.

Under Corps and EPA regulations, wetlands are defined 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. Wetlands generally include swamps, marshes, bogs, and similar areas.”

In non-tidal waters, the lateral extent of Corps jurisdiction is determined by the ordinary high water mark (OHWM) which is defined as the: “...line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” (33 CFR 328[e]).

STATE OF CALIFORNIA

California Endangered Species Act. CESA was enacted to protect fish, wildlife, and plant species in danger of, or threatened with, extinction in the State of California (Fish and Game Code §2051). CESA prohibits “take” of a state-listed species. Take is defined as “hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill” (Fish and Game Code §86).

Unlawful Destruction of Nest or Eggs, Fish and Game Code Section 3503. This section of the California Fish and Game Code prohibits the take, possession or needless destruction of nests or eggs of birds.

Fully Protected Species, Fish and Game Code Sections 3511, 4700, 5050, and 5515. This section of the California Fish and Game Code provides particular and special state protection to a list of 37 wildlife species and prohibits take or possession “at any time” with few exceptions and the CDFW cannot authorize incidental take of fully protected species.

Migratory Bird Treaty Act, Fish and Game Code Section 3513. This section of the California Fish and Game Code complies with and strengthens state support for the MBTA. The section makes it unlawful to take or possess any nongame migratory bird or part of any such migratory nongame bird except under the special provisions in the federal MBTA.

Section 1600 Lake/Streambed Alteration Agreement (LSAA). The CDFW also regulates activities that may impact streambeds or other wetland areas. A LSAA with the CDFW is required to authorize work in a streambed or lake that would substantially change or use any material from the bed, bank or channel within jurisdictional areas.

MERCED COUNTY

Merced County Regulations

The unincorporated lands of Merced County fall under the jurisdiction of the County. The Land Use Element and the Natural Resource Element of the 2030 Merced County General Plan contain goals, objectives, and policies pertaining to biological resources of Merced County (Merced County, 2013). Goals, objectives, and policies that are relevant to biological resources are presented in Appendix A.

2.3 PROJECT LOCATION

The existing Oliveira Dairy and the site of the proposed expansion are located on an approximately 22-acre portion of 290-acre facility on seven parcels in an unincorporated area of Merced County on the southside of Oak Avenue. The project's location is within the central California region (see Figures 1 and 2). The dairy facility is located on one parcel, identified as Merced County Assessor's Parcel Numbers (APN) 059-190-026. APN 059-190-026 is 28 acres in size and is the site of the dairy facility that includes freestall barns, shade structures, feed storage area, maternity barn, open corrals, milking parlor, manure storage area, hay barn, and commodity barn. Seven acres of cropland within APN 059-190-025, 026, and -027 will be converted to the proposed dairy expansion. The project site is located in Section 32, Township 7 South, Range 13 East, Mount Diablo Base and Meridian; 37°16'47.91"N, 120°33'51.48" W in the Atwater USGS 7.5-minute topographic quadrangle.

2.4 PROJECT DESCRIPTION

The project consists of the expansion of an existing dairy facility located in rural Merced County west of the City of Merced. The project consists of the construction of new buildings and structures to support the proposed dairy expansion. These include two new shade barns, two additional freestall barns, and a new milking parlor at an existing dairy facility located in rural Merced County. The site of the proposed expansion is an approximate 22-acre portion of the existing farm which comprises approximately 290 acres within seven parcels.

Approximately 249 acres of the project site are fields currently used for the production of crops and application of manure process water on parcels owned by the dairy operator

(APN 059-190-025, 059-190-027, 059-190-072, 059-190-073, 059-190-074, and 059-220-019). To allow for expansion of the dairy, the applicant has submitted an application for issuance of a new Conditional Use Permit (CUP 16-005) from Merced County. The new CUP would expand the dairy to house 2,500 milk cows and 400 dry cows. This would represent an increase of 2,182 animals from existing numbers. The proposed dairy expansion project would include the construction of supporting buildings and structures, including two new shade barns, approximately 30,000 square feet each; two additional freestall barns, approximately 52,500 square feet and 72,500 square feet; and a new milking parlor, approximately 30,000 square feet. Implementation of the proposed dairy expansion, new structures would consist of approximately 215,000 square feet of construction, for a total of 312,700 square feet of building structures on the dairy. Construction of the proposed facilities would result in the conversion of seven acres of crop land to active dairy facilities. Animal waste would continue to be managed with an onsite waste management system and would be applied to offsite agricultural fields in accordance with the Nutrient Management Plan.

3 METHODS AND SURVEY LIMITATIONS

3.1 METHODS

Padre Associates, Inc. (Padre) evaluated the potential biological resources impacts of the proposed Oliveira Dairy Expansion Project through a review of available data and a site visit. Prior to the site visit, Padre conducted a query of California Natural Diversity Database (CNDDDB) for the USGS topographic quadrangle including the project area (Atwater 7.5-minute quadrangle) and for the surrounding eight USGS 7.5-minute topographic quadrangles (Arena, Cressey, Winton, Merced, Yosemite Lake, Turner Ranch, Sandy Mush, and El Nido) (CDFW, 2018). The CNDDDB record search reports listed sensitive species and habitat locations and provides specific information (e.g. state and federal protection status; global and state rank; CDFW listing status; rare plant status; specific location data; existence status; dates last observed; habitat preferences and other notes) for each recorded occurrence.

Padre also conducted a query of the California Native Plant Society's Electronic Inventory (CNPS, 2018) for the same quadrangles to provide additional information on plant species of concern that may occur within the project site and surrounding vicinity. A species list was obtained from the USFWS website for the Atwater quadrangle to provide information on species of concern to the federal agency that have the potential to occur in the vicinity of the proposed project (Appendix B). A query of the USFWS National Wetland Inventory (NWI) Map for the Atwater quadrangle was conducted for information regarding known wetlands in the project area.

The results of the database search and location analysis were used to determine: (a) if any sensitive resources had been previously reported within or in the immediate local vicinity of the Oliveira Dairy site; and (b) which sensitive biological resources should be specifically searched for during the biological reconnaissance survey. Only those species with the potential to occur on the project site were given consideration in this report.

Padre conducted a biological reconnaissance survey of the project site on August 2, 2018. The purpose of the survey was to characterize general biological resources supported by the project site and evaluate the potential for sensitive biological resources to occur on the site and be affected by implementation of the proposed project. The surveys included evaluating primary vegetative cover types, a general assessment of habitat suitability for known local wildlife, and recording observed plant and animal species (Table 1). The August 2, 2018 survey was conducted during the day between 10:30 am and 1:00 pm and under normal summer conditions (warm and sunny). The reconnaissance survey consisted of investigation of the site, including on-foot evaluations of principal facilities and visual surveys of cropped fields from the vehicle on perimeter roads. Berms along roadsides and all culverts found by the biologists during the reconnaissance surveys were checked for sign of use by burrowing owl and/or San Joaquin kit fox. Dominant flora and fauna were noted and identified to the lowest possible taxon.

3.2 LIMITATIONS

The survey was conducted at a reconnaissance level, not a focused or protocol survey level. The survey lasted approximately 2.5 hours in the late morning and therefore did not include dawn or dusk surveys or extended observations.

4 SURVEY RESULTS

4.1 PHYSICAL CHARACTERISTICS

The proposed expansion is located on approximately 22-acres of an active dairy facility on APN 059-190-026. Approximately 249 acres of the project site are currently used for the production of crops and application of manure process water and/or solid manure. The remaining acreage is composed of a series of corrals and barns for the dairy herd. Approximately seven acres would be converted from cropland to provide space to support the proposed dairy expansion.

4.2 VEGETATION AND WILDLIFE

The majority of the proposed dairy expansion will occur on the Home Field or within the active dairy facility. A small portion of the southern limits of the Pump Field is also

proposed for expansion. Home field, Pump field, New Field, and Buhach Field were in agricultural production at the time of surveys (Figure 2). The surveyed fields were minimally vegetated at the margins in weedy species including turkey-mullein (*Croton setigerus*), bindweed (*Convolvulus arvensis*), and tumbleweed (*Amaranthus albus*).

Drainage ditches identified by NWI Maps occur along the northern, southern, and the eastern side of the project site. Flowing water was present in the northern and eastern ditch. Vegetation along the ditches was sparse with small patches of tall cyperus (*Cyperus eragrostis*), Johnsongrass (*Sorghum halepense*), barnyard grass (*Echinochloa crus-gali*), and rush (*Juncus* sp.).

As shown in Table 1, wildlife species observed on the site commonly included a mix of terrestrial and wetland avian species. Terrestrial species included Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), Eurasian Collared-Dove (*Streptopelia decaocto*), and mourning dove (*Zenaida macroura*). Species observed around the treatment ponds that frequent aquatic habitats include spotted sandpiper (*Actitis macularius*), great egret (*Ardea alba*), and snowy egret (*Egretta thula*). Birds seen soaring above the project include two Swainson's hawks (*Buteo swainsoni*) and several turkey vultures (*Cathartes aura*).

The climate in the project vicinity is hot and dry in the summer, and cold and moist in the winter. Between winter rains are periods of cloudy, foggy or sunny weather. The average winter temperature is 47°F and the average daily maximum temperature during the summer is 96°F (www.weatherunderground.com). The primary soil type on site is Landlow silty clay loam (NRCS, 2018).

Table 1 Wildlife Species Recorded in Project Vicinity	
Common Name	Scientific Name
Birds	
Spotted sandpiper	<i>Actitis macularius</i>
Eurasian Collared-Dove	<i>Streptopelia decaocto</i>
Rock pigeon	<i>Columba livia</i>
Mourning dove	<i>Zenaida macroura</i>
Great egret	<i>Ardea alba</i>
Snowy egret	<i>Egretta thula</i>
Turkey vulture	<i>Cathartes aura</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Western kingbird	<i>Tyrannus verticalis</i>
American crow	<i>Corvus brachyrhynchos</i>
Western scrub jay	<i>Apelocoma californica</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>

Barn swallow	<i>Hirundo rustica</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
House sparrow	<i>Passer domesticus</i>
European starling	<i>Sturnus vulgaris</i>
Great-tailed grackle	<i>Quiscalus mexicanus</i>

The entire site is or was in the recent past managed as an active dairy or cultivated in irrigated forage crops. No trees are within the portion of the project area proposed for construction, and no ground nests were observed during the August 2018 survey.

4.3 SENSITIVE HABITATS, SPECIAL-STATUS PLANTS, AND SPECIAL-STATUS WILDLIFE

A list of special-status plant and animal species that historically occurred in the vicinity of the project site and vicinity was compiled based on the following:

- A review of previous studies;
- An official species list (Consultation Code: 08ESMF00-2018-SLI-2954) was requested from the USFWS via their Information for Planning and Conservation) IPAC online system (<https://ecos.fws.gov/ipac/>) (USFWS, 2018a); and
- Queries of the CDFW's California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database (CDFW, 2018; CNPS, 2018).

To determine the special-status species that could occur in the vicinity of the project area, the CNDDDB was queried within a five-mile radius around the project site. Species recorded within 10 miles that may occur in similar habitat were also included in the analyses. The resulting species' occurrences are mapped in Figure 3. The species identified from these data sources were further assessed for their potential to occur within the project site based upon previously documented occurrences, their habitat requirements, and the quality and extent of available habitat within the site. The summary of this analysis is presented in Table 2.

One sensitive natural community, 25 special-status plant species, and 32 special-status wildlife species have been recorded in the nine-quadrangles surrounding the project site (Table 2 and Figure 3).

Sensitive natural communities are those that are considered rare within the region, support sensitive plant and/or wildlife species, or function as corridors for wildlife movement. The sensitive natural community recorded in the area is Northern Claypan Vernal Pool. No sensitive vernal pool communities occur on the project site or in the immediate vicinity of the project site.

Neither special-status plants nor habitat that would support special-status plants occurs on the project site. The entire site is or was in the recent past managed as an active dairy or cultivated in irrigated forage crops.

A number of special-status wildlife species may occur on or adjacent to the proposed expansion site. These include: burrowing owl (*Athene cunicularia*), giant garter snake (*Thamnophis gigas*), tricolored blackbird (*Agelaius tricolor*), Swainson's hawk (*Buteo swainsoni*), Northern harrier (*Circus cyaneus*), San Joaquin kit fox (*Vulpes macrotis mutica*), and American badger (*Taxidea taxus*). Four Swainson's hawk and three tricolored blackbird occurrences have been reported less than five miles from the project site and could forage in on the project site. Two Swainson's hawks were observed soaring above the project site during field surveys and could nest near the project site. Three reported San Joaquin kit fox occurrences are located within 10 miles of the project site at the Great Valley Grasslands State Park. Many ground squirrel burrows were observed along the berm that bisects the active dairy and the agricultural field to the south. The burrows could provide habitat for American badger, SJKF or burrowing owls. No sign of San Joaquin kit fox (SJKF) was observed and the species is widely recognized to be eradicated from its northern range. Agricultural access roads open or fallow fields, and irrigation ditches and canals provide an important corridor for the movements of mammals such as American badger and SJKF, if present in the region. Although no tricolored blackbirds were observed at the project site, they have been known to nest within silage and/or triticale fields associated with dairy farms. There was no vernal pool habitat that could support listed vernal pool invertebrates observed during the reconnaissance survey of the site.

The project site may provide occasional foraging opportunities for a number of additional sensitive wildlife species including Swainson's hawk and various species of raptors and migratory birds that are protected by the Migratory Bird Treaty Act. Table 2 provides an analysis of the probability of occurrence of special-status species on the project site.

Table 2 Special-Status Species Reported on the CNDDB, CNPS Inventory, and USFWS Species List for the Oliveira Dairy Project Area			
Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	1B.2	Alkaline environments, valley and foothill grassland, and vernal pools. 1 to 60 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Atriplex cordulata</i> var. <i>cordulata</i> Heartscale	1B.2	Chenopod scrub, valley and foothill grassland, meadows, alkaline flats and scalds in the Central Valley. Sandy soils. Found regionally in alkali grassland. 1 to 150 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex depressa</i> Brittlescale	1B.2	Chenopod scrubs, meadows, seeps, playas, and vernal pool in alkaline soils. 1 to 320 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex minuscula</i> Lesser saltscale	1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy alkaline soils. 20 to 100 m. Found locally in heavily alkaline grassland, with a white crust of soil salts.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex persistens</i> Vernal pool smallscale	1B.2	Alkaline vernal pools. Found regionally in northern claypan vernal pool. 10 to 115 m.	Absent. There are no vernal pools to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex subtilis</i> Subtle orache	1B.2	Valley and foothill grassland. 40 to 100 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Castilleja campestris succulenta</i> Succulent owl's-clover	FT SE 1B.2	Vernal pools with acidic soils. 50 to 750 m.	Absent. There are no vernal pools to support this plant at the project site. The proposed project would not impact this species.
<i>Clarkia rostrata</i> Beaked clarkia	1B.3	Cismontane woodland, valley and foothill grassland at elevations between 60 and 500 m in Merced, Mariposa, Stanislaus, and Tuolumne counties.	Absent. There is no habitat that would support this plant on the project site. The proposed project would not impact this species.
<i>Cryptantha hooveri</i> Hoover's cryptantha	1B.2	Valley and foothill grassland in coarse sand. 1-150M	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Delphinium recurvatum</i> Recurved larkspur	1B.2	Chenopod scrub, valley and foothill grassland, cismontane woodland. On alkaline soils; often in valley saltbush or valley chenopod scrub. Found regionally in slightly alkaline beds of vernal pools. 3-685M.	Absent. There is no habitat that would support this plant on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDb, CNPS Inventory, and USFWS Species List for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Downingia pusilla</i> Dwarf downingia	2B.2	Valley/foothill grassland (mesic), vernal pools. 1 to 455 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Eryngium recemosum</i> Delta button-celery	SE, 1B.1	Riparian scrub in vernal mesic clay depressions. 3 to 30 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Eryngium spinosepalum</i> Spiny-sepaled button-celery	1B.2	Valley and foothill woodlands and vernal pools. 80 to 975m	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Extriplex joaquinana</i> San Joaquin spearscale	1B.2	Alkaline environments, chenopod scrub, meadows and seeps, playas, and valley and foothill grasslands. 1 to 835 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Lagophylla dichotoma</i> Forked hare-leaf	1B.1	Cismontane woodland, valley/foothill grassland. 50 to 760 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	1B.1	Coastal salt marshes and swamps, playas, and vernal pools. 1 to 1220 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Monardella leucocephala</i> Merced monardella	1A	Valley/foothill grasslands (sandy mesic soils). 35 to 100 m.	Presumed extinct
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	1B.1	Mesic coastal scrub, meadows, seeps, valley/foothill grassland, vernal pools. 15 to 1,200 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Navarretia nigelliformis radians</i> Shining navarretia	1B.1	Cismontane woodland, valley/foothill grasslands, vernal pools. 76 to 1,000 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT, SE, 1B.1	Vernal pools. 10 to 755 m.	Absent. There are no vernal pools to support this plant at the project site. The proposed project would not impact this species.
<i>Orcuttia pilosa</i> Hairy Orcutt grass	FE SE 1B.1	Vernal pools. 46 to 200 m.	Absent. There are no vernal pools to support this plant at the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Puccinellia simplex</i> California alkali grass	1B.2	Chenopod scrub, meadows and seeps, valley and foothill grasslands, and vernal pools. In alkaline and vernal mesic sinks, flats, and lake margins. 2 to 930 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes and ditches. 0 to 610 m.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Sidalcea keckii</i> Keck's checkerbloom	FE 1B.1	Cismontane woodland, valley and foothill grassland on serpentinite, clay at elevations from 120 to 425 m. Reported from Tulare and Fresno counties.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Sphenopholis obtusata</i> Prairie wedge grass	2B.2	Mesic cismontane woodlands as well as meadows and seeps. 300 to 2000 m.	Absent. There is no habitat for this plant on the project site. The proposed project would not impact this species.
SPECIAL STATUS INVERTEBRATES			
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE	Endemic to the grasslands of the northern two-thirds of the central valley; found in large, turbid pools. Regionally inhabits astatic pools located in swales formed by old, braided alluvium, filled by winter/spring rains and lasting until June.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Branchinecta longiantenna</i> Longhorn fairy shrimp	FE	The habitat characteristics typical of the pools that support the longhorn fairy shrimp are clear to turbid pools often in alkaline soils. These include clear-water depressions in sandstone outcroppings, grass-bottomed pools, and claypan pools.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT	Endemic to the grasslands of the central valley, central coast mountains and south coast mountains, in astatic rain-filled pools. Regionally inhabits small, clear-water sandstone depression pools and grassed swale, earth slump or basalt-flow depression pools.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT	Occurrences of the VELB are primarily in the vicinity of moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages (U.S. Fish and Wildlife Service, 1984). Elderberry plants are obligate hosts for the VELB, providing a source of food and broodwood.	Absent. There were no blue elderberry shrubs observed within 160 feet of the project. The proposed project would not impact this species.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE	Found in seasonally ponded habitats including vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, and ruts caused from vehicular traffic.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
SPECIAL STATUS FISH			
<i>Hypomesus transpacificus</i> Delta smelt	FT, SE	Endemic to the upper Sacramento/San Joaquin Delta, it mainly inhabits the freshwater-saltwater mixing zone of the estuary, except during its spawning season, when it moves into freshwater during the early spring months from March until May.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Oncorhynchus mykiss</i> Central Valley steelhead	FT	Sacramento and San Joaquin River systems, Sacramento-San Joaquin Delta, and San Francisco Bay	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Mylopharodon conocephalus</i> Hardhead	CSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	CSC	Sacramento splittail are freshwater species that are highly tolerant of brackish water. They have been collected at salinities as high as 18 ppt but are most abundant in the 0-10 ppt salinity range (Goals Project, 2000). Splittail are generally a hardy species tolerating a wide range of water temperatures (45-90° F), low dissolved oxygen levels, and strong water currents. Splittail are numerous in small deadend sloughs and larger sloughs particularly in edge-water areas lined with emergent aquatic vegetation, which provides good foraging habitat and escape cover. Shallow seasonally flooded vegetation is the preferred spawning substrate for the Sacramento splittail.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
SPECIAL STATUS AMPHIBIANS			
<i>Ambystoma californiense</i> California tiger salamander	FT, ST	Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	Absent. There is no habitat to support this species on the project site. The nearest known occurrence of this species is approximately 5 miles SW of the site near the Merced National Wildlife Refuge. The proposed project would not impact this species.
<i>Lithobates pipiens</i> Northern leopard frog	CSC	Inhabits grasslands, wet meadows, bogs, marshes, and reservoirs. Generally, prefers permanent water with abundant aquatic vegetation	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDb, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Rana draytonii</i> California red-legged frog	FT, CSC	Found in marshes, lakes, reservoirs, ponds, slow parts of streams, and other usually permanent water in lowlands, foothill woodlands and grasslands. Require areas with extensive emergent vegetation. High value habitats are deep-water ponds with dense stands of overhanging willows and a fringe of cattails.	Absent. Project site is outside of the recognized range of the species.
<i>Spea hammondi</i> Western spadefoot toad	CSC	Occurs primarily in grassland habitats; can be found in valley foothill hardwood woodlands. Vernal pools are essential for breeding and egg laying.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
SPECIAL STATUS REPTILES			
<i>Emys marmorata</i> Western pond turtle	CSC	Ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg laying.	Absent. Although aquatic habitat is present onsite, the agricultural ditches support flows that are higher than typically preferred by the species, and banks are very steep with no basking habitat. The proposed project would not impact this species.
<i>Anniella pulchra pulchra</i> Silvery legless lizard	CSC	In San Joaquin Valley south to Baja California in moist, warm, and loose soils with vegetative cover.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Thamnophis gigas</i> Giant garter snake	FT, ST	Freshwater marshes and streams. Has adapted to drainage canals and irrigation ditches.	Likely Absent. Canals are located adjacent to the site but they do not offer the necessary habitat components for GGS occupancy. The nearest known occurrence (Occ. # 136) is located approximately 12 miles west. Habitat would not be affected by project.
<i>Gambelia sila</i> Blunt-nosed leopard lizard	FE, SE, FP	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species. The nearest known occurrence (Occ. # 116) of this species is 25 miles southeast of the project site.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
SPECIAL STATUS BIRDS			
<i>Agelaius tricolor</i> Tricolored blackbird	ST	Nesting colony requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	Potential. This species could nest within the cultivated farmland impacted by project activities. The nearest recent occurrence (#630) is located approximately 4.5 miles west of the project site.
<i>Ardea alba</i> Great egret	S4	Breeds in shrubs or trees near water or in low marshes. Forages for its prey in open environments often on lake or river shores.	Likely foraging. Although this species was not observed during field surveys, and there is no nesting (rookery) habitat onsite or reported within 10 miles of the site, the fields may provide suitable foraging habitat for this species. The proposed project would not impact this species.
<i>Ardea Herodias</i> Great blue heron	S4	Nests in trees or shrubs near water and can forage in almost any type of slow moving freshwater or in coastal bays.	Likely foraging. Although this species was not observed during field surveys, and there is no nesting (rookery) habitat onsite or reported within 10 miles of the site, the fields may provide suitable foraging habitat for this species. The proposed project would not impact this species.
<i>Buteo swainsoni</i> Swainson's hawk	ST, BCC	Breeds in stands with few trees in juniper-sage flats, riparian areas and in oak savannah. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Likely foraging/Possible Nesting. This species was observed during surveys and has four recorded nesting occurrences within 5 miles of the project site. Potential nesting habitat occurs within the row of trees located immediately south of the dairy facility.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Egretta thula</i> Snowy egret	S4	Nests in colonies in trees, shrubs, mangroves, sometimes on or near the ground in marshes and forages in many types of freshwater and saltwater habitats.	Likely foraging. Although this species was not observed during field surveys, and there is no nesting (rookery) habitat onsite or reported within 10 miles of the site, the fields may provide suitable foraging habitat for this species. The proposed project would not impact this species.
<i>Eremophila alpestris actia</i> California horned lark	WL	Breeds and forages primarily in open habitats including prairies, fields, airports, golf courses and lake flats. Nests are built on the ground in these open habitats.	Unlikely. This species or its call were not observed during field surveys. The closest known records are approximately 25 miles to the west of the project site. The proposed project would not significantly impact this species.
<i>Athene cunicularia</i> Western burrowing owl	CSC, BCC	Uses burrow sites in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Potential. Suitable burrows were present along the southern limits of the project site. The nearest known occurrence (Occ. # 988) of this species is 2.5 miles east of the project area.
<i>Circus cyaneus</i> Northern harrier	CSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Nests on ground near marsh edge or grassland. Preys mostly on voles and other small mammals, birds, frogs, small reptiles, crustaceans, insects, and, rarely on fish.	Potential. Agricultural fields onsite may support both foraging and nesting habitat for this species. The supporting agricultural fields may offer foraging opportunities after harvest. The nearest known occurrence (Occ. # 7) of this species is 12.5 miles SW of the project area.
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE, SE	Breeds in low dense growth and occasionally chaparral, woodland edges, or scrub oaks.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
SPECIAL STATUS MAMMALS			
<i>Dipodomys nitratoideis exilis</i> Fresno kangaroo rat	FE	Historically found in grassland and chenopod scrub communities on the San Joaquin Valley floor from the Merced River to the north and Tulare Lake to the south.	Absent. The project site is outside of the known geographic distribution for this species. The nearest known occurrence (Occ. # 22) of this species is 50 miles south of the project site.
<i>Antrozous pallidus</i> Pallid bat	CSC	Typically inhabits grasslands, shrublands, woodlands, and coniferous forests in open, dry habitats that contain rocky areas for roosting. They are a year-round resident in most of their range, and hibernate in winter near their summer roost. Day roosts are usually rock crevices, tree hollows, mines, caves and a variety of human-made structures. Tree roosting occurs in conifer snags, hollows of redwoods, and cavities in oaks.	Likely Absent. The only habitat onsite for this species would be structures; however, buildings are currently active and would not provide suitable shelter for roosting bats.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	CSC, SC	Inhabit a variety of locations including riparian woodlands, semi-desert montane shrublands, and coniferous forests. Usually they hibernate during the winter in caves or mines and during the summer they will roost in a variety of locations ranging from caves to man-made structures.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Lasiurus blossevillei</i> Western red bat	CSC	Found primarily in cities and forests. Typically roosts in the foliage of trees and bushes.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 2
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List
for the Oliveira Dairy Project Area

Scientific Name	Status	Habitat Requirements	Probability of Occurrence
<i>Taxidea taxus</i> American badger	CSC	Most abundant in drier open stages of most shrub, forest and herbaceous habitats, with friable soils. Need sufficient food, friable soils and open, uncultivated ground.	Unlikely. This species or its sign (burrows, tracks, and scat) were not observed during field surveys; however, burrows located along the southern limits of the project could provide habitat for the species. The closest known occurrence (Occ. # 541) are from approximately 10 miles southeast of the site. This species may occur occasionally as a transient but is not expected to den onsite. The proposed project would not impact this species.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE, ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing and suitable prey base.	Unlikely. This species or its sign (burrows, tracks, scat) were not observed during field surveys. The closest occurrence (Occ. # 602) are approximately 5 miles south of the site. This species may occur occasionally as a transient but is not expected to den onsite. The proposed project would not impact this species.

^aStatus (Federal/State)

None = No Federal or State status

FE = Federally listed endangered

FT = Federally listed threatened

SE = State listed endangered

ST = State listed threatened

SC = State candidate for listing

CSC = State species of special concern

FP = California fully protected species

WL = CDFW Watchlist

BCC = USFWS Birds of Conservation Concern

S4 = Apparently secure in the state but of long term concern (Rookeries protected)

^bStatus (California Rare Plant Rank)

Rank 1A – Plants presumed extirpated in California

Rank 1B – Plants rare, threatened or endangered in California and elsewhere

Rank 2B – Plants rare, threatened or endangered in California but more common elsewhere

4.4 POTENTIALLY JURISDICTIONAL WATERS/WETLANDS

The NWI was queried to see if any mapped wetlands occurred onsite that might be considered jurisdictional under the Clean Water Act to determine potential areas for focus during field surveys. The NWI map does not depict any wetlands on the project site within areas designated for dairy expansion (USFWS, 2018b). Several agricultural ditches occur at the project site and are discussed below.

A large canal with flowing water is located immediately adjacent to South Gurr Road east of the Pump Field. This canal is referred to as Deane Canal and is classified by the NWI as an excavated, riverine, lower perennial, unconsolidated bottom, permanently flooded (USFWS, 2018b). The Deane Canal supported sparse pockets of hydrophytic vegetation and does not appear to be directly connected to dairy operations. Another agricultural ditch located north of the dairy facility is classified as excavated, riverine, unknown perennial, unconsolidated bottom, semi permanently flooded (USFWS, 2018b). This ditch is referred to as the Thornton Lateral and supports hydrophytic vegetation and had flowing water at the time of surveys. An agricultural ditch that occurs immediately east of the Pump Field and south of the dairy facility is classified by NWI as excavated, riverine, unknown perennial, unconsolidated bottom, semi permanently flooded (USFWS, 2018b). This ditch is unnamed. It supported hydrophytic vegetation but did not contain water at the time of surveys. A tailwater return system is located on the southern perimeter of the project site. It is entirely contained onsite and not connected to any agricultural ditches or jurisdictional WoUS. Although agricultural ditches are located at the perimeter of the project site they will not be affected by the proposed dairy expansion. The Deane Canal is a relatively permanent waterway that flows to a Traditional Navigable Water of the U.S. (TNW) or tributary of a TNW, and is potentially a Corps jurisdictional WoUS.

5 PROJECT IMPACT ANALYSIS

Approval of the Oliveira Dairy Expansion project would expand the dairy to house 4,750 cows which would represent an increase of 2,182 animals from existing numbers. The proposed expansion is located on an approximate 22-acre portion of 290 acres within seven parcels. Approximately 249 acres of the project site are fields currently used for the production of crops and application of manure process water on parcels owned by the dairy operator. The proposed dairy expansion project would include construction of supporting buildings and structures, including two new shade barns, two new freestall barns, and a new milking parlor. Construction of the proposed structures would convert approximately seven acres of cropland to active dairy facilities reducing the cropland to 242 acres. Direct and/or indirect potential discharge of dairy wastewater to sensitive wetland areas in the project vicinity could occur via allocation of dairy wastewater to adjacent farmland; however, the tailwater system is designed to prevent the movement

of wastewater offsite, therefore, there would be no direct or indirect discharge to sensitive wetland areas. Conversion of approximately seven acres of cultivated farmland to dairy facilities would contribute to the loss of foraging and nesting habitat for some special-status and migratory birds.

5.1 STANDARDS OF SIGNIFICANCE

State CEQA Guidelines and standard professional practice determine whether the proposed Oliveira Dairy project would have a significant environmental effect. The project would have a significant impact on biological resources if it would:

- Result in a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS;
- Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Result in a substantial adverse effect on wetlands as defined by the Corps under Section 404 of the Clean Water Act or the Regional Water Quality Control Board under the Porter-Cologne Act through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;
- Result in impacts to biological resources that are individually limited, but cumulatively considerable (i.e., the incremental effects of the project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

5.2 IMPACTS TO BIOLOGICAL RESOURCES

Special Status Species

Plants

The likelihood of occurrence of special-status plant species in the site is considered extremely low due to a lack of suitable habitat and ongoing intensive agricultural activities. Implementation of the Oliveira Dairy project is expected to have less than significant impacts to special-status plants. **(No impact)**

Wildlife

Giant Garter Snake

The agricultural ditches onsite don't contain the habitat components necessary to support giant garter snake, specifically the aquatic habitat with emergent vegetation and prey base. Additionally, adjacent cropland does not offer typical upland (hibernation) habitat, consequently, no impacts to the giant garter snake are expected. **(No impact)**

Nesting Birds

Throughout Merced County, the conversion of cultivated farmland to dairies and other developments are resulting in a cumulative and significant loss of foraging and nesting habitat for some special-status and migratory birds. Conversion of seven acres of croplands to dairy would contribute to that cumulative loss. This loss of habitat is cumulatively significant, unavoidable, and unmitigable. The dairy would be constructed on land that has been previously cultivated in corn and currently provides foraging habitat for a variety of special-status and migratory bird species.

There is the potential for migratory birds, especially ground nesters, to breed onsite. Suitable habitat for ground nesting birds such as western meadowlark, killdeer, short-eared owl, and horned lark is limited and only expected along irrigation canals and ditches. **(Potentially significant)**

Recommended Mitigation:

To reduce project related impacts to active bird nests and to reduce the potential for construction activities to interrupt breeding and rearing behaviors of birds, the following measures shall be implemented prior to and during construction activities:

1. A preconstruction survey shall be conducted to determine the presence of nesting birds if ground clearing or construction activities will be initiated during the breeding season (February 15 through September 15). The project site and potential nesting areas within 100 feet of the site for MBTA protected birds and 500 feet for raptors shall be surveyed within 7 days prior to the initiation of construction. Surveys will be performed by a qualified biologist or ornithologist to verify the presence or absence of nesting birds.
2. Construction shall not occur within a 500-foot buffer surrounding nests of raptors (including burrowing owls) or a 100-foot buffer surrounding nests of migratory birds (including killdeer, house finch, mourning dove, etc.).
3. If construction within these buffer areas is required or if nests must be removed to allow continuation of construction, prior approval must be obtained from the CDFW.

Preconstruction surveys and avoidance measures would reduce this impact to less than significant. Further, while approximately seven acres of cropland would be converted to

active dairy facilities, 242 acres would remain as cropland. Approximately 97 percent of the site currently in agricultural production would remain in agricultural production and continue to provide foraging and nesting habitat.

Tricolored Blackbird

Tricolored blackbird (TCBB) is a California threatened species under CESA as of April 19, 2018. Based on a recent statewide survey, the TCBB population has declined by 63 percent in the last 6 years (Meese, 2014). TCBB is a highly colonial species that nests in large flocks near open water with a protected substrate and nearby foraging area. TCBB have two specific peaks in breeding activity, one in the first week of June and one in the first two weeks of July. Total nesting duration is approximately 45 days. Historically, TCBB nested within emergent wetland in the Central Valley; however, currently 38 percent of TCBB nests occur on triticale, a wheat-rye hybrid grown for forage on dairies (Meese, 2014). The timing of triticale harvest conflicts with TCBB nesting, putting entire colonies at risk from harvesting activities that occur before fledging (Meese, 2009). TCBB foraging typically occurs within 3-5 miles of the nesting colony. Lightly grazed fields, irrigated pastures, annual grasslands, and grain fields that provide habitat for a supply of large insects such grasshoppers, dragonflies, and damselflies offer the best foraging habitat. However, dairy and silage edge as well as feed lots maybe used for foraging. Surface water is typically present within a half mile of the nesting colony, a habitat criterion that would be met by the wastewater storage ponds at this site. Although TCBB was not observed during the site survey, the croplands onsite could provide suitable nesting habitat for TCBB.

Currently, there are no specific mitigation requirements for the loss of TCBB nesting or foraging habitat. Both nesting and foraging mitigation options are currently being developed by CDFW and the Tricolored Blackbird Working Group (TBWG). If there is a permanent loss of TCBB breeding habitat, this impact may require compensatory mitigation. Loss of TCBB habitat may be compensated through a combination of: 1) creation of replacement habitat; 2) habitat preservation through Conservation Easement; 3) acquisition of credits at an approved mitigation bank; 4) in-lieu contribution to a regional habitat restoration fund; and/or 5) other compensatory measures that are deemed acceptable by the CDFW. According to Samantha Arthur of the TBWG a disturbance buffer of 100 feet has been given to nesting TCBB at dairy operations in the Central Valley (Airola, et al., 2016). Although not currently required, mitigation for foraging habitat will likely be required in the future. Mitigation for the loss of foraging habitat could have a similar approach to what is currently being required for the Swainson's hawk, where compensatory mitigation is required for the conversion of foraging habitat within a specific buffer from a nest (Airola, et al., 2016).

Construction of the proposed dairy expansion would result in the conversion of approximately seven acres of cropland to dairy facilities. **(Potentially significant)**

Recommended Mitigation:

Due to the loss of seven acres of potential breeding habitat, the following measures shall be implemented prior to and during construction activities:

1. A preconstruction survey shall be conducted to determine presence / absence of TCBB if ground clearing or construction activities will be initiated during the breeding season (February 15 through September 15). This measure is also required for all MBTA protected nesting birds, as indicated above.
2. If a TCBB nest colony is discovered during preconstruction surveys, CDFW will be consulted prior to ground disturbing activities to determine the appropriate actions or required mitigation. Avoidance and minimization measures are likely to include the delayed harvest of silage until the TCBB young have fledged. If there is a permanent loss of TCBB breeding habitat, compensatory mitigation may be required. Loss of TCBB habitat may be compensated through a combination of: (1) creation of replacement habitat; (2) habitat preservation through Conservation Easement; (3) acquisition of credits at an approved mitigation bank; (4) in-lieu contribution to a regional habitat restoration fund; and/or (5) other compensatory measures that are deemed acceptable by the CDFW.

Swainson's Hawks

The state-threatened Swainson's hawk is known to nest and forage in the project vicinity. Two Swainson's hawks were observed soaring over the project site during surveys. Although no raptor nests were observed potential nesting habitat is present for tree-nesting raptors including Swainson's hawk along the southern limits of the project site. Due to the proximity of the suitable nesting habitat, direct impacts could occur, if a Swainson's hawk nests in the trees onsite. There are four Swainson's hawk occurrences within 5 miles and 14 within 10 miles of the project site and Swainson's hawks generally forage within 10 miles of their nest tree, and more commonly within five miles of their nest tree (CDFW, 2018). Because cropland provides foraging habitat for small ground dwelling mammals, which are prey species for raptors, conversion of cultivated farmland to dairy facilities would contribute to the loss of foraging habitat for the Swainson's hawk. In the San Joaquin Valley, this loss of habitat is considered cumulatively significant, unavoidable and unmitigable.

According to the CDFW Staff Report regarding Mitigation for Impacts to Swainson's Hawks (CDFW, 1994), the following vegetation types are considered small mammal and insect foraging habitat for Swainson's hawks: alfalfa; fallow fields; beet, tomato, and other low-growing row or field crops; dry-land and irrigated pasture; rice land (when not

flooded); and cereal grain crops (including corn after harvest). Because Swainson's hawk is a state-listed species, and approximately seven acres of appropriate foraging habitat would be removed with project implementation, this would be a potentially significant impact, and the following compensatory mitigation would be required.

(Potentially significant)

Recommended Mitigation:

1. *Protocol Surveys*: For work that begins between March 1 and August 30, a qualified biologist with expertise in Swainson's hawk shall conduct protocol surveys of potential nesting habitat within 0.5 mile of any earth-moving activities prior to initiation of such activities. The project applicant shall conduct a protocol-level survey in conformance with the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley," Swainson's Hawk Technical Advisory Committee (<https://www.wildlife.ca.gov/conservation/survey-protocols#377281284-birds>) (May 31, 2000) hereby incorporated by references. This protocol prescribes minimum standards for survey equipment, mode of survey, angle and distance to tree, speed, visual and audible clues, distractions, notes and observations, and timing of surveys. If construction work begins after August 30 and ends before March 1 (outside of the breeding season), impacts to the Swainson's hawk would be avoided. Surveys would not be required for work conducted during this part of the year.

A written report with the pre-construction survey results must be provided to the Planning Department and CDFW within 30 days prior to commencement of construction-related activities. The report shall include: the date of the report, authors and affiliations, contact information, introduction, methods, study location, including map, results, discussion, and literature cited.

2. *Nest Avoidance*. If the required protocol surveys show there are no active nests within the appropriate radius as defined by the technical advisory referenced above, then no additional mitigation for nest disturbance will be required. If nesting Swainson's hawks are observed within 0.5-mile of the project site, the project applicant must implement CDFW pre-approved mitigation measures to avoid nest impacts during construction. These measures include:
 - a. All project-related activities with the potential to cause nest abandonment or forced fledging of young shall be avoided until the young have fledged.
 - b. If disturbances, habitat conversions, or other project-related activities, that may cause nest abandonment or forced fledging, are necessary, within the nest protection buffer zone (0.5-mile), monitoring of the nest site by a qualified raptor biologist, funded by the project applicant, shall be required, to determine if the nest is abandoned. If the nest is abandoned, but the

nestlings are still alive, the project proponent is required to fund the recovery and hacking, that is the controlled release of captive reared young, of the nestling.

- c. The project applicant shall be required to obtain an Incidental Take Permit under the California Endangered Species Act from the CDFW if project activities with the potential to cause disturbance to nesting Swainson's hawks are proposed to be conducted within the 0.5 mile buffer.
 - d. Routine disturbances such as agricultural activities, commuter traffic, and routine maintenance activities within one-quarter-mile of an active nest are not prohibited.
3. Foraging Impacts: Generally, CDFW requires mitigation for foraging habitat based on the presence of active nests within 10 miles of the project. If an active nest site is identified within ten miles of the Project Boundary, the project proponent will be required by CDFW to provide off-site foraging habitat management lands at a specified Mitigation Ratio that is based on nest proximity to the project site, as follows:

Distance from Project Boundary	Mitigation Acreage Ratio*
Within 1 mile	1.00:1**
Between 1 and 5 miles	0.75:1
Between 5 and 10 miles	0.50:1
*Ratio means [acres of mitigation land] to [acres of foraging habitat impacted]. **This ratio shall be 0.5:1 if the acquired lands can be actively managed for prey production.	

CDFW provides options for off-site habitat management by fee title acquisition or conservation easement acquisition with CDFW-approved management plan, and by the acquisition of comparable habitat. Mitigation credits may be pursued through a CDFW-approved mitigation bank for Swainson's hawk impacts in Merced County. Go to: www.dfg.ca.gov/habcon/conplan/mitbank/catalogue

The CDFW pre-approved CEQA mitigation measures are found at: "DFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California," CDFW (http://www.madera-county.com/rma/archives/uploads/1188143775_Document_upload_23w.pdf) (November 8, 1994).

The Planning Department may negotiate Management Conditions that differ from the foregoing CDFW pre-approved mitigation measures if such conditions are consistent with California Fish and Wildlife Commission and the state legislative policy and such conditions are approved by CDFW prior to reaching agreement with the project applicant.

San Joaquin Kit Fox (SJKF)

Burrows were observed along the southern limits of the project site; however, no signs of San Joaquin kit fox were observed at the burrows and it is not expected the species would den within the proposed expansion site. Nevertheless, records from the CNDDB occurrences of San Joaquin kit fox occur within the Great Valley Grasslands State Park approximately five miles southwest of the project site. **(Potentially significant)**

Because there is the potential for San Joaquin kit fox and American badgers to occur on site, the *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS, 2011) shall be followed. The measures that are listed below have been excerpted from those guidelines and will protect San Joaquin kit fox and American badgers.

Recommended Mitigation:

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes are most active. Night-time operations should be minimized to the extent possible. However, if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
2. To prevent inadvertent entrapment of San Joaquin kit foxes or other animals, all excavated, steep-walled holes or trenches more than two feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured San Joaquin kit fox is discovered, USFWS and CDFW shall be contacted as noted under Measure 13 referenced below.
3. San Joaquin kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All pipes, culverts, or similar structures with a diameter of four-inches or greater that are stored at the site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a San Joaquin kit fox is discovered inside a pipe, that section of pipe should not

be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.

4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the project site.
5. No firearms shall be allowed on the project site.
6. If any San Joaquin kit fox or American badger, or their sign, are detected on site, dogs and cats shall be kept off the project site to prevent harassment, mortality of San Joaquin kit foxes or American badgers, and/or destruction of their dens.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of San Joaquin kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a San Joaquin kit fox or who finds a dead, injured or entrapped San Joaquin kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.
9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

10. Upon completion of the project, all areas subject to temporary ground disturbance, including storage and staging areas, temporary roads, pipeline corridors, etc. should be recontoured if necessary, and revegetated to promote restoration of the area to pre-project conditions.
11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for guidance.
12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist at (530) 934-9309. The USFWS should be contacted at the numbers below.
13. The Sacramento Fish and Wildlife Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFW contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
13. New sightings of San Joaquin kit fox shall be reported to the CNDDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the USFWS at the address below.
14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.
15. Any project-related information required by the USFWS or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at: Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California, 95825-1846, (916) 414-6620 or (916) 414-6600.

Sensitive Natural Community

No sensitive natural communities are present at the Oliveira Dairy Expansion project site. **(No impact)**

Wetlands

Potential jurisdictional WoUS or wetlands were observed within agricultural ditches on the property (Deane Canal east of the Pump Field and west of South Gurr Road and Thornton Lateral north of the site and south of Oak Avenue). The small ditch located on the southern perimeter of the project site is part of a tailwater return system that is entirely contained onsite and not connected to any jurisdictional WoUS. This ditch would not be considered a jurisdictional WoUS. None of the canals or agricultural ditches would be impacted by the project; therefore, the Oliveira Dairy Expansion project would no impact on federally protected WoUS or wetlands as defined by Section 404 of the Clean Water Act. **(No impact)**

Wildlife movement and nursery sites

Bear Creek located approximately 1-mile north of the project site could provide potential wildlife movement corridors and potential nursery sites. Habitat along Bear Creek is fragmented but the creek could still be the preferred movement corridor for wildlife species in the vicinity of the project. Additionally, Merced National Wildlife Refuge (MNWR) is located approximately 6.5 miles southwest of the project. MNWR offers extensive wetland habitat that could be used as a nursery site or a stopover for avian species during migration.

The intensively cultivated fields and dairy facilities in the immediate vicinity of the Oliveira Dairy Site are not suitable corridors or nursery sites. Due to the distance to Bear Creek and MNWR, development of the Oliveira Dairy Expansion project would not interfere with wildlife movement or impede the use of wildlife nursery sites. **(No impact)**

Conflict with policies or ordinances

Implementation of the proposed Oliveira Dairy Expansion project would not conflict with any Merced County policies or ordinances pertaining to biological resources. **(No impact)**

Conflict with a Conservation Plan

The Oliveira Dairy Expansion area is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No impact)**

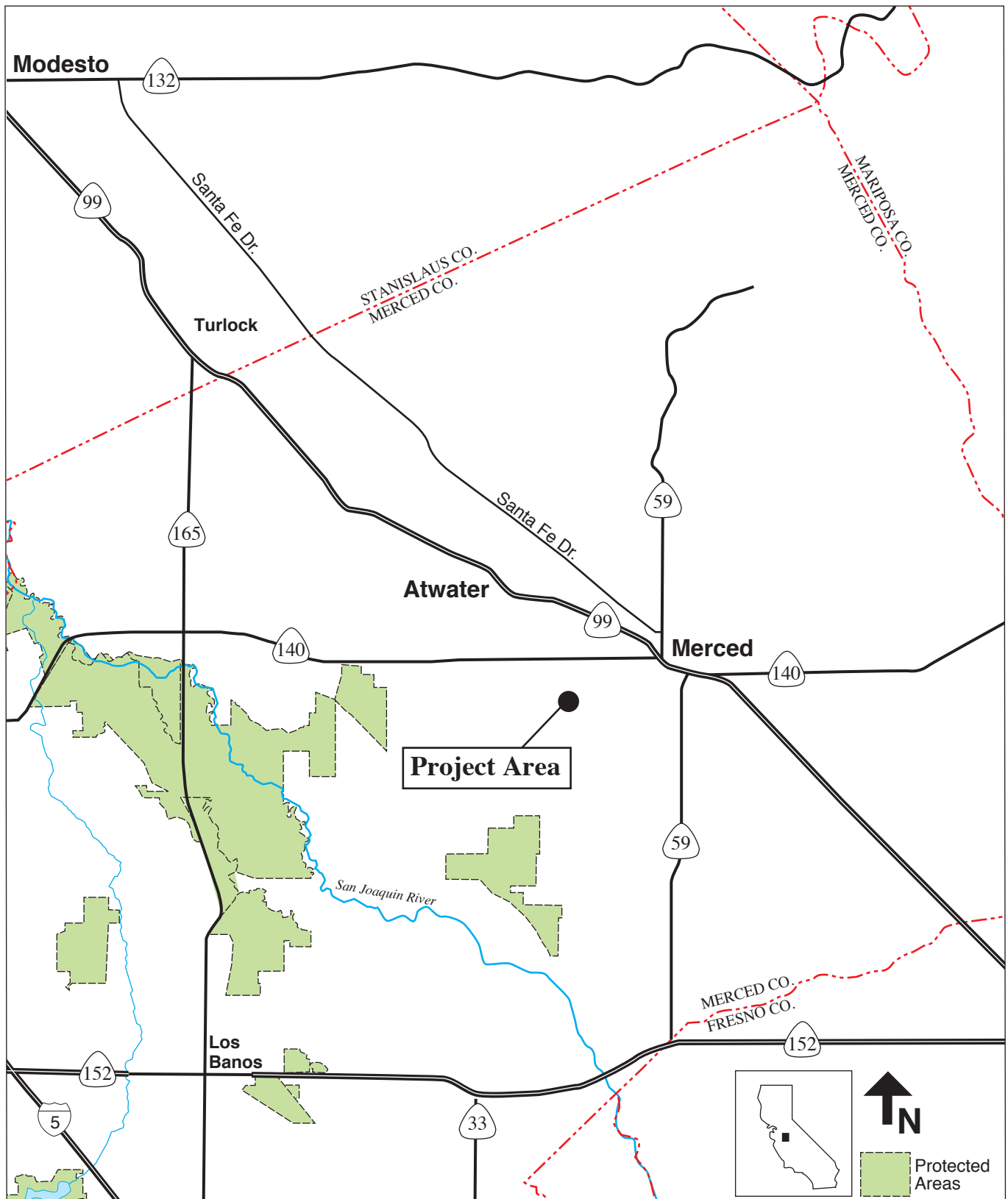
Cumulative Biological Impacts

The Oliveira Dairy Expansion project, which involves the conversion of seven acres of cropland to active dairy facilities, would contribute to the cumulative loss of foraging habitat for songbirds and raptors in the Merced County area. In the San Joaquin Valley, this loss of habitat is considered cumulatively significant, unavoidable and unmitigable. **(Cumulatively significant, unavoidable and unmitigable loss of foraging habitat).**

6 REFERENCES

- Airola, Dan., Ted Beedy, and Samantha Arthur. 2016. Tricolored Blackbird Biology, Conservation, and Survey Techniques Workshop. Wildlife Society-Sacramento-Shasta Chapter. May 4, 2016. Folsom, CA.
- California Department of Fish and Wildlife. 2018. Natural Diversity Database (CNDDB) and Biological Information and Observation System (BIOS). Wildlife and Habitat Data Analysis Branch. Data accessed August, 2018.
- _____. 1994. State Fish and Game Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California. November 6, 1994.
- California Native Plant Society. 2018. Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, CA. Accessed on August 10, 2018 at <<http://www.rareplants.cnps.org/>>
- Meese, RJ. 2014. Results of the 2014 Tricolored Blackbird Statewide Survey. Report available at the Tricolored Blackbird Portal at <http://tricolor.ice.ucdavis.edu/reports>.
- _____. 2009. Contribution of the Conservation of Silage Colonies of Tricolored Blackbird Conservation from 2005-2009. Report Submitted to the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, CA. Report available at the Tricolored Blackbird Portal at <http://tricolor.ice.ucdavis.edu/reports>.
- Merced, County of. 2013. 2030 Merced County General Plan. Prepared by Mintier Harnish. December 2013.
- Natural Resources Conservation Service. 2018. Web Soil Survey. U.S. Department of Agriculture. <http://websoilsurvey.nrcs.usda.gov/app/>
- Swainson's Hawk Technical Advisory Committee (SHTAC). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys for the California Central Valley.
- U. S. Fish and Wildlife Service. 2018a. Species list for Oliveira Dairy Expansion Project footprint through IPaC Trust Resource Report on August 10, 2018 for use in preparation of Biological Reconnaissance Report.
- _____. 2018b. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands>
- _____. 2011. Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance. Sacramento Fish and Wildlife Office, Sacramento, CA. January 2011.

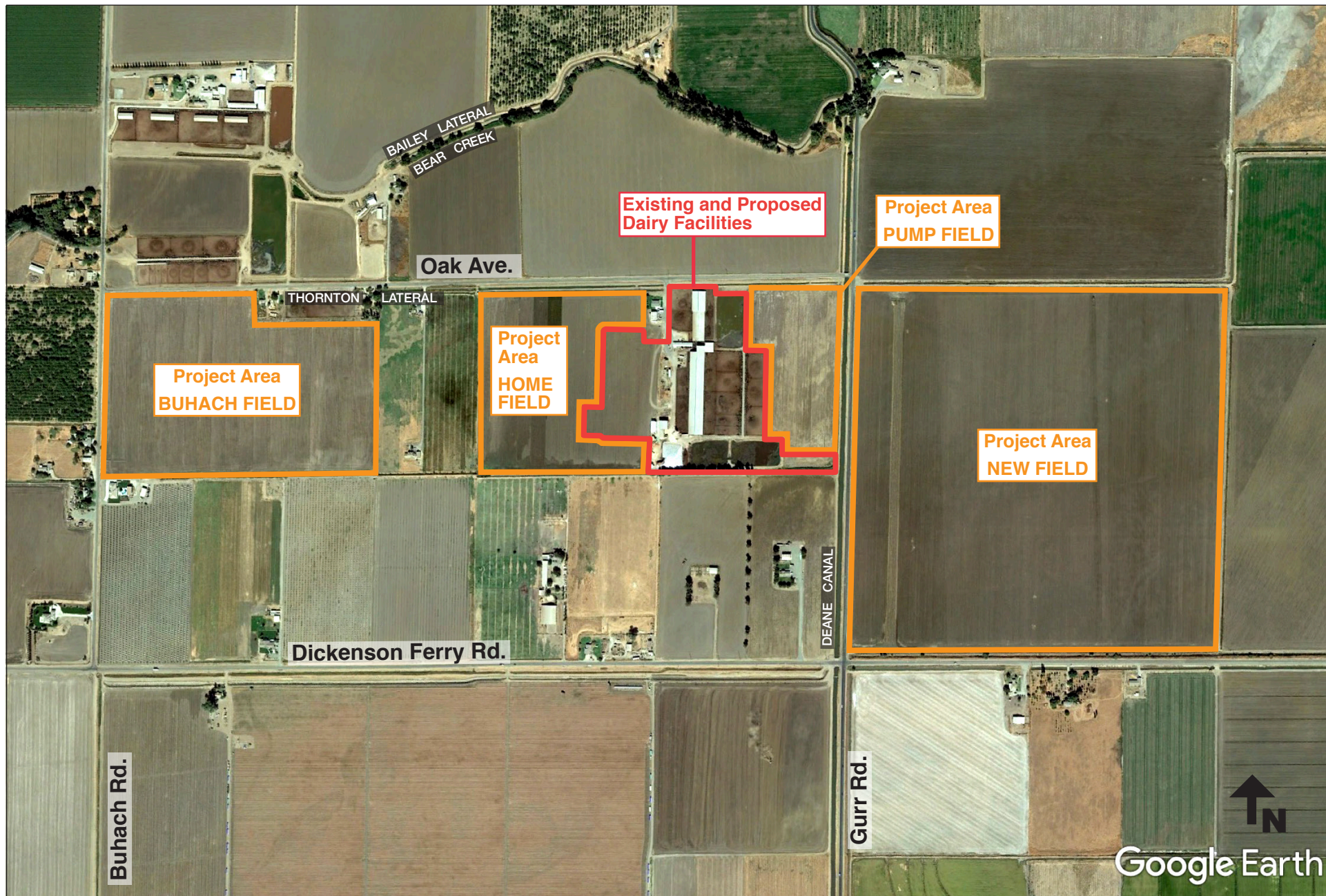
FIGURES



SOURCE: Planning Partners, 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 1
Regional Location



SOURCE: Sousa Engineering 2016; Planning Partners 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 2
Project Location

Oliveira Dairy Expansion project



Printed from <http://blos.dig.ca.gov>

Photograph A.
View of Freestall
Barn and
agricultural ditch
just south of Oak
Avenue and north
of the project site.



Photograph B.
View of the feed
storage area. The
Dairy Expansion
will be Northwest
of this feed
storage area.



Photograph C.

View of the tailwater ditch south of the Pump Field. The ditch was dry at the time of surveys.



Photograph D.

View of the northern wastewater storage pond. The Pump Field in crop production is visible in the background.



Photograph E.
View of Deane
Canal adjacent to
South Gurr Road
and the Pump
Field.



Photograph F.
View of a large
burrow along the
southern limits of
the project site.
Photograph was
taken south of the
Feed Storage
area.



Photograph G.

View of a ground squirrel burrow along the southern limits of the project site. Photograph was taken south of the wastewater storage ponds.



Photograph H.

View of the New Field where solids/wastewater will be applied. Thornton Lateral is the agricultural ditch visible in the photo.



Photograph I.
View of Home
Field where
solids/wastewater
will be applied.



Photograph J.
View of trees
along southern
perimeter of active
dairy that provide
potential nesting
habitat.



APPENDIX A

BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013	
POLICY	DESCRIPTION
<i>Land Use Element</i>	
LU-1.13	Wetland Habitat Area Separation (RDR) Do not allow rural commercial and industrial uses, secondary residences, and ancillary agricultural uses within a half mile of either State or Federal wildlife refuges, or managed wetlands within the Grasslands Ecological Area when it is determined by the County that there could be an unmitigated impact to natural resources or habitat.
LU-2.4:	Secondary Uses in Agricultural Areas (RDR) Except as otherwise provided by law, limit ancillary uses in Agricultural and Foothill Pasture areas to include secondary single-family residences, farm worker housing, agricultural tourism related uses, and agricultural support services, provided that such uses do not interfere with historic agricultural practices, result in adverse health risks, or conflict with sensitive habitats or other biological resources.
LU-2.7	Rural Energy Production (RDR/SO) Allow the development of ethanol production, co-generation, solar, and wind facilities in Agricultural and Foothill Pasture areas that produce renewable energy, support agricultural-related industries, and/or use agricultural waste, provided that such uses do not interfere with agricultural practices or conflict with sensitive habitats or other biological resources.
LU-3.4:	New Rural Residential Center Prohibition (RDR) Prohibit the creation of any new, or the expansion of any existing, Rural Residential Centers in the unincorporated county.
LU-4.7:	Wildlife Refuge Separation (RDR) Do not allow rural commercial and industrial uses, secondary residences, and ancillary agricultural uses within a half mile of either State or Federal wildlife refuges, or managed wetlands within the Grasslands Ecological Area when it is determined by the County that there could be an unmitigated impact to natural resources or habitat.
LU-10.14:	Consultation with Grassland Resources Regional Working Group (IGC) Consult with the Grasslands Resources Regional Working Group during project review and conservation planning efforts for projects within the boundaries of the Grasslands Focus Area.
LU-10.12:	Consultation with State and Federal Agencies (IGC) Continue to consult with applicable State and Federal regulatory agencies during project review and permitting activities.
<i>Natural Resources Element</i>	
NR-1.1:	Habitat Protection (RDR/PSR) Identify areas that have significant long-term habitat and wetland values including riparian corridors, wetlands, grasslands, rivers and waterways, oak woodlands, vernal pools, and wildlife movement and migration corridors, and provide information to landowners.
NR-1.2	Protected Natural Lands (RDR/PSR) Identify and support methods to increase the acreage of protected natural lands and special habitats, including but not limited to, wetlands, grasslands, vernal pools, and wildlife movement and migration corridors, potentially through the use of conservation easements.
NR-1.3	Forest Protection (SO) Preserve forests, particularly oak woodlands, to protect them from degradation, encroachment, or loss.
NR-1.4	Important Vegetative Resource Protection (SO) Minimize the removal of vegetative resources which stabilize slopes, reduce surface

	water runoff, erosion, and sedimentation.
NR-1.5	Policy NR-1.5: Wetland and Riparian Habitat Buffer (PSR/RDR) Identify wetlands and riparian habitat areas and designate a buffer zone around each area sufficient to protect them from degradation, encroachment, or loss.
NR-1.6	Policy NR-1.6: Terrestrial Wildlife Mobility (SO) Encourage property owners within or adjacent to designated habitat connectivity corridors that have been mapped or otherwise identified by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service to manage their lands in accordance with such mapping programs. In the planning and development of public works projects that could physically interfere with wildlife mobility, the County shall consult with the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service to determine the potential for such effects and implement any feasible mitigation measures.
NR-1.7	Policy NR-1.7: Agricultural Practices (SO) Encourage agricultural, commercial, and industrial uses and other related activities to consult with environmental groups in order to minimize adverse effects to important or sensitive biological resources.
NR-1.8	Policy NR-1.8: Use of Native Plant Species for Landscaping (SO) Encourage the use of native plant species in landscaping, and, where the County has discretion, require the use of native plant species for landscaping.
NR-1.9	Policy NR-1.9: Rural to Urban Redesignations (MPSP) Carefully consider the potential impacts on significant habitats from new development when redesignating land from a rural to an urban use.
NR-1.10	Policy NR-1.10: Aquatic and Waterfowl Habitat Protection (MPSP) Cooperate with local, State, and Federal water agencies in their efforts to protect significant aquatic and waterfowl habitats against excessive water withdrawals or other activities that would endanger or interrupt normal migratory patterns or aquatic habitats.
NR-1.11	Policy NR-1.11: On-Going Habitat Protection and Monitoring (PSR) Cooperate with local, State, and Federal agencies to ensure that adequate on-going protection and monitoring occurs adjacent to rare and endangered species habitats or within identified significant wetlands.
NR-1.12	Policy NR-1.12: Wetland Avoidance (RDR/PSR/MPSP) Avoid or minimize loss of existing wetland resources by careful placement and construction of any necessary new public utilities and facilities, including roads, railroads, high speed rail, sewage disposal ponds, gas lines, electrical lines, and water/wastewater systems.
NR-1.13	Policy NR-1.13: Wetland Setbacks (RDR) Require an appropriate setback, to be determined during the development review process, for developed and agricultural uses from the delineated edges of wetlands.
NR-1.14	Policy NR-1.14: Temporary Residential Uses (RDR) Ensure that buildings and structures approved for temporary residential use in significant wetland areas are not converted to permanent residential uses.
NR-1.15	Policy NR-1.15: Urban Forest Protection and Expansion (SO/MPSP) Protect existing trees and encourage the planting of new trees in existing communities. Adopt an Oak Woodland Ordinance that requires trees larger than a specified diameter that are removed to accommodate development be replaced at a set ratio.
NR-1.16	Policy NR-1.16: Hazardous Waste Residual Repository Location (RDR) Require new hazardous waste residual repositories (e.g., contaminated soil facilities) to be located at least a mile from significant wetlands, designated sensitive species habitat, and State and Federal wildlife refuges and management areas.
NR-1.17	Policy NR-1.17: Agency Coordination (MPSP/IGC/JP)

	Consult with private, local, State, and Federal agencies to assist in the protection of biological resources and prevention of degradation, encroachment, or loss of resources managed by these agencies.
NR-1.18	Policy NR-1.18: San Joaquin River Restoration Program Support (MPSP/SO) Monitor the San Joaquin River Restoration Program efforts to ensure protection of landowners, local water agencies, and other third parties.
NR-1.19	Policy NR-1.19: Merced River Restoration Program Support (MPSP/SO) Support the restoration efforts for the Merced River consistent with the Merced River Corridor Restoration Plan.
NR-1.20	Policy NR-1.20: Conservation Easements (SO/IGC/JP) Encourage property owners to work with land trusts and State and Federal agencies to pursue voluntary conservation easements.
NR-1.21	Policy NR-1.21: Special Status Species Surveys and Mitigation (RDR/SO/IGC) Incorporate the survey standards and mitigation requirements of state and federal resource management agencies for use in the County's review processes for both private and public projects.
Program NR-C	GIS Mapping (PSR, PI) Update the existing Geographical Information System to include current protected or designated habitat spatial information, including wildlife refuges, Grasslands Focus Area (GFA) and Grasslands Ecological Area (GEA) boundaries, mitigation banks, Williamson Act parcels, Habitat Connectivity Corridors, priority riparian corridors, and habitat preserves. Implements Which Policies: NR-1.1, NR-1.2, NR-1.5
Program NR-D	Sensitive Habitat Guidelines (MPSP) Prepare and adopt guidelines and thresholds of significance pursuant to State CEQA Guidelines Section 15064.7 for evaluating project impacts to identified sensitive habitat, including a significance criterion for potential effects on habitat values within Grasslands Focus Area (GFA) boundaries. The guidelines shall be made available for public comment prior to final adoption. For discretionary projects within the boundaries of the GFA, the guidelines shall require the preparation of an appropriate project-level CEQA document with a review and evaluation of biological resources impacts at a level of detail commensurate with the proposed project's effects to such resources in addition to implementation of the Open Space Development Review System. For non-discretionary or ministerial projects within the GFA boundaries, the Guidelines shall require the County to implement the Open Space Development Review System, including referral to GRRWG (Grasslands Resources Regional Working Group) as appropriate. The guidelines shall recommend measures such as buffers, clustered development, project design alterations, and transferable development rights, sufficient to protect sensitive habitats from encroachment. Implements Which Policies: NR-1.1, NR-1.2, NR-1.3, NR-1.4, NR-1.5, NR-1.7, NR-1.10, NR-1.12, NR-1.13, NR-1.14, NR-1.17, NR-1.21
Program NR-E	Biological Resources Review Requirements (RDR/MPSP/IGC) County biological resources review requirements should identify state and federal biological significance thresholds and species-specific survey guidelines, and should include types of survey reports, surveyor qualifications, countywide habitat classifications, foraging crop habitat values, approved mitigation banks, and procedures to facilitate pre-consultation with state and federal agencies. State and federal mitigation standards should be considered as minimum County standards. Submit results of biological resources assessments, surveys and proposed mitigation measures to the appropriate state and federal agency as early in the review process as practicable, to expedite and ensure regulatory consistency among local, regional, state, and federal agencies with jurisdiction over such resources. Implements Which Policies: NR-1.1, NR-1.2, NR-1.3, NR-1.4, NR-1.5, NR-1.7, NR-1.10, NR-1.12, NR-1.13, NR-1.14, NR-1.17, NR-1.21.

Program NR-F	<p>Ongoing Inventory of Open Space Resources (MPSP/PSR/SO)</p> <p>The County shall maintain an open space and conservation inventory to delineate those areas that have significant open space or conservation value. Those areas include agricultural lands, native pasture lands, parks and recreation areas, historic resources, scenic highways, wetland, wildlife and vegetation habitat resources, mineral and energy resource areas, fire hazard areas, geologic and flood hazard areas, noise impacted areas and other resource and hazard areas. Implements Which Policies: AG-2.1, AG-2.8, AG-2.9, AG-4.5, NR-1.1, NR-1.2, NR-1.7, NR-1.11, NR-3.4, NR-4.1, NR-4.2, HS-1.1, HS-1.3, HS-1.6, HS-1.7, HS-2.6, HS-2.7, HS-2.9, HS-2.10, HS-2.13, HS-3.8, HS-7.1, HS-7.3.</p>
Program NR-G	<p>Open Space Development Review System (RDR/IGC)</p> <p>The Open Space Development Review System (OSDRS) is one of the primary implementing tools of the County's Open Space Action Plan. Through such a review system, daily planning and permit approval decisions should reflect and implement the adopted policies and development standards of the 2030 General Plan.</p> <p>Other federal, state and local agencies also have responsibility for the protection, maintenance and development of Open Space resources. The referral of projects and consultation with appropriate responsible and trustee agencies is part of the program.</p> <p>The system is intended for utilization both by developers in the design and building of projects, and by planners and decision makers in review of projects for conformance with County policy. The system is basically a process for assessing the appropriateness of proposed developments, including their compatibility with surrounding environmental constraints and resources. The general review system will be organized in a five step process. This process will be implemented in conformance with the Sensitive Habitat Guidelines developed under Implementation Program NR-D of this Element.</p> <p>This system of review will be required of all projects for which a building permit or other entitlement is necessary such as a land division or use permit, as well as during policy and ordinance amendment. The Community and Economic Development Department has developed a five-step process consisting of:</p> <ol style="list-style-type: none"> 1. Basic Land Use Category, Zone Code Consistency, and Community Service Availability Determination 2. Open Space Inventory Map and Data Base Review 3. Demonstration by the permit applicant of consultation with the California Department of Fish and Wildlife, the Central Valley Regional Water Quality Control Board, the State Water Resources Control Board, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and/or the Army Corps of Engineers, and any water purveyor serving the project area, as appropriate, to evaluate resources that could be affected by the proposed action; and proof of issuance of permits by these agencies, as required 4. Environmental Determination 5. Land Use and Sensitive Resource Compatibility Determination. 6. <p>Implements Which Policies: NR-1.1, NR-1.2, NR-1.3, NR-1.4, NR-1.5, NR-1.7, NR-1.10, NR-1.12, NR-1.13, NR-1.14, NR-1.17, NR-1.21.</p>
Program NR-I	<p>Agricultural Education Program (SO/IGC/PI)</p> <p>In a coordinated effort between the Department of Community and Economic Development and the County Agricultural Commissioner, the County shall produce a brochure or publication outlining the responsibilities of landowners in managing and preserving sensitive environmental resources on their properties. The brochure shall set forth state and federal regulatory requirements and permitting procedures, state and federal agency contact information, and statutory penalties for noncompliance, including the loss of commodity support and other assistance offered through the USDA. The brochures will be made available at the offices of the County departments cited above, the County Building Division counter, posted on the County's website, and provided to the various Resource Conservation Districts throughout the county for additional distribution.</p> <p>Implements Which Policies: AG-1.10, AG-4.6, NR-1.1, NR-1.2, NR-1.3, NR-1.4, NR-1.5, NR-1.7, NR-1.10, NR-1.12, NR-1.13, NR-1.14, NR-1.17, NR-1.21.</p>

APPENDIX B



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

August 10, 2018

Consultation Code: 08ESMF00-2018-SLI-2954

Event Code: 08ESMF00-2018-E-08750

Project Name: Oliveira Dairy Expansion Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2018-SLI-2954

Event Code: 08ESMF00-2018-E-08750

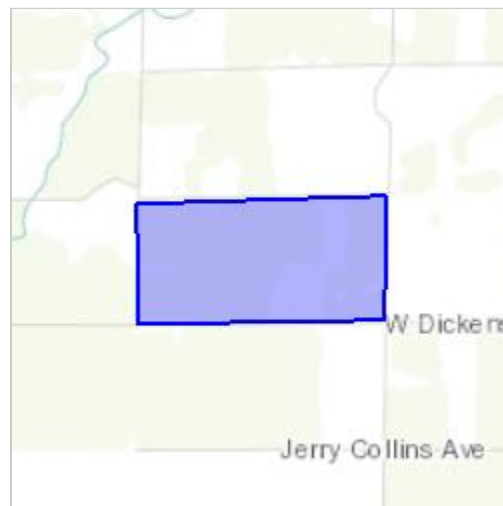
Project Name: Oliveira Dairy Expansion Project

Project Type: AGRICULTURE

Project Description: The existing Oliveira Dairy and the site of the proposed expansion are located on an approximate 22-acre portion of a 290-acre site. The proposed dairy expansion project would include construction of supporting buildings and structures, including two new shade barns, two new freestall barns, and a new milking parlor. Construction of the proposed structures would convert approximately seven acres of cropland to active dairy facilities on APN 059-190-026 and -027.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.276818800286705N120.56929930337334W>



Counties: Merced, CA

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard <i>Gambelia silus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Colusa Grass <i>Neostapfia colusana</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5690	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: BIOS selection

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	95 270	951 S:31	1	1	0	0	6	23	16	15	25	6	0
<i>Agrostis hendersonii</i> Henderson's bent grass	G2Q S2	None None	Rare Plant Rank - 3.2	225 225	26 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ambystoma californiense</i> California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	105 600	1177 S:34	1	3	2	2	0	26	5	29	34	0	0
<i>Anniella pulchra</i> northern California legless lizard	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	98 98	333 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	200 200	415 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Astragalus tener var. tener</i> alkali milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2	90 90	65 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	130 450	1971 S:10	4	1	3	0	0	2	0	10	10	0	0
<i>Atriplex cordulata var. cordulata</i> heartscale	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	95 150	66 S:5	0	2	0	0	1	2	5	0	4	0	1
<i>Atriplex minuscula</i> lesser saltscale	G2 S2	None None	Rare Plant Rank - 1B.1	95 95	37 S:2	0	1	0	0	1	0	2	0	1	0	1



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Atriplex persistens</i> vernal pool smallscale	G2 S2	None None	Rare Plant Rank - 1B.2	95 145	41 S:8	2	2	0	0	1	3	4	4	7	1	0
<i>Atriplex subtilis</i> subtle orache	G1 S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		24 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	G2 S2	Endangered None	IUCN_EN-Endangered	85 270	43 S:5	2	0	0	0	0	3	1	4	5	0	0
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	85 660	766 S:67	45	8	1	0	0	13	4	63	67	0	0
<i>Branchinecta mesoatlantica</i> midvalley fairy shrimp	G2 S2S3	None None		95 350	128 S:30	3	0	0	0	0	27	2	28	30	0	0
<i>Buteo regalis</i> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	175 175	107 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	95 219	2460 S:28	6	7	2	1	1	11	8	20	27	1	0
<i>Castilleja campestris var. succulenta</i> succulent owl's-clover	G4?T2T3 S2S3	Threatened Endangered	Rare Plant Rank - 1B.2	175 700	91 S:27	4	7	0	2	0	14	3	24	27	0	0
<i>Charadrius montanus</i> mountain plover	G3 S2S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	275 275	90 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Clarkia rostrata</i> beaked clarkia	G2G3 S2S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	375 375	74 S:2	1	1	0	0	0	0	0	2	2	0	0
<i>Delphinium recurvatum</i> recurved larkspur	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	120 120	100 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	G3T2 S2	Threatened None		100 110	271 S:3	0	0	0	0	1	2	2	1	2	1	0
<i>Dipodomys heermanni dixonii</i> Merced kangaroo rat	G3G4T2T3 S2S3	None None		280 435	21 S:6	0	0	0	0	0	6	0	6	6	0	0
<i>Downingia pusilla</i> dwarf downingia	GU S2	None None	Rare Plant Rank - 2B.2	273 630	132 S:3	0	2	0	0	0	1	0	3	3	0	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	139 317	1343 S:6	0	1	1	0	0	4	1	5	6	0	0
<i>Eryngium racemosum</i> Delta button-celery	G1 S1	None Endangered	Rare Plant Rank - 1B.1	85 100	26 S:4	1	1	0	0	0	2	2	2	4	0	0
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	G2 S2	None None	Rare Plant Rank - 1B.2	200 245	90 S:4	0	0	0	0	0	4	0	4	4	0	0
<i>Eumops perotis californicus</i> western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	180 200	294 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Euphorbia hooveri</i> Hoover's spurge	G1 S1	Threatened None	Rare Plant Rank - 1B.2	95 95	29 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Extriplex joaquinana</i> San Joaquin spearscale	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	100 100	124 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Falco columbarius</i> merlin	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	410 410	36 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Gambelia sila</i> blunt-nosed leopard lizard	G1 S1	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	120 120	323 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	270 270	327 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lagophylla dichotoma</i> forked hare-leaf	G2 S2	None None	Rare Plant Rank - 1B.1		7 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasiurus blossevillii</i> western red bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	200 200	126 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	200 200	236 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	85 85	97 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	G4T1 S1	None None	Rare Plant Rank - 1B.2	85 85	14 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	G4 S3S4	Endangered None	IUCN_EN-Endangered	85 180	324 S:9	3	3	1	1	0	1	2	7	9	0	0
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	85 590	434 S:24	1	4	1	0	0	18	1	23	24	0	0
<i>Lithobates pipiens</i> northern leopard frog	G5 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	100 100	22 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lytta molesta</i> molestan blister beetle	G2 S2	None None		230 230	17 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Mylopharodon conocephalus</i> hardhead	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	90 175	32 S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Myotis yumanensis</i> Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	200 200	263 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Navarretia nigelliformis ssp. radians</i> shining navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	200 380	72 S:16	3	6	0	0	0	7	0	16	16	0	0
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	G2 S2	None None	Rare Plant Rank - 1B.1	90 90	60 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Neostapfia colusana</i> Colusa grass	G1 S1	Threatened Endangered	Rare Plant Rank - 1B.1	90 380	62 S:11	1	0	5	0	4	1	4	7	7	4	0
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	G1 S1.1	None None		90 135	21 S:4	0	0	1	0	0	3	4	0	4	0	0
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	G3 S3.1	None None		160 675	126 S:4	0	0	0	0	0	4	4	0	4	0	0
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	G5T2Q S2	Threatened None	AFS_TH-Threatened		31 S:2	0	0	0	1	0	1	0	2	2	0	0
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	G1 S1	Threatened Endangered	Rare Plant Rank - 1B.1	182 340	48 S:7	0	1	3	0	2	1	2	5	5	0	2
<i>Orcuttia pilosa</i> hairy Orcutt grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1	175 309	33 S:2	0	0	0	0	2	0	2	0	0	1	1
<i>Perognathus inornatus</i> San Joaquin Pocket Mouse	G2G3 S2S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern	310 490	123 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Phacelia ciliata var. opaca</i> Merced phacelia	G5TH SH	None None	Rare Plant Rank - 3.2	200 200	7 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Phrynosoma blainvillii</i> coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	95 95	774 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Puccinellia simplex</i> California alkali grass	G3 S2	None None	Rare Plant Rank - 1B.2	100 100	71 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Sagittaria sanfordii</i> Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	90 350	126 S:4	0	2	0	0	0	2	2	2	4	0	0
<i>Sidalcea keckii</i> Keck's checkerbloom	G2 S2	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	280 280	16 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Spea hammondi</i> western spadefoot	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	85 183	463 S:4	1	1	0	0	0	2	2	2	4	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	145 185	559 S:2	1	0	0	0	0	1	1	1	2	0	0
<i>Thamnophis gigas</i> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	105 170	366 S:2	0	1	0	0	1	0	1	1	1	1	0
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	G4T3 S1	None None	Rare Plant Rank - 2B.1	100 100	9 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	G4T2 S2	Endangered Threatened		100 225	1017 S:6	1	1	2	1	0	1	1	5	6	0	0