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## APPENDIX E

### Biological Resources Reconnaissance Survey and CEQA Analysis

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## Report of Findings

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### **Biological Resources Reconnaissance Survey and CEQA Analysis** Godinho Heifer Ranch Expansion Project

Location:  
13140 Johnson Road  
Los Banos, CA 93635  
37°05'50.35"N, 120°51'45.74"W  
Permit Sought: Conditional Use Permit No. CUP19-006



Prepared for: Environmental Planning Partners, Inc.  
2934 Gold Pan Court, Suite 3  
Rancho Cordova, CA 95670-6136

Prepared by: Padre Associates, Inc.  
350 University Avenue, Suite 250  
Sacramento, CA 95825  
(916) 333-5920

Dates of Biological Resources Reconnaissance Surveys: September 27, 2019  
Date of Report: January 16, 2020

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# **1 SUMMARY**

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The existing Godinho Heifer Ranch is located on approximately 15.4 acres of two existing parcels totaling approximately 64.1 acres in an unincorporated area of Merced County northwest of the City of Los Banos. Approximately 50 acres of the Heifer Ranch are in crop production and for manure process water and/or solid manure disposal. The applicant proposes to increase the present herd of cattle by 1,497 cows for a total of 3,501 animals. The proposed project includes construction of three freestall barns and a loafing barn.

A reconnaissance-level biological survey was conducted on September 27, 2019 by biologists from Padre Associates, Inc. (Padre). A number of special-status species, including Swainson's hawk, tricolored blackbird, and western pond turtle have been reported within approximately five miles of the Godinho Heifer Ranch. Other raptors and migratory birds are known to forage in the area.

## **2 INTRODUCTION**

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### **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 Godinho Heifer Ranch Expansion near the City of Los Banos in Merced County, California. The Biological Reconnaissance Survey was conducted on September 27, 2019 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 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 is in jeopardy due to loss or change in habitat.

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

## **FEDERAL**

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

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.

## **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.

## **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 Godinho Heifer Ranch is located on 15.4± acres of two existing parcels totaling approximately 64.1 acres in unincorporated Merced County north/northwest of the City of Los Banos. The project site is located on the east side of Johnson Road. The project's location is within the central California region. The project site is located in Section 3, Township 10 South, Range 10 East, Mount Diablo Base and Meridian: 37°05'50.35"N, 120°51'45.74"W.

## **2.4 PROJECT DESCRIPTION**

**2.4.1 EXISTING FACILITIES.** The existing heifer ranch currently consists of buildings and infrastructure for the housing, feeding, and raising of support stock for a separate, nearby dairy operation. The Godinho Heifer Ranch facilities include the following:

- shade structures
- two wastewater storage ponds
- open corrals
- office and storage building

There are approximately 140,640 square feet (sq-ft) of structures that comprise the existing active facilities on a 15.4-acre portion of a 64.1-acre site.

Approximately 50 acres of the project area are currently used for the production of crops and the application of wastewater for the nearby Godinho Dairy facility.

The existing heifer ranch facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal wastes from freestall and other concrete-surfaced areas are flushed with recycled water to an on-site waste management system that consists of two wastewater storage ponds (retention pond). The area of active heifer facilities has been graded to direct corral runoff to the existing waste management system. Corrals are scraped twice annually to remove solids and maintain proper gradient for drainage. Stormwater runoff from impervious surfaces is routed to the wastewater ponds. Stormwater from all roofed areas is routed to a nearby field.

Solid manure is removed from wastewater ponds with excavation equipment and exported to land application areas associated with the adjacent, separate dairy operation. Wastewater collected in the retention pond is also applied to the same land application areas via irrigation. There are no agricultural wells on the project site. Wastewater export agreements are in place in accordance with the Merced County Animal Confinement Ordinance (ACO).



**2.4.2 PROPOSED EXPANSION.** The project sponsor has applied for a new Conditional Use Permit (CUP19-006) from Merced County to expand the existing heifer facility so that the modified heifer facility would house 471 dry cows and 3,030 support stock (2,125 AU) (see Table 1). This would represent an increase of 1,497 animals (1,022 AU) from existing numbers.

<b>Table 1</b> <b>Existing and Proposed Herd at the Godinho Heifer Ranch</b>							
	<b>Dry Cows</b>	<b>Bred Heifers (15-24 mo.)</b>	<b>Heifers (7-14 mo.)</b>	<b>Calves (4-6 mo.)</b>	<b>Calves (0-3 mo.)</b>	<b>Total Animals</b>	<b>Animal Units (AU)</b>
Existing	0	0	1,632	372	0	2,004	1,103
Proposed	471	1,262	354	882	532	3,501	2,125
<b>Change</b>	<b>471</b>	<b>1,262</b>	<b>-1,278</b>	<b>510</b>	<b>532</b>	<b>1,497</b>	<b>1,022</b>

Note: This evaluation considers maximum buildout.

Source: Project Applicant, March 2019.

The proposed project would include the construction of three freestall barns and a loafing barn with sizes of approximately 90,000 square feet, 78,000 square feet, 44,200 square feet, and 102,00 square feet. With implementation of the proposed heifer facility expansion, new structures would consist of approximately 314,200 square feet of construction. A mechanical solids separator and separator pad would be installed with the proposed expansion. A new well may be constructed on the north side of the heifer facility. Construction of these facilities would eliminate an existing open corral and increase the developed area of the site by approximately six acres.

With construction of the proposed facilities, approximately six acres of cropped acreage would be converted to active heifer facilities.

Animal wastes 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.

Stormwater runoff from roofed areas would continue to be routed to adjacent fields. Wastewater would continue to be exported from the facility and applied to adjacent cropland.

Solid manure that accumulates within corrals would continue to be removed two times per year. With the proposed heifer facility expansion, dry manure would continue to be stockpiled on site at the existing dry manure storage area. Dry manure would be used for bedding or sold and hauled off site for use as fertilizer and soil amendments. As reported in the Nutrient Management Plan (NMP), liquid and solid manure would be trucked and/or piped to adjacent fields and non-adjacent fields. All land application areas are managed and reported under the Godinho Dairy Waste Management Plan

(WMP). While the exact location of these off-site cropland parcels may vary throughout operations, the disposal of manure at off-site locations and the acreage necessary to properly dispose of manure liquids and solids are accounted for in the project NMP.

Operations at the heifer facility would continue to occur during primary operating hours of 6:00 a.m. to 8:00 a.m. when the animals are fed, and from 3:00 p.m. to 3:30 p.m. when feed is pushed back into feedracks. With implementation of the proposed project, the number of employees would remain at two workers. Once per week, during the veterinarian check there would be as many as five individuals onsite.

Grading would be required for new building pads and access roads. Approximately 15,000 cubic yards of fill would be obtained from the adjacent fields associated with the Godinho Dairy.

### 3 METHODS AND SURVEY LIMITATIONS

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#### 3.1 METHODS

Padre Associates, Inc. (Padre) evaluated the potential biological resources impacts of the Godinho Heifer Ranch Expansion Project through a review of available data and a site visit. Prior to the site visit, Padre conducted a query of California Natural Diversity Database (CNDDDB) for the USGS topographic quadrangle including the project area (Los Banos) and for the surrounding eight USGS topographic quads (Ingomar, San Luis Ranch, Turner Ranch, Volta, Delta Ranch, Ortigalita Peak NW, Charleston School, and Dos Pablos) (CDFW, 2019). 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 (see Appendix C).

Padre also conducted a query of the California Native Plant Society's Electronic Inventory (CNPS, 2019) for the same quadrangles to provide information on additional plant species of concern that may occur within the project site and surrounding vicinity. A species list was obtained from the USFWS website for the Los Banos quadrangle to provide information on federally listed species that have the potential to occur in the vicinity of the proposed project. A query of the USFWS National Wetland Inventory (NWI) Map for the Los Banos quadrangle was conducted for information regarding known wetlands in the project area (USFWS, 2019).

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 Godinho Heifer Ranch facility 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 September 27, 2019. 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 (Table 2). The survey was conducted during the day between 7:45 a.m. and 10:15 a.m. The weather was warm 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 all culverts 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 reconnaissance-level field survey was conducted in Fall after many plants have bloomed. The survey was conducted at a reconnaissance level, not a focused or protocol survey level. The survey lasted approximately two and a half hours in the morning and, therefore, did not include dusk surveys or extended observations.

## **4 SURVEY RESULTS**

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### **4.1 PHYSICAL CHARACTERISTICS**

The existing Godinho Heifer Ranch is located on a 15.4-acre portion of two existing parcels totaling 64.1-acre in an unincorporated area of Merced County. Operations occur within a relatively flat and partially graded area on bare and exposed soil within an existing ranch. Section 2.4.1 details the existing infrastructure on the site.

### **4.2 VEGETATION AND WILDLIFE**

The 15.4-acre portion of the site that supports active facilities is denuded of vegetation due to the trampling by the herd. Surrounding the heifer ranch on all sides are a combination of agricultural fields and single-family residences. The closest off-site residences are located approximately 205 and 215 feet south of active heifer facility facilities. The dairy facility located to the north of the heifer ranch is owned by the project applicant but is operated separately from the Godinho Heifer Ranch. The applicant also owns cropland immediately adjacent to the heifer ranch and in the project area that is used for dairy facility operations.

There are Central California Irrigation District (CCID) surface water canals within the vicinity of the proposed project, and one of these CCID canals crosses the eastern portion of the project site. The City of Los Banos is located approximately 0.5 miles southeast of the Godinho active heifer facilities. The project site is outside of the Grasslands Ecological Area but within the boundary of the Grasslands Focus Area.

The NWI query identified riverine features within the site boundary, consisting of various agricultural ditches and the CCID canal. During field surveys, the ditches and canal were surveyed. The ditch showed on NWI as running along the west and north sides of the property were only observed in the northern portion of the site adjacent to the corn field's eastern border. It was not observed on the western boarder of the ranch facilities or along the corn field's northern border. At the time of the survey, there was no water in the ditch, and virtually no plants in the ditch. The sparse plants that were present

along the road were primarily weedy ruderal species including pigweed (*Amaranthus* sp.) and puncture vine (*Tribulus terrestris*).

Within the eastern portion of the site boundary is a short segment of a dirt road with a concrete-lined irrigation canal (CCID canal) along the eastern side of the road. At the time of the survey, there was water in the ditch, and several patches of aquatic plants occurred within the canal.

As shown in Table 2, wildlife species observed near the heifer ranch included primarily terrestrial and some wetland species. No ground squirrel colonies or other burrows were observed in concentrations. Few scattered burrows were found along the berms surrounding the wastewater ponds. The majority of these burrows were small and had been weathered. There was, however, a single burrow that appeared open and was of adequate size for use by burrowing owl or San Joaquin kit fox. This burrow was located on the north of the wastewater ponds. This location is within the limits of active and ongoing heifer operations and it is very unlikely that this burrow would be used by San Joaquin kit fox or burrowing owl due to the high level of disturbance and the poor habitat quality of the active cattle operation.

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 Henmel clay loam, partially drained and Pedcat clay loam, leveled, 0 to 2 percent slopes.

<b>Table 2</b> <b>Wildlife Species Recorded in Project Vicinity</b>	
<b>Common Name</b>	<b>Scientific Name</b>
<b>Fish</b>	
Western mosquitofish	<i>Gambusia affinis</i>
<b>Birds</b>	
Rock pigeon	<i>Columba livia</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>
Mourning dove	<i>Zenaida macroura</i>
Killdeer	<i>Charadrius vociferus</i>
Least sandpiper	<i>Calidris minutilla</i>
Western sandpiper	<i>Calidris mauri</i>
Great egret	<i>Ardea alba</i>
White-faced Ibis	<i>Plegadis chihi</i>
Turkey vulture	<i>Cathartes aura</i>

<p><b>Table 2</b> <b>Wildlife Species Recorded in Project Vicinity</b></p>	
<b>Common Name</b>	<b>Scientific Name</b>
Red-tailed hawk	<i>Buteo jamaicensis</i>
American kestrel	<i>Falco sparverius</i>
Black phoebe	<i>Sayornis nigricans</i>
American crow	<i>Corvus brachyrhynchos</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Western meadowlark	<i>Stenella neglecta</i>
European starling	<i>Sturnus vulgaris</i>
House sparrow	<i>Passer domesticus</i>
House finch	<i>Haemorhous mexicanus</i>
American goldfinch	<i>Spinus tristis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</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) (<https://ecos.fws.gov/ipac/project/I2DIOA4MERBO3KBZ2HW5LGX3RY>); and
- Queries of the CDFW's California Natural Diversity Database (CNDDDB), Biogeographic Information and Observation System (BIOS), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database (CDFW, 2019; CNPS, 2019).

To determine what special-status species occurred in the vicinity of the project area, the CNDDDB was queried spatially within a 10-mile radius around the project site. Species recorded within 10 miles that may occur in similar habitat 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 CNDDDB and CNPS lists for the 10 mile area (nine quadrangle), and the USFWS Species List for the Los Banos quadrangle, identified four natural communities, 24

special-status plants, and 35 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 four sensitive natural communities recorded in the area (cismontane alkali marsh, coastal and valley freshwater marsh, 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 cattle facilities and/or crop fields.

Special-status wildlife species that may occur on the site from time to time include tricolored blackbird, American badger and Swainson's hawk. The San Joaquin kit fox has been known to occur at the Merced National Wildlife Refuge, which is approximately 12 miles northeast of the site, and the species has been reported within 5.5 miles of the site at the San Luis National Wildlife Refuge to the north. No sign of San Joaquin kit fox was observed, but they may occur onsite as transient foragers. 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 (two 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. The project site is also approximately 1.8 miles west of the Los Banos Waterfowl Management Area, 2.5 miles east of the Volta Wildlife Area, and approximately 5.7 miles from the

San Luis National Wildlife Refuge.

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 (see 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. As of January 2020, no response from the GRRWG was received.



**Table 3**  
**Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species**  
**List for the Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<b>SPECIAL-STATUS PLANTS</b>			
<i>Amsinckia furcata</i> Forked fiddleneck	4.2	Cismontane woodlands and valley and foothill grasslands. 160 to 3,280 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Androsace elongata</i> ssp. <i>acuta</i> California androsace	4.2	Chaparral, cismontane woodlands, coastal scrub, meadows and seeps, pinyon and juniper woodlands, and valley and foothill grasslands. 490 to 4,280 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Astragalus tener tener</i> Alkali milk-vetch	1B.2	Plays, valley and foothill grassland (adobe soils) and vernal pools. 3 to 200 ft.	<b>Absent.</b> 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 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex coronata</i> ssp. <i>coronata</i> Crownscale	4.2	Chenopod scrub, valley and foothill grassland, and vernal pools. Alkaline and often clayey soils. 3 to 1,000 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex coronata</i> ssp. <i>vallicola</i> Lost Hills crownscale	1B.2	Alkaline chenopod scrub, valley and foothill grasslands, and vernal pools. 160 to 2,080 ft.	<b>Absent.</b> 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 CNDDb, CNPS Inventory, and USFWS Species**  
**List for the Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Atriplex depressa</i> Brittlescale	1B.2	Chenopod scrubs, meadows, seeps, playas, and vernal pool in alkaline soils. 3 to 1,500 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex minuscula</i> Lesser saltscale	1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy alkaline soils. 60 to 350 ft. Found locally in heavily alkaline grassland, with a white crust of soil salts.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Atriplex persistens</i> Vernal pool smallscale	1B.2	Alkaline vernal pools. Found regionally in northern claypan vernal pool. 30 to 380 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Caulanthus lemmonii</i> Lemmon's jewelflower	1B.2	Pinyon and juniper woodlands and valley and foothill grasslands. 260 to 5,180 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Chloropyron mollis</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.	<b>Absent.</b> There is no habitat that would support this plant on the project site. The proposed project would not adversely impact this species.
<i>Centromadia parryi</i> ssp. <i>rudis</i> Parry's rough tarplant	4.2	Valley and foothill grasslands and vernal pools. Alkaline and vernal mesic soils. 3 to 330 ft.	<b>Absent.</b> There is no habitat that would support this plant on the project site. The proposed project would not adversely impact this species.
<i>Delphinium recurvatum</i> Recurved larkspur	1B.2	Alkaline chenopod scrub, cismontane woodlands, and valley and foothill grasslands. 0 to 2,590 ft.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Eryngium racemosum</i> Delta button-celery	SE 1B.1	Riparian scrub in vernal mesic clay depressions. 10 to 100 ft.	<b>Absent.</b> 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-sealed button-celery	1B.2	Valley/foothill grassland, Vernal pool. 260 to 850 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Euphorbia hooveri</i> Hoover's spurge	FT 1B.2	Vernal pools. 80 to 820 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Myosurus minimus</i> ssp. <i>apus</i> Little mousetail	3.1	Valley/foothill grasslands, vernal pools (alkaline). 65 to 2,100 ft.	<b>Absent.</b> 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, seeps, valley/foothill grassland, vernal pools. 50 to 4,000 ft.	<b>Absent.</b> 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. 15 to 655 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Puccinellia simplex</i> California alkali grass	1B.2	Alkaline and vernal mesic chenopod scrub, meadows and seeps, vernal pools, and valley and foothill grasslands. 0 to 2,950 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes and ditches. 0 to 2,000 ft.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Senecio aphanactis</i> Chaparral ragwort	2B.2	Chaparral, cismontane woodland, and coastal scrub. 50 to 2625 ft.	<b>Absent.</b> 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> Slender-leaved pondweed	2B.2	Found in freshwater wetlands and riparian habitats between 900 and 6,900 ft.	<b>Absent.</b> 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. 15 to 1,430 ft.	<b>Absent.</b> There is no habitat to support this plant on the project site. The proposed project would not impact this species.
<b>SPECIAL-STATUS INVERTEBRATES</b>			
<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.	<b>Absent.</b> 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.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Brachinecta 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.	<b>Absent.</b> 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.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud bottomed and highly turbid.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<b>SPECIAL-STATUS FISH</b>			
<i>Hypomesus transpacificus</i> Delta smelt	FT, SE	Endemic to the upper Sacramento/San Joaquin Delta, it mainly inhabits the freshwater-saltwater mixing zone of the estuary, except during its spawning season, when it moves into freshwater during the early spring months from March until May.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Oncorhynchus mykiss</i> Central Valley steelhead Critical Habitat	FT	Sacramento and San Joaquin River systems, Sacramento-San Joaquin Delta, and San Francisco Bay	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<b>SPECIAL STATUS AMPHIBIANS</b>			
<i>Ambystoma californiense</i> California tiger salamander	FT, ST	Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	<b>Absent.</b> 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.	<b>Absent.</b> 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 toad	CSC	Occurs primarily in grassland habitats; can be found in valley foothill hardwood woodlands. Vernal pools essential for breeding and egg laying.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Lithobates pipiens</i> Northern leopard frog	CSC	Inhabits grasslands, wet meadows, bogs, marshes, and reservoirs. Generally, prefers permanent water with abundant aquatic vegetation	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<b>SPECIAL STATUS REPTILES</b>			
<i>Emys (=Clemmys) marmorata</i> Western pond turtle	CSC	Ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg laying.	<b>Absent.</b> The closest occurrence is approximately 2 miles east of the project site (Occ. #231). 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.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	CSC	Open, dry, and treeless areas including grasslands and saltbrush scrub. Seeks refuge in rodent burrows and under vegetation.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Thamnophis gigas</i> Giant garter snake	FT ST	Freshwater marshes and streams. Has adapted to drainage canals and irrigation ditches.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<b>SPECIAL STATUS BIRDS</b>			

**Table 3**  
**Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List for the Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<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.	<b>Absent.</b> 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.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Agelaius tricolor</i> Tricolored blackbird	ST	Nesting colony requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	<b>Possible.</b> The closest recorded occurrence is located approximately 3.1 miles east of the project site and is from 2014 (Occ. #656). Although this species was not observed during the site survey, the croplands onsite could provide suitable nesting habitat for tricolored blackbird. Approximately six acres of potential breeding and foraging habitat will be impacted by this project.
<i>Aquila chrysaetos</i> Golden eagle	FP BCC	Forages over open grasslands, savannahs, and deserts. Nests in large trees or cliffs.	<b>Possible.</b> The closest recorded occurrence is located approximately 3.9 miles south of the project site and is from 1987 (Occ. #120). This species is very uncommon in the vicinity of the project site. There is no suitable breeding habitat for this species on the project site, although the species could forage.
<i>Ardea alba</i> Great egret	CDFS (Rookery)	Nests high in the canopy of trees often over water. The species sensitive listing status is due to its colonial nesting behavior known as "rookeries". Rookeries are protected.	<b>Likely.</b> This species is common in the area and could be observed foraging near the project site along irrigation canals in areas that will not be affected by the project. There is no suitable nesting habitat on or adjacent to the project site; therefore, the Project would not impact a rookery.



**Table 3**  
**Special-Status Species Reported on the CNDDB, CNPS Inventory, and USFWS Species List for the Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Ardea Herodias</i> Great blue heron	CDFS (Rookery)	Typically nests in large groups in large trees or shrubs, often near water. The species sensitive listing status is due to its colonial nesting behavior known as "rookeries". Rookeries are protected.	<b>Likely.</b> This species is common in the area and could be observed foraging near the project site along irrigation canals in areas that will not be affected by the project. There is no suitable nesting habitat on or adjacent to the project site; therefore, the Project would not impact a rookery.
<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.	<b>Possible.</b> The closest recorded occurrence is located approximately 6.9 miles southwest of the project site and is from 1993 (Occ. #197). Burrows found onsite were mostly unsuitable to support nesting for this species although one burrow was of adequate size. Breeding of this species on the project site is very unlikely, although the species could use the site to forage. The proposed project would likely not impact breeding or foraging by this species.
<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.	<b>Possible.</b> The closest recorded occurrence is located approximately 7 miles northwest of the project site and is from 1987 (Occ. #21).
<i>Buteo swainsoni</i> Swainson's hawk	ST, BCC	Breeds in stands with few trees in juniper-sage flats, riparian areas and in oak savannah. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	<b>Likely.</b> The closest record of a nesting occurrence is in a eucalyptus tree approximately 0.2 miles from the project site (Occ. #1660) observed in 2006. This nest tree along with others in the project vicinity were checked for nests and none were observed. Swainson's hawk's 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 six acres of potential foraging habitat for this species will be impacted by this project.

**Table 3**  
**Special-Status Species Reported on the CNDDDB, CNPS Inventory, and USFWS Species List for the Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Circus cyaneus</i> Northern harrier	CSC	Forages and nests in freshwater and brackish marshes and their adjacent grasslands.	<b>Possible.</b> This species is common in the area and could use the project area for foraging. There is no suitable nesting habitat on or adjacent to the project site.
<i>Coturnicops noveboracensis</i> Yellow rail	CSC BCC	Shallow grassy marshes, sometimes brackish, and wet meadows. Also found in rice fields.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Elanus leucurus</i> White-tailed kite	FP	Rolling foothills / valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Forages over grasslands, marshes, and oak savannas close to isolated, dense-topped trees for nesting and perching.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Eremophila alpestris actia</i> California horned lark	WL	Resident populations of horned larks are found in the stubble, grass, and fallow lands near cultivated fields. The majority of the birds live in the wide expanses of the deserts, foothills, and dry grasslands that encircle the farming areas.	<b>Possible.</b> The site provides limited ground nesting habitat at the edge of agricultural fields. This species could forage within harvested fields during the non-breeding season..
<i>Falco mexicanus</i> Prairie falcon	WL, BCC	Inhabits open hills, grasslands, and deserts typically avoiding forested land. Nest sites are typically located on cliffs with a protective overhanging rock. Seldom found nesting in trees.	<b>Absent.</b> 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 Godinho Heifer Ranch Project Area**

Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Lanius ludovicianus</i> Loggerhead shrike	CSC BCC	Open habitats like prairies and grasslands, with sparse perches	<b>Possible.</b> This species is relatively common in the area and could use the project area for foraging. The closest CNDDDB occurrence is approximately 9.5 miles north of the project site and is from 2014 (Occ. #109). The project would not impact this species.
<b>SPECIAL STATUS MAMMALS</b>			
<i>Lasiurus blossevillei</i> Western red bat	CSC	Range from western Canada to Central America. Roosts only in the foliage of riparian trees, primarily walnuts, oaks, willows, cottonwoods, and sycamores. Feeds on insects.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Antrozous pallidus</i> Pallid bat	CSC	Typically inhabits grasslands, shrublands, woodlands, and coniferous forests in open, dry habitats that contain rocky areas for roosting. They are a year-round resident in most of their range, and hibernate in winter near their summer roost. Day roosts are usually rock crevices, tree hollows, mines, caves and a variety of human-made structures. Tree roosting occurs in conifer snags, hollows of redwoods, and cavities in oaks.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.
<i>Dipodomys nitratoides exilis</i> Fresno kangaroo rat	FE	Historically found in grassland and chenopod scrub communities on the San Joaquin Valley floor from the Merced River to the north and Tulare Lake to the south.	<b>Absent.</b> There is no habitat to support this species on the project site. The proposed project would not impact this species.

<b>Table 3</b> <b>Special-Status Species Reported on the CNDDb, CNPS Inventory, and USFWS Species List for the Godinho Heifer Ranch Project Area</b>			
Scientific Name Common Name	Status	Habitat Requirements	Likelihood of Occurrence
<i>Taxidea taxus</i> American badger	CSC	Most abundant in drier open stages of most shrub, forest and herbaceous habitats, with friable soils. Need sufficient food, friable soils and open, uncultivated ground.	<b>Unlikely.</b> 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 1.4 miles south of the site and is from 1927 (Occ. #160). 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.	<b>Unlikely.</b> 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 5.6 miles southwest of the site from 1997 (Occ. #183). This species may occur occasionally as a transient but is not expected to den onsite. The proposed project would not significantly impact this species.
<b><sup>a</sup>Status (Federal/State)</b> None = No Federal or State status FE = Federally listed endangered FT = Federally listed threatened FDL=Federal Delisted 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		<b><sup>b</sup>Status (CNPS)</b> 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 in the CCID canal that bisects the 64.1 acre property. The NWI map indicates that the heifer ranch is within and adjacent to a riverine, excavated, semi permanently flooded, unconsolidated bottom wetland (R5UBFx). This riverine feature identified by NWI is the CCID irrigation canal that bisects the parcel. On both the eastern and western side of the canal there were small areas of ponded water present, presumably from irrigation practices. These water features would not provide habitat to sensitive species due to their unpredictability. The proposed project does not involve any development that would impact the CCID canal.

Surrounding the corn field there is a shallow irrigation drainage ditch dug into the soil. The great majority of this ditch lacked water and consisted of sparse patches of ruderal and some hydrophytic plants including barnyard grass (*Echinochloa crus-gali*), horse purslane (*Trianthema portulacastrum*), pigweed, and puncture vine. At the northwestern corner of the property, this drainage ditch flows into a culvert under Johnson Road.

## 5 PROJECT IMPACT ANALYSIS

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The project includes approval of a new Conditional Use Permit (CUP19-006) from Merced County to expand the existing heifer facility so that the modified heifer facility would house 471 dry cows and 3,030 support stock (2,125 AU) (see Table 1). This would represent an increase of 1,497 animals (1,022 AU) from existing numbers.

The proposed project would include the construction of three freestall barns and a loafing barn with sizes of approximately 90,000 square feet, 78,000 square feet, 44,200 square feet, and 102,00 square feet. With implementation of the proposed heifer facility expansion, new structures would consist of approximately 314,200 square feet of construction. A mechanical solids separator and separator pad would be installed with the proposed expansion. Construction of these facilities would eliminate an existing open corral and increase the developed area of the site by approximately six acres. With construction of the proposed facilities, approximately six acres of cropped acreage would be converted to active heifer facilities. There are no silage piles on site.

Animal wastes 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.

Daily trips by all classes of vehicle are estimated to increase from approximately 6.8 to 7.4 average daily trips, with an increase of less than one daily trip. The majority of trips would consist of auto and light truck trips. All trips would continue to access Johnson Road and Henry Miller Road.

### 5.1 STANDARDS OF SIGNIFICANCE

State CEQA Guidelines and standard professional practice determine whether the Godinho Heifer Ranch 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 USWFS;
- 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 ranching and agricultural operations (see Figure 4). The Godinho Heifer Ranch Expansion Project is expected to have no increased impacts or no new impacts that would affect special-status plants. **(No impact)**

#### **Wildlife**

##### **Nesting Birds**

Implementation of the project would result in the conversion of six acres of cropland to developed lands for the construction of the new heifer facilities. The facility would be constructed on land that has been previously cultivated in corn and currently provides nesting and/or foraging habitat for a variety of special-status and migratory bird species.

There is the potential for migratory birds, especially ground nesters, to breed onsite. Suitable habitat for ground nesting birds such as western meadowlark, killdeer, short-eared owl, and horned lark is limited and only expected along 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. A preconstruction survey shall be conducted to determine the presence of nesting birds if ground clearing or construction activities will be initiated during the breeding season (February 15 through September 15). The project site and potential nesting areas within 100 feet of the site for MBTA protected birds and 500 feet for raptors shall be surveyed within 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.
2. Construction shall not occur within a 500-foot buffer surrounding nests of raptors (including burrowing owls) or a 100-foot buffer surrounding nests of migratory birds (including killdeer, house finch, mourning dove, etc.).
3. If construction within these buffer areas is required or if nests must be removed to allow continuation of construction, prior approval must be obtained from the CDFW.

Preconstruction surveys and avoidance measures would reduce this impact to less than significant. Further, while approximately six acres of cropland would be converted to active heifer ranch facilities, 44 acres would remain as cropland.

### **Tricolored Blackbird**

Tricolored blackbird (TCBB) is a California threatened species under CESA as of April 19, 2018. Based on a recent statewide survey, the TCBB population has declined by 63 percent in the last six years (Meese, 2014). However, the most recent results of the 2017 TCBB Statewide Survey 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 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 triticales, a wheat-rye hybrid grown for forage on dairies (Meese, 2014). The timing of triticales 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 could provide suitable nesting habitat for TCBB.



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

Construction of the proposed heifer ranch expansion would result in the conversion of approximately six acres of cropland to developed ranch facilities. **(Potentially significant)**

#### **Recommended Mitigation:**

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

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

## Swainson's Hawks

The state-threatened Swainson's hawk is known to nest and forage in the project vicinity. Although no raptor nests were observed, a Swainson's hawk nesting occurrence (Occ. #1660) is located approximately 0.2 miles from the site in a eucalyptus 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 35 Swainson's hawk occurrences within 5 miles and 63 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, 2019). Because cropland provides foraging habitat for small ground dwelling mammals, which are prey species for raptors, conversion of cultivated farmland to heifer ranch 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 six acres of appropriate foraging habitat would be removed with project implementation, this would be a potentially significant impact, and the following compensatory mitigation would be required.  
**(Potentially significant)**

### Recommended Mitigation:

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

A written report with the pre-construction survey results must be provided to the Planning Department and CDFW within 30 days prior to commencement of construction-related activities. The report shall include: the date of the report,

authors and affiliations, contact information, introduction, methods, study location, including map, results, discussion, and literature cited.

2. **Nest Avoidance.** If the required protocol surveys show there are no active nests within 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 CDFW pre-approved mitigation measures to avoid nest impacts during construction. These measures include:
  - a. All project-related activities with the potential to cause nest abandonment or forced fledging of young shall be avoided until the young have fledged.
  - b. If disturbances, habitat conversions, or other project-related activities, that may cause nest abandonment or forced fledging, are necessary, within the nest protection buffer zone (0.5-mile), monitoring of the nest site by a qualified raptor biologist, funded by the project applicant, shall be required, to determine if the nest is abandoned. If the nest is abandoned, but the nestlings are still alive, the project proponent is required to fund the recovery and hacking, that is the controlled release of captive reared young, of the nestling.
  - c. The project applicant shall be required to coordinate with CDFW to determine if project activities with the potential to cause disturbance to nesting Swainson's hawks within the 0.5-mile buffer may proceed with a reduced nest buffer and an approved biological monitor. CDFW may authorize a reduced nest buffer with the presence of a monitoring biologist during construction activities to ensure that the nest is not disturbed.
  - d. Routine disturbances such as agricultural activities, commuter traffic, and routine maintenance activities within 0.5-mile of an active nest are not prohibited.
3. **Foraging Impacts:** Generally, CDFW requires mitigation for foraging habitat based on the presence of active nests within 10 miles of the project. If an active nest site is identified within ten miles of the project site, the project proponent will be required by CDFW to provide off-site foraging habitat management lands at a specified Mitigation Ratio that is based on nest proximity to the project site, as follows:

<b>Distance from Project Boundary</b>	<b>Mitigation Acreage Ratio*</b>
Within 1 mile	1.00:1**
Between 1 and 5 miles	0.75:1
Between 5 and 10 miles	0.50:1

\*Ratio means [acres of mitigation land] to [acres of foraging habitat impacted].

\*\*This ratio shall be 0.5:1 if the acquired lands can be actively managed for prey production.

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

The CDFW pre-approved CEQA mitigation measures are found at: "DFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California," CDFW ([http://www.madera-county.com/rma/archives/uploads/1188143775\\_Document\\_upload\\_23w.pdf](http://www.madera-county.com/rma/archives/uploads/1188143775_Document_upload_23w.pdf)) (November 8, 1994).

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

#### **San Joaquin Kit Fox (SJKF) and American Badger**

No potential denning habitat is present for San Joaquin kit fox within the planned expansion location. Nevertheless, there are records from the occurrences of San Joaquin kit fox within the Merced National Wildlife Refuge, approximately twelve miles northeast of the project site, and from the San Luis National Wildlife Refuge, approximately six miles away. Signs of the American badger were not observed during field surveys, but there are two known records of the species within two miles of the site (Occ. #160 and #161). This species may occur occasionally as a transient but is not expected to den onsite. However, because new construction associated with the project would not result in the conversion of habitat to agricultural production, no new impacts would occur to San Joaquin kit fox or American badger. **(No impact)**

#### ***Sensitive Natural Community***

No riparian habitats or other sensitive natural communities have been mapped or observed on the site of the Godinho Ranch 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 for the project site indicates that potential jurisdictional Waters of the U.S. occur adjacent to the project site. However, the waterway identified within the NWI map is a concrete-lined canal that will not be impacted by proposed project activities. Because construction would not alter the existing irrigation canal and no other wetlands 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 in the site. The project is located within the GFA boundary but is not within 0.5-mile of State or Federal wildlife refuges or managed wetlands within the GEA. The site is 1.8 miles west of the Los Banos Waterfowl Management Area and 2.5 miles east of the Volta Wildlife Area. Wildlife areas provide wetland and riparian habitat for migratory waterfowl and shorebirds and potential wildlife movement corridors and nursery sites.

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.

Existing night lighting at the Godinho Heifer Ranch includes LED fixtures mounted on buildings.

With implementation of the proposed herd expansion, the project applicant expects new building-mounted lighting with LED fixtures on the proposed expanded facilities. 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 ranching 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 heifer ranch 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 Godinho Heifer Ranch. 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 Godinho Heifer Ranch Expansion Project would not conflict with any Merced County policies or ordinances pertaining to biological resources (see Appendix E). **(No impact)**

***Conflict with a Conservation Plan***

The Godinho Heifer Ranch Expansion 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)**

## 6 REFERENCES

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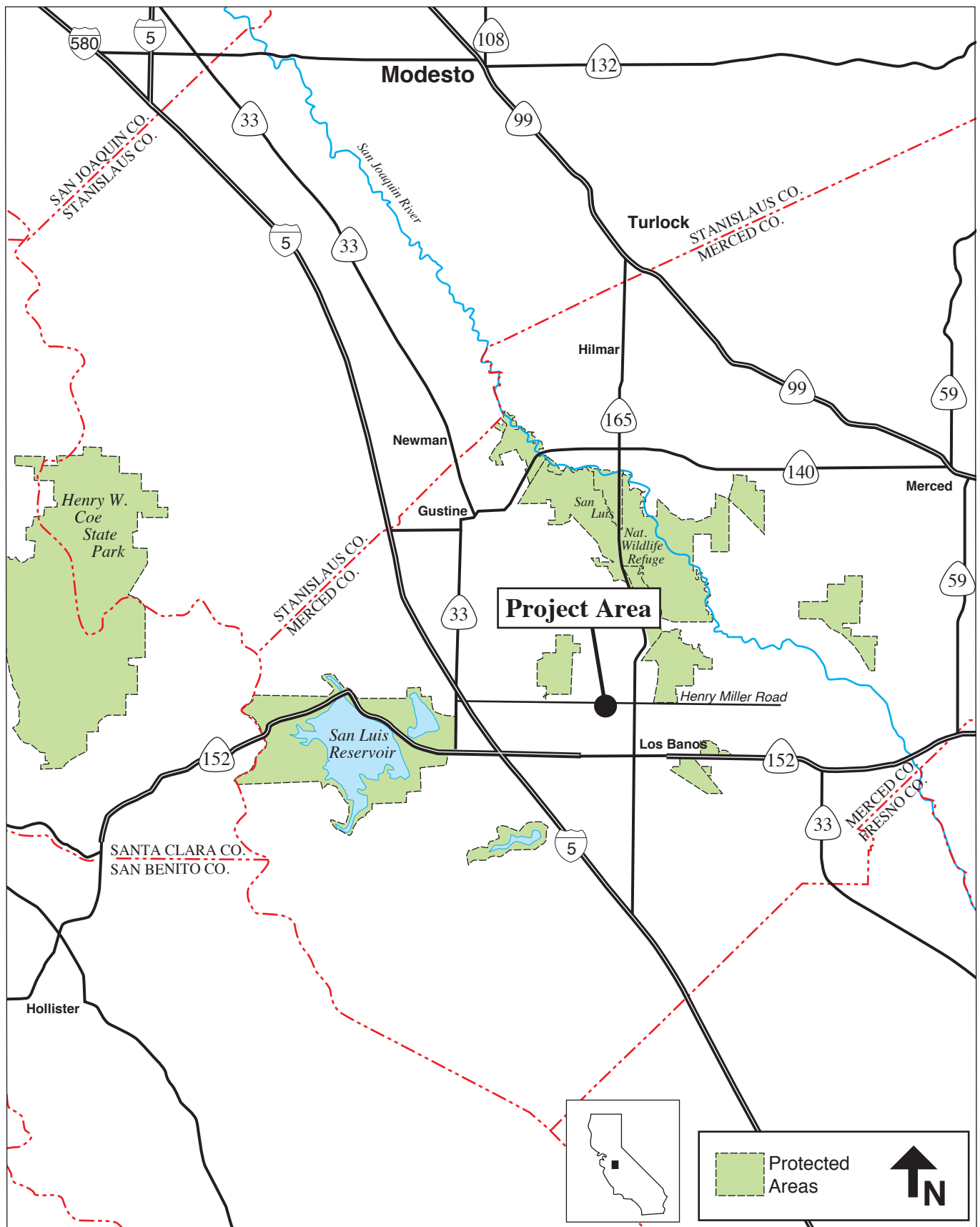
- Airola, Dan., Ted Beedy, and Samantha Arthur. 2016. Tricolored Blackbird Biology, Conservation, and Survey Techniques Workshop. Wildlife Society-Sacramento-Shasta Chapter. May 4, 2016. Folsom, CA
- Baldwin, Bruce G., Goldman, Douglas H., Keil, David J., Rosatti, Thomas J. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition*. University of California Press. Berkeley, CA.
- California Department of Fish and Game. 1994. State Fish and Game Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California.
- 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California Central Valley*. Swainson's Hawk Technical Advisory Committee, May 31, 2000.
- 2006. *Swainson's Hawk*. California Wildlife Habitat Relationships System. Sacramento, CA.
- 2019. California Natural Diversity Database (CNDDB) RAREFIND-5 Query. California Department of Fish and Game. Sacramento, CA. Data accessed October, 2019.
- California Native Plant Society. 2019. *Inventory of Rare and Endangered Vascular Plants of California*. California Native Plant Society, Sacramento, CA. Accessed on October 2019 at <<http://northcoastcnps.org/cgi-bin/inv/inventory.cgi>>
- Clark, D., ed. 1985. *Sunset New Western Garden Book*. Lane Publishing Co. Menlo Park, CA.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Nongame Heritage Program. Sacramento, CA.
- Meese, R.J. 2009. Contribution of the Conservation of Silage Colonies of Tricolored Blackbird Conservation from 2005-2009. Report Submitted to the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, CA. Report available at the Tricolored Blackbird Portal at <http://tricolor.ice.ucdavis.edu/reports>
- 2014. Results of the 2014 Tricolored Blackbird Statewide Survey. Report available at the Tricolored Blackbird Portal at <http://tricolor.ice.ucdavis.edu/reports>.
- 2017. Results of the 2014 Tricolored Blackbird Statewide Survey. Report available at the Tricolored Blackbird Portal at <http://tricolor.ice.ucdavis.edu/reports>.



- Miles, S. and C. Goudey. 1997. *Ecological Subregions of California: Section and Subsection Descriptions*. USDA Forest Service, Pacific Southwest Region Publication R5-EM-TP-005. San Francisco, CA.
- Natural Resources Conservation Service. 2019. Web Soil Survey. U.S. Department of Agriculture. <http://websoilsurvey.nrcs.usda.gov/app/>
- Sawyer, John O., Keeler-Wolf, Todd, Evens, Julie. 2009. *A Manual of California Vegetation Second Edition*. California Native Plant Society. Berkeley, CA.
- Shuford, W. D., and Gardali, T., eds. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Swainson's Hawk Technical Advisory Committee (SHTAC). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys for the California Central Valley.
- U.S. Fish and Wildlife Service. 1999. San Joaquin Kit Fox Survey Protocol for the Northern Range. Sacramento Fish and Wildlife Office, Sacramento, CA. June 1999.
- 1999. Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. Sacramento Fish and Wildlife Office, Sacramento, CA. June 1999.
- 2019. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands>
- Western Regional Climate Center. 2019. Historical Climate Information. Desert Research Institute.
- Zeiner, D., W. Laudenslayer, Jr. and K. Mayer. 1988. *California's Wildlife, Volume I, Amphibians and Reptiles*. California Department of Fish and Game. Sacramento, CA.
- Zeiner, D., W. Laudenslayer, Jr., K. Mayer, and M. White. 1990a. *California's Wildlife, Volume II, Birds*. California Department of Fish and Game. Sacramento, CA.
- . 1990b. *California's Wildlife, Volume III, Mammals*. California Department of Fish and Game. Sacramento, CA.

## FIGURES

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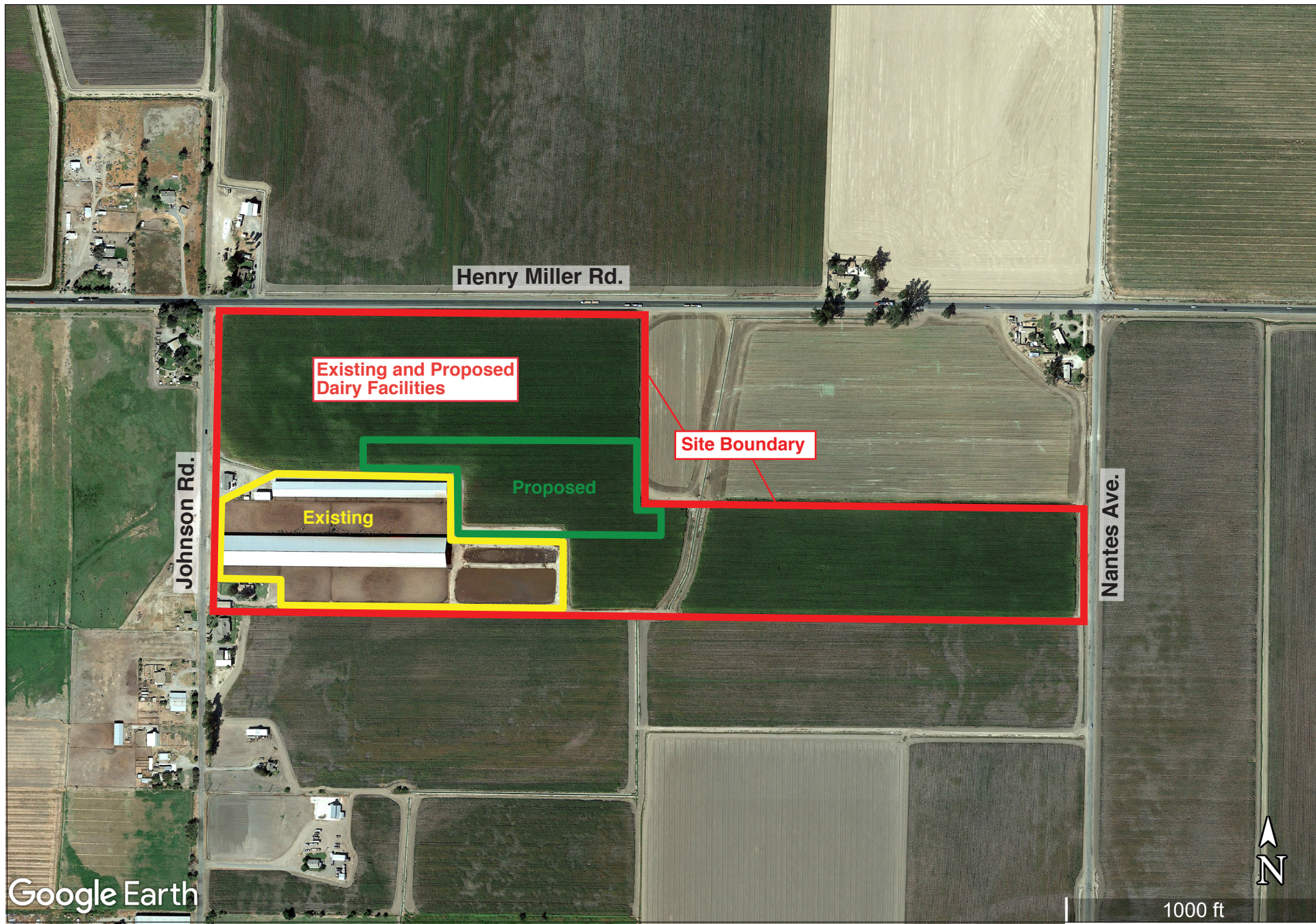


SOURCE: Planning Partners, 2019

Godinho Heifer Ranch Expansion Project CUP19-006

**Figure 1**  
Regional Location





SOURCE: Planning Partners, 2019

Godinho Heifer Ranch Expansion Project CUP19-006

**Figure 2**  
Project Location



### **FIGURE 3. SPECIAL-STATUS SPECIES MAP**

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

Photograph A.  
View of southern  
wastewater  
storage pond  
(photograph taken  
9/27/19).



Photograph B.  
View of irrigation  
canal that is  
located east of the  
proposed dairy  
facilities location  
(photograph taken  
9/27/19).



Photograph C.  
View of irrigation ditch that is dug around the outside of the corn field and also divides the existing dairy facilities from the proposed facilities (photograph taken 9/27/19).



Photograph D.  
View of a portion of the site proposed for the new facilities (photograph taken 9/27/19).





Photograph D.  
View of eucalyptus  
grove located  
approximately 0.2  
miles from the  
project site that  
contained a  
Swainson's hawk  
nest (CNDDDB Occ.  
#1660). No nest  
was observed  
during surveys  
(photograph taken  
9/27/19).





## **APPENDIX A**

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### **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
<b>Land Use Element</b>	
<b>LU-1.13</b>	<b>Wetland Habitat Area Separation (RDR)</b> 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.
<b>LU-2.4:</b>	<b>Secondary Uses in Agricultural Areas (RDR)</b> 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.
<b>LU-2.7</b>	<b>Rural Energy Production (RDR/SO)</b> 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.
<b>LU-3.4:</b>	<b>New Rural Residential Center Prohibition (RDR)</b> Prohibit the creation of any new, or the expansion of any existing, Rural Residential Centers in the unincorporated county.
<b>LU-4.7:</b>	<b>Wildlife Refuge Separation (RDR)</b> 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.
<b>LU-10.14:</b>	<b>Consultation with Grassland Resources Regional Working Group (IGC)</b> 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.
<b>LU-10.12:</b>	<b>Consultation with State and Federal Agencies (IGC)</b> Continue to consult with applicable State and Federal regulatory agencies during project review and permitting activities.
<b>Natural Resources Element</b>	
<b>NR-1.1:</b>	<b>Habitat Protection (RDR/PSR)</b> 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.
<b>NR-1.2</b>	<b>Protected Natural Lands (RDR/PSR)</b> 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.
<b>NR-1.3</b>	<b>Forest Protection (SO)</b> Preserve forests, particularly oak woodlands, to protect them from degradation, encroachment, or loss.
<b>NR-1.4</b>	<b>Important Vegetative Resource Protection (SO)</b> Minimize the removal of vegetative resources which stabilize slopes, reduce surface water runoff, erosion, and sedimentation.

<b>BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013</b>	
<b>POLICY</b>	<b>DESCRIPTION</b>
<b>NR-1.5</b>	<b>Policy NR-1.5: Wetland and Riparian Habitat Buffer (PSR/RDR)</b> Identify wetlands and riparian habitat areas and designate a buffer zone around each area sufficient to protect them from degradation, encroachment, or loss.
<b>NR-1.6</b>	<b>Policy NR-1.6: Terrestrial Wildlife Mobility (SO)</b> 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.
<b>NR-1.7</b>	<b>Policy NR-1.7: Agricultural Practices (SO)</b> 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.
<b>NR-1.8</b>	<b>Policy NR-1.8: Use of Native Plant Species for Landscaping (SO)</b> Encourage the use of native plant species in landscaping, and, where the County has discretion, require the use of native plant species for landscaping.
<b>NR-1.9</b>	<b>Policy NR-1.9: Rural to Urban Redesignations (MPSP)</b> Carefully consider the potential impacts on significant habitats from new development when redesignating land from a rural to an urban use.
<b>NR-1.10</b>	<b>Policy NR-1.10: Aquatic and Waterfowl Habitat Protection (MPSP)</b> 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.
<b>NR-1.11</b>	<b>Policy NR-1.11: On-Going Habitat Protection and Monitoring (PSR)</b> 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.
<b>NR-1.12</b>	<b>Policy NR-1.12: Wetland Avoidance (RDR/PSR/MPSP)</b> 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.
<b>NR-1.13</b>	<b>Policy NR-1.13: Wetland Setbacks (RDR)</b> Require an appropriate setback, to be determined during the development review process, for developed and agricultural uses from the delineated edges of wetlands.
<b>NR-1.14</b>	<b>Policy NR-1.14: Temporary Residential Uses (RDR)</b> Ensure that buildings and structures approved for temporary residential use in significant wetland areas are not converted to permanent residential uses.
<b>NR-1.15</b>	<b>Policy NR-1.15: Urban Forest Protection and Expansion (SO/MPSP)</b> 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.
<b>NR-1.16</b>	<b>Policy NR-1.16: Hazardous Waste Residual Repository Location (RDR)</b> 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.

<b>BIOLOGICAL RESOURCES POLICIES FROM THE 2030 MERCED COUNTY GENERAL PLAN ADOPTED DECEMBER 10, 2013</b>	
<b>POLICY</b>	<b>DESCRIPTION</b>
<b>NR-1.17</b>	<b>Policy NR-1.17: Agency Coordination (MPSP/IGC/JP)</b> 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.
<b>NR-1.18</b>	<b>Policy NR-1.18: San Joaquin River Restoration Program Support (MPSP/SO)</b> Monitor the San Joaquin River Restoration Program efforts to ensure protection of landowners, local water agencies, and other third parties.
<b>NR-1.19</b>	<b>Policy NR-1.19: Merced River Restoration Program Support (MPSP/SO)</b> Support the restoration efforts for the Merced River consistent with the Merced River Corridor Restoration Plan.
<b>NR-1.20</b>	<b>Policy NR-1.20: Conservation Easements (SO/IGC/JP)</b> Encourage property owners to work with land trusts and State and Federal agencies to pursue voluntary conservation easements.
<b>NR-1.21</b>	<b>Policy NR-1.21: Special Status Species Surveys and Mitigation (RDR/SO/IGC)</b> 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.
<b>Program NR-C</b>	<b>GIS Mapping (PSR, PI)</b> 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
<b>Program NR-D</b>	<b>Sensitive Habitat Guidelines (MPSP)</b> 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
<b>Program NR-E</b>	<b>Biological Resources Review Requirements (RDR/MPSP/IGC)</b> 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**

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

## **APPENDIX B**

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### **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:  
Consultation Code: 08ESMF00-2019-SLI-3147  
Event Code: 08ESMF00-2019-E-10015  
Project Name: Godhino Heifer Ranch Expansion

September 24, 2019

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

## To Whom It May Concern:

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

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

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

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

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

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

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

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

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

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

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

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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

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## Project Summary

Consultation Code: 08ESMF00-2019-SLI-3147

Event Code: 08ESMF00-2019-E-10015

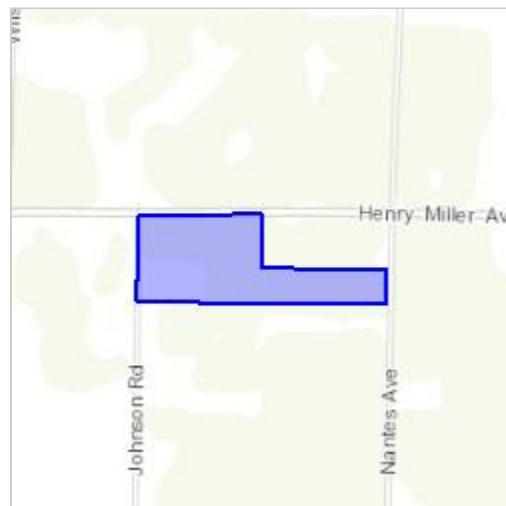
Project Name: Godhino Heifer Ranch Expansion

Project Type: AGRICULTURE

Project Description: Expansion of existing ranch

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.09823276763049N120.86206255703368W>



Counties: Merced, CA

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## Endangered Species Act Species

There is a total of 10 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 Fisheries<sup>1</sup>, 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.

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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 nitratoide exilis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5150">https://ecos.fws.gov/ecp/species/5150</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/37/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/37/office/11420.pdf</a>	Endangered
San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2873">https://ecos.fws.gov/ecp/species/2873</a>	Endangered

## Reptiles

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

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## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

## Fishes

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

## Insects

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

## Crustaceans

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

## Critical habitats

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

## **APPENDIX C**

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### **CNDDB QUERY RESULTS**



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Query Criteria: BIOS selection

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<b><i>Agelaius tricolor</i></b> tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	72 382	955 S:26	1	3	1	0	2	19	15	11	24	0	2
<b><i>Ambystoma californiense</i></b> California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	70 80	1205 S:3	0	1	0	0	0	2	3	0	3	0	0
<b><i>Aquila chrysaetos</i></b> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	140 280	321 S:2	0	0	0	0	0	2	2	0	2	0	0
<b><i>Astragalus tener var. tener</i></b> alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2	85 85	65 S:1	0	0	0	1	0	0	1	0	1	0	0
<b><i>Athene cunicularia</i></b> 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	1988 S:4	0	0	2	0	0	2	2	2	4	0	0
<b><i>Atriplex cordulata var. cordulata</i></b> heartscale	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	85 95	66 S:6	0	0	0	0	1	5	6	0	5	1	0
<b><i>Atriplex minuscula</i></b> lesser saltscale	G2 S2	None None	Rare Plant Rank - 1B.1		52 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Atriplex persistens</i></b> vernal pool smallscale	G2 S2	None None	Rare Plant Rank - 1B.2	75 80	41 S:2	0	0	0	0	0	2	2	0	2	0	0
<b><i>Branchinecta conservatio</i></b> Conservancy fairy shrimp	G2 S2	Endangered None	IUCN_EN-Endangered	85 85	43 S:1	0	0	0	0	0	1	1	0	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<b><i>Branchinecta longiantenna</i></b> longhorn fairy shrimp	G1 S1S2	Endangered None	IUCN_EN-Endangered	70 97	20 S:2	0	0	0	1	0	1	0	2	2	0	0
<b><i>Branchinecta lynchi</i></b> vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	75 80	769 S:2	0	0	0	0	0	2	2	0	2	0	0
<b><i>Branta hutchinsii leucopareia</i></b> cackling (=Aleutian Canada) goose	G5T3 S3	Delisted None	CDFW_WL-Watch List	80 100	19 S:2	0	0	0	0	0	2	2	0	2	0	0
<b><i>Buteo regalis</i></b> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	610 760	107 S:2	0	0	0	0	0	2	1	1	2	0	0
<b><i>Buteo swainsoni</i></b> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	75 350	2510 S:74	10	31	14	2	0	17	11	63	74	0	0
<b><i>Chloropyron molle ssp. hispidum</i></b> hispid salty bird's-beak	G2T1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	70 105	35 S:25	9	5	2	0	1	8	15	10	24	0	1
<b><i>Circus hudsonius</i></b> northern harrier	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-3 90	53 S:5	3	1	0	0	0	1	1	4	5	0	0
<b><i>Cismontane Alkali Marsh</i></b> Cismontane Alkali Marsh	G1 S1.1	None None		75 103	4 S:2	0	0	0	0	0	2	2	0	2	0	0
<b><i>Coastal and Valley Freshwater Marsh</i></b> Coastal and Valley Freshwater Marsh	G3 S2.1	None None		85 85	60 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Coturnicops noveboracensis</i></b> yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFWS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	120 120	45 S:1	0	0	0	0	0	1	1	0	1	0	0





# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>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	70 328	1375 S:16	3	12	0	0	0	1	1	15	16	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:3	0	0	0	0	0	3	2	1	3	0	0
<i>Eryngium racemosum</i> Delta button-celery	G1 S1	None Endangered	Rare Plant Rank - 1B.1	80 85	26 S:6	1	2	0	0	0	3	4	2	6	0	0
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	G2 S2	None None	Rare Plant Rank - 1B.2	85 170	108 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Falco mexicanus</i> prairie falcon	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	400 700	460 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Gambelia sila</i> blunt-nosed leopard lizard	G1 S1	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	300 610	324 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Lanius ludovicianus</i> loggerhead shrike	G4 S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	72 72	110 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	G4 S3S4	Endangered None	IUCN_EN-Endangered	70 90	325 S:5	0	0	1	0	0	4	2	3	5	0	0
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	70 85	438 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	G5T2T3 S2?	None None	CDFW_SSC-Species of Special Concern	350 550	96 S:4	0	0	0	0	0	4	4	0	4	0	0
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	G2 S2	None None	Rare Plant Rank - 1B.2	85 100	60 S:4	1	0	0	0	0	3	4	0	4	0	0
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	G5T2Q S2	Threatened None	AFS_TH-Threatened		31 S:1	0	0	0	1	0	0	0	1	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<b><i>Puccinellia simplex</i></b> California alkali grass	G3 S2	None None	Rare Plant Rank - 1B.2	90 90	80 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Sagittaria sanfordii</i></b> Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		126 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Spea hammondi</i></b> western spadefoot	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	70 87	1057 S:4	0	0	0	0	0	4	4	0	4	0	0
<b><i>Stuckenia filiformis ssp. alpina</i></b> slender-leaved 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
<b><i>Taxidea taxus</i></b> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	85 321	591 S:3	0	0	0	0	0	3	2	1	3	0	0
<b><i>Thamnophis gigas</i></b> giant gartersnake	G2 S2	Threatened Threatened	IUCN_VU-Vulnerable	75 115	366 S:18	1	2	3	0	1	11	12	6	17	1	0
<b><i>Trichocoronis wrightii var. wrightii</i></b> Wright's trichocoronis	G4T3 S1	None None	Rare Plant Rank - 2B.1	85 85	9 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Valley Sacaton Grassland</i></b> Valley Sacaton Grassland	G1 S1.1	None None		75 85	9 S:2	0	1	1	0	0	0	2	0	2	0	0
<b><i>Valley Sink Scrub</i></b> Valley Sink Scrub	G1 S1.1	None None		85 400	29 S:4	0	0	1	2	0	1	4	0	4	0	0
<b><i>Vulpes macrotis mutica</i></b> San Joaquin kit fox	G4T2 S2	Endangered Threatened		73 750	1018 S:22	1	7	2	1	0	11	20	2	22	0	0

## **APPENDIX D**

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### **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.