Clovis Tru Hotel Habitat Assessment

Accessor Parcel Numbers 491-030-019 and 491-030-028
Clovis, California

Prepared for

RED Inc Architects
1217 J Street
Modesto, CA 95354

Prepared by

1401 Fulton St, Suite 918
Fresno, CA 93721

September 16, 2019

APPENDIX B

1. Executive Summary

RED Inc Architects (RED) proposes to construct a five story, 86-unit hotel and parking lot (Project) on 3.53 acres of property within Assessor Parcel Numbers 491-030-19 and 491-030-28 in the City of Clovis, California (Project Site). Soar Environmental Consulting, Inc. (Soar Environmental) prepared this Habitat Assessment Report for RED, in support of the City of Clovis development application requirements. The City of Clovis has required RED to file a General Plan Amendment request and a Rezone Application with the City as part of its development application. The Project site is located on the United States Geological Survey Clovis 7.5-minute quadrangle at an elevation of approximately 360 feet above mean sea level.

On August 23, 2019, Soar Environmental Consulting, Inc. (Soar Environmental) performed a habitat assessment of Project Site. The purpose of the pedestrian habitat assessment survey on the Project site is to search for the presence of San Joaquin kit fox, Fresno kangaroo rat, western yellow-billed cuckoo, blunt-nosed leopard lizard, giant garter snake, California red-legged frog, California tiger salamander, Delta smelt, vernal pool fairy shrimp, conservancy fairy shrimp, tricolored blackbird, Greene's tuctoria, Swainson's hawk, California jewelflower, and least Bell's vireo.

Despite no special status species being observed during the pedestrian habitat assessment survey, potentially suitable habitat for some of these species may be present within the proposed Project footprint, depending upon the time of year that Project activities occur. Soar Environmental recommends that a biologist assess the following features prior to the commencement of ground disturbance activities: surveying trees within and surrounding the Project site for nesting raptors and other Migratory Bird Treaty Act protected species.

Table of Contents

1. Executive Summary ii
2. Introduction 5
3. Methods 9
   3.1. Literature Review 9
   3.2. Habitat Survey 9
4. Results 12
   4.1. San Joaquin Kit Fox 12
   4.2. Fresno Kangaroo Rat 12
   4.3. Western Yellow-billed Cuckoo 12
   4.4. Blunt-nosed Leopard Lizard 13
   4.5. Giant Garter Snake 13
   4.6. California Red-legged Frog 13
   4.7. California Tiger Salamander 14
   4.8. Delta Smelt 14
   4.9. Vernal Pool Fairy Shrimp 14
   4.10. Conservancy Fairy Shrimp 15
   4.11. Tricolored Blackbird 15
   4.12. Greene's Tuctoria 15
   4.13. Swainson's Hawk 16
   4.14. California Jewelflower 16
   4.15. Least Bell's Vireo 16
5. Presence of Potential Jurisdictional Waters or Wetlands 16
6. Findings 17
7. Recommendations 19
8. Works Cited 20

List of Figures

Figure 1 – Location Map 6
Figure 2 – Project Boundary Map 7
Figure 3 – Habitat Map 8
Figure 4 – North Fence, Facing West 10
Figure 5 – Northwest Corner, Facing Southeast 11

List of Tables

Table 1 – Special Status Species Findings 18

2. Introduction

RED Inc Architects (RED) seeks to construct a five story, 86-unit hotel and parking lot (Project) on 3.53 acres of property within Assessor Parcel Numbers 491-030-019 and 491-030-028 (Project site), in the City of Clovis, California. The Project site is located on the south side of Magill Avenue, with State Route 168 to the west, and the Fresno-Clovis Rail Trail to the southwest **(Figure 1)**. The Project site falls in the United States Geological Survey (USGS) Clovis 7.5-minute quadrangle **(Figure 2)** at an elevation of approximately 360 feet above Mean Sea Level. To support this task, RED contacted Soar Environmental Consulting, Inc. (Soar Environmental) to conduct a habitat assessment within the Project site

On August 23, 2019, Soar Environmental biologist Danielle Gutierrez performed a pedestrian survey of the Project Site to assess the potential presence of sensitive species and associated suitable habitat. The Project site is disked grass, with an Ash Tree and Desert Willow near the southern boundary and the West Branch Clovis Ditch, an ephemeral irrigation canal. The plant community on the Project Site is comprised of Great Brome (*Bromus diandrus*), Desert Willow (*Salix exigua*), Ash Tree (*Fraxinus sp.)*, Jimson Weed (*Datura stramonium*), Deervetch (*Acmispon americanus*), Common Knotgrass (*Polygonum aviculare*), Bermuda Grass (*Cynodon dactylon*), Tumblemustard *(Sisymbrium altissimum*), Wild Oat (*Avena fatua*), and Pigweed (*Chenopodium album*).

North of the Project Site are disked open fields and asphalt paved parking lots. The land features west of the Project Site are the SR 168 highway overpass and embankment, and the Fresno-Clovis Rail Trail. South of the Project Site are the West Branch Clovis Ditch, the Fresno-Clovis Rail-Trail, and additional disked open fields. The land features east of the Project Site are disked open fields.

Figure 1 – Location Map

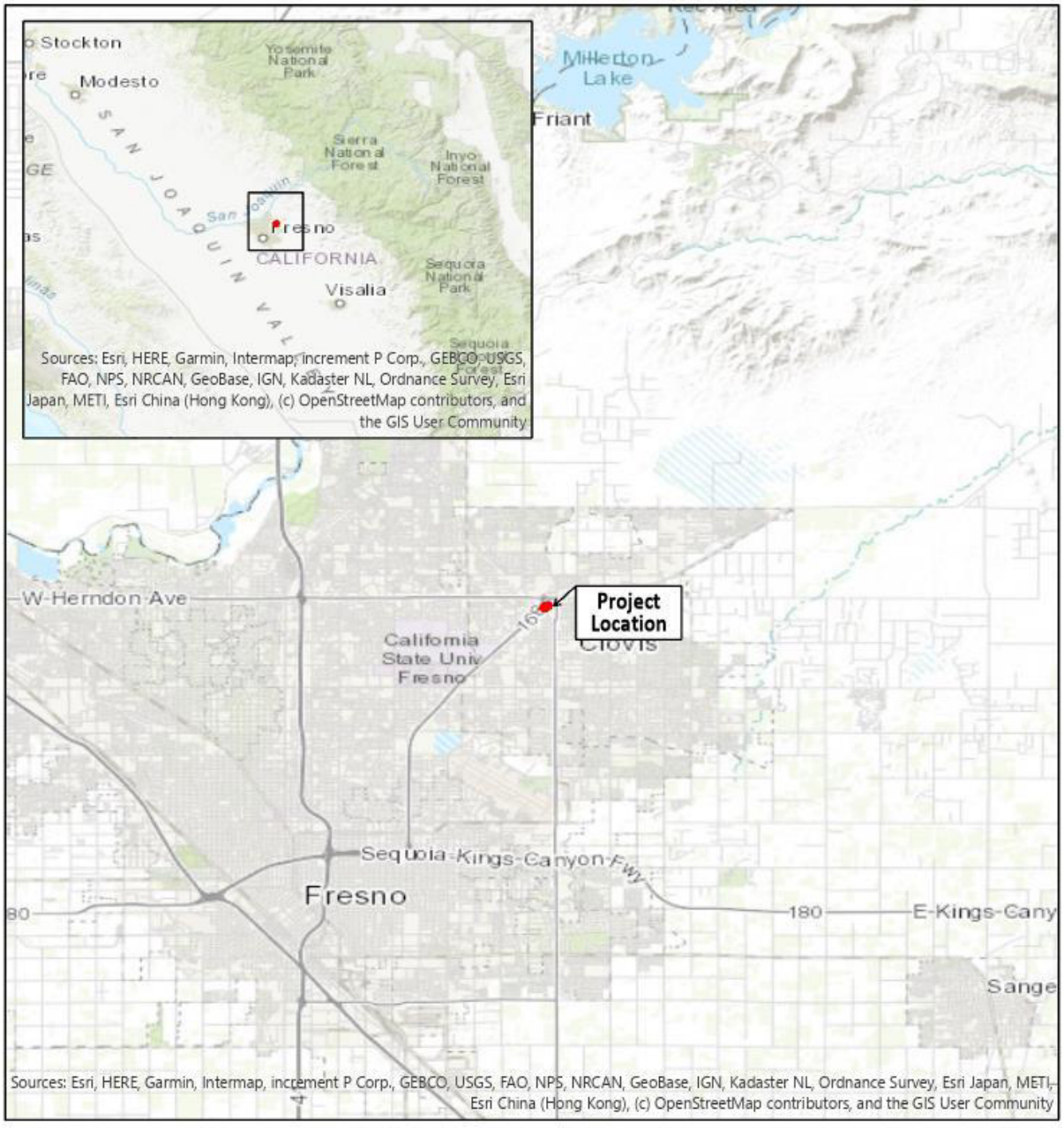
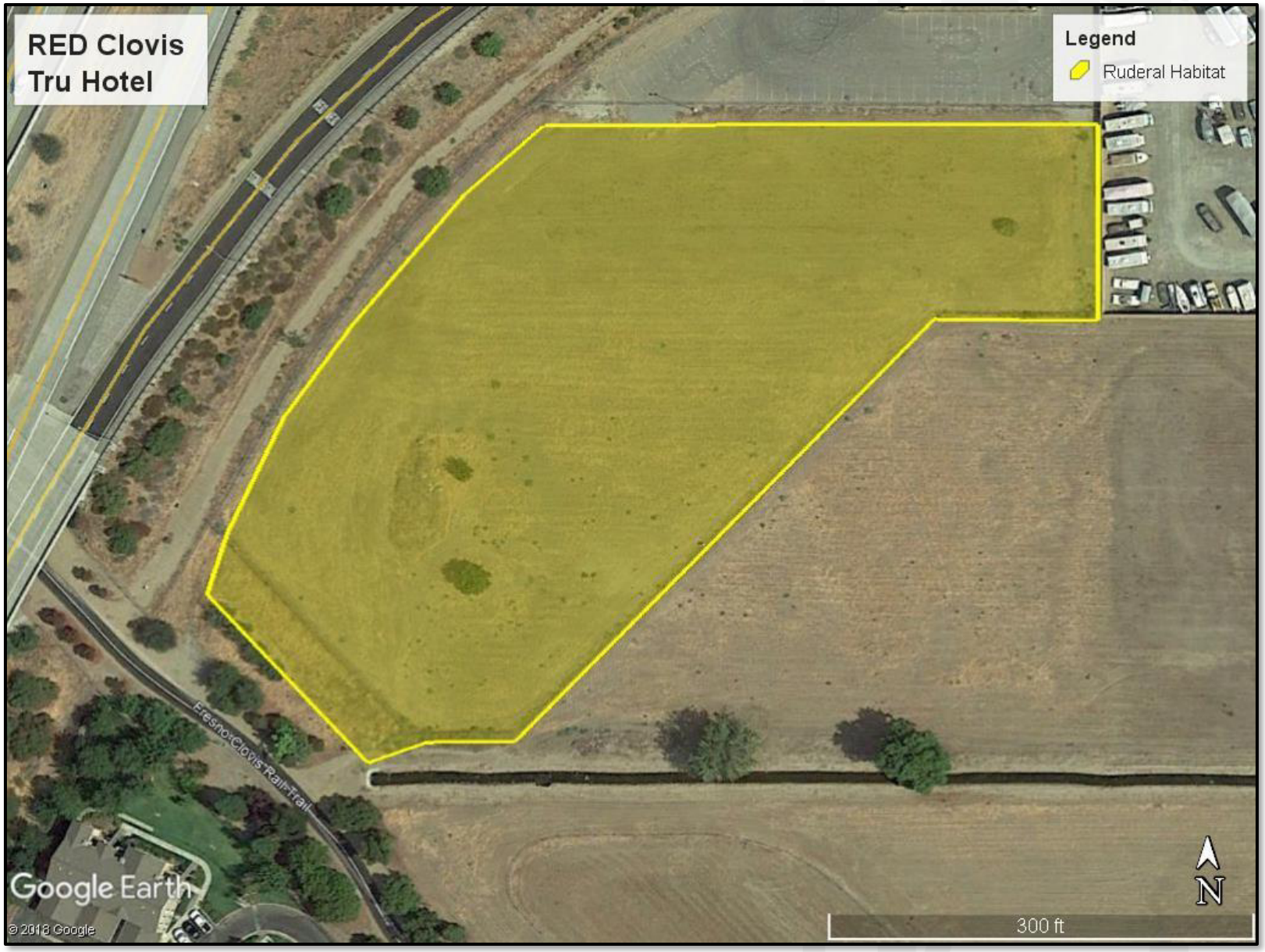


Figure 2 – Project Boundary Map

Figure 3 – Habitat Map



3. Methods

3.1. Literature Review

Prior to performing the habitat assessment, Soar Environmental reviewed records of species observations on the California Natural Diversity Database (CNDDB) and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) databases. The CNDDB search indicated that State-listed sensitive species most likely to occur within or near the Project site are tricolored blackbird (*Agelaius tricolor*), California tiger salamander (*Ambystoma californiense*), vernal pool fairy shrimp (*Branchinecta lynchi*), Swainson's hawk (*Buteo swainsoni*), California jewelflower (*Caulanthus californicus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), Greene's tuctoria (*Tuctoria greenei*), and least Bell's vireo (*Vireo bellii pusillus*).

The IPaC search revealed the Federally listed sensitive species most likely to occur within or near the Project Site are Fresno kangaroo rat (*Dipodomys nitratoides exilis*), San Joaquin kit fox (Vulpes macrotis mutica), yellow-billed cuckoo (*Coccyzus americanus*), blunt-nosed leopard lizard (*Gambelia silus*), giant garter snake (*Thamnophis gigas*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), Delta smelt (*hypomesus transpacificus*), conservancy fairy shrimp (*Branchinecta conservation*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Greene's tuctoria (*Tuctoria greenei*). The western yellow-billed cuckoo is the regional subgroup of the yellow-billed cuckoo, and as such it is the only examined subspecies in this report.

3.2. Habitat Survey

On August 23, 2019, Soar Environmental biologist Danielle Gutierrez arrived at the Project site.

Ms. Gutierrez began the pedestrian survey by entering the Project site through the northeast corner using the password provided by the client on the gate lock holding the chain-link fence. Ms. Gutierrez walked along the northern boundary heading west. The project soil had been disked and vegetative cover was approximately 30%. Assorted empty plastics and packaging were scattered along the northern fence line against the chain-link fence. Along the western Project boundary, Ms. Gutierrez noted the presence of mature oak and pine trees immediately outside the Project footprint along the fence line **(Figure 4)**. Using 10X power binoculars, the biologist searched the trees for nests and signs of birds. Ms. Gutierrez walked towards the southern portion of the Project site and observed the mature oak and pine trees outside the Project footprint, along the southern boundary more than 150 feet from the Project site. The biologist did not observe any nests within the Project trees; however, she could not visually confirm the presence or absence of nests in trees on the neighboring parcel.

Ms. Gutierrez continued east and observed a soil stockpile and the remains of a cement structure. Within and surrounding the stockpile, the biologist observed numerous small mammal burrows, most likely from California ground squirrel, as the burrows did not display matted vegetation or prey remains typical of San Joaquin kit fox (SJKF), or American badger (AB). The biologist observed and heard California ground squirrel vocalizing in the near distance. The biologist scanned the Ash Tree and Desert Willow for potential nesting birds; however, the biologist did not observe any nests. Ms. Gutierrez walked through the center of the Project site and searched for burrows; however, she did not observe any burrows in the Project footprint, possibly due to recent disking. Ms. Gutierrez walked along the eastern boundary towards the gate to complete the habitat assessment.

Figure 4 – North Fence, Facing West

Figure 5 – Northwest Corner, Facing Southeast

4. Results

During the field survey, Ms. Gutierrez did not observe any signs of San Joaquin kit fox, Fresno kangaroo rat (FKR), western yellow-billed cuckoo (Western YBCU), blunt-nosed leopard lizard (BNLL), giant garter snake (GGS), California red-legged frog (CRLF), California tiger salamander (CTS), Delta smelt (DS), vernal pool fairy shrimp (VPFS), conservancy fairy shrimp (CFS), tricolored blackbird (TRBL), Greene's tuctoria (GT), Swainson's hawk (SWHA), California jewelflower (CJF), or least Bell's vireo (LBV) within the Project footprint.

The biologist did not observe potential suitable habitat for these special status species. Notable habitat features requiring evaluation prior to groundbreaking are the numerous trees surrounding the Project footprint on the western boundary and the Ash tree and Desert Willow within the Project site, which all may provide suitable habitat for nesting Migratory Bird Treaty Act (MBTA) protected species.

4.1. San Joaquin Kit Fox

The SJKF is listed as Threatened at the Federal level and Endangered at the State level. SJKF are petite, light-colored canids, approximately 50 centimeters (20 inches) in length, with bushy, black-tipped tails, large ears, and pointed snouts. SJKF are fond of alkali meadows, playas, grassland communities, scrubland, and wetland communities in the San Joaquin Valley and adjoining foothills. SJKF have adapted to human habitation and can also be found in more developed areas such as golf courses, airports, and residential areas.

The habitat on the Project site is unsuitable for SJKF due to the lack of grassland habitat and keyhole burrows ranging from 10-25 centimeters (4-10 inches) in diameter. No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the Mercey Hot Springs 7.5-minute quadrangle, 64 miles southwest of the Project site in August 2006.

4.2. Fresno Kangaroo Rat

The FKR is listed as Endangered at the Federal Level and Endangered at the State Level. The FKR is one of three subspecies of the San Joaquin kangaroo rat. The Fresno kangaroo rat subspecies is limited in distribution to the flat valley floor of the San Joaquin Valley from Merced County to the northern border of Kings County, California. The Fresno kangaroo rat habitat is on elevated grassy patches on alkali plains or in grassy terrain with scattered alkali patches (USFWS 2010).

The habitat on the Project site is unsuitable for FKR due to disked ground and lack of grassland habitat with burrows smaller than 10 centimeters (4 inches). No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the San Joaquin 7.5-minute quadrangle, 29 miles southwest of the Project site in September 1990.

4.3. Western Yellow-billed Cuckoo

The Western YBCU is listed as Threatened on the Federal level and as Endangered on the State level. Western YBCU are medium-sized birds, approximately 30 centimeters (8 inches) in length, with long tails, light abdomens, gray brown backsides, rufous wing patches, and yellow mandibles, and prefer to breed

in riparian systems throughout the western United States. This extremely habitat-specific species requires large tracts of riparian habitat, consisting of 42 acres or more, for breeding and foraging. Important foraging habitat for this species includes large concentrations of cottonwood (*Populus* spp.) and willow (*Salix* spp.) trees.

The habitat on the Project site is unsuitable for WYBC due to the lack of wooded habitat with dense cover and water nearby. No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the Mendota Dam 7.5-minute quadrangle, 37 miles southwest of the Project site in July 1977.

4.4. Blunt-nosed Leopard Lizard

BNLL is listed as Endangered on the Federal and the State level. BNLL have a light background with dark gray-brown spotting, giving it an almost Giraffe-like appearance. The body length of the BNLL ranges from seven to 12 centimeters (5 inches), with a tail typically longer than the body. BNLL are found in the southern San Joaquin Valley and surrounding foothills and valleys. BNLL prefer flat areas with open space for running, including semi-arid grasslands, alkali flats, and washes, utilize shrubs and small mammal burrows for cover and shelter, and typically avoid densely vegetated areas.

The habitat on the Project site is unsuitable for BNLL due to the disked ground and lack of sparse shrubs. No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the Mercey Hot Springs 7.5-minute quadrangle, 62 miles southwest of the Project site in May 2005.

4.5. Giant Garter Snake

GGS is listed as Threatened on the Federal and the State level. GGS are at least 162 centimeters (64 inches) long, with a brownish olive background, a yellow stripe down the center of the back, and a light-colored stripe on either side. GGS historically ranged from Kern County to Butte County, but due to habitat degradation, this species is thought to no longer occur south of Fresno County. GGS are found primarily in marshes, sloughs, drainage canals, irrigation ditches, and prefers locations with vegetation close to water for basking. GGS use small mammal burrows and vegetation piles for cover during hotter weather.

The habitat on the Project site is unsuitable for GGS as there are no marshes, drainage or irrigation ditches or water present for a long enough duration on the Project footprint. No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the Tranquility 7.5-minute quadrangle, 34 miles southwest of the Project site in August 2008.

4.6. California Red-legged Frog

CRLF is listed as Threatened on the Federal level and is considered a Species of Special Concern in California. CRLF are medium-sized frogs from 4.4-13.3 centimeters (1.75 to 5.5 inches) long, with a slim waist, long legs, reddish brown, gray, or olive color with black flecks, dark mask on the head, and red on hind legs and lower belly. In the San Joaquin Valley, CRLF are prevalent in Fresno. CRLF are most common in lowlands and foothills, primarily near ponds in humid forests, woodlands, grasslands, and coastal scrub, and prefer streamside locations with vegetative cover.

The habitat on the Project site is not suitable for CRLF as there are no ponds, wetlands, or streamside locations present on the Project footprint. No record of species observation has been recorded for the Clovis 7.5-minute quadrangle in the CNDDB. According to CNDDB records, the most recent occurrence of this species in Fresno County was recorded in the Laguna Seca Ranch 7.5-minute quadrangle, 61 miles southwest of the Project site in February 2009.

4.7. California Tiger Salamander

CTS is listed as Endangered in Santa Barbara and Sonoma Counties, and Threatened in the Central San Joaquin Valley. Adult CTS range in size from 15-22 centimeters (6 to 9 inches) long and have a dark background color with distinctive yellow spots. Juvenile CTS look much like adults but lack the yellow spots. Larval CTS are grayish green in color and have the appearance of tadpoles with obvious, external gills. CTS eggs are clear and are typically laid singly or in groups of three or four in shallow ponds. This endemic California species are found in grasslands, oak savannah woodlands, edges of mixed woodland, lower elevations of coniferous forests, and in heavily grazed fields along the Central California Coast and within the Central San Joaquin Valley, however, CTS may breed in ditches where water is present for a long enough duration for eggs and larvae to metamorphose into adults.

The habitat on the Project site is unsuitable for CTS due to the lack of heavily grazed grasslands, ponds, burrows, or streamside locations on the Project footprint. No record of species observation has been recorded within the Project footprint. According to CNDDB records, the most recent occurrence of this species in the Clovis 7.5-minute quadrangle was recorded 3 miles northeast of the Project site in February 2006.

4.8. Delta Smelt

DS is listed as Threatened on the Federal level and Endangered on the State level. DS are 60-70 millimeters (2-3 inches) long, slim bodied fish with a silver sheen. DS prefer shallow, fresh, or slightly brackish backwater sloughs and edgewaters with good water quality and substrate for spawning and are generally found in brackish waters below 25 degrees Celsius. The range of DS is restricted to the upper reaches of the San Francisco Bay and Sacramento-San Joaquin Delta Estuary.

The habitat on the Project site is not suitable for delta smelt as there are no rivers, creeks, or streamside locations present on the Project footprint. No record of species observation has been recorded anywhere in Fresno County in the CNDDB.

4.9. Vernal Pool Fairy Shrimp

VPFS are listed as Threatened on the Federal level and has no listing on the State level. VPFS are 2.5 centimeters (one inch) long, translucent crustaceans with 11 pairs of appendages. VPFS are limited to vernal pool habitats in Oregon and California and do not occur in riverine, marine, or other permanent bodies of water where fish are present. During the wet season, the females produce hardy resting eggs, called cysts, which survive the dry season and hatch when the rains come again.

The habitat on the Project site is not suitable for VPFS as there are no vernal pools present on the Project footprint. No record of species observation has been recorded within the Project footprint. According to

CNDDB records, the most recent occurrence of this species in the Clovis 7.5-minute quadrangle was recorded 4 miles east of the Project site in February 2006.

4.10. Conservancy Fairy Shrimp

CFS is listed as threatened on the Federal level and endangered on the state level. CFS are found in vernal pools in Tehama, Solano, Butte, Glenn, Merced, and Ventura Counties. The relatively rare Conservancy fairy shrimp (*Branchinecta conservatio*), is a small crustacean in the Branchinectidae family. It ranges in size from about 1.3 to 2.5 cm (½ to 1 inch) long. Fairy shrimp are aquatic species in the order Anostraca. They have delicate elongate bodies, large stalked compound eyes, no carapaces, and 11 pairs of swimming legs. They glide gracefully upside down, swimming by beating their legs in a complex, wavelike movement that passes from front to back. CFS inhabit rather large, cool-water vernal pools with moderately turbid water. Females lay hardy eggs, known as cysts, which can survive dry hot summers until the vernal pool begins to fill during the first rains. It takes 41 days for a CFS to reach maturity, after which point it must reproduce before dying at the end of the rainy season. Typically, the cysts hatch in December and live until May, unless temperatures become too warm.

The habitat on the Project site is not suitable for CFS as there are no vernal pools present on the Project footprint. No record of species observation has been recorded anywhere in Fresno County in the CNDDB.

4.11. Tricolored Blackbird

TRBL is listed as a species of concern on the Federal level and threatened on the State level. This species is broadly distributed throughout California, though the bulk of the population resides in the Central Valley. In the past, TRBL nested in freshwater marshes with cattail, rushes, and willows. They now nest almost exclusively in triticale fields, especially those with invasive mustard or mallow plants. Females select the nesting site within a male's territory, typically close to freshwater with plenty of concealing vegetation. Females build nests in vegetation from just above ground level up to about 8 feet. The nest takes about 3 days to build and is about 18 centimeters (7 inches) tall and 13 centimeters (5 inches) wide. Foraging habitats include cultivated fields, feedlots associated with dairy farms, and wetlands. The breeding season for this species begins in April and ends in June.

The habitat on the Project site is unsuitable for TRBL due to the lack of marshes and tall vegetation such as cattails or bulrushes to support nesting colonies. No record of species observation has been recorded within the Project footprint. According to CNDDB records, the most recent occurrence of this species in the Clovis 7.5-minute quadrangle was recorded 3 miles southwest of the Project site in April 1975.

4.12. Greene's Tuctoria

GT is listed as Endangered on the Federal level and is listed as Rare on the State level. This species is found in the Central Valley of California in Butte, Merced, and Tehama Counties from Tulare County in the south to Shasta County in the north. GT occurs in wetlands within vernal pool habitat, located in Valley Grassland, Freshwater Wetlands, and wetland-riparian communities.

The habitat on the Project site is not suitable for GT as there are no vernal pools present on the Project footprint. There are no CNDDB records of species observation in Fresno County in the past 50 years.

4.13. Swainson's Hawk

SWHA is not listed on the Federal level and as Threatened on the State level. SWHA favor open habitat for foraging such as agricultural fields, pastures, and row crops. They nest in scattered stands of eucalyptus, willow, oak, cottonwood, and conifers. On occasion, SWHA will nest on a power pole or transmission tower. Nests are constructed with loose bundles of sticks and debris items. Nesting period is approximately 35 days and incubation period is 17-22 days. The breeding season for this species begins in March and ends in September. During the field survey, no signs of SWHA were observed in the Project footprint or surrounding areas.

The habitat on the Project Site is unsuitable for SWHA due to the lack of mature trees and utility poles. There are no CNDDB records of species observation in the Clovis 7.5-minute quadrangle. The most recent record of this species in Fresno County is from June 2018 in the Jamesan 7.5-minute quadrangle, approximately 26 miles to the southwest.

4.14. California Jewelflower

CJ is listed as Endangered on the Federal level and is listed as Endangered on the State level. This species is commonly located in sandy habitats within Chenopod scrub, pinyon and juniper woodland, and Valley and grassland communities, from 200 feet to 3,300 feet above mean sea level. The blooming season for this species begins in February and ends in May.

The habitat on the Project site is unsuitable for CJ due to the lack of valley saltbrush scrub habitat. There are no CNDDB records of species observation in the Clovis 7.5-minute quadrangle. The most recent record of this species in Fresno County is from April 2019 in the Kreyenhagen Hills 7.5-minute quadrangle, approximately 65 miles to the southwest.

4.15. Least Bell's Vireo

LBV is listed as Endangered on the Federal level and is listed as Endangered on the State level. This species is prevalent in summers in Southern California riparian zones, usually below 2000 feet elevation. This species nests among dense bushes or branches of shrubby trees like willow and mesquite. Breeding occurs between March and August, and the incubation period lasts approximately 14 days.

The habitat on the Project site is unsuitable for Least Bell's Vireo due to the lack of dense shrubby vegetation. There are no CNDDB records of species observation in Fresno County in the past 50 years.

5. Presence of Potential Jurisdictional Waters or Wetlands

The presence of potential jurisdictional waters or wetlands is determined through researching references located in Federal Emergency Management Agency (FEMA) flood inundation maps, general and community plans, mitigation plans, and technical support documents for application of the Clean Water Rule.

No potential jurisdictional water features were observed on the Project site.

6. Findings

Soar Environmental finds that the Project site does not contain suitable habitat for San Joaquin kit fox, Fresno kangaroo rat, western yellow-billed cuckoo, yellow-billed cuckoo, blunt-nosed leopard lizard, giant gartersnake, California red-legged frog, California tiger salamander, Delta smelt, vernal pool fairy shrimp, conservancy fairy shrimp, tricolored blackbird, Greene's tuctoria, Swainson's hawk, California jewelflower, or least Bell's vireo. The biologist did not observe any of the above referenced special status species on the Project site. Species observations are summarized in Table 1 below.

Table 1 – Special Status Species Findings

Species Name	Species Observed on Project Site	Potential Habitat on Project Site
San Joaquin kit fox (Vulpes macrotis mutica)	No	No
Fresno kangaroo rat (Dipodomys nitradoides exilis)	No	No
western yellow-billed cuckoo (Coccyzus americanus occidentalis)	No	No
blunt-nosed leopard lizard (Gambelia silus)	No	No
giant garter snake (Thamnophis gigas)	No	No
California red-legged frog (Rana Draytonii)	No	No
California tiger salamander (Ambystoma californiense)	No	No
Delta smelt (Hypomesus transpacificus)	No	No
vernal pool fairy shrimp (Branchinecta lynchi)	No	No
conservancy fairy shrimp (Branchinecta conservatio)	No	No
tricolored blackbird (Agelaius tricolor)	No	No
Greene's tuctoria (Tuctoria greenei)	No	No
Swainson's hawk (Buteo swainsoni)	No	No
California jewelflower (Caulanthus californicus)	No	No
least Bell's vireo (Vireo bellii pusillus)	No	No

7. Recommendations

Nesting Bird Recommendations

If Project activities commence during the nesting season (March 1 to September 15), Soar Environmental recommends that the developer survey the Project site and the surrounding habitat for nesting birds prior to ground disturbance to avoid any adverse impacts leading to nest failure or abandonment. During construction activities, the developer should avoid active raptor nests by a buffer of at least 150 feet, and non-raptor nests by at least 50 feet. The developer should monitor all nests during Project activities for signs of distress. If signs of distress are observed, the developer should adjust Project activities to prevent further disturbance to the birds.

8. Works Cited

Calflora. Retrieved from https://www.calflora.org

California Diversity Database (CNDDB). California Department of Fish and Wildlife RareFind. Retrieved from https://map.dfg.ca.gov/rarefind

California Herps. (2019). Retrieved from https://www.californiaherps.com

California Native Plant Society, Rare Plant Program. (9 September 2019*). Inventory of Rare and Endangered Plants of California* (online edition, v8-03 0.39). Retrieved from http://www.rareplants.cnps.org

California Water Management Planning Tool. Retrieved from https://gis.water.ca.gov/app/boundaries

Calscape. Retrieved from https://calscape.org

Center for Biological Diversity. Retrieved from https://www.biologicaldiversity.org

Cornell Lab of Ornithology. (2017). *Yellow-billed Cuckoo Life History.* Retrieved from https://www.allaboutbirds.org/guide/Yellow-billed_Cuckoo/lifehistory

eBird Database, Cornell University Lab of Ornithology. Retrieved from https://ebird.org

State Water Resources Control Board (12 April 2019). *State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State*. Retrieved from https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html

US EPA. (Feb. 2010). *Delta Smelt, Hypomesus transpacificus*. Retrieved from https://www.epa.gov/sites/production/files/2013-08/documents/delta-smelt_0.pdf

US EPA/ US Department of the Army. (May 27, 2015). *Technical Support Document for the Clean Water Rule: Definition of Waters of the United States*

USFWS. (27 Mar. 2019). *Information for Planning and Consultation*. Retrieved from https://ecos.fws.gov/ipac/

USFWS. (20 Dec. 2017). *Blunt-nosed Leopard Lizard Species Information.* Retrieved from https://www.fws.gov/sacramento/es_species/accounts/amphibians-reptiles/blunt_nosed_leopad_lizard/

USFWS. (6 Dec. 2017). *California Tiger Salamander Species Information*. Retrieved from https://www.fws.gov/sacramento/es_species/Accounts/Amphibians-Reptiles/ca_tiger_salamander/