Appendix C: Biological Resources

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Query Criteria: Quad IS (Altamont (3712166))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii	ABNKC12040	None	None	G5	S4	WL
Cooper's hawk						
Agelaius tricolor	ABPBXB0020	None	Candidate	G2G3	S1S2	SSC
tricolored blackbird			Endangered			
Ambystoma californiense	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
California tiger salamander						
Ammodramus savannarum	ABPBXA0020	None	None	G5	S3	SSC
grasshopper sparrow						
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
pallid bat						
Astragalus tener var. tener	PDFAB0F8R1	None	None	G2T2	S2	1B.2
alkali milk-vetch						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Atriplex cordulata var. cordulata	PDCHE040B0	None	None	G3T2	S2	1B.2
heartscale						
Atriplex depressa	PDCHE042L0	None	None	G2	S2	1B.2
brittlescale						
Atriplex minuscula	PDCHE042M0	None	None	G2	S2	1B.1
lesser saltscale						
Balsamorhiza macrolepis	PDAST11061	None	None	G2	S2	1B.2
big-scale balsamroot						
Blepharizonia plumosa	PDAST1C011	None	None	G2	S2	1B.1
big tarplant						
Bombus occidentalis	IIHYM24250	None	None	G2G3	S1	
western bumble bee						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp				_		
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
ferruginous hawk						
California macrophylla	PDGER01070	None	None	G4	S4	1B.2
round-leaved filaree				0.070	0.0	
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Chloropyron molle ssp. hispidum	PDSCR0J0D1	None	None	G2T1	S1	1B.1
hispid salty bird's-beak						
Chloropyron palmatum	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
palmate-bracted salty bird's-beak						
<i>Deinandra bacigalupii</i> Livermore tarplant	PDAST4R0V0	None	Endangered	G1	S1	1B.1



Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Delphinium californicum ssp. interius	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Hospital Canyon larkspur						
Elanus leucurus	ABNKC06010	None	None	G5	S3S4	FP
white-tailed kite						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Extriplex joaquinana	PDCHE041F3	None	None	G2	S2	1B.2
San Joaquin spearscale						
Fritillaria agrestis	PMLIL0V010	None	None	G3	S3	4.2
stinkbells						
Hygrotus curvipes	IICOL38030	None	None	G1	S1	
curved-foot hygrotus diving beetle						
Lanius Iudovicianus	ABPBR01030	None	None	G4	S4	SSC
loggerhead shrike						
Lasiurus cinereus	AMACC05030	None	None	G5	S4	
hoary bat						
Masticophis flagellum ruddocki	ARADB21021	None	None	G5T2T3	S2?	SSC
San Joaquin coachwhip						
Plagiobothrys glaber	PDBOR0V0B0	None	None	GH	SH	1A
hairless popcornflower						
Puccinellia simplex	PMPOA53110	None	None	G3	S2	1B.2
California alkali grass						
Rana boylii	AAABH01050	None	Candidate	G3	S3	SSC
foothill yellow-legged frog			Threatened			
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Sycamore Alluvial Woodland						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Trifolium hydrophilum	PDFAB400R5	None	None	G2	S2	1B.2
saline clover						
Tropidocarpum capparideum	PDBRA2R010	None	None	G1	S1	1B.1
caper-fruited tropidocarpum						
Valley Sink Scrub	CTT36210CA	None	None	G1	S1.1	
Valley Sink Scrub						
Vulpes macrotis mutica	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin kit fox						

Record Count: 40

CNPS labifornia Native Plant Society.

Plant List

Inventory of Rare and Endangered Plants

22 matches found. Click on scientific name for details

Search Criteria

Found in Quad 3712166

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S2S3	G2G3
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S2	G2T2
<u>Atriplex cordulata var.</u> <u>cordulata</u>	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
<u>Atriplex coronata var.</u> <u>coronata</u>	crownscale	Chenopodiaceae	annual herb	Mar-Oct	4.2	S3	G4T3
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	1B.1	S2	G2
California macrophylla	round-leaved filaree	Geraniaceae	annual herb	Mar-May	1B.2	S4	G4
<u>Centromadia parryi ssp.</u> <u>congdonii</u>	Congdon's tarplant	Asteraceae	annual herb	May- Oct(Nov)	1B.1	S2	G3T2
<u>Chloropyron molle ssp.</u> <u>hispidum</u>	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.1	S1	G2T1
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	1B.1	S1	G1
Deinandra bacigalupii	Livermore tarplant	Asteraceae	annual herb	Jun-Oct	1B.1	S1	G1
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
<u>Fritillaria agrestis</u>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	4.2	S3	G3
<u>Myosurus minimus ssp.</u> <u>apus</u>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1	S2	G5T2Q
<u>Navarretia nigelliformis ssp.</u> <u>nigelliformis</u>	adobe navarretia	Polemoniaceae	annual herb	Apr-Jun	4.2	S3	G4T3
Plagiobothrys glaber	hairless popcornflower	Boraginaceae	annual herb	Mar-May	1A	SH	GH
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
<u>Spergularia macrotheca var.</u> longistyla	long-styled sand- spurrey	Caryophyllaceae	perennial herb	Feb-May	1B.2	S2	G5T2

Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Tropidocarpum capparideum	caper-fruited tropidocarpum	Brassicaceae	annual herb	Mar-Apr	1B.1	S1	G1

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Questions and Comments

rareplants@cnps.org

Contributors

<u>The Califora Database</u> <u>The California Lichen Society</u> <u>California Natural Diversity Database</u> <u>The Jepson Flora Project</u> <u>The Consortium of California Herbaria</u> <u>CalPhotos</u>

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IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Local office Sacramento Fish And Wildlife Office ↓ (916) 414-6600 ⊕ (916) 414-6713 Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846	Alameda County, California	TION
Sacramento Fish And Wildlife Office └ (916) 414-6600 ⓓ (916) 414-6713 Federal Building 2800 Cottage Way, Room W-2605		NSULIT
 ▶ (916) 414-6600 ▶ (916) 414-6713 Federal Building 2800 Cottage Way, Room W-2605 	Local office	CO°
I (916) 414-6713 Federal Building 2800 Cottage Way, Room W-2605	Sacramento Fish And Wildlife Office	
2800 Cottage Way, Room W-2605		
$\langle \circ \rangle$	2800 Cottage Way, Room W-2605	

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.

The following species are potentially affected by activities in this location:

Mammals	014-		
NAME	$c \cup c$	STATUS	
San Joaquin Kit Fox Vulpes macrotis mutica No critical habitat has been designated for this species.	0	Endangered	
https://ecos.fws.gov/ecp/species/2873			
Reptiles			
NAME		STATUS	
Alameda Whipsnake (=striped Racer) Masticophis late There is final critical habitat for this species. Your location	5	Threatened	
https://ecos.fws.gov/ecp/species/5524			
Amphibians			
NAME		STATUS	
California Red-legged Frog Rana dravtonii		Threatened	

California Red-legged Frog Rana draytonii There is final critical habitat for this species. Your location is outside the critical habitat.	Threatened	
https://ecos.fws.gov/ecp/species/2891		
California Tiger Salamander Ambystoma californiense There is final critical habitat for this species. Your location is outside the critical habitat.	Threatened	
https://ecos.fws.gov/ecp/species/2076		

Fishes

NAME

https://ecos.fws.gov/ecp/species/321

Insects

NAME	STATUS
San Bruno Elfin Butterfly Callophrys mossii bayensis There is proposed critical habitat for this species. The location of the critical habitat is not available.	Endangered
https://ecos.fws.gov/ecp/species/3394	
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is final critical habitat for this species. Your location is outside the critical habitat.	Threatened
https://ecos.fws.gov/ecp/species/7850	
Crustaceans	
NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is final critical habitat for this species. Your location is outside the critical habitat.	Threatened
https://ecos.fws.gov/ecp/species/498	
Flowering Plants	STATUS
Palmate-bracted Bird's Beak Cordylanthus palmatus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1616	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the <u>take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any</u> <u>such conduct</u>) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described <u>below</u>.

- 1. The <u>Migratory Birds Treaty Act</u> of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <u>http://www.fws.gov/birds/management/managed-species/</u> <u>birds-of-conservation-concern.php</u>
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php

• Nationwide conservation measures for birds

http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are <u>USFWS Birds of Conservation Concern</u> that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the <u>E-bird data mapping tool</u> (year-round bird sightings by birders and the general public) and <u>Breeding Bird Survey</u> (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the <u>E-bird Explore Data Tool</u>.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Ashy Storm-petrel Oceanodroma homochroa https://ecos.fws.gov/ecp/species/7237	Breeds May 1 to Jan 15
Black Oystercatcher Haematopus bachmani https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeds Mar 1 to Sep 15
Black Skimmer Rynchops niger https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black Swift Cypseloides niger https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Turnstone Arenaria melanocephala	Breeds elsewhere
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
California Thrasher Toxostoma redivivum	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii	Breeds Jan 1 to Dec 31
Common Yellowthroat Geothlypis trichas sinuosa https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Lawrence's Goldfinch Carduelis lawrencei https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15

Red Knot	Calidris canutus ssp. roselaar	i
https://	ecos.fws.gov/ecp/species/8880	

Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus https://ecos.fws.gov/ecp/species/9480

Snowy Plover Charadrius alexandrinus

Song Sparrow Melospiza melodia maxillaris https://ecos.fws.gov/ecp/species/7716

Spotted Towhee Pipilo maculatus clementae https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata

Wrentit Chamaea fasciata

Yellow Rail Coturnicops noveboracensis https://ecos.fws.gov/ecp/species/9476

Yellow-billed Magpie Pica nuttalli https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (=)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

Breeds elsewhere

Breeds elsewhere

Breeds elsewhere

Breeds Mar 5 to Sep 15

Breeds Feb 20 to Sep 5

Breeds Apr 15 to Jul 20

Breeds Mar 15 to Aug 10

Breeds elsewhere

Breeds elsewhere

Breeds Mar 15 to Aug 10

Breeds elsewhere

Breeds Apr 1 to Jul 31

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.

PECIES	JAN	FEB	MAR	APR	MAY	JUN	probability of JUL	of presence AUG	breedir SEP	ng season l ост	NOV	ort — no dat DEC
llen's Hummingbird												
shy Storm-petrel												
lack Oystercatcher							1111					
lack Rail		- -	11	↓ Ⅰ		-11-						
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urrowing Owl				1111	1111			1111	100	1111	1111	
alifornia Thrasher						1111		4010	1111	¹		
ark's Grebe								<u>un</u>				
ommon Yellowthroat		IIII		1111	II II	1011	HH			IIII	 	
osta's Hummingbird					HEI)			 			-
PECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
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ewis's Woodpecker		-111	<u>III-</u>	 	-##-	-1-1	11		-###	### #	II II	₿-₿-
ong-billed Curlew	titti -	TIT	1111		III				 			
larbled Godwit	1111			1111	III	****	 				 	***
uttall's Woodpecker		III										
ak Titmouse												
ed Knot	 			1111	-	1-11			 	### #	# ###	# ###
ufous Hummingbird		-++		1111	I III		\$\$ \$ -	***	₩			
nort-billed Dowitcher		 			II II	-+++				 	 	
nowy Plover	 	I III								 		 -
ong Sparrow												III I
potted Towhee										1111		****
PECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
ricolored Blackbird	 	I III		1111		1111			I III	###		I III

Whimbrel			 		 				III	1111	III
Willet					II II	 	1111	1111		1111	
Wrentit	***	 					<mark> </mark>	 	 	 	
Yellow Rail							 				
Yellow-billed Magpie	***	****				1111		### #	 		####

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in <u>Birds of North America (BNA) Online</u> under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a <u>subscription</u>. Additional measures and/or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the Endangered Species Act (ESA).

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The <u>The Cornell Lab of Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds guide</u>. If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

<u>PEMA</u>

FRESHWATER FORESTED/SHRUB WETLAND

<u>PSSC</u>

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

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Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Table 1: Special-Status Plant Species Potentially Occurring within the Project Site

Spe	ecies		Status			Considered in	
Scientific Name	Common Name	ESA ¹	CESA ²	CNPS ³	Habitat Description ⁴	Impact Analysis	Rationale
Astragalus tener var. tener	Alkali milk-vetch	_	—	1B.2	Annual herb in the pea family (Fabaceae). Playas, Valley and foothill grassland (adobe clay), and vernal pools (alkaline). Blooms: March to June Elevation: 1 to 60 meters	No	Suitable habitat and known habitat components not found within the project site.
Atriplex cordulata	Heartscale	_	_	18.2	Annual herb. Chenopod scrub, Meadows and seeps, Valley and foothill grassland (sandy)/saline or alkaline. Blooms: April to October Elevation: 1 to 375 meters	No	Suitable habitat and known habitat components not found within the project site. No atriplex species were identified as occurring within the project site during the site assessment.
Atriplex depressa	Brittlescale	_	_	18.2	Annual herb. Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools in alkaline, clay soils. Blooms: May to October Elevation: 1 to 320 meters	No	Suitable habitat and known habitat components not found within the project site. No atriplex species were identified as occurring within the project site during the site assessment.
Atriplex joaquiniana	San Joaquin spearscale		_	18.2	Annual herb. Chenopod scrub, meadows and seeps, playas, Valley and foothill grassland in alkaline soils. Blooms: April to October	No	Suitable habitat and known habitat components not found within the project site. No

Spe	ecies		Status			Considered in	
Scientific Name	Common Name	ESA ¹	CESA ²	CNPS ³	Habitat Description ⁴	Impact Analysis	Rationale
					Elevation: 1 to 835 meters		atriplex species were identified as occurring within the project site during the site assessment.
Atriplex minuscula	Lesser saltscale	_	_	18.1	Annual herb. Chenopod scrub, playas, Valley and foothill grassland in alkaline, sandy soils. Blooms: May to October Elevation: 15 to 200 meters	No	Suitable habitat and known habitat components not found within the project site. No atriplex species were identified as occurring within the project site during the site assessment.
Balsamorhiza macrolepis	Big-scale balsamroot	_	-	18.2	Perennial herb in the sunflower family (Asteraceae). Chaparral, cismontane woodland, Valley and foothill grassland (sometimes serpentinite). Blooms: March to June Elevation: 90 to 1,400 meters	No	Suitable habitat and known habitat components not found within the project site.
Blepharizonia plumosa	Big tarplant	—	—	18.1	Annual herb in the sunflower family (Asteraceae). Valley and foothill grassland. Dry hills and plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. Blooms: July to October Elevation: 30 to 505 meters	No	Suitable habitat and known habitat components not found within the project site. Not identified onsite during the October 2013 survey.

Spe	ecies		Status			Considered in	
Scientific Name	Common Name	ESA ¹	CESA ²	CNPS ³	Habitat Description ⁴	Impact Analysis	Rationale
California macrophylla	Round-leaved filaree	_	_	18.1	Annual herb in the geranium family (Geraniaceae). Cismontane woodland, Valley and foothill grassland in clay soils. Blooms: March to May Elevation: 15 to 1,200 meters	No	Suitable habitat and known habitat components not found within the project site.
Centromadiaparry is sp. congdonii	Congdon's tarplant	_	_	18.1	Annual herb in the sunflower family (<i>Asteraceae</i>). Valley and foothill grassland (alkaline). A synonym of <i>Hemizoniaparryi</i> ssp. <i>congdonii</i> in The Jepson Manual. Blooms: May to October (November) Elevation: 1 to 230 meters	No	Suitable habitat and known habitat components not found within the project site. Not identified onsite during the October 2013 survey.
Chloropyron molle ssp. hispidum	Hispid bird's-beak	_	_	18.1	Hemi-parasitic annual herb in the figwort family (Scrophulariaceae). Meadows and seeps, playas, valley and foothill grassland in alkaline soils. Endemic to California. Apparently extirpated from much of the lower San Joaquin Valley. Blooms: June to September Elevation: 1 to 155 meters	No	Suitable habitat and known habitat components not found within the project site.
Cordylanthus palmatus	Palmate-bracted bird's-beak	FE	SE	18.1	Annual herb hemi-parasitic in the figwort family (<i>Scrophulariaceae</i>). Chenopod scrub, Valley and foothill grassland, alkaline. Blooms: May to October Elevation: 5 to 155 meters	No	Suitable habitat and known habitat components not found within the project site. Not identified onsite during the October 2013 survey.

Sp	ecies		Status			Considered in	
Scientific Name	Common Name	ESA ¹	CESA ²	CNPS ³	Habitat Description ⁴	Impact Analysis	Rationale
Deinandra bacigalupii	Livermore tarplant	_	_	18.2	Annual herb in the sunflower family (Asteraceae). Meadows and seeps (alkaline). Known from fewer than five occurrences near Livermore. Blooms: June to October Elevation: 150 to 185 meters	No	Suitable habitat and known habitat components not found within the project site. Not identified onsite during the October 2013 survey.
Delphinium californicum ssp. interius	Hospital Canyon larkspur	_	_	18.2	Perennial herb in the buttercup family (Ranunculaceae). Chaparral (openings), and cismontane woodland (mesic). Blooms: April to June Elevation: 230 to 1,095 meters	No	Suitable habitat and known habitat components not found within the project site.
Eschscholzia rhombipetala	Diamond-petaled California poppy	_	_	18.1	Annual herb in the poppy family (Papaveraceae). Valley and foothill grassland (alkaline, clay). Found at Lawrence Livermore Laboratory Site 300, Alameda Co. in 1997, where extant as of 2003. Blooms: March to April Elevation: 0 to 975 meters	No	Suitable habitat and known habitat components not found within the project site. Not identified onsite during the October 2013 survey.
Navarretia prostrata	Prostrate navarretia	—	_	1B.1	Annual herb. Coastal scrub, meadows and seeps, Valley and foothill grassland (alkaline), and vernal pools (mesic). Blooms: April to July Elevation: 15 to 700 meters	No	Suitable habitat and known habitat components not found within the project site.
Plagiobothrys glaber	Hairless popcorn flower	_	—	1A	Annual herb. Meadows and seeps (alkaline), marshes and swamps	No	Suitable habitat and known habitat

Sp	ecies		Status			Considered in	
Scientific Name	Common Name	ESA ¹	CESA ²	CNPS ³	Habitat Description ⁴	Impact Analysis	Rationale
					(coastal salt). Blooming period: March to May Elevation: 15 to 180 meters.		components not found within the project site.
Trifolium depauperatum var. hydrophilum	Saline clover	_	_	18.2	Annual herb. Marshes and swamps, Valley and foothill grassland (mesic, alkaline), and vernal pools. Blooming period: April to June Elevation: 0 to 300 meters.	No	Suitable habitat and known habitat components not found within the project site.
Tropidocarpum capparideum	Caper-fruited tropidocarpum	_	_	1B.1	Annual herb. Valley and foothill grassland (alkaline hills). Blooms: March to April Elevation: 1 to 455 meters	No	Suitable habitat and known habitat components not found within the project site.
Endangered S FT Listed as threa Endangered S FC Candidate for endangered) u Species Act	ngered under the becies Act itened under the becies Act listing (threatened or under Endangered cordance with the becies Act so of Concern	CDFW Listi SE Liste Califi ST Liste Califi SSC Spec iden CFP Liste CDFC	ing d as endang ornia Endan d as threate ornia Endan ties of Specia tified by CDI d as fully pro G code	2013 USFWS a gered under th gered Species ened under th gered Species al Concern as FW otected unde d as rare by C	1APlants species that presumed extinct in California.1BPlant species that are rare, threatened, or endangered in California and elsewhere.2List 22Plant species that are rare, threatened, or endangered in California, but more common elsewhere.	ia eat) adapted CNPS o Other SLC S Si Si	description: Habitat description d from CNDDB (CDFW 2013) and nline inventory (CNPS 2013) pecies of Local or Regional oncern or conservation ignificance

S	pecies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
Invertebrates				·		· ·
Branchinecta conservatio	Conservancy fairy shrimp	FE		Inhabits rather large, cool-water vernal pools with moderately turbid water. They have been collected from early November to early April. Currently, the USFWS is aware of eight populations of Conservancy fairy shrimp, which include (from north to south): (1) Vina Plains, Butte and Tehama counties; (2) Sacramento National Wildlife Refuge, Glenn County; (3) Yolo Bypass Wildlife Area, Yolo County; (4) Jepson Prairie, Solano County; (5) Mapes Ranch, Stanislaus County; (6) University of California, Merced, Merced County; (7) Grasslands Ecological Area, Merced County and (8) Los Padres National Forest, Ventura County.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project sit (CDFW 2013a).
Branchinecta longiantenna	Longhorn fairy shrimp	FE		A freshwater fairy shrimp. It inhabits the ephemeral water of swales and vernal pools. It has been found in grass-bottomed pools in unplowed grasslands as well as clear-water pools in sandstone depressions. Known to occur in clear, moderately deep, small- to-medium-size pool depressions in bedrock outcrops; moderately deep, medium-to-large-size turbid alkali	No	Suitable habitat and known habitat components not found within the project site. The closest known occurrence (Occurrence number 3) is approximately 1 mile south of the project sit (CDFW 2013a).

Table 2: Special-Status Wildlife Species Potentially Occurring within the Project Site

Spe	ecies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
				pools in the Kesterson National Wildlife Refuge in western Merced County.		
Branchinecta lynchi	Vernal pool fairy shrimp	FT		Occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Although the species has been collected from large vernal pools, including one exceeding 25 acres, it tends to occur in smaller pools. It is most frequently found in pools measuring less than 0.05 acre most commonly in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands. Vernal pool fairy shrimp have been collected from early December to early May.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Fish		·		^	·	
Hypomesustrans pacificus	Delta smelt	FT	ST	Located exclusively in the Sacramento- San Joaquin Delta. They have been found as far upstream as the mouth of the American River on the Sacramento and San Joaquin rivers and their tributaries.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Oncorhynchus mykiss	Central California coastal Evolutionary Significant Unit steelhead	FT	_	Spawns in the Sacramento and San Joaquin rivers and their tributaries; now extirpated from most of historical range; the majority of native, natural	No	Suitable habitat and known habitat components not found within the project site.

Spe	ecies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
				production occurs in upper Sacramento River tributaries below Red Bluff Diversion Dam, but these populations are nearly extirpated. This ESU does not include steelhead from San Francisco and San Pablo bays and their tributaries.		There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Amphibians						
Ambystoma californiense	California tiger salamander	FT	ST	Typically found in annual grasslands of lower hills and valleys; breeds in temporary and permanent ponds and in streams; uses rodent burrows and other subterranean retreats in surrounding uplands for shelter; appears to be absent in waters containing predatory game fish. The California tiger salamander spends most of its lifecycle estivating underground in adjacent valley oak woodland or grassland habitat, primarily in abandoned rodent burrows. Research has shown that dispersing juveniles can roam up to two miles from their breeding ponds and that a minimum of several hundred acres of uplands habitat is needed surrounding a breeding pond in order for the species to survive over the long-term.	No	Suitable habitat and known habitat components not found within the project site. Closest known occurrence (Occurrence number 895) is approximately 0.75 mile southwest of the project site within Dry Creek (CDFW 2013a).
Rana boylii	Foothill yellow-legged	—	SSC	Partly shaded, shallow streams and	No	Suitable habitat and

Sp	ecies	St	atus	_	Considered in	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	
	frog			riffles with a rocky substrate in various habitats, with adjacent sunny banks or open woodlands. Breeding season begins mid-March to May.		known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Rana draytonii	California red-legged frog	FT	SSC	Lowlands and foothill streams, pool, and marshes in or near permanent or late season sources of deep water with dense, shrubby, riparian, or emergent vegetation (e.g., ponds, perennial drainages, well-developed riparian) below 3,936 feet in elevation. Breeds late December to early April.	No	Suitable habitat and known habitat components not found within the project site. The closest known occurrence (Occurrence number 411) is approximately 1 mile northeast of the project site within Dry Creek (CDFW 2013a).
Spea hammondii	Western spadefoot		SSC	Associated habitat divided between aquatic breeding ponds and upland, nonbreeding habitat. During much of the year found in upland grassland, chaparral, and woodland communities. Will travel long distances to ephemeral breeding pools. Breeding typically takes place from January to May.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).

Spec	cies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
Emys marmorata	Western pond turtle		SSC	Permanent or nearly permanent water in various habitats (e.g., ponds, streams, perennial drainages). Requires basking sites particularly in areas vegetated with riparian habitats. The western pond turtle includes two subspecies, the northwestern pond turtle (<i>Actinemys marmorata</i> <i>marmorata</i>) and the southwestern pond turtle (<i>Actinemys marmorta</i> <i>pallida</i>). The two subspecies range is interconnected within and around the San Francisco Bay Area.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Masticophis flagellum ruddocki	San Joaquin whipsnake		SSC	This subspecies is endemic to California, ranging from Arbuckle in the Sacramento Valley in Colusa County southward to the Grapevine in the Kern County portion of the San Joaquin Valley and westward into the inner South Coast Ranges, from near 20 meters to around 900 meters. This species occurs in open, dry, treeless areas, including grassland and saltbush scrub; takes refuge in rodent burrows, under shaded vegetation, and under surface objects.	No	The ruderal/urban habitat within the project site is devoid of vegetation and prey for the species. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).

Spec	cies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
Masticophis lateralis euryxanthus Birds	Alameda whipsnake	FT	ST	This snake is most often found in chaparral foothills, shrublands with scattered grassy patches, rocky canyons and watercourses, and adjacent habitats.	No	The ruderal/urban habitat within the project site is devoid of vegetation and prey for the species. The closest known occurrence (Occurrence number 106) is approximately 1 mile south of the project site (CDFW 2013a).
FALCONIFORMES (hawks, falco	ons)					
Accipiter cooperii	Cooper's hawk			Cooper's hawks are forest and woodland birds. These hawks are a regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around.	Yes	Limited trees within the project site; adjacent properties provide suitable nesting and foraging habitat. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Buteo regalis	Ferruginous hawk		SSC	Ferruginous hawks are birds of open country. They are found in open habitats, such as grasslands, sagebrush, deserts, shrublands, and outer edges of pinyon-pine and other forests. They select rocky outcrops, hillsides, rock pinnacles, or trees for nest sites.	Yes	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile

Spec	ies	St	atus		Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
						buffer of the project site (CDFW 2013a).
Elanus leucurus	White-tailed kite		CFP	Nests in shrubs (in Delta) and trees adjacent to grasslands oak woodland, edges of riparian habitats. Roosts communally, resident year-round, and breeds February to October.	Yes	Limited trees within the project site; adjacent properties provide suitable nesting and foraging habitat. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Passeriformes (Perching Birds)						
Agelaius tricolor	Tri-colored blackbird		SSC	Breeds in freshwater wetlands, with tall dense vegetation including tule, cattail, blackberry and rose. Forages in grasslands and croplands. Resident year-round. Breeds April to July.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Eremophila alpestrisactia	California horned lark	_	WL	A widespread occupant of open habitats across North America, horned larks prefer areas with sparse vegetation and exposed soil. In western North America, this species is associated with desert brushlands, grasslands, and similar open habitats,	Yes	Limited trees and fencing within the project site; adjacent properties provide suitable nesting and foraging habitat. There are no recorded occurrences of the species within a 1-mile

Species		Status			Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
				as well as alpine meadows. Throughout their range, horned larks avoid all habitats dominated by dense vegetation and become scarce and locally distributed in heavily forested areas.		buffer of the project site (CDFW 2013a).
Strigiformes (Owls)						
Athene cunicularia	Western burrowing owl		SSC	Open grasslands and shrublands up to 5,300 feet with low perches and small mammal burrows. Resident year- round. Breeds March to August.	No	Suitable habitat and known habitat components not found within the project site. No prey species or burrows available on the project site. The closest known occurrence (Occurrence number 50) is approximately 1 mile northeast of the project site (CDFW 2013).
Charadriiformes (Shorebirds, G	Gulls)					
Sternula antillarum	California least tern	FE	SE	Summer/nesting in Bay Area; isolated colony in San Francisco Bay on sandy beaches bordering shallow water in estuaries; bulk of distribution in southern California coast.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site

Species		Status			Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
						(CDFW 2013a).
Mammals	·		·	·	<u> </u>	·
Antrozous pallidus	Pallid bat	_	SSC	Pallid bats roost in rock crevices, tree hollows, mines, caves, and a variety of anthropogenic structures, including vacant and occupied buildings and buildings, mines, and natural caves are utilized as roosts. Occurrence is primarily in arid habitats. Colonies are usually small and may contain 12-100 bats.	No	Suitable habitat and known habitat components not found within the project site. The closest known occurrence (Occurrence number 126) is approximately 0.75 mile south of the project site (CDFW 2013a).
Corynorhinus townsendii	Townsend's big-eared bat		SSC	These bats hibernate in caves or mines where the temperature is 12°C (54°F) or less, but usually above freezing. Hibernation sites in caves often are near entrances in well-ventilated areas. They hibernate in clusters of a few to more than 100 individuals. Maternity colonies usually are located in relatively warm parts of caves. No long-distance migrations are known. Like many other bats, they return year after year to the same roost sites. They are found in western Canada, the western U.S. to southern Mexico, and a few isolated populations in the eastern U.S.	No	Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).

Species		Status			Considered in	Potential to Occur/
Scientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³	Impact Analysis	Known Occurrence/ Suitable Habitat
Lasiurus cinereus	Hoary bat		SSC	Basically solitary, except for mother- young association; however, during migration, groups of up to hundreds of individuals may form. Dispersed population allows little chance to obtain density figures. Those migrating through the western U.S. in fall go south at least into Mexico.		Suitable habitat and known habitat components not found within the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Taxidea taxus	American badger		SSC	Stout-bodied, primarily solitary species that hunts for ground squirrels and other small mammal prey in open grassland, cropland, deserts, savanna, and shrubland communities. Badgers have large home ranges and spend inactive periods in underground burrows. Badgers typically mate in mid- to late summer and give birth between March and April.	No	Suitable habitat and known habitat components not found within the project site. No prey species or burrows available on the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).
Vulpes macrotis mutica	San Joaquin kit fox	FE	ST	Alkali sink, valley grassland, foothill woodland. Hunts in areas with low sparse vegetation that allows good visibility and mobility. Multiple underground dens are used throughout the year. Den usually has multiple entrances. Sometimes uses pipes or culverts as den sites. Mates in winter; 4 to 7 young are born in February or March.	No	Suitable habitat and known habitat components not found within the project site. No prey species or burrows available on the project site. There are no recorded occurrences of the species within a 1-mile buffer of the project site (CDFW 2013a).

Species		Status				Considered in	Potential to Occur/	
S	cientific Name	Common Name	ESA ¹	CESA ²	Habitat Description ³		Impact Analysis	Known Occurrence/ Suitable Habitat
Notes: Common Name 1 Federal status: October 2013 USFWS Listing ESU Evolutionary Significant Unit is a distinctive population. FE Listed as endangered under the Endangered Species Act FT Listed as threatened under the Endangered Species Act FC Candidate for listing (threatened or endangered) under Endangered Species Act FD Delisted in accordance with the Endangered Species Act FPD Federally Proposed to be Delisted		SE L E ST L SSC S CFP L CR R	isted as endar indangered Sp isted as threat ndangered Sp pecies of Spec	tened under the California recies Act cial Concern as identified by CDFW protected under CDFG code nia	Habitat De ³ Habitat	•	nation adapted from CNDDB	