
APPENDIX H

Biological Resources Reconnaissance Survey and CEQA Analysis

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Report of Findings

Biological Resources Reconnaissance Survey and CEQA Analysis Correia Family Dairy Farms Expansion Project

Location:

26380 W. Fahey Road,

Gustine, California 37° 7'32.99"N, 120°58'0.25"W

Permit Sought: Conditional Use Permit No. CUP21-009



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Dates of Biological Resources Reconnaissance Surveys: May 9, 2023
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1 SUMMARY

The existing Correia Family Dairy is located on approximately 60 acres of an existing farm totaling approximately 502 acres in an unincorporated area of Merced County south of the City of Gustine. A Conditional Use Permit Application has been submitted to Merced County to increase the permitted herd size from 2,130 animals to 6,075 animals. This represents an increase of 3,945 animals. The proposed project includes construction of five new freestall barns, two new loafing barns, and an expansion of the existing milking parlor. There would be approximately 11.4 acres of cropland converted to new facilities with the proposed expansion.

A reconnaissance-level biological survey was conducted on May 9, 2023 by biologists from Padre Associates, Inc. (Padre). A number of special-status species, including Swainson's hawk and tricolored blackbird have been reported within approximately five miles of the Correia Family Dairy. Other raptors and migratory birds are known to forage in the area.

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 Correia Family Dairy Farms Expansion Project in Merced County, California. The Biological Reconnaissance Survey was conducted on May 9, 2023 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 resource 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);
- Listed endangered, threatened, or a candidate species under the California Endangered Species Act (CESA);
- Listed as a Fully Protected Species by the California Department of Fish and Wildlife (CDFW);
- Listed as a species of special concern by the California Department of Fish and Wildlife (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 and reproduction in the wild are in immediate jeopardy, present in such small numbers throughout all or a significant portion of its range that it may become endangered, or likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

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. Consultations are conducted under Sections 7 or 10 of FESA depending on the involvement by the federal government.

Under Section 7, the Services are authorized to issue Incidental Take Permits (ITP) for the take of a listed species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency. A Biological Assessment is usually required as part of the Section 7 consultation to provide sufficient information for the Services to fully determine the project's potential effect on listed species.

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.

Food Security Act of 1985. The U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) is responsible for delineation of wetlands on agricultural lands. The wetland conservation provisions of the 1985 Food Security Act removed incentives for production of agricultural commodities on converted wetlands making farmers ineligible for program benefits for agricultural commodities produced on wetlands converted after December 23, 1985, unless the functions of the converted wetlands were mitigation or unless an exemption applies. The NRCS is responsible for wetland certifications made to determine eligibility for USDA program benefits. An NRCS certification may result in determination of “prior converted croplands” or “farmed wetlands” depending on the date of conversion to agricultural croplands and other factors.

“Prior converted croplands” are wetlands that were both manipulated (e.g., drained or otherwise physically altered to remove excess water) and cropped prior to December 23, 1985, to the extent that they no longer exhibit important wetland values and are inundated for no more than 14 consecutive days during the growing season. Prior converted cropland does not include pothole or playa wetlands or wetlands that are seasonally flooded or ponded for 15 or more consecutive days during the growing season.

“Farmed wetlands” are wetlands that were both manipulated and cropped before December 23, 1985, but which continue to exhibit important wetland values. Farmed wetlands include cropped areas with 15 or more consecutive days of inundation during the growing season or cropped potholes and playas.

The wetland conservation provisions are intended to protect remaining values, acreage, and functions of the farmed wetlands. Farming of wetlands under natural conditions may occur; however, no action can be taken to increase effects on the water regime beyond that which existed on December 23, 1985, unless NRCS determines the effect on loss of remaining wetland values would be minimal under CFR Title 7, Subtitle A §12.5(b)(1)(v). The production of an agricultural commodity on lands determined by NRCS to be prior converted cropland is exempted from USDA Regulations for the area that was converted.

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 (CWA). Waters of the United States include territorial seas, navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, perennial and intermittent tributaries to waters of the United States, and wetlands that are adjacent to jurisdictional waters of the United States.

The ACOE will determine CWA jurisdiction for areas that are in agricultural production proposed for development to determine if a Section 404 permit is required. According to ACOE regulatory guidance, prior converted croplands typically have been subject to such extensive and relatively permanent physical hydrological modification and alteration of hydrophytic vegetation that the resulting cropland constitutes the normal circumstance for purposes of CWA jurisdiction, and subsequently are not subject to regulation under Section 404 of the CWA. For croplands designated as prior converted cropland or farmed wetland by the NRCS, the ACOE will rely upon NRCS designations to the extent possible when determining CWA jurisdiction. For croplands not previously designated, the ACOE will consult with NRCS staff when determining CWA jurisdiction.

Section 10 of the Rivers and Harbors Act of 1899. The ACOE regulates activities affecting “navigable waters of the United States” under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Navigable waters are defined as “...*those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.*” Structures or work under or over a navigable WoUS is considered to have an impact on the navigable capacity of the waterbody.

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, which is administered by the California Department of Fish and Wildlife (CDFW), 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. 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. Completion of a LSAA with the CDFW is required before any work begins that will substantially change or use any material from the bed, bank or channel within jurisdictional areas.

Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act mandates that waters of the State of California shall be protected. Current policy in California is that activities that may affect waters of the State shall be regulated to attain the highest quality. Waters of the State include any surface water or groundwater, including saline waters, and any aquatic features that meet the state definition of a wetland, within the boundaries of the state. The Porter-Cologne Act establishes that the state assumes responsibility for implementing portions of the federal Clean Water Act, rather than operating separate state and Federal water pollution control programs in California. Consequently, the state is involved in activities such as setting water quality standards, issuing discharge permits, and operating grant programs. Pursuant to Section 401 of the Clean Water Act, the ACOE cannot issue a federal permit until the State of California first issues a water quality certification to ensure that a project will comply with state water quality standards. The Regional Water Quality Control Board issues water quality certifications.

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 Correia Family Dairy is located on four existing parcels south of the City of Gustine within Merced County. The project site is bisected by Fahey Road, most dairy facilities on the north side of the road while heifer pens are located on the south side of the road. The project's location is within the central California region. The project site is located in Section 27 Township 9 South, Range 9 East Mount Diablo Principal Meridian: 37° 7'45.98" N 120°57'59.69" W.

2.4 PROJECT DESCRIPTION

2.4.1 EXISTING FACILITIES

The existing dairy facilities include approximately 185,354 square feet of roofed structures, 198,890 square feet of impervious areas, and 1,148,660 square feet of earthen areas. Existing dairy facilities are located on the north side of W. Fahey Road and include the following:

- | | |
|--------------------------------|--------------------------------|
| - - freestall barns and shades | - - freestall barns and shades |
| - - open corrals | - - open corrals |
| - - commodity barn | - - commodity barn |
| - - milk barn | - - milk barn |

The heifer facility located on the south side of W. Fahey Road includes corrals and manure storage. Approximately 398± acres of the dairy project parcels are currently used for the production of crops and the application of manure process water and/or solid manure. The remaining project acres consist of field roads and ancillary farm uses.

There are approximately 1,050 milk cows and 120 dry cows with 960 support stock, totaling 2,130 animals at the dairy.

The existing dairy facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal waste from animal barns and other concrete-surfaced areas are flushed with recycled water to an on-site waste management system that consists of two solid settling basins and one wastewater storage pond. All ponds are earthen-lined. The area of active dairy facilities has been graded to direct corral runoff to the existing waste management system. Wastewater from the heifer facility is transported via wastewater pipeline to the dairy facility pond. Stormwater runoff from impervious surfaces and roofed areas is routed to the wastewater pond. Recycled water is used to clean the milk parlor floor and is the source of sprinkler pen water.

2.4.2 PROPOSED EXPANSION

A Conditional Use Permit Application (CUP21-009) has been submitted to Merced County to increase the permitted herd size from 2,130 animals to 6,075 animals. This represents an increase of 3,945 animals. The proposed project includes construction of five new freestall barns, two new loafing barns, and an expansion of the existing milking parlor. There would be approximately 11.4 acres of cropland converted to new facilities with the proposed expansion.

Table 1 Existing and Proposed Herd at the Correia Family Dairy							
	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)	Total Animals
Existing	1,050	120	375	475	110	0	2,130
Proposed	3,000	390	830	1,160	415	280	6,075
Change	1,950	270	455	685	305	280	3,945

Note: This evaluation considers maximum buildout.

Source: Project Applicant, March 2023.

The proposed project would include the construction of 474,831 square feet of supporting buildings and structures at the existing dairy, including: five (5) new freestall barns (totaling 310,931 square feet), two (2) new loafing barns (totaling 127,200 square feet), a new milking parlor (36,700 square feet), a new domestic well at the dairy to replace an old existing domestic well on the dairy parcel, a new impervious manure drying area, new feed storage areas, and two (2) new solid manure weeping walls.

One of the proposed freestall barns and one loafing barn would be located at the facilities south of W. Fahey Road. In addition, the existing calf hutches would be relocated from the main dairy facility to the facilities south of W. Fahey Road. The existing milking parlor located at the entrance of the site would be converted to a hospital/maternity milking parlor and a new milking parlor would be constructed north of the existing housing barns. The existing settling basin would be reconfigured/reconstructed with the same capacity to provide room for a proposed freestall barn. All barns would consist of a concrete foundation and steel beam supports with corrugated metal roofs. Freestall barns would include concrete lanes for animal access and flushing with individual stalls for each animal. Loafing barns would have concrete lanes for animal access and flushing. The milking parlor walls would be constructed with concrete masonry unit (CMU) blocks.

Solid manure that accumulates within corrals would continue to be scraped and composted onsite. Dry manure would continue to be used for bedding; additional manure would be sold and hauled off site for use as fertilizer and soil amendments. Exported solid manure applied to off-site agricultural fields not owned by the project applicant would increase from 7,400 tons of solid manure from the dairy facility to 35,400 tons of solid manure with the proposed expansion (approximately 35 percent of proposed previously separated solids).

Operations at the dairy would continue to occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. With implementation of the proposed project, the number of employees is expected to increase from 8 to 10.

3 METHODS AND SURVEY LIMITATIONS

3.1 METHODS

Padre Associates, Inc. (Padre) evaluated the potential biological resources impacts of the Correia Family Dairy Farms 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 7.5' topographic quadrangle including the project area (Ingomar) and for the surrounding eight USGS topographic quadrangles (Gustine, Howard Ranch, Newman, San Luis Ranch, San Luis Dam, Volta, Los Banos, and Stevinson) (CDFW, 2023). The CNDDDB record search reports special-status species and habitat locations, and provide 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 (Appendix C).

Padre also conducted a query of the California Native Plant Society's (CNPS) Electronic Inventory for the same quadrangles to provide information on additional plant species of concern that may occur within the project site and surrounding vicinity (CNPS, 2023). A species list was obtained from the USFWS website for the Ingomar quadrangle to provide information on federally listed species that have the potential to occur within the vicinity of the proposed project (USFWS, 2023b) (Appendix B). A query of the USFWS National Wetland Inventory (NWI) Map for the Ingomar quadrangle was conducted for information regarding known wetlands in the project area project area (USFWS, 2023a).

Lastly, a series of historic aerial photographs, ranging from 1937 to 2016 were obtained from Environmental Data Resources (EDR) for analysis of the dairy development and surrounding area (EDR, 2023).

The results of the database search and location analysis were used to determine a) if any sensitive resources had been previously reported onsite or in the immediate vicinity of the Correia Family Dairy Farm Expansion project site and b) which sensitive biological resources should be the focus of 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 May 9, 2023. 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 vegetation cover types, assessing habitat suitability for known local wildlife, and recording observed plant and animal species. The survey was conducted during the day between 8:45 a.m. and 3:00 p.m. The weather was cool with a light breeze. The reconnaissance survey involved surveying the entire site, including on-foot and windshield evaluations of principal facilities and the project site. Berms along roadsides and bordering crop fields found by the biologists during the reconnaissance surveys were checked for sign of use by burrowing owl, American badger, and/or San Joaquin kit fox. Dominant flora and fauna were noted (when present) 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 six hours in morning and midday and, therefore, did not include dusk surveys or extended observations.

4 SURVEY RESULTS

4.1 PHYSICAL CHARACTERISTICS

The active dairy facilities of the Correia Family Dairy Farms are located on 60 acres of an existing farm totaling approximately 502 acres in unincorporated Merced County. Operations occur within a relatively flat, partially graded area on bare and exposed soil or concrete within the existing dairy. Section 2.4.1 details the existing infrastructure on the site.

4.2 VEGETATION AND WILDLIFE

The 60-acre portion of the site that supports active facilities is denuded of vegetation due to the trampling by the herd, operation of dairy related machinery, and other routine

agricultural practices. Surrounding the dairy on all sides are a combination of agricultural fields and rural single-family residences.

There are Central California Irrigation District (CCID) surface water canals within the vicinity of the proposed project, and the CCID Main Canal is located approximately 0.4 miles west of the project site. The project site is outside of the Grasslands Ecological Area but within the boundary of the Grasslands Focus Area. The NWI query identified the majority of the site as freshwater emergent wetland; however, the current site condition is active dairy and cropland.

As shown in Table 2, wildlife species observed on the dairy were limited to bird species that are common in the area and that are accustomed to human disturbance. No ground squirrel colonies or other burrows were observed in large concentrations. A few scattered burrows were found along the berms surrounding the wastewater ponds and row crops. The majority of these burrows were small and had been weathered and appeared to be inactive.

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 annual maximum temperature is 76.4° F, peaking in July at 96.5° F. The average annual minimum temperature is 48.0° F, with the lowest being in December and January at 36.3° F (Western Regional Climate Center). The primary soil types on the site are Pedcat loam, Pedcat clay, and Pedcat clay loam.

Table 2 Wildlife Species Recorded in Project Vicinity	
Common Name	Scientific Name
Birds	
Eurasian collared-dove	<i>Streptopelia decaocto</i>
Killdeer	<i>Charadrius vociferus</i>
Black-necked stilt	<i>Himantopus mexicanus</i>
Great egret	<i>Ardea alba</i>
Mallard	<i>Anas platyrhynchos</i>
Turkey vulture	<i>Cathartes aura</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Common Raven	<i>Corvus corax</i>
Western meadowlark	<i>Stenella neglecta</i>
Western Kingbird	<i>Tyrannus verticalis</i>
European starling	<i>Sturnus vulgaris</i>
House sparrow	<i>Passer domesticus</i>
House finch	<i>Haemorhous mexicanus</i>

Table 2 Wildlife Species Recorded in Project Vicinity	
Common Name	Scientific Name
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Great-tailed grackle	<i>Quiscalus mexicanus</i>
Mammals	
California Ground Squirrel	<i>Spermophilus beecheyi</i>
Coyote	<i>Canis latrans</i>

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;
- Informal consultation with the USFWS via the Information, Planning, and Consultation system (IPaC);
- Queries of the CDFW's California Natural Diversity Database (CNDDB), Biogeographic Information and Observation System (BIOS) (CDFW, 2023); and,
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database (CNPS, 2023).

To determine what special-status species occurred in the vicinity of the project area, the CNDDB was queried spatially within the USGS quadrangle containing the project site, Ingomar, and the surrounding eight quadrangles. Species recorded within the nine quadrangle search that may occur in similar habitat present at the project site were included in the analyses. The species occurrence map for the area immediately surrounding the project site is included 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 any available habitat within the site. The summary of this analysis is presented in Table 3.

The CNDDB and CNPS lists for nine quadrangle area and the USFWS Species List for the Ingomar quadrangle, identified six natural communities, 18 special-status plants, and 33 special-status wildlife species (Appendix B and C and Table 3).

Sensitive natural communities are those that are considered rare within the region and support sensitive plant and/or wildlife species, or function as corridors for wildlife movement. The six sensitive natural communities recorded in the area (cismontane alkali marsh, coastal and valley freshwater marsh, great valley cottonwood riparian

forest, sycamore alluvial woodland, valley sacaton grassland, and valley sink scrub) do not 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 occur on the project site. The entire site is or was in the recent past managed dairy farm and/or crop fields.

Special-status wildlife species that may occur on the site from time to time include tricolored blackbird and Swainson's hawk. Although very few burrows were observed on site, it is likely that the project site could support small mammals that provide prey for San Joaquin kit fox, American badger, and Swainson's hawk. Agricultural access roads, open or fallow fields, and irrigation ditches and canals provide an important corridor for the movements of these mammals. There was no vernal pool habitat that could support listed vernal pool invertebrates observed onsite during the reconnaissance survey.

The project site may provide occasional foraging opportunities for additional sensitive wildlife species including various raptors and migratory birds that are protected by the Migratory Bird Treaty Act. The nearby Los Banos Waterfowl Management Area (7.8 miles east) provides habitat for migratory waterfowl and shorebirds. This area provides potential habitat for nesting wildlife species as ducks, short-eared owls, northern harriers, and pheasants, and upland foraging and grazing wildlife species such as raptors, geese, cranes, and egrets. These species may disperse to or forage within surrounding areas, including the project site.

The project site is outside of the Grasslands Ecological Area (GEA) but within the boundary of the Grasslands Focus Area (GFA). The GEA is comprised of the Grasslands Wildlife Management Area (WMA) boundary with the addition of several state and federal wildlife areas that are outside of the Grasslands WMA.

Merced County 2030 General Plan Policy LU-1.13 restricts development within a half mile of State or Federal wildlife refuges within the GEA such as the Los Banos Waterfowl Management Area, the San Luis National Wildlife Refuge, and the Merced National Wildlife Refuge if the County determines that there are unmitigated impacts to natural resources or habitat. The proposed project site is more than a half mile from any State or Federal wildlife refuges. In addition, Policy LU-10.14 (Appendix A) requires the County to consult with the Grassland Resources Regional Working Group (GRRWG) during project review for projects located within the GFA. Consultation with the GRRWG has been initiated through the CEQA process during the Preliminary Application Review (PAR), prior to circulation of the Initial Study.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
SPECIAL-STATUS PLANTS			
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	1B.2	Alkali playa, valley and foothill grasslands and vernal pools. An annual herbaceous species that blooms from March to June and occurs at elevations between 0 and 200 feet.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<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. 3 to 500 feet. Blooms from April to October.	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 scrub, meadows and seeps in valley and foothill grassland habitat typically on alkaline soils. An annual herbaceous species that blooms from April to October, and occurs at an elevation of 0 to 1,000 feet.	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	Alkaline chenopod scrub, playas, and valley and foothill grasslands typically on sandy soils. Blooms from May to October and occurs at elevations ranging from 50 to 650 feet.	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	Vernal pools in alkaline soils. An annual herbaceous species that blooms from June through October and occurs between 0 and 320 feet elevation.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Chamaesyce hooveri</i> Hoover's Spurg	FT, 1B.2	This species is found in valley and foothill grassland, vernal pools on volcanic mudflow or clay substrate. Found regionally in moderately saline-alkaline soils at elevations ranging from 80 to 820 ft. Blooms from July to September, sometimes into October.	Absent. There is no habitat that would support this plant on the project site. The proposed project would not adversely impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Chloropyron molle</i> ssp. <i>hispidum</i> Hispid bird's-beak	1B.1	Meadows, playas, valley, and foothill grassland. In damp alkaline soils, especially meadows and sinks. Found regionally in a wetland with saltgrass. 33 to 500 ft. Blooms from June to September.	Absent. There is no habitat that would support this plant on the project site. The proposed project would not adversely impact this species.
<i>Eryngium racemosum</i> Delta button-celery	SE, 1B.1	Valley and foothill woodlands and vernal pools at elevations ranging from 250 to 3,200 feet. Blooms from June to October.	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 grasslands and vernal pools at elevations ranging from 260 to approximately 3,200 feet. Blooms from April to June.	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	It is an annual herb that is associated alkaline soils in chenopod scrub, meadows and seeps, playas, and valley and foothill grassland. It blooms from April to October and occurs at elevations of 0 and 2,500 feet.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Lasthenia chrysantha</i> alkali-sink goldfields	1B.1	Alkaline vernal pool habitat at elevations ranging from 0 to approximately 655 feet. Blooms from February to April.	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	It is an annual herbaceous species occurring in coastal salt marsh and vernal pool cover types. It blooms from February to June and occurs between 1 and 4,000 feet elevation.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	1B.1	Mesic coastal scrub, meadows and seeps, alkaline valley and foothill grasslands, and vernal pools. It blooms from April to July and occurs at elevations ranging from 10 to 3,970 feet	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Neostapfia colusana</i> Colusa grass	FT, SE, 1B.1	Vernal pools at elevations ranging from 15 to approximately 655 feet. Blooms from May to August.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Puccinellia simplex</i> California alkali grass	1B.2	Alkali and vernal mesic grasslands, vernal pools, and meadows. This species can be found at elevations less than 2,950 feet in both California and Utah. It blooms from March to May.	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	Assorted freshwater habitats including swamps and marshes at elevations ranging from 0 to approximately 2,130 feet. Blooms from May to October, sometimes into November.	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	2B.1	Alkaline meadows and seeps, marshes and swamps, riparian forests, and vernal pools at elevations ranging from 15 to approximately 1,425 feet. Blooms from May to September	Absent. There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Stuckenia filiformis</i> ssp. <i>alpina</i> Northern slender pondweed	2B.2	Shallow freshwater marshes and swamps at elevations from 985 to approximately 7,055 ft. Blooms from May to July.	Absent. There is no habitat to support 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.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
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Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<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.
<i>Danaus plexippus</i> Monarch butterfly	FC	Monarchs roost in eucalyptus, Monterey cypress, Monterey pine, and other trees in groves along the Pacific coastline of California, arriving starting in late October. Dispersal from these roosts generally begins in mid-February. Milkweed and nectar plant availability throughout the spring, summer and fall is important for monarch migration. In areas of the desert southwest, monarchs use nectar and milkweed plants throughout much of the year.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<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 is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
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Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Lepidurus packardii</i> Vernal Pool Tadpole Shrimp	FE	This species inhabits freshwater habitats containing clear to highly turbid water, with water temperatures ranging from 50 to 84 degrees Fahrenheit and pH ranging from 6.2 to 8.5	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>Acipenser medirostris</i> pop. 1 green sturgeon - southern DPS	FT	Juvenile green sturgeon have been collected in the San Francisco Bay up to the lower reaches of the Sacramento and San Joaquin rivers; however, spawning locations and seasons of this species are not known.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Oncorhynchus mykiss irideus</i> pop. 11 Steelhead – Central Valley DPS	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.
SPECIAL STATUS AMPHIBIANS			
<i>Ambystoma californiense</i> California tiger salamander	FT, ST	Seasonal pools and stockponds for breeding habitat. Needs underground refuges, especially ground squirrel burrows as upland habitat.	Absent. There is no habitat to support this species on the project site. The nearest occurrence (Occ. #12) From 1993 is 10 miles northeast of the project area in the San Luis National Wildlife Refuge. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Rana boylei</i> pop. 4 Foothill Yellow-legged Frog - central coast DPS	PFT, SE	Occurs in the foothills of the Coast, Cascade, and Sierra ranges from sea level to 6,000 feet. It is an inhabitant of streams and rivers in a variety of habits including foothill woodland, chaparral, and forest. It is generally found within a few feet of stream banks where it can bask on warm rocks, but escape quickly into the stream for protection.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<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. Requires areas with extensive emergent vegetation. High value habitats are deep-water ponds with dense stands of overhanging willows and a fringe of cattails.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Spea hammondi</i> Western spadefoot	CSC	This species occurs primarily in grassland situations, but occasional populations also occur in valley-foothill hardwood woodlands. Breeding and egg laying normally takes place from late winter until the end of March.	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>Anniella pulchra</i> Northern California legless lizard	CSC	This species occurs in coastal dune, valley-foothill, chaparral, and coastal scrub habitats.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Emys marmorata</i> Western pond turtle	FPT, 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. The closest occurrence is approximately 2.6 miles east of the project site (Occ. #229) from 2002. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<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 nearest occurrence (Occ. #117) from 1931 is 7 miles southwest of 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.	Low. There is no habitat to support this species on the project site. The closest occurrence (Occ. #153) from 2018 is 2 miles east of the project site. The proposed project would not impact this species.
SPECIAL STATUS BIRDS			
<i>Accipiter cooperii</i> Cooper's hawk	WL	Breeds in forests and streamside trees where it can hunt its prey by ambush in the dense cover. Has also been known to forage in residential areas.	Low – Foraging / Absent – Nesting. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Accipiter striatus</i> Sharp-shinned hawk	WL	Breeds in woodland habitat. Typically forages in areas of dense cover where it can ambush its prey.	Low – Foraging / Absent – Nesting. There is no habitat to support this species on the project site. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Agelaius tricolor</i> Tricolored blackbird	ST, CSC, BCC	Nesting colony requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	Moderate – Foraging and Nesting. The closest recorded occurrence is located approximately 1.8 miles southeast of the project site and is from 2008 (Occ. #658). Although this species was not observed during the site survey, the croplands onsite or in surrounding areas could provide suitable nesting habitat for tricolored blackbird. The rye fields grown onsite are not a preferred nesting substrate. Approximately 11.4 acres of cropland providing potential breeding and foraging habitat will be impacted by this project.
<i>Aquila chrysaetos</i> Golden eagle	WL, FP	Varied open and semi-open habitats throughout much of California, including mountains, desert, and grassland. It generally nests in tall trees which overlook open areas suitable for hunting. In winter it will inhabit more varied habitats including chaparral.	Low – Foraging / Absent – Nesting. The closest recorded occurrence is located approximately 6.3 south of the project site (Occ. #120) is from 1987. No other, more current observations of this species occur in the region. The proposed project would not impact this species.
<i>Athene cunicularia</i> Burrowing owl	CSC, BCC	Dry, open short grass, treeless plains that are associated with burrowing species. Underground nesting habitat in burrows.	Low – Foraging and Nesting. There is very limited foraging or nesting habitat at the project site due to the high level of disturbance that is part of routine dairy operation. No significant mammal burrow colonies were observed during surveys that could provide suitable burrowing habitat for the species. The closest recorded occurrence is located approximately 3.8 miles southwest of the project site and is from 1993 (Occ. #198). The proposed project would not impact breeding or foraging habitat.
<i>Branta hutchinsii leucopareia</i> Cackling (=Aleutian Canada) goose	FDL, WL	Breeds in the Aleutian Islands and winters in the Central Valley of California. During the winter, it occurs in agricultural fields and pastures.	Low - Foraging / Absent - Nesting. The closest recorded occurrence is located approximately 3.8 miles northwest of the project site and is from 1987 (Occ. #21). The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Buteo swainsoni</i> Swainson's hawk	ST	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.	High – Foraging / Moderate - Nesting. The closest record of a nesting occurrence is 0.5 miles from the project site (Occ. #2493) observed in 1993. This nest tree along with others in the project vicinity were checked for nests and none were observed. Swainson's hawks are likely to forage on project area croplands if the crops are in an appropriate condition to allow foraging (harvested or sparse enough to allow flight). Approximately 11.4 acres of cropland providing suitable foraging habitat will be impacted by this project.
<i>Circus hudsonius</i> Northern harrier	CSC, BCC	Meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Breeding occurs April to September, with peak activity June through July.	Moderate – Foraging / Absent – Nesting. The open fields surrounding the project site may provide suitable foraging habitat for this species depending on what crop is in production. There is no suitable nesting habitat at the project site. The closest occurrence (Occ. #40) from 2001 is 1.5 miles east of the project vicinity within the Volta Wildlife Area. Approximately 11.4 acres of cropland providing suitable foraging habitat will be impacted by this project.
<i>Coturnicops noveboracensis</i> Yellow rail	CSC, BCC	Sedge- or grass-dominated wetlands, particularly wet prairie, and fens. It winters in coastal marshes in the southeastern United States. It is present in its breeding habitat from April through September	Absent - Foraging and Nesting. The closest occurrence (Occ. # 7) from 1911 is 7.5 miles southeast of the project area. No more recent occurrences of this species occur within the nine quadrangles surrounding the project area. The proposed project would not impact this species.
<i>Eremophila alpestris actia</i> California horned lark	WL	Year-round resident of open areas in California with short sparse vegetation including prairies, deserts, dunes, heavily grazed fields, and plowed fields. Nests on the ground in a small depression.	Low – Foraging / Absent - Nesting. The nearest occurrence (Occ #9) from 1993 was 4 miles southwest of the project area. The proposed project would not impact this species.

Table 3
Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species
List for the Correia Family Dairy Farms Expansion Project Area

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Gymnogyps californianus</i> California Condor	FE, SE, FP	Nests in caves or rock crevices, laying one egg per clutch between February and May. California condors have been observed making forays from the coast range across the Central Valley to the western slope of the Sierra Nevada Range, specifically roosting within Tulare and Kern counties for short periods of time, typically from late summer through early spring.	Absent - Foraging and Nesting. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Lanius ludovicianus</i> Loggerhead shrike	CSC	Open habitats like prairies and grasslands, with sparse perches including trees, shrubs, posts, and fences.	Moderate – Foraging / Low - Nesting. Limited suitable nesting habitat is present at the site. Loggerhead shrike forage in open areas like those present at the site and are likely to forage in the project vicinity. The closest occurrence (Occ. #109) from 2014 is 8.2 miles northeast of the project area within the boundaries of the Great Valley Grasslands State Park.
SPECIAL STATUS MAMMALS			
<i>Dipodomys ingens</i> Giant kangaroo rat	FE, SE	The giant kangaroo rat is permanent resident occurring in scattered colonies along the western side of the San Joaquin Valley. It is found on fine sandy loam soils supporting sparse annual grass/forb vegetation, and marginally found in low-density alkali desert scrub. It prefers level terrain and sandy loam soils for burrowing.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Dipodomys nitratoideis exilis</i> Fresno kangaroo rat	FE, SE	Historically, this species occupied of alkaline sink shrublands and arid, alkaline grasslands of the San Joaquin Valley.	Absent. There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Lasiurus frantzii</i> Western red bat	CSC	It roosts in forest and woodland habitats from sea level to mixed conifer forests but feeds over a variety of habitats including grasslands and shrublands. Roosts almost exclusively in riparian areas. Prefers cottonwoods, sycamores, and willows for roosting	Absent. There is no habitat to support this species on the project site. The closest known record of the species (Occ. #80) from 1999 is approximately 16.3 miles north of the project site. No contemporary, closer observations occur. The proposed project would not

Table 3 Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List for the Correia Family Dairy Farms Expansion Project Area			
Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
			impact this species.
<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.	Low. This species or its sign (burrows, tracks, scat) were not observed during field surveys, and the substrate was void of any significant burrows. The closest known record of the species is approximately 5.8 miles southwest of the site and is from 2006 (Occ. #485). This species may occur occasionally as a transient but is not expected to den onsite. The proposed project would not significantly 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.	Low. This species or its sign (burrows, tracks, scat) were not observed during field surveys, and the substrate was devoid of any suitable burrows. The closest known record of the species is approximately 2.9 miles west of the site from 1994 (Occ. #122). This species may occur occasionally as a transient but is not expected to den onsite. The proposed project would not significantly impact this species.
^aStatus (Federal/State) None = No Federal or State status FE = Federally listed endangered FT = Federally listed threatened FDL = Federal delisted FPT = Federal Proposed Threatened PFT = Federal proposed threatened SE = State listed endangered ST = State listed threatened CSC = State species of special concern FP = California fully protected species WL = California watch list species BCC = Federal Birds of Conservation Concern		^bStatus (CNPS) List 1B.1 – Threatened in California and elsewhere, seriously threatened in California List 1B.2 = Threatened in California and elsewhere, moderately threatened in California List 2B = Plants rare, threatened, or endangered in California but more common elsewhere List 3 = Plants about which more information is needed List 4 = Plants of limited distribution	

4.4 POTENTIALLY JURISDICTIONAL WATERS/WETLANDS

At the time of the reconnaissance survey, the site was dry, and no standing water was observed except in the wastewater treatment ponds and at some locations in perimeter agricultural ditches adjacent to the study area. The NWI map indicates that much of the dairy farm is identified as a freshwater emergent wetland (PEM1K [palustrine, emergent, persistent, artificially flooded wetland]); however, currently the site is used in agriculture as an active dairy farm and associated crop land. A preliminary aquatic

resource delineation was conducted within the study area and based on the lack of aquatic resources observed during the delineation field surveys and previous Certified Wetland Determinations provided by the Natural Resources Conservation Service (NRCS) of prior converted cropland/non-wetland (PC/NW) and mitigation exemption (MIW) within the croplands and developed dairy farm, the study area was not found to support any federally jurisdictional waters of the U.S. or wetlands. The findings of the delineation are preliminary and require verification by the Sacramento District of the ACOE.

5 PROJECT IMPACT ANALYSIS

The project includes approval of a new Conditional Use Permit (CUP21-009) from Merced County to expand the existing heifer facility so that the modified heifer facility would house a total of 3,000 milk cows, 390 dry cows, and 2,685 support stock (see Table 1). This would represent an increase of 3,945 animals from existing numbers.

The proposed project would include the construction of five freestall barns approximately 310,931 square feet and two loafing barn approximately 127,200 square feet, and a new milking parlor approximately 36,700 square feet. Additionally, the proposed project would include a new impervious manure drying area, new feed storage areas, and two new solid manure weeping walls.

Animal waste from freestall and other concrete-surfaced areas would continue to be flushed to an on-site waste management system, except for solid manure within corral areas, which would continue to be scraped. Liquid manure would continue to be directed to the wastewater storage ponds.

5.1 STANDARDS OF SIGNIFICANCE

State CEQA Guidelines and standard professional practice determine whether the Correia Family Dairy Farms Expansion 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 state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (see Appendix A for Merced County policies);
- 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 dairy and agricultural operations (see site photos in Figure 4). The Correia Family Dairy Farms Expansion Project is expected to have no increased impacts or no new impacts that would affect special-status plants. **(No impact)**

Wildlife

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 a portion of the project site to a dairy facility would contribute to that cumulative loss. This loss of habitat is cumulatively significant, unavoidable, and unmitigable. A portion of the dairy expansion would be constructed on land that has been previously cultivated in grain crops and has provided foraging habitat for a variety of special-status and migratory bird species. Implementation of the project would result in the conversion of 11.4 acres of cropland to developed lands for the construction of the new dairy facilities.

There is the potential for migratory birds, especially ground nesters, to breed onsite. Suitable habitat for ground nesting birds such as killdeer and short-eared owl, is limited and only potentially expected along edges of the agricultural fields. **(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. Ground clearing and initiation of construction should occur outside the breeding season, if feasible (September 15 to February 15).
2. If ground clearing outside of nesting season is not feasible, a preconstruction survey shall be conducted to determine the presence of nesting birds for any ground clearing or construction activities that 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 seven 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.
3. Construction shall not occur within a 500-foot buffer surrounding nests of raptors or a 100-foot buffer surrounding nests of migratory birds until the young have fledged or a qualified biologist determines that the nest is no longer active.
4. If construction within these buffer areas is required, prior approval must be obtained from the CDFW.

Preconstruction surveys and avoidance measures would reduce this impact to less than significant. Further, while approximately 11.4 acres of cropland would be converted to active dairy facilities, approximately 386.6 acres would remain as cropland on the Correia Family Dairy Farm and surrounding the dairy facility.

Tricolored Blackbird

Tricolored blackbird (TCBB) is a California threatened species under CESA. Based on the 2014 TCBB statewide survey, the TCBB population has declined by 63 percent since 2003 (Meese, 2014). Results of the TCBB statewide surveys conducted in 2017 suggest that the rapid decline in abundance observed since at least 2008 has been arrested and that there has been an increase in abundance since 2014 of about 32,000 birds (Meese, 2017). TCBB statewide surveys were postponed in 2020 and 2021 due to the pandemic. However, the most recent results of the 2022 statewide survey showed a continuation of the modest increase in statewide population since the low in 2014 and a 23 percent increase over the estimate from the 2017 statewide survey (Colibri Ecological Consulting, 2022).

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 as grasshoppers, dragonflies, and damselflies offer the best foraging habitat. However, dairy and silage edge as well as feed lots may be 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 and in the surrounding area could provide suitable nesting habitat for TCBB if they were in production of triticale silage, a common nesting substrate associated with dairy farms.

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).

Construction of the proposed dairy expansion would result in the conversion of approximately 11.4 acres of cropland to developed dairy facilities. Although the cropland planned for conversion is not currently planted in crops that are known to be preferred TCBB habitat, grainfields are considered potentially suitable TCBB habitat, particularly if preferred grain crop (e.g., triticale) is planted. **(Potentially significant)**

Recommended Mitigation:

Due to the potential for nesting TCBB onsite or in the surrounding area, the following measures shall be implemented prior to and during construction activities:

1. Ground clearing and initiation of construction activities shall occur outside the breeding season, if feasible (September 15 to February 15).
2. If construction outside the breeding season is not feasible, a preconstruction survey shall be conducted to determine presence / absence of TCBB within 500 feet of project activities. This measure is also required for all MBTA protected nesting birds, as indicated above.
3. If a TCBB nest colony is discovered during preconstruction surveys, a minimum 300 foot buffer shall be applied around the nesting colony and all disturbance within the buffer area will be prohibited until the breeding season has ended or the qualified biologist has determined that there are no active nests remaining in the colony and the young have fledged and are no longer reliant on the colony or parental care for survival.
4. If implementation of the above measures to avoid take is not feasible, the applicant shall obtain an Incidental Take Permit from the CDFW pursuant to Fish and Game Code section 2081 prior to construction.

Swainson's Hawks

The state-threatened Swainson's hawk is known to nest and forage in the project vicinity. Although no raptor nests were observed, a Swainson's hawk nesting occurrence (Occ. #2493) is located approximately 0.5 miles from the site in a cottonwood tree. Due to the proximity of the suitable nesting habitat, direct impacts could occur if a Swainson's hawk nested in that area when construction took place. There are 12 Swainson's hawk occurrences within 5 miles and 59 within ten 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, 2023). 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.

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 11.4 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 reference. 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, and surveys would not be required.

A written report with the pre-construction survey results must be provided to the Merced County Community and Economic Development 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 0.5-mile of construction activities, 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 a minimum 0.5-mile nest protection buffer until the breeding season has ended or until a qualified biologist determines that the young have fledged and are no longer reliant on the nest for survival.
3. If implementation of the above measures to avoid take is not feasible, the applicant shall obtain an Incidental Take Permit from the CDFW pursuant to Fish and Game Code section 2081 prior to construction.
4. Foraging Impacts: CDFW requires mitigation for loss of foraging habitat based on the presence of active nests within 10 miles of the project (CDFG, 1994). If an active nest site is identified within ten miles of the project site, the project proponent shall provide off-site foraging habitat at a specified Mitigation Ratio that is based on proximity of the nest to the project site. Mitigation ratios for loss of foraging habitat are included in Table 4.

Table 1. Mitigation Ratios for Loss of Swainson's Hawk Foraging Habitat

Distance from Active Nest	Mitigation Acreage Ratio*
Within 1 mile	1:1**
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.

The CDFW pre-approved CEQA mitigation measures are found in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsonii*) in the Central Valley of California (CDFG, 1994).

The Merced County Community and Economic Development 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) and American Badger

No potential denning habitat is present for San Joaquin kit fox within the planned expansion location. Nevertheless, there are records of San Joaquin kit fox within the San Luis National Wildlife Refuge, approximately nine miles away (CDFW, 2023). Signs of the American badger were not observed during field surveys. These species may occur occasionally as transient foragers or dispersing individuals but are not expected to den onsite. **(Potentially significant)**

Although there is a low likelihood of occurrence of San Joaquin kit fox and American badger, because there is the potential for occurrence as transient foragers or dispersing individuals, 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. Anyone 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 and USFWS immediately in the case of a dead, injured or entrapped kit fox.
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.
14. 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.
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.

Sensitive Natural Community

No riparian habitats or other sensitive natural communities have been mapped or observed on the site of the Correia Family Dairy Farms Expansion Project. Because construction associated with the project is located in active cropland, and no sensitive natural communities occur on site, the project would not have a substantial adverse effect on any riparian habitats or other sensitive natural communities. **(No impact)** *(For effects to migratory and resident birds in adjacent protected areas, see below.)*

Wetlands

The NWI map identified freshwater emergent wetland (PEM1K) throughout most of the site; however, currently the site is used in agriculture as an active dairy farm and crop land. A preliminary aquatic resource delineation was conducted within the study area

and based on the lack of aquatic resources observed during the delineation field surveys and previous Certified Wetland Determinations provided by the Natural Resources Conservation Service (NRCS) of prior converted cropland/non-wetland (PC/NW) and mitigation exemption (MIW) within the croplands and developed dairy farm, the study area was not found to support any federally jurisdictional waters of the U.S. or wetlands. The findings of the delineation are preliminary and require verification by the Sacramento District of the ACOE.

Because waters of the U.S. and wetlands do not presently occur on site, the project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. **(No impact)**

Wildlife movement and nursery sites

There are no creeks, valleys, or other wildlife movement corridors on the site. The project is located within the GFA boundary but not the GEA boundary and is 1.1 miles west of the Volta Wildlife Area. The wildlife refuges and wildlife areas within the GEA provide wetland and riparian habitat for migratory waterfowl and shorebirds and potential wildlife movement corridors and nursery sites near the project site; however, none of them are within 0.5-mile of the site.

Lighting Interference with Nocturnal Wildlife

A non-exhaustive literature review was conducted to provide background for assessing the potential impacts of nighttime lighting on nearby wildlife species, and on birds in particular (Appendix D).

Published studies of the effects of night lighting on wildlife generally conclude that there is limited scientific understanding of the ecological impacts of night lighting, but that night lighting may have an adverse effect on wildlife in certain situations. One study found that “research focusing on artificial night lighting will probably reveal it to be a powerful force structuring local wildlife communities by disrupting competition and predator-prey interactions” (Longcore and Rich, 2004). The type of night lighting (such as lighted buildings, street lamps, and vehicle lamps), the percent change in illumination, and the type of light (i.e., ultraviolet wavelengths versus infrared) can have varying effects on wildlife (Longcore and Rich, 2004). The same paper also notes that “our understanding of the full range of ecological consequences of artificial night lighting is still limited.” The authors of these reports concur on the need for continued studies.

Operations at the dairy are 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. Existing night lighting at the Correia Family Dairy

Farm includes building-mounted, dusk to dawn lighting on the freestall barns and the milking parlor. Building-mounted porch lights also exist at each of the residences.

With implementation of the proposed herd expansion, the project includes new building-mounted dusk to dawn lighting on the proposed structures. Existing County standards require that all lighting be directed away from or be properly shaded to eliminate light trespass or glare within a project or onto surrounding properties. Based on the existing lighting configuration and proposal of new lighting in expansion areas, there may be light trespass beyond the area of active dairy facilities into cropped or natural areas where night-active wildlife may forage, nest, and rest. To ensure that existing lighting and proposed lighting at the dairy facility meets County standards to reduce the potential for impact to migratory birds and night-active wildlife, the following mitigation measure would be required. **(Significant)**

Recommended Mitigation:

A Lighting Plan shall be developed to modify existing and future lighting at the Correia Family Dairy Farm. Project-related lighting shall be minimized and directed away or shielded to maintain lighting within developed areas of the facility and away from sensitive areas. No light trespass shall occur onto adjacent fields or off site. The Lighting Plan must comply with the following general standards:

Lighting shall be designed so that exterior light fixtures are hooded, with light directed downward or toward the area to be illuminated, and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project site boundary and neither the lamp nor the reflector interior surface are visible from outside the footprint of the facilities;

- Light fixtures shall be installed on poles of minimal height and/or be building-mounted;
- All lighting shall be of minimum necessary brightness consistent with worker safety;
- The number of lighting fixtures shall be limited to the minimum required;
- Illuminated areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied;
- All lighting poles, fixtures, and hoods will be dark-colored;
- Unless determined necessary by the County for safety or security reasons, any signs at the entry of the project site will not be lit (reflective coating is acceptable).

- When possible, green light bulbs will be utilized to minimize lighting impact on birds.

The Lighting Plan must specify the type and intensity of lighting and shall be approved by the County and implemented prior to final inspection.

Minimizing and/or directing/shielding lighting away from sensitive areas will ensure that disruption of night-active species will not occur. This will help reduce or minimize any accelerated night-time predation rates on adjacent agricultural fields and sensitive natural areas.

Conflict with policies or ordinances

Approval of the Correia Family Dairy Farm Project would not conflict with any Merced County policies or ordinances pertaining to biological resources (see Appendix A). **(No impact)**

Conflict with a Conservation Plan

The Correia Family Dairy Farm Project 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 Correia Family Dairy Farms Expansion Project, which involves the conversion of 11.4 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).**

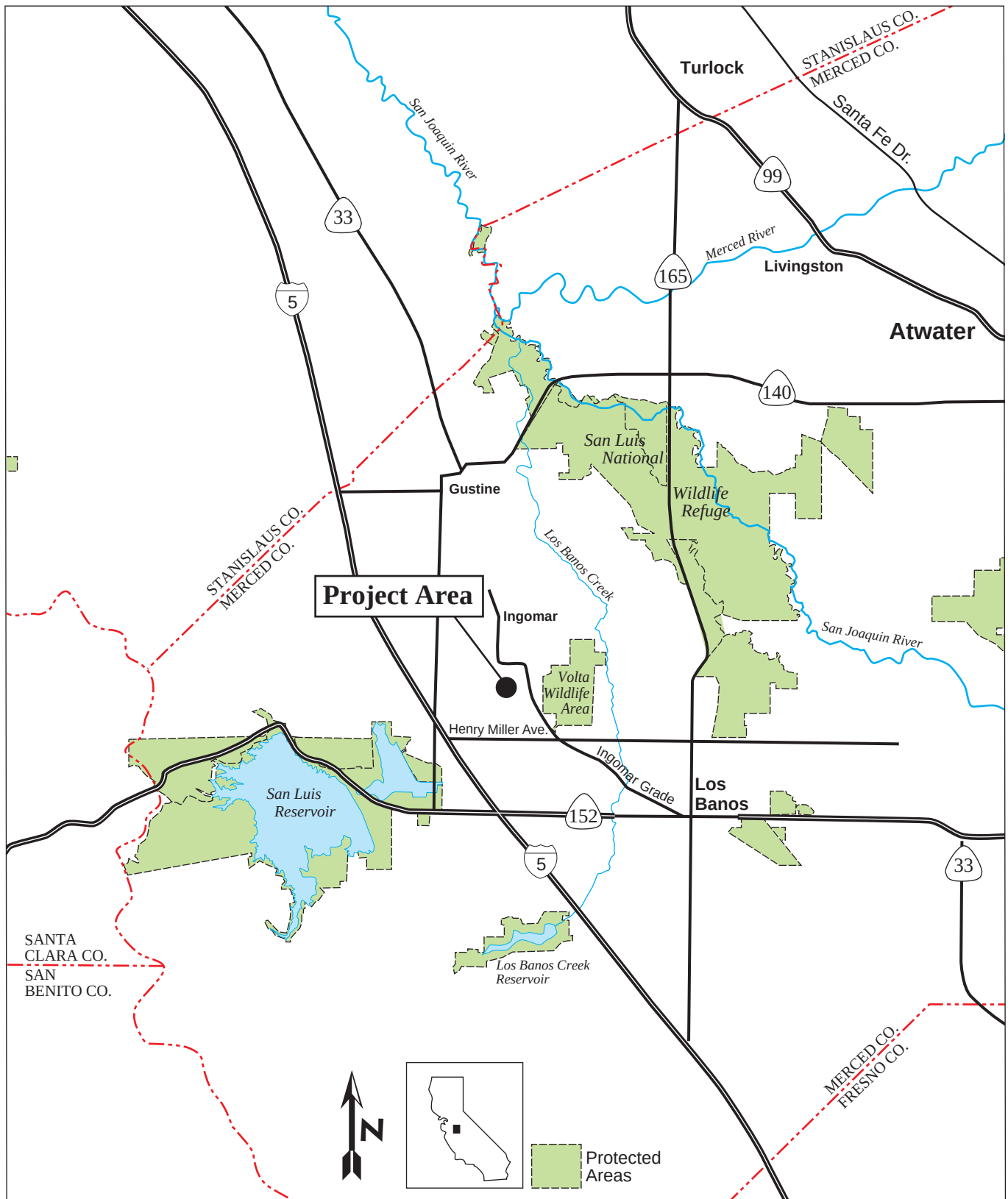
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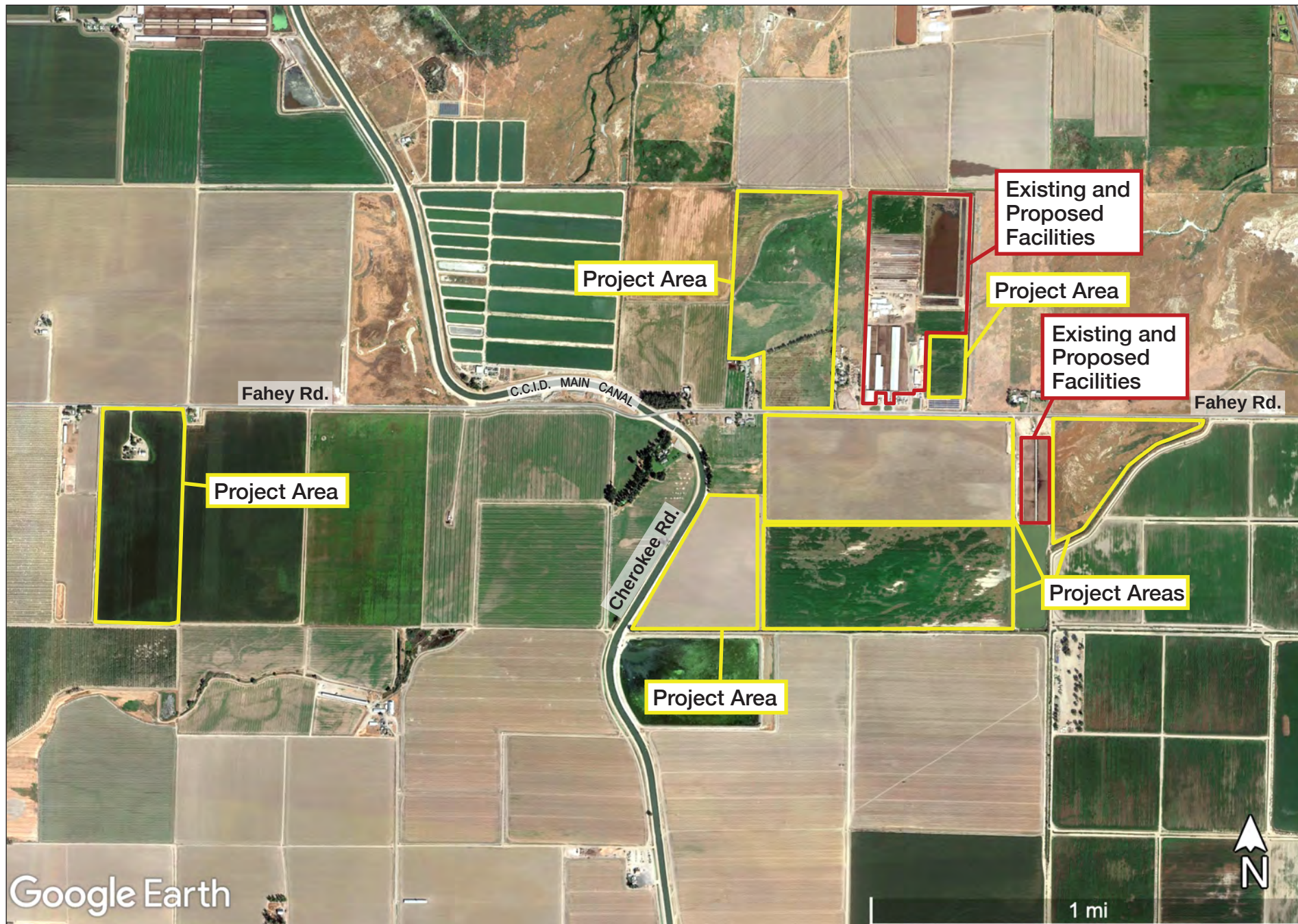
FIGURES



SOURCE: Planning Partners 2023

Correia Family Dairy Farms Expansion Project CUP21-009

Figure 1
Regional Location



SOURCE: Planning Partners 2023

Correia Family Dairy Farms Expansion Project CUP21-009

Figure 2
Project Location

FIGURE 3

SPECIAL-STATUS SPECIES MAP

**CNDDDB GEOSPATIAL DATA IS CONFIDENTIAL – FIGURE
AVAILABLE UPON REQUEST**

Photograph A.
View of rye field
proposed for
conversion to a
manure drying
area. View
southwest
(photograph taken
5/9/2023).



Photograph B.
View of existing
free stall barns
within the existing
Dairy Farm north
of Fahey Road.
Proposed free stall
barns would be
constructed
between the
existing free stall
barns. View south
(photograph taken
5/9/2023).



Photograph C.
View of southern
portion of the rye
field proposed to
be converted into a
manure drying
area. The existing
manure drying
area is visible in
the right of the
photograph. View
east (photograph
taken 5/9/2023).



Photograph D.
View of the
developed dairy
facility behind the
disked cropland at
the Correia Family
Dairy. Existing
facilities in this
photo include free
stall barns,
commodity barn,
feed storage area,
and cropland. View
southwest
(photograph taken
5/9/2023).



Photograph E.
View of location of
the proposed solid
manure weeping
walls within
existing cropland.
No crop cover was
present at the time
of surveys and
field had been
recently disked.
View east
(photograph taken
5/9/2023).



Photograph F.
View of existing
corrals south of
Fahey Road
adjacent to the
proposed freestall
barn and loafing
barn location. View
west (photograph
taken 5/9/2023).



Photograph G.
View of existing
corrals South of
Fahey Road. View
north (photograph
taken 5/9/2023).



Photograph H.
View disturbed
land adjacent to
the corrals south of
Fahey Road
currently used for
stockpiles. This
area is proposed
for construction of
a free stall barn
and a loafing barn.
View north
(photograph taken
5/9/2023).



APPENDIX A

BIOLOGICAL RESOURCE POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN

BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013	
POLICY	DESCRIPTION
Land Use Element	
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.
Natural Resources Element	
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.

BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013	
POLICY	DESCRIPTION
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.

BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013	
POLICY	DESCRIPTION
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.

BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013	
POLICY	DESCRIPTION
Program NR-F	Ongoing Inventory of Open Space Resources (MPSP/PSR/SO) 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.
Program NR-G	Open Space Development Review System (RDR/IGC) 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. 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. 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. 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: 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. 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-I	Agricultural Education Program (SO/IGC/PI) 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. 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.

APPENDIX B

USFWS SPECIES LIST



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:

Project Code: 2023-0093118

Project Name: Correia Family Dairy Expansion

June 13, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location 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, 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 U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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 Code 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

Project Code: 2023-0093118
Project Name: Correia Family Dairy Expansion
Project Type: Restoration / Enhancement - Agricultural
Project Description: Dairy expansion
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.18602525,-120.93609597906962,14z>



Counties: Merced and Stanislaus counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 16 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
Fresno Kangaroo Rat <i>Dipodomys nitratoides exilis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5150	Endangered
Giant Kangaroo Rat <i>Dipodomys ingens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6051	Endangered
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

BIRDS

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	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 overlaps 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 does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> Population: Central Coast Distinct Population Segment (Central Coast DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location overlaps 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 overlaps 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 overlaps 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 does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5690	Threatened
Hoover's Spurge <i>Chamaesyce hooveri</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3019	Threatened

CRITICAL HABITATS

There are 6 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> https://ecos.fws.gov/ecp/species/2891#crithab	Final
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> https://ecos.fws.gov/ecp/species/8246#crithab	Final
Hoover's Spurge <i>Chamaesyce hooveri</i> https://ecos.fws.gov/ecp/species/3019#crithab	Final
Longhorn Fairy Shrimp <i>Branchinecta longiantenna</i> For information on why this critical habitat appears for your project, even though Longhorn Fairy Shrimp is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/4294#crithab	Final
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> https://ecos.fws.gov/ecp/species/498#crithab	Final
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> https://ecos.fws.gov/ecp/species/2246#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: Padre Associates Inc

Name: Amelia Olson

Address: 350 University Avenue, Suite 250

City: Sacramento

State: CA

Zip: 95827

Email: aolson@padreinc.com

Phone: 8053155008

APPENDIX C

CNDDB QUERY RESULTS



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS >(San Luis Ranch (3712027)> OR San Luis Dam (3712111)> OR Volta (3712018)> OR Howard Ranch (3712121)> OR Newman (3712131)> OR Gustine (3712038)> OR Stevinson (3712037)> OR Los Banos (3712017)> OR Ingomar (3712028))

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>Acipenser medirostris</i> pop. 1 green sturgeon - southern DPS	G2T1 S1	Threatened None	AFS_VU-Vulnerable IUCN_EN-Endangered	57 57	14 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Agelaius tricolor</i> tricolored blackbird	G1G2 S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered USFWS_BCC-Birds of Conservation Concern	60 600	955 S:57	7	3	2	0	5	40	34	23	52	3	2
<i>Ambystoma californiense</i> pop. 1 California tiger salamander - central California DPS	G2G3T3 S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	70 800	1271 S:8	0	5	0	0	0	3	7	1	8	0	0
<i>Anniella pulchra</i> Northern California legless lizard	G3 S2S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	90 90	386 S:1	0	0	1	0	0	0	1	0	1	0	0
<i>Antrozous pallidus</i> pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	70 70	420 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Aquila chrysaetos</i> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern	140 140	325 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ardea alba</i> great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	75 75	43 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	75 75	156 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	65 175	65 S:6	0	3	0	1	0	2	5	1	6	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>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	170 620	2011 S:8	1	2	2	0	0	3	5	3	8	0	0
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	70 175	66 S:10	0	1	0	0	1	8	10	0	9	1	0
<i>Atriplex depressa</i> brittlescale	G2 S2	None None	Rare Plant Rank - 1B.2	95 175	60 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Atriplex minuscula</i> lesser saltscale	G2 S2	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		52 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Atriplex persistens</i> vernal pool smallscale	G2 S2	None None	Rare Plant Rank - 1B.2	65 100	41 S:9	0	0	0	0	0	9	9	0	9	0	0
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	G2 S2	Endangered None	IUCN_EN-Endangered	72 88	53 S:7	2	1	0	0	0	4	2	5	7	0	0
<i>Branchinecta longiantenna</i> longhorn fairy shrimp	G1 S2	Endangered None	IUCN_EN-Endangered	70 97	23 S:2	0	0	0	1	0	1	1	1	2	0	0
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	69 85	796 S:8	2	0	0	0	0	6	1	7	8	0	0
<i>Branta hutchinsii leucopareia</i> cackling (=Aleutian Canada) goose	G5T3 S3	Delisted None	CDFW_WL-Watch List	70 100	19 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Buteo regalis</i> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	610 1,140	107 S:9	0	0	0	0	0	9	7	2	9	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S4	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	57 590	2561 S:91	12	37	12	2	0	28	18	73	91	0	0
<i>Chloropyron molle</i> ssp. <i>hispidum</i> hispid salty bird's-beak	G2T1 S1	None None	Rare Plant Rank - 1B.1	60 100	35 S:23	9	3	2	0	1	8	14	9	22	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>Circus hudsonius</i> northern harrier	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-3 360	54 S:6	3	2	0	0	0	1	6	0	6	0	0
<i>Cismontane Alkali Marsh</i> Cismontane Alkali Marsh	G1 S1.1	None None		75 103	4 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh	G3 S2.1	None None		75 85	60 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	120 120	45 S:1	0	0	0	0	0	1	1	0	1	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	55 100	1427 S:21	4	16	1	0	0	0	11	10	21	0	0
<i>Eremophila alpestris actia</i> California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	165 300	94 S:5	0	0	0	0	0	5	4	1	5	0	0
<i>Eryngium racemosum</i> Delta button-celery	G1 S1	None Endangered	Rare Plant Rank - 1B.1	55 85	26 S:13	2	5	2	1	0	3	11	2	13	0	0
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	70 170	108 S:4	0	0	0	0	0	4	3	1	4	0	0
<i>Extriplex joaquinana</i> San Joaquin spearscale	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	70 75	127 S:2	0	1	0	0	0	1	2	0	2	0	0
<i>Gambelia sila</i> blunt-nosed leopard lizard	G1 S2	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	300 610	418 S:2	0	0	0	0	0	2	2	0	2	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Gonidea angulata</i> western ridged mussel	G3 S2	None None	IUCN_VU-Vulnerable	128 128	157 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Great Valley Cottonwood Riparian Forest</i> Great Valley Cottonwood Riparian Forest	G2 S2.1	None None			56 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lanius ludovicianus</i> loggerhead shrike	G4 S4	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	72 72	110 S:2	2	0	0	0	0	0	0	2	2	0	0
<i>Lasiurus cinereus</i> hoary bat	G3G4 S4	None None	IUCN_LC-Least Concern	70 70	238 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasiurus frantzii</i> western red bat	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	70 70	128 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasthenia chrysanthra</i> alkali-sink goldfields	G2 S2	None None	Rare Plant Rank - 1B.1	75 75	55 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	30 30	111 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	G4 S3	Endangered None	IUCN_EN-Endangered	65 90	330 S:12	2	2	2	0	0	6	6	6	12	0	0
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	70 85	508 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Myotis yumanensis</i> Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern	70 70	265 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	G2 S2	None None	Rare Plant Rank - 1B.2	65 100	61 S:8	3	0	0	0	0	5	7	1	8	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



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Perognathus inornatus</i> San Joaquin pocket mouse	G2G3 S2S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern	175 600	140 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Puccinellia simplex</i> California alkali grass	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	90 90	80 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rana boylei</i> pop. 4 foothill yellow-legged frog - central coast DPS	G3T2 S2	Proposed Threatened Endangered	BLM_S-Sensitive USFS_S-Sensitive	438 438	178 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	200 200	1685 S:1	0	0	0	1	0	0	1	0	1	0	0
<i>Sagittaria sanfordii</i> Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		143 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Spea hammondi</i> western spadefoot	G2G3 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	72 831	1430 S:11	1	2	0	0	0	8	9	2	11	0	0
<i>Stuckenia filiformis</i> ssp. alpina northern slender pondweed	G5T5 S2S3	None None	Rare Plant Rank - 2B.2	85 85	21 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sycamore Alluvial Woodland</i> Sycamore Alluvial Woodland	G1 S1.1	None None		200 200	17 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	70 944	594 S:12	0	5	0	0	0	7	4	8	12	0	0
<i>Thamnophis gigas</i> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	70 115	373 S:27	1	2	3	0	1	20	17	10	26	1	0
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	G4T3 S1	None None	Rare Plant Rank - 2B.1	85 85	12 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Valley Sacaton Grassland</i> Valley Sacaton Grassland	G1 S1.1	None None		75 85	9 S:3	1	1	1	0	0	0	3	0	3	0	0
<i>Valley Sink Scrub</i> Valley Sink Scrub	G1 S1.1	None None		65 400	29 S:5	0	0	2	2	0	1	5	0	5	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	G4T2 S3	Endangered Threatened		73 830	1020 S:28	2	10	1	1	0	14	26	2	28	0	0

APPENDIX D

SUMMARY OF LITERATURE REVIEWED ON THE EFFECTS OF NIGHT LIGHTING ON WILDLIFE

Literature	Content Summary
Bird, B.; Branch, L.; Miller, D. 2004. Effects of Coastal Lighting on Foraging Behavior of Beach Mice. <i>Conservation Biology</i> 18(5): 1435-1439. October 2004.	This study investigated the effects of two kinds of artificial lights on the foraging behavior of Santa Rosa beach mice (<i>Peromyscus polionotus leucocephalus</i>). The results show that artificial light affects the behavior of terrestrial species in coastal areas and that light pollution deserves greater consideration in conservation planning.
Longcore, T. Rich, C. 2010 Ecological light pollution. In: <i>Frontiers in Ecology and the Environment</i> (4): 191-198.	This study reviews the potential sources and ecological impacts of light pollution from artificial night lighting. The study concludes that ecological light pollution has demonstrable effects on both behavioral and population ecology of organisms.
Perkin, E.; Holker, F.; Richardson, J.; Sadler, J.; Wolter, C.; Tockner, K. 2011. The influence of artificial light on stream and riparian ecosystems: questions, challenges, and perspectives. <i>Ecosphere</i> 2(11):122. November 2011.	This study reviews the current literature on artificial lighting impacts on stream and riparian ecosystems.
International Dark-Sky Association, undated. Effects of Artificial Light at Night on Wildlife.	This study reviews effects of artificial light at night on multiple wildlife species. The study includes discussion of light fixation hazards for birds migrating during the night.
EcoBridges Environmental Consulting, 2005. Effects of Light at Night on Waterfowl and Shorebirds: A Literature Review for the Berkeley Playing Fields Project. Prepared by Anne Wallace. March 2005.	This document is a literature review of the effects of lights at night on birds prepared as an Appendix to an EIS for a project in Berkeley. The review concluded that literature on the effects of light at night on waterbirds is limited, and most of the literature only provided anecdotal reports of changes to behavior. The review suggests there may be more subtle influences of artificial night lighting on the behavior and community ecology of species that needs to be studied further.