

APPENDIX B

BIOLOGICAL RESOURCES

**BR-1 – DATA BASE RECORDS, SPECIAL-STATUS
SPECIES TABLE, PCCP CONSISTENCY TABLE**

CNDDB 10 Miles

December 2021

Table with columns: SNAME, CNAME, ELMCODE, OCCNUMBER, MAPNDX, FONDX, KEYQUAD, KQUADNAME, KEYCOUNTY, PLSS, ELEVATION, PARTS, ELMTYPE, TAXONGROUP, EOCOUNT, ACCURACY, PRESENCE, OCCTYPE, OCCRANK, SENSITIVE, SITEDATE, ELMDATE, OWNERMG, FEDLIST, CALLIST, GRANK. Rows include species like Downlingia pusilla, Thamnophis gigas, and Ammodramus savannarum with associated location and status data.

CNDDDB 10 Miles

December 2021

<u>SNAME</u>	<u>CNAME</u>	<u>SRANK</u>	<u>RPLANTRANK</u>	<u>CDFWSTATUS</u>	<u>OTHRSTATUS</u>
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Branchinecta lynchi	vernal pool fairy shrimp	S3			IUCN_VU
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Lepidurus packardii	vernal pool tadpole shrimp	S3S4			IUCN_EN
Emys marmorata	western pond turtle	S3		SSC	BLM_S; IUCN_VU; USFS_S
Gonidea angulata	western ridged mussel	S1S2			
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Spea hammondii	western spadefoot	S3		SSC	BLM_S; IUCN_NT
Coccyzus americanus occidentalis	western yellow-billed cuckoo	S1			BLM_S; NABCI_RWL; USFS_S; USFWS_BCC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Elanus leucurus	white-tailed kite	S3S4		FP	BLM_S; IUCN_LC
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	S3	1B.2		SB_CalBG/RSABG; SB_UCBG

<u>LOCATION</u>
ALONG UNION PACIFIC RAILROAD (USED TO BE WESTERN PACIFIC RR?); 0.2 MILE SOUTH OF ELKHORN BLVD, RIO LINDA.
APPROX. 1500 FEET NORTHEAST OF NATOMAS EAST MAIN DRAINAGE CANAL AT DRY CREEK; 700 FEET SE OF ASCOT AVE AT WEST 6TH ST.
2.1 KM SOUTHWEST OF LINCOLN IN INGRAM SLOUGH, 1.5 KM WSW OF INTERSECTION OF MOORE ROAD AND HIGHWAY 65.
NNW OF ROSEVILLE IN INGRAM SLOUGH; 0.4 KM WEST OF INTERSECTION OF HIGHWAY 65 AND INDUSTRIAL BLVD.
2 MILES SE OF THE LINCOLN RODEO GROUNDS, ABOUT 3 MILES SSE OF LINCOLN.
0.6 MILES ENE OF BREWER RD AT SUNSET BLVD, PLEASANT GROVE, NW OF ROSEVILLE.
SOUTHWEST OF THE INTERSECTION OF PLEASANT GROVE ROAD AND HOWSLEY ROAD.
SOUTHWEST OF THE INTERSECTION OF PLEASANT GROVE ROAD AND SANKEY ROAD.
WEST OF MCCLELLAN AIR FORCE BASE BETWEEN MAGPIE CREEK & ASCOT AVE, DEL PASO, NORTH OF SACRAMENTO.
BETWEEN MARKHAM AND AUBURN RAVINES, FROM ABOUT 0.1 TO 0.9 MILE S OF WILLIAM LN AND 0.5 TO 0.9 MILE W OF S DOWD RD.
BETWEEN KASEBERG CREEK & SOUTH BRANCH PLEASANT GROVE CREEK; ABOUT 0.6 MILE SW OF FOOTHILLS BLVD AT PLEASANT GROVE BLVD.
ALONG INDUSTRIAL AVE (=LINCOLN BLVD), ABOUT 0.3 MILE SSW OF THE LINCOLN BYPASS (=HWY 65) OVERPASS, SSW OF LINCOLN.
1.7 KM S OF HWY 70 AT MARCUM ROAD, ON W SIDE OF HIGHWAY AND E OF OLD RAILROAD GRADE; 45 FT W OF HWY SHOULDER.
IMMEDIATELY N OF MARCUM ROAD INTERSECTION WITH STATE ROUTE 70. BETWEEN HWY 70 AND ABANDONED RR GRADE W OF HWY 70.
MCCLELLAN AFB. DON JULIO CREEK ABOUT 1.4 KM NE OF THE INTERSECTION OF MAIN AVE & RALEY BLVD.
SACRAMENTO.
NEAR THE INTERSECTION OF WOODCREEK OAKS BLVD AND PLEASANT GROVE BLVD, WOODCREEK OAKS SUBDIVISION IN WESTERN ROSEVILLE.
ALONG MOORE ROAD, BETWEEN 1.2 AND 0.5 MILES WEST OF S DOWD ROAD, WEST OF LINCOLN.
ON SOUTH SIDE OF EAST CATLETT ROAD, JUST WEST OF FIDDYMENT ROAD, SW OF LINCOLN.
ON SOUTH SIDE OF MOORE RD, ABOUT 0.5 MILE EAST OF ITS INTERSECTION WITH S DOWD RD, WEST OF LINCOLN.
ALONG EAST CATLETT ROAD NEAR ITS INTERSECTION WITH AITKEN ROAD, SW OF LINCOLN.
UNNAMED TRIBUTARY TO PLEASANT GROVE CREEK VICINITY OF BOBDOYLE DR AT HAYDEN PKWY, WESTPARK NEIGHBORHOOD OF ROSEVILLE.
POOLS ADJACENT TO RAILROAD TRACKS NEAR TAYLOR ROAD, 0.4 MILE SOUTH OF SEWAGE DISPOSAL PONDS, ROSEVILLE.
N DOWD RD, 1.1 MILES NORTH OF ITS INTERSECTION WITH NICOLAUS RD, WEST OF LINCOLN.
S DOWD RD, JUST NORTH OF ITS INTERSECTION WITH MOORE RD, WEST OF LINCOLN.
EAST CATLETT ROAD, 0.7 MILE WEST OF ITS INTERSECTION WITH FIDDYMENT ROAD, SWOF LINCOLN
TRIBUTARY TO KASEBERG CREEK, 1.3 MILES NE OF JCT BASE LINE & FIDDYMENT ROADS, ROSEVILLE.
BEND IN PHILIP ROAD, 1.5 MILE W OF JCT WITH FIDDYMENT ROAD, 0.3 MILE WEST WHERE ROAD PARALLELS PLEASANT GROVE CREEK.
SACRAMENTO.
ALONG DON JULIO CREEK, ABOUT 1.4 KM NE OF THE INTERSECTION OF MAIN AVENUE AND RALEY BOULEVARD, MCCLELLAN AIR FORCE BASE.
JUST WEST OF WHERE THE SACRAMENTO NORTH BIKE TRAIL CROSSES DRY CREEK SOUTH, RIO LINDA.
JUST SE OF THE DRY CREEK CONVERGENCE WITH NEMDC, DEL PASO.
ALONG ROBLA CREEK, JUST UPSTREAM OF THE MAGPIE CREEK DIVERSION CHANNEL CONFLUENCE, SW OF RIO LINDA AIRPORT.
NE OF THE INTERSECTION OF SOTNIP AND TUNIS, JUST WEST OF NEMDC, DEL PASO.
JUST SOUTH OF WHERE DRY CREEK CONVERGES WITH NEMDC, BETWEEN NEMDC AND THE WESTERN PACIFIC RAILROAD TRACKS, DEL PASO.
0.2 MILE EAST OF DRY CREEK ROAD, BETWEEN E STREET AND ROBLA CREEK, RIO LINDA.
JUST NE OF WHERE ROBLA CREEK CONVERGES WITH THE NEMDC, BETWEEN NEMDC AND THE WESTERN PACIFIC RAILROAD TRACKS, DEL PASO.
ON THE WEST SIDE OF THE SOUTH BRANCH OF PLEASANT GROVE CREEK, BETWEEN FOOTHILLS BLVD AND WOODCREEK OAKS BLVD, ROSEVILLE.
WOODBIDGE PARK, EAST SIDE OF LINDA CREEK, 0.5 MILE SOUTH OF OLD AUBURN ROAD, ORANGEVALE.
WEST SIDE OF EAST SIDE CANAL, ON EAST SIDE OF PACIFIC AVE, 0.5-1.0 MILE NORTH OF CATLETT RD.

CNDDDB 10 Miles

December 2021
SNAME

Branchinecta lynchi
Branchinecta lynchi
Branchinecta lynchi
Branchinecta lynchi
Branchinecta lynchi
Branchinecta lynchi
Branchinecta lynchi
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Lepidurus packardii
Coccyzus americanus occidentalis
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Elanus leucurus
Hibiscus lasiocarpus var. occidentalis

CNAME

vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool fairy shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
vernal pool tadpole shrimp
western pond turtle
western ridged mussel
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western spadefoot
western yellow-billed cuckoo
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
white-tailed kite
woolly rose-mallow

LOCDETAILS

LINCOLN CROSSING MITIGATION SITE. 1996: 42 TOTAL POOLS SURVEYED. 1998: 20 TOTAL POOLS SURVEYED.
LINCOLN CROSSING MITIGATION SITE. 1996: 42 TOTAL WATERBODIES SURVEYED.

IN TOAD HILL RANCH MITIGATION BANK. MAPPED ACCORDING TO PROVIDED MAP.
ROADSIDE DITCHES SOMEWHERE IN SECTION 11.
ROADSIDE DITCHES SOMEWHERE IN SECTION 26.
SEASONAL WETLANDS, INNUNDATED APPROXIMATELY >30 DAYS DURING WINTER 1998. LOCATION GIVEN ONLY AS T9N, R5E, SECTION 19. SNAPPED TO EXISTING MAPPED VERNAL POOLS.
S-MOST 2 POLYGONS MAPPED TO 1995-1996 DETECTIONS ON USAF LINCOLN COMMUNICATIONS FACILITY. REMAINING POLYGONS REPRESENT 2006-2013 DETECTIONS ON WESTERN PLACER SCHOOLS CONSERVATION BANK (WPCB) (EXACT LOCATIONS NOT GIVEN FOR 2006 DETECTIONS).
AKA WOODCREEK OAKS MITIGATION SITE. 1993: EXACT DETECTION LOCATION UNKNOWN; SOMEWHERE IN TRS SEC 29. 1995: MAPPED TO LOCATION GIVEN FOR POOL C2 ON MAP IN SUGNET REPORTS; SPECIMEN LOCALITY GIVEN AS "NW 1/4 OF SW 1/4 SECTION 28, T11N R06E."
MAPPED TO GIVEN COORDINATES; MAPPED NON-SPECIFICALLY BECAUSE IT SEEMS LIKELY THAT THE CYST FOUND MAY HAVE BEEN TRANSPORTED FROM A NEARBY WETLAND.

SPECIMEN LOCALITY GIVEN ONLY AS "SACRAMENTO." EXACT COLLECTION LOCATION UNKNOWN, MAPPED GENERALLY CENTERED ON SACRAMENTO.
MAPPED TO DESCRIPTION GIVEN (TOWNSHIP, SECTION AND ELEVATION DON'T MATCH SITE DESCRIPTION).
MAPPED ACCORDING TO MAP PROVIDED. SOUTH POLYGON IS THE ESTIMATED LOCATION OF CALLING SPADEFOOTS HEARD FROM ROAD.
MAPPED ACCORDING TO MAP PROVIDED.
MAPPED ACCORDING TO PROVIDED MAP.
MAPPED ACCORDING TO MAP PROVIDED.
MAPPED TO THE PROVIDED COORDINATES AND MAP.
POOLED AREAS BETWEEN TRACKS AND DEVELOPMENT. MAPPED TO THE PROVIDED COORDINATES.
MAPPED TO COORDINATES PROVIDED.
MAPPED TO COORDINATES PROVIDED.
MAPPED ACCORDING TO MAP PROVIDED.
5 CONSTRUCTED VERNAL POOLS AND TRIBUTARY TO KASEBERG CREEK. MAPPED TO SITE DESCRIPTION (ELEVATION GIVEN DOESN'T MATCH).

1877 EXPEDITION CONDUCTED IN "VICINITY OF SACRAMENTO CITY...WHERE VEGETATION WAS NOURISHED BY THE PRESENCE OF WATER." MAPPED GENERALLY CENTERED ON SACRAMENTO.

NEST SITE IS LOCATED 400 FEET WEST OF THE BIKE TRAIL CROSSING OF DRY CREEK SOUTH.

SITE IS LOCATED ALONG THE BORDER BETWEEN WOODCREEK GOLF COURSE AND HEWLETT-PACKARD.
NEST SITE LOCATED SOUTH OF POND AND EAST OF THE TENNIS COURTS, BORDERING THE FENCELINE; DEVELOPED PARK ON ONE SIDE AND LINDA CREEK RIPARIAN AREA ON THE OTHER.
ON BOTH SIDES OF LOW-FLOW BRIDGE, AND EXTENDING SOUTH ALONG WESTERN SIDE OF CANAL FOR 0.5 MILE, ENDING AT RIPARIAN FOREST. MAPPED FROM 2015 PIMENTEL COORDINATES AND LOCATION DESCRIPTION, MOSTLY IN THE SW 1/4 OF SECTION 27.

CNDDDB 10 Miles

December 2021

<u>SNAME</u>	<u>CNAME</u>	<u>THREAT</u>	<u>THREATLIST</u>
Juncus leiopermus var. ahartii	Ahart's dwarf rush	MUCH DISTURBANCE BY ORVS, RECENT ROAD CONSTRUCTION, CATTLE GRAZING, AND NEARBY DEVELOPMENT.	Development; Grazing; ORV activity; Road/trail construction/maint.
Alkali Meadow	Alkali Meadow	GRAZED IN WINTER. DEVEL PLANNED FOR THE AREA.	Grazing
Alkali Seep	Alkali Seep	GRAZED IN WINTER. DEVELOPMENT PLANS FOR SITE.	Grazing; Vandalism/dumping/litter
Andrena subapasta	An andrenid bee		
Andrena subapasta	An andrenid bee		
Riparia riparia	bank swallow		
Riparia riparia	bank swallow		
Balsamorhiza macrolepis	big-scale balsamroot		
Balsamorhiza macrolepis	big-scale balsamroot	MUCH OF THIS AREA HAS BEEN DEVELOPED SINCE THE COLLECTIONS WERE MADE.	Development
Nycticorax nycticorax	black-crowned night heron	POTENTIAL THREAT OF CONVERSION TO AGRICULTURE.	Agriculture
Nycticorax nycticorax	black-crowned night heron	AREA IS INCLUDED WITHIN THE OVERALL "SUTTER BAY" PROJECT; THUS, SITE IS THREATENED BY FUTURE DEVELOPMENT.	Development
Gratiola heterosepala	Boggs Lake hedge-hyssop	IN 1977 VISIT, SITE HAD BEEN PLOWED, HARROWED, AND LEVELED OBVIOUSLY IN PREPARATION FOR HOUSING DEVELOPMENT.	Development
Gratiola heterosepala	Boggs Lake hedge-hyssop	AREA GRAZED AND PROPOSED FOR REGIONAL SHOPPING CENTER. 2009 AERIAL IMAGERY SHOWS SITE EXTIRPATED BY DEVELOPMENT.	Development; Grazing
Gratiola heterosepala	Boggs Lake hedge-hyssop	AREA GRAZED. LINCOLN AREA GROWING RAPIDLY; PROPERTY FOR SALE IN 1989.	Development; Grazing
Gratiola heterosepala	Boggs Lake hedge-hyssop	LAND USE FOR LIVESTOCK, DEVELOPMENT.	Development; Grazing
Gratiola heterosepala	Boggs Lake hedge-hyssop	RESIDENTIAL AND COMMERCIAL DEVELOPMENT.	Development
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	POSSIBLE THREAT FROM A PROPOSED ENERGY FACILITY.	Development
Athene cucularia	burrowing owl	FALLOW FIELDS TO THE WEST HAVE BEEN DEVELOPED (RESIDENTIAL DEVELOPMENT).	Development
Athene cucularia	burrowing owl	DEVELOPMENT, AND SRCSD 2007 UPPER NW INTERCEPTOR PROJECT DURING BREEDING SEASON; BURROWS CLOSED IN 2007 FOR PROJECT.	Development
Athene cucularia	burrowing owl	THREATENED BY HUMAN DISTURBANCE, NON-NATIVE PREDATORS, PESTICIDES, WATER POLLUTION, & CONSTRUCTION BY SRCSD (2007).	Biocides; Non-native animal impacts; Other; Pollution; Recreational use (non-ORV)
Athene cucularia	burrowing owl	THREATS INCLUDE POSSIBLE FUTURE DEVELOPMENT OR LOSS OF GRAZERS.	Development; Other
Athene cucularia	burrowing owl	BURROW FOUND CRUSHED BY SOMEONE'S FOOT IN FEB 2007. BURROWS CLOSED FOR SRCSD UPPER NW INTERCEPTOR PROJECT IN 2007.	Development; Recreational use (non-ORV)
Athene cucularia	burrowing owl	THREATENED BY THE CONSTRUCTION OF THE UPPER NW INTERCEPTOR PROJECT BY THE SRCSD DURING THE 2007 BREEDING SEASON.	Other
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	DEVELOPMENT WILL EVENTUALLY BE COMPLETED AND THE BURROWING OWLS WILL BE EVICTED. POSSIBLY THREATENED BY DOMESTIC PETS.	Development; Non-native animal impacts
Athene cucularia	burrowing owl	BURXIMITY TO ROADS (POTENTIAL FOR VEHICLE COLLISIONS).	Vehicle collisions
Athene cucularia	burrowing owl	THREATENED BY HOUSING DEVELOPMENTS IN NATOMAS BASIN.	Development
Athene cucularia	burrowing owl	DEVELOPMENT LISTED BY HOWE AS A POTENTIAL THREAT.	Development
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	POSSIBLE THREAT FROM EARTH-MOVING EQUIPMENT.	Other
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	THREATENED BY ENCROACHING URBAN DEVELOPMENT FROM BOTH LINCOLN & ROSEVILLE.	Development
Athene cucularia	burrowing owl	THREATENED BY DOMESTIC PETS (PARTICULARLY HOUSE CATS), AND DEVELOPMENT OF SURROUNDING HABITAT.	Development; Other
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	VEHICLE COLLISIONS.	Vehicle collisions
Athene cucularia	burrowing owl		
Athene cucularia	burrowing owl	THREATENED BY ONGOING DEVELOPMENT.	Development
Athene cucularia	burrowing owl	THREATENED BY AIRPORT LANDSCAPE, VEGETATION, AND SERVICE ROAD MAINTENANCE ACTIVITIES.	Other; Road/trail construction/maint.
Athene cucularia	burrowing owl	THREATENED BY SURROUNDING DEVELOPMENT (GOLF COURSES AND RESIDENTIAL DEVELOPMENT).	Development
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	FUTURE RESIDENTIAL DEVELOPMENT PLANNED IN ADJACENT AREA; DIRT ROADS BISECT PRESERVE; GRAZING; RODEO GROUNDS TO THE NW.	Development; Grazing; Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	POTENTIAL DEVELOPMENT.	Development
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	EXPANSION OF BASE FACILITIES; MODIFICATION OF WATERSHED; AIRCRAFT REPAIR; LIGHT INDUSTRIAL; RESIDENTIAL; COMMERCIAL.	Development; Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	DISKING OF POOLS; POSSIBLE HERBICIDE RUNOFF FROM ANTENNA PADS; AGRICULTURE-CATTLE & SHEEP GRAZING, RICE FARMING NEARBY.	Agriculture; Biocides; Grazing
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	THREATENED BY DEVELOPMENT AS A HIGH SCHOOL.	
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella	ENERGY INFRASTRUCTURE MAINTENANCE/CONSTRUCTION.	Other
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	FUTURE HIGHWAY EXPANSION OR REALIGNMENT.	Road/trail construction/maint.
Linderiella occidentalis	California linderiella	CATTLE GRAZING; RICE FARMING.	Agriculture; Grazing
Linderiella occidentalis	California linderiella	GRAZING; POTENTIAL WIDENING OF ELKHORN BLVD OR REMOVAL OF SOIL FOR FILL OR AGRICULTURAL DEVELOPMENT.	Agriculture; Development
Linderiella occidentalis	California linderiella	ADJACENT LANDOWNERS WANT LEVEL LAND FOR AGRICULTURE AND SELL SURFACE MATERIAL FOR SACRAMENTO METRO AIRPORT DEVELOPMENT.	Agriculture; Development
Linderiella occidentalis	California linderiella	FARMING ON SITE; POSSIBILITY THAT OWNER WILL GRADE SITE TO FACILITATE IRRIGATION FOR GROWING MORE INTENSIVE CROPS (HAY).	Agriculture; Other
Linderiella occidentalis	California linderiella	ILLEGAL DUMPING; FUTURE EXPANSION OF EAST LEVEE.	Development; Vandalism/dumping/litter
Linderiella occidentalis	California linderiella		
Linderiella occidentalis	California linderiella	SOME GRAZING.	Grazing
Linderiella occidentalis	California linderiella	SOME CATTLE GRAZING, RICE FARMING NEARBY.	Grazing
Linderiella occidentalis	California linderiella	PREDATION BY HYLA TADPOLES; COMPETITION PRESSURE FROM AQUATIC INSECTS; HEAVY VEHICLE USE ON SITE.	ORV activity; Other
Linderiella occidentalis	California linderiella	DEVELOPMENT; MILITARY USES; COMMERCIAL AND LIGHT INDUSTRIAL; RESIDENTIAL.	Development; Other
Linderiella occidentalis	California linderiella	HYBRIDIZATION W/FALL-RUN & HATCHERY FISH. GRAVEL MINING, AGRICULTURAL DIVERSIONS, NON-NATIVE PREDATORS (2004).	Dam/Inundation; Hybridization; Mining; Non-native animal impacts; Surface water diversion
Oncorhynchus tshawytscha pop. 11	chinook salmon - Central Valley spring-run EU		
Branchinecta conservancy	Conservancy fairy shrimp		
Downingia pusilla	dwarf downingia	HEAVY CATTLE GRAZING.	Grazing
Downingia pusilla	dwarf downingia	SITE IS GRAZED BY CATTLE AND HAS BEEN LEVELED AND DISKED IN THE PAST. SITE MAY BE DEVELOPED IN THE FUTURE.	Agriculture; Development
Downingia pusilla	dwarf downingia	AREA GRAZED, BUT LITTLE DISTURBANCE. PARCEL TO EAST BEING DEVELOPED.	Grazing
Downingia pusilla	dwarf downingia	SITE GRAZED AND RUTTED BY VEHICLE TRACKS. ROSEVILLE PLANS TO RETAIN AS URBAN RESERVE, BUT DEVELOPMENT SURROUNDS.	
Downingia pusilla	dwarf downingia	SITE IS GRAZED AND RECEIVES RUNOFF FROM ADJACENT HOUSING. AREA IS SLATED FOR DEVELOPMENT.	Development; Erosion/runoff; Grazing

CNDDDB 10 Miles

December 2021

<u>SNAME</u>	<u>CNAME</u>	<u>LASTUPDATE</u>	<u>AREA</u>	<u>PERIMETER</u>	<u>AVLCODE</u>	<u>Symbology</u>	<u>Shape_Length</u>	<u>Shape_Area</u>
Branchinecta lynchi	vernal pool fairy shrimp	19960618	20011.04073	502.102705	20102	801	502.102705	20011.04073
Branchinecta lynchi	vernal pool fairy shrimp	19960924	20010.97943	502.101947	20101	201	502.101947	20010.97943
Branchinecta lynchi	vernal pool fairy shrimp	20020321	20009.14106	502.078785	20101	201	502.078785	20009.14106
Branchinecta lynchi	vernal pool fairy shrimp	19960717	20008.98393	502.07683	20101	201	502.07683	20008.98393
Branchinecta lynchi	vernal pool fairy shrimp	19950630	20008.61886	502.072248	20101	201	502.072248	20008.61886
Branchinecta lynchi	vernal pool fairy shrimp	20200522	11589.28445	398.15932	20201	202	398.15932	11589.28445
Lepidurus packardii	vernal pool tadpole shrimp	19970311	3126756.627	6276.314676	20701	207	6276.314676	3126756.627
Lepidurus packardii	vernal pool tadpole shrimp	19970311	3126755.651	6276.313936	20701	207	6276.313936	3126755.651
Lepidurus packardii	vernal pool tadpole shrimp	20000120	1296241.248	4533.952817	20202	802	4533.952817	1296241.247
Lepidurus packardii	vernal pool tadpole shrimp	20150112	319781.0208	5577.143429	20201	202	5577.143429	319781.0208
Lepidurus packardii	vernal pool tadpole shrimp	20170228	281379.7639	1882.799707	20502	805	1882.799707	281379.7639
Lepidurus packardii	vernal pool tadpole shrimp	20150112	70602.60057	942.200263	20401	204	942.200263	70602.60057
Lepidurus packardii	vernal pool tadpole shrimp	19951113	20011.78321	502.111928	20101	201	502.111928	20011.78321
Lepidurus packardii	vernal pool tadpole shrimp	19951011	20011.78037	502.111886	20102	801	502.111886	20011.78037
Emys marmorata	western pond turtle	19960105	22500.65936	657.763762	20302	803	657.763762	22500.65936
Gonidea angulata	western ridged mussel	20200803	201051722.1	50264.84447	21003	810	50264.84447	201051722.1
Spea hammondii	western spadefoot	20000112	1130889.852	3769.840739	20601	206	3769.840739	1130889.852
Spea hammondii	western spadefoot	20200130	285744.138	3886.544056	20301	203	3886.544056	285744.138
Spea hammondii	western spadefoot	20200130	282629.0875	1884.766824	20501	205	1884.766824	282629.0875
Spea hammondii	western spadefoot	20200130	282628.8793	1884.764813	20501	205	1884.764813	282628.8793
Spea hammondii	western spadefoot	20200130	75608.38942	1196.987839	20201	202	1196.987839	75608.38942
Spea hammondii	western spadefoot	20190502	46083.40274	1079.199616	20201	202	1079.199616	46083.40274
Spea hammondii	western spadefoot	20190501	34946.19201	688.243591	20201	202	688.243591	34946.19201
Spea hammondii	western spadefoot	20200130	20105.86009	502.652754	20101	201	502.652754	20105.86009
Spea hammondii	western spadefoot	20200130	20105.86009	502.652754	20101	201	502.652754	20105.86009
Spea hammondii	western spadefoot	20200130	20073.77455	502.452112	20101	201	502.452112	20073.77455
Spea hammondii	western spadefoot	20000120	20027.77009	502.202382	20101	201	502.202382	20027.77009
Spea hammondii	western spadefoot	20000120	20023.27929	502.135843	20101	201	502.135843	20023.27929
Coccyzus americanus occidentalis	western yellow-billed cuckoo	20150403	201051722.1	50264.84447	21003	810	50264.84447	201051722.1
Elanus leucurus	white-tailed kite	19960214	22500.65936	657.763762	20302	803	657.763762	22500.65936
Elanus leucurus	white-tailed kite	20030617	20023.38808	502.136384	20101	201	502.136384	20023.38808
Elanus leucurus	white-tailed kite	20030618	20023.32581	502.136426	20101	201	502.136426	20023.32581
Elanus leucurus	white-tailed kite	20030617	20023.32566	502.136424	20101	201	502.136424	20023.32566
Elanus leucurus	white-tailed kite	20030618	20023.32524	502.13642	20101	201	502.13642	20023.32524
Elanus leucurus	white-tailed kite	20030618	20023.32439	502.136411	20101	201	502.136411	20023.32439
Elanus leucurus	white-tailed kite	20030618	20023.32335	502.136395	20101	201	502.136395	20023.32335
Elanus leucurus	white-tailed kite	20030618	20023.3231	502.136389	20101	201	502.136389	20023.3231
Elanus leucurus	white-tailed kite	20000330	20023.31214	502.136255	20101	201	502.136255	20023.31214
Elanus leucurus	white-tailed kite	19931207	20008.03813	502.065019	20101	201	502.065019	20008.03813
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	20180119	56799.84893	1988.167761	10201	102	1988.167761	56799.84893

CNPS Results

ScientificName	CommonName	Family	Lifeform	CRPR	GRank	SRank	CESA	FESA	BloomingPeriod	Habitat	MicroHabitat	ElevationLow_m	ElevationLow_ft	ElevationHigh_m	ElevationHigh_ft	CAEndemic	States
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	G2T1	S1	None	None	Jun-Sep	Meadows and seeps, Playas, Valley and foothill grassland	Alkaline	1	5	155	510	TRUE	CA
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Asteraceae	perennial herb	1B.2	G2	S2	None	None	Mar-Jun	Chaparral, Cismontane woodland, Valley and foothill grassland	Serpentine (sometimes)	45	150	1555	5100	TRUE	CA
<i>Downingia pusilla</i>	dwarf downingia	Campanulaceae	annual herb	2B.2	GU	S2	None	None	Mar-May	Valley and foothill grassland, Vernal pools		1	5	445	1460	FALSE	CA, SA
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	1B.2	G3	S3	None	None	May-Oct(Nov)	Marshes and swamps		0	0	650	2135	TRUE	CA
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	4.2	G3	S3	None	None	Mar-Jun	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	Clay, Serpentine (sometimes)	10	35	1555	5100	TRUE	CA
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	G2	S2	CE	None	Apr-Aug	Marshes and swamps, Vernal pools	Clay	10	35	2375	7790	FALSE	CA, OR
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	1B.2	G5T3	S3	None	None	Jun-Sep	Marshes and swamps		0	0	120	395	TRUE	CA
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	G2T1	S1	None	None	Mar-May	Valley and foothill grassland		30	100	229	750	TRUE	CA
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	Juncaceae	annual herb	1B.1	G2T2	S2	None	None	Mar-Jun	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools	Vernally Mesic	35	115	1250	4100	TRUE	CA
<i>Legenere limosa</i>	legenere	Campanulaceae	annual herb	1B.1	G2	S2	None	None	Apr-Jun	Vernal pools		1	5	880	2885	TRUE	CA
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	Polemoniaceae	annual herb	1B.1	G2T2	S2	None	None	Apr-May	Vernal pools		20	65	330	1085	TRUE	CA
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	Asteraceae	annual herb	4.2	G3T3	S3	None	None	May-Oct	Valley and foothill grassland, Vernal pools	Alkaline, Roadsides (sometimes), Seeps, Vernally Mesic	0	0	100	330	TRUE	CA
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	Themidaceae	perennial bulbiferous herb	4.2	G5T3	S3	None	None	Apr-May(Jun)	Valley and foothill grassland, Vernal pools	Alluvial Terraces, Gravelly, Sandy, Silt	10	35	335	1100	TRUE	CA

CNPS Results

ScientificName	CommonName	Counties
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	ALA, KRN, MER, PLA, SOL
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	ALA, AMA, BUT, COL, ELD, LAK, MPA, NAP, PLA, SCL, SHA, SOL, SON, TEH, TUO
<i>Downingia pusilla</i>	dwarf downingia	FRE, MER, NAP, PLA, SAC, SIQ, SOL, SON, STA, TEH, YUB
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	BUT, DNT, ELD, FRE, MAD, MER, MPA, MRN, NAP, SAC, SBD, SHA, SIQ, SOL, SUT, TEH, TUL, VEN, YUB
<i>Fritillaria agrestis</i>	stinkbells	ALA, CCA, COL, FRE, KNG, KRN, MEN, MER, MNT, MPA, PLA, SAC, SBA, SBT, SCL, SLO, SMT, SOL, STA, TUL, TUO, VEN, YOL, YUB
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	FRE, LAK, LAS, MAD, MEN, MER, MOD, PLA, SAC, SHA, SIS, SIQ, SOL, SON, TEH
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	BUT, CCA, COL, GLE, SAC, SIQ, SOL, SUT, YOL
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	BUT, CAL, PLA, SAC, TEH, YUB
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	BUT, PLA, SHA, TEH
<i>Legenere limosa</i>	legenere	ALA, LAK, MNT, NAP, PLA, SAC, SCL, SHA, SIQ, SMT, SOL, SON, STA, TEH, YUB
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	AMA, CAL, MAD, MER, PLA, SAC
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	BUT, COL, GLE, LAK, MER, MOD, SAC, SIQ, SOL, STA, YOL
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	BUT, CAL, NEV, PLA, SAC, SIQ, SUT, YUB

CNPS Results

ScientificName	CommonName	Quads	EOTotal	EOA	EOB	EOC	EOD	EOX	EOU	EOHistorical	EORecent	EOExtant	
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	Altamont (3712166), Coal Oil Canyon (3511911), Delta Ranch (3712016), Denverton (3812128), Dos Palos (3612086), Elmira (3812138), Gosford (3511931), Gustine (3712038), Ingomar (3712028), Lamont (3511838), Los Banos (3712017), Oildale (3511941), Roseville (3812173), San Luis Ranch (3712027), Volta (3712018)	35	9	7	4	0	1	14		22	13	34
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Ackerson Mtn. (3711977), Altamont (3712166)*, Amador City (3812047), Ascension Mtn. (3711978), Bartlett Springs (3912226), Bear Valley (3712051), Brush Creek (3912163), Chico (3912167), Cordelia (3812222), Coulterville (3712062), El Portal (3711967), Gilroy (3712115), Hayward (3712261), Hornitos (3712052), Houlihan (3812138)	51	8	10	2	0	2	29		23	28	49
<i>Dawningia pusilla</i>	dwarf downingia	Allendale (3812148), Antioch North (3812117), Black Butte Dam (3912273), Browns Valley (3912124), Camp Far West (3912113), Capell Valley (3812242), Clay (3812132), Cooperstown (3712065), Corning (3912282), Cuttings Wharf (3812223), Denverton (3812128), Dozier (3812137), Elk Grove (3812143), Elmira (3812138)	132	13	50	10	6	7	46		92	40	125
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Atwater (3712035), Bend (4012232), Berry Creek (3912164), Biggs (3912146), Bruceville (3812134), Buffalo Creek (3812152), Carbondale (3812141), Carmichael (3812153), Citrus Heights (3812163), Clarksville (3812161), Clovis (3611976), Courtland (3812135), Crescent City (4112472), Cucamonga Peak (3411725), Dales (4112472)	126	14	35	29	4	9	35		49	77	117
<i>Fritillaria agrestis</i>	stinkbells	Altamont (3712166), Ano Nuevo (3712213), Antioch North (3812117), Antioch South (3712187), Arbutle (3912211), Atascadero (3512046), Ballinger Canyon (3411984), Brentwood (3712186), Burnett Peak (3512172), Burro Mountain (3512173), Byron Hot Springs (3712176), Caliente Mtn. (3511917), Camatta Ranch (3512282)	32	2	9	8	0	2	11		32	0	30
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Ambrose (4112058), Ambrose Valley (4112027), Balls Ferry (4012242), Bend (4012232), Big Sage Reservoir (4112056), Boles Meadows West (4112068), Buffalo Creek (3812152), Bullard Lake (4012078), Cable Mtn. (4012183), Carmichael (3812153), Champs Flat (4012068), Clearlake Highlands (3812286), Corning (3912282)	99	18	31	13	3	5	29		76	23	94
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	Bouldin Island (3812115), Bruceville (3812134), Butte City (3912148), Clarksburg (3812145), Clifton Court Forebay (3712175), Courtland (3812135), Dozier (3812137), Florin (3812144), Gilsizer Slough (3912116), Grays Bend (3812166), Hamlin Canyon (3912166), Holt (3712184), Isleton (3812125), Jersey Island (3812116), John S. Galt (3812116)	173	0	78	38	16	1	40		79	94	172
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	Biggs (3912146), Buffalo Creek (3812152)*, Carmichael (3812153), Honcut (3912135), Lincoln (3812183), Loma Rica (3912134), Palermo (3912145), Red Bluff East (4012222), Valley Springs SW (3812018)	13	1	6	2	1	1	2		8	5	12
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	Balls Ferry (4012242), Bend (4012232), Black Butte Dam (3912273), Blossom (4012224), Burney (4012186), Burney Falls (4112116), Burney Mtn. West (4012176), Campbell Mound (3912187), Cherokee (3912165), Cottonwood (4012243), Enterprise (4012253), Henleyville (3912283), Olinda (4012244), Oroville (3912155), Orville (3812116)	62	7	18	8	3	4	22		29	33	58
<i>Legenere limosa</i>	legenere	Balls Ferry (4012242), Browns Valley (3912124), Bruceville (3812134), Buffalo Creek (3812152), Carbondale (3812141), Carmichael (3812153), Clay (3812132), Clements (3812121), Cottonwood (4012243), Cuttings Wharf (3812223), Dales (4012231), Denverton (3812128), Dozier (3812137), Elk Grove (3812143), Elmira (3812138)	83	11	30	10	3	9	20		48	35	74
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	Carbondale (3812141), Folsom (3812162), Goose Creek (3812131), Haystack Mtn. (3712043), Ione (3812038), Irish Hill (3812048), Lanes Bridge (3611987), Lincoln (3812183), Owens Reservoir (3712032), Valley Springs SW (3812018)	16	3	2	0	0	0	11		9	7	16
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	Adin (4112028), Arbutle (3912211), Big Swamp (4112121), Birds Landing (3812127), Bruceville (3812134), Brush Lake (3712151), Butte City (3912148), Clarksburg (3812145), Colusa (3912221), Courtland (3812135), Davis (3812156), Dozier (3812137), Elmira (3812138), Florin (3812144), Glenn (3912251), Grays Bend (3812143)	0	0	0	0	0	0	0		0	0	0
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	Buffalo Creek (3812152), Camp Far West (3912113), Carbondale (3812141), Carmichael (3812153), Cherokee (3912165), Chico (3912167), Citrus Heights (3812163), Clements (3812121), Folsom (3812162), Goose Creek (3812131), Hamlin Canyon (3912166), Honcut (3912135), Jenny Lind (3812017), Lincoln (3812183), Nor	0	0	0	0	0	0	0		0	0	0

CNPS Results

ScientificName	CommonName	EOPossiblyExtirpated	EOExtirpated	EOTreatList	Notes
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	0	1	23	Apparently extirpated from much of the lower San Joaquin Valley. Threatened by agricultural conversion, development, and grazing. See Brittonia 25:135-158 (1973) for revised nomenclature.
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	1	1	29	Threatened by grazing. Potentially threatened by residential or recreational development. Possibly threatened by energy development and non-native plants. See Annals of the Missouri Botanical Garden 22:132 (1935) for original description.
<i>Dawningia pusilla</i>	dwarf downingia	2	5	81	Threatened by urbanization, development, agriculture, grazing, non-native plants, vehicles, and industrial forestry.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	8	1	65	Extirpated from southern California, and mostly extirpated from the Central Valley. Several SAC Co. occurrences not relocated during fieldwork in 2005. Threatened by grazing, development, recreational activities, non-native plants, road widening, and channel alteration and maintenance. See Pittonia 2:158 (1890) for original description.
<i>Fritillaria agrestis</i>	stinkbells	2	0	24	Most populations small. Threatened by development, grazing, and vehicles. Possibly threatened by non-native plants.
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	1	4	70	Threatened by agriculture, development, grazing, trampling, and vehicles. Known from one occurrence in OR, where state listed as Threatened. Lassen NF has adopted species management guidelines. See Madroño 12(5):150-152 (1954) for original description.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	0	1	91	Most occurrences are very small. Seriously threatened by habitat disturbance, development, agriculture, recreational activities, and channelization of the Sacramento River and its tributaries. Also threatened by weed control measures and erosion. Possibly threatened by trail maintenance. See Madroño 56(2):104-111 (1954) for original description.
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	1	0	8	Known from approximately 10 occurrences. Threatened by development. See Memoirs of the New York Botanical Garden 39:49 (1986) for original description.
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	3	1	38	Threatened by development, grazing, vehicles, industrial forestry, and agriculture. See Leaflets of Western Botany 5:113 (1948) for original description, and Memoirs of the New York Botanical Garden 39:46-51 (1986) for revised treatment.
<i>Legenere limosa</i>	legenere	1	8	59	Many historical occurrences extirpated. Threatened by grazing, road widening, non-native plants, and development. See Pittonia 2:81 (1890) for original description, North American Flora 32(1):13-14 (1943) for revised nomenclature, and Wasmann Journal of Biology 33(1-2):91 (1975) for distributional information.
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	0	0	3	Threatened by development. Possibly threatened by non-native plants. See Novon 3(4):337 (1993) for original description.
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	0	0		Threatened by development, habitat alteration and habitat disturbance. Possibly threatened by grazing and road maintenance. Protected on several refuges including Sacramento NWR, Colusa NWR, the Llano Seco Unit of the North Valley Wildlife Management Area, the Llano Seco Ranch, and the Vic Fazio Yolo Wetland.
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	0	0		Threatened by urbanization. Previously assigned to <i>B. coronaria</i> ; differentiated by staminodes strongly inrolled, tapering to an apex vs. staminodes flat to incurved, uniformly wide from base to obtuse apex in <i>B. coronaria</i> . Similar to <i>B. rosea</i> ssp. <i>rosea</i> , but with perianth always violet, most floral characters longer, and with

CNPS Results

ScientificName	CommonName	FullScientificName	Synonyms	ElementCode	USDAPlantsSymbol	CBRReason	DateAdded	LastUpdate
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	<i>Chloropyron molle</i> ssp. <i>hispidum</i> (Pennell) Tank & J.M. Egger	<i>Cordylanthus mollis</i> ssp. <i>hispidus</i>	PDSCR0J0D1			1/1/1974 0:00	10/4/2021 0:00
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	<i>Balsamorhiza macrolepis</i>	<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	PDAST11061	BAMA3		1/1/1974 0:00	8/25/2021 0:00
<i>Downingia pusilla</i>	dwarf downingia	<i>Downingia pusilla</i>	<i>Downingia humilis</i>	PDCAM060C0	DOPU3		1/1/1980 0:00	5/26/2021 0:00
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	<i>Sagittaria sanfordii</i>		PMALI040Q0	SASA2		1/1/1984 0:00	5/26/2021 0:00
<i>Fritillaria agrestis</i>	stinkbells	<i>Fritillaria agrestis</i>		PMLILOV010	FRAG		1/1/1980 0:00	1/5/2022 0:00
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>		PDSCR0R060	GRHE		1/1/1974 0:00	1/5/2022 0:00
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> (Torr.) A. Gray	<i>Hibiscus californicus</i> , <i>Hibiscus lasiocarpus</i> , <i>Hibiscus lasiocarpus</i>	PDMAL0HOR3			1/1/1974 0:00	1/5/2022 0:00
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	<i>Juncus leiospermus</i> var. <i>ahartii</i> B. Ertter		PMJUN011L1	JULEA		1/1/1984 0:00	1/5/2022 0:00
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>		PMJUN011L2	JULEL		1/1/1974 0:00	1/5/2022 0:00
<i>Legenere limosa</i>	legenere	<i>Legenere limosa</i>		PDCAMOC010	LELI		1/1/1974 0:00	5/26/2021 0:00
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	<i>Navarretia myersii</i> ssp. <i>myersii</i>	<i>Navarretia myersii</i>	PDPLMOC0X1	NAMYM		1/1/1994 0:00	5/26/2021 0:00
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	<i>Centromadia parryi</i> ssp. <i>rudis</i> (Greene) B.G. Baldwin		PDAST4R0P3	CEPAR4		5/22/2007 0:00	9/27/2021 0:00
<i>Brodiaea rosea</i> ssp. <i>vallicola</i>	valley brodiaea	<i>Brodiaea rosea</i> ssp. <i>vallicola</i> R.E. Preston		PMLILOK0K2			1/7/2019 0:00	6/3/2021 0:00

BIOS Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxonomic_Sort
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812184	SHERIDAN	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812174	PLEASANT GROVE	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Amphibians	Spea hammondii	western spadefoot	AAABF02020	None	None	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP ; WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP ; WL	-	3812173	ROSEVILLE	Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Buteo regalis	ferruginous hawk	ABNKC19120	None	None	WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Buteo regalis
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812175	VERONA	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812174	PLEASANT GROVE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812183	LINCOLN	Mapped	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812184	SHERIDAN	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812185	NICOLAUS	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812165	TAYLOR MONUMENT	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Buteo swainsoni	Swainson's hawk	ABNKC19070	None	Threatened	-	-	3812164	RIO LINDA	Mapped and Unprocessed	Animals - Birds - Accipitridae - Buteo swainsoni
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	3812164	RIO LINDA	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	3812164	RIO LINDA	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Eremophila alpestris actia	California horned lark	ABPAT02011	None	None	WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Alaudidae - Eremophila alpestris actia
Animals - Birds	Aythya americana	redhead	ABNJB11030	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Anatidae - Aythya americana
Animals - Birds	Chaetura vauxi	Vaux's swift	ABNUA03020	None	None	SSC	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Apodidae - Chaetura vauxi
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812164	RIO LINDA	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812165	TAYLOR MONUMENT	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812185	NICOLAUS	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812184	SHERIDAN	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812174	PLEASANT GROVE	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812165	TAYLOR MONUMENT	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812184	SHERIDAN	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812185	NICOLAUS	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812183	LINCOLN	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812164	RIO LINDA	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Ardeidae - Botaurus lentiginosus
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	3812165	TAYLOR MONUMENT	Unprocessed	Animals - Birds - Ardeidae - Botaurus lentiginosus
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812164	RIO LINDA	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	3812165	TAYLOR MONUMENT	Mapped and Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812165	TAYLOR MONUMENT	Mapped and Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812164	RIO LINDA	Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	3812175	VERONA	Mapped	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	-	-	3812185	NICOLAUS	Mapped	Animals - Birds - Cuculidae - Coccyzus americanus occidentalis
Animals - Birds	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	-	-	3812164	RIO LINDA	Mapped	Animals - Birds - Cuculidae - Coccyzus americanus occidentalis
Animals - Birds	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	-	-	3812165	TAYLOR MONUMENT	Mapped	Animals - Birds - Cuculidae - Coccyzus americanus occidentalis
Animals - Birds	Falco mexicanus	prairie falcon	ABNKD06090	None	None	WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Falconidae - Falco mexicanus
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812164	RIO LINDA	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812173	ROSEVILLE	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812175	VERONA	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812185	NICOLAUS	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812163	CITRUS HEIGHTS	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812165	TAYLOR MONUMENT	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812164	RIO LINDA	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812185	NICOLAUS	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812184	SHERIDAN	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812183	LINCOLN	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812175	VERONA	Mapped and Unprocessed	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812173	ROSEVILLE	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBX80020	None	Threatened	SSC	-	3812174	PLEASANT GROVE	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Xanthocephalus xanthocephalus	yellow-headed blackbird	ABPBXB3010	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Icteridae - Xanthocephalus xanthocephalus
Animals - Birds	Icteria virens	yellow-breasted chat	ABPBX24010	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Icteriidae - Icteria virens
Animals - Birds	Icteria virens	yellow-breasted chat	ABPBX24010	None	None	SSC	-	3812185	NICOLAUS	Unprocessed	Animals - Birds - Icteriidae - Icteria virens
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812175	VERONA	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Lanius ludovicianus	loggerhead shrike	ABPBR01030	None	None	SSC	-	3812164	RIO LINDA	Unprocessed	Animals - Birds - Laniidae - Lanius ludovicianus
Animals - Birds	Chlidonias niger	black tern	ABNNM10020	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Laridae - Chlidonias niger
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812163	CITRUS HEIGHTS	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Setophaga petechia	yellow warbler	ABPBX03010	None	None	SSC	-	3812183	LINCOLN	Unprocessed	Animals - Birds - Parulidae - Setophaga petechia



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:

January 10, 2022

Consultation Code: 08ESMF00-2022-SLI-0777

Event Code: 08ESMF00-2022-E-02353

Project Name: SMUD Country Acres

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

To Whom It May Concern:

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

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

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

<http://>

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

Attachment(s):

- Official Species List
-

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2022-SLI-0777

Event Code: Some(08ESMF00-2022-E-02353)

Project Name: SMUD Country Acres

Project Type: ** OTHER **

Project Description: Proposed solar facility on leased agricultural land in Placer County California

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.7929725,-121.4236496,1290221,14z>



Counties: Placer County, California

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

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

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

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

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

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

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

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

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

Table BR-1a. Special Status Plant Species with Potential for Occurrence in the SMUD Country Acres Region and their Potential to Occur in the Study Area

Scientific Name	Common Name	Regulatory Status			Habitat Requirements	Elevation Range (feet above msl)	Blooming Period	Potential for Occurrence*
		Fed	State	CRPR				
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	–	–	1B.2	Occurs on slopes in foothill woodlands and valley grasslands.	92 – 6,594	March – June	Unlikely to occur. Habitat for this species is present on the project site but there are no CNDDDB occurrences within a 2-mile buffer. Most recent observation within a 10-mile buffer of the project area is a 1957 collection from 3.2 miles north of Roseville along HWY 99E.
<i>Brodiaea rosea</i> spp. <i>vallicola</i>	valley brodiaea	–	–	4.2	Valley and foothill grasslands, vernal pools.	35 – 1,100	April – June	Unlikely to occur. Habitat for this species is present on the project site (marginal vernal pool habitat and disturbed annual grassland) but there are no CNDDDB occurrences within a 10-mile buffer of the project area.
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	–	–	4.2	Valley and foothill grassland, vernal pools. Alkaline soils, roadsides, seeps, and vernal mesic habitat.	0 – 330	May – October	Unlikely to occur. Habitat for this species is present on the project site but there are no CNDDDB occurrences within a 10-mile buffer of the project area. The presence of disturbed grassland, vernal pools, and valley seeps onsite and adjacent to the project area provide marginally suitable habitat.
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's beak	–	–	1B.1	Meadows and seeps, playas, valley and foothill grasslands, alkaline soils.	5 – 510	June – Sep.	Unlikely to occur. Habitat for this species is present on the project site but there are no CNDDDB occurrences within a 10-mile buffer of the project area. The presence of disturbed grassland, vernal pools, and valley seeps onsite and adjacent to the project area provide suitable habitat.
<i>Downingia pusilla</i>	dwarf downingia	–	–	2B.2	Valley and foothill grassland (mesic), vernal pools.	5 – 1,460	March – May	Potential to occur. Habitat for this species is present on the project site. There were eight occurrences identified by CNDDDB within a 2-mile buffer of the project area. The closest occurrences were recorded just over a mile east of the project area.

Scientific Name	Common Name	Regulatory Status			Habitat Requirements	Elevation Range (feet above msl)	Blooming Period	Potential for Occurrence*
		Fed	State	CRPR				
<i>Fritillaria agrestis</i>	stinkbells	–	–	4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Clay and serpentine soils.	35 – 5,100	March – June	Unlikely to occur. There is some habitat for this species present on the project site; however, the clay soils in the site are highly disturbed and developed for rice production. CNDDDB shows four occurrences within a 10-mile buffer of the project site, however, no occurrences were within or adjacent to the project (no occurrences within a 2-mile buffer of the project site). No occurrences observed since 1997 within a 10-mile buffer of the project site.
<i>Gratiola heterosepala</i>	Boggs lake hedge-hyssop	–	–	1B.2	Marshes and swamps (lake margins), vernal pools, mud and shallow water. Clay soils.	35 – 7,790	April – August	Potential to occur. There is suitable habitat for this species within and adjacent to the project site. CNDDDB showed a single occurrence of this species near the project area, approximately 1.5 miles due east of the easternmost boundary of the project site.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	–	–	1B.2	Freshwater marshes and swamps.	0 – 395	June – September	Unlikely to occur. There is marginal habitat for this species present onsite. CNDDDB did not identify any occurrences within 10 miles of the project site. Amount of habitat present onsite is not significant to support an ongoing population of this species.
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	–	–	1B.2	Valley and foothill grasslands (mesic).	100 – 750	March – May	Potential to occur. There is some suitable habitat present onsite but no occurrences within proximity to the project area. CNDDDB identified one occurrence within a 10-mile buffer of the project area in the Lincoln 7.5-minute quadrangle. CNPS shows the closest occurrence within the Lincoln 7.5-minute quadrangle.

Scientific Name	Common Name	Regulatory Status			Habitat Requirements	Elevation Range (feet above msl)	Blooming Period	Potential for Occurrence*
		Fed	State	CRPR				
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	–	–	1B.1	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grasslands, vernal pools. Vernal mesic habitat.	115 – 4,100	March – June	Unlikely to occur. There is marginal vernal pool habitat on the project site, the species was not observed by AECOM biologists during field surveys. No CNDDDB occurrences identified within a 10-mile buffer of the project site. The closest occurrence is within the Roseville 7.5-minute quadrangle. Marginal habitat for this species is present within and adjacent to the project area but no historic occurrences.
<i>Legenere limosa</i>	legenere	–	–	1B.1	Vernal pools.	5 – 2,885	April – June	Potential to occur. There is marginal vernal pool habitat on the project site. CNDDDB identified six occurrences of this species within a 10-mile buffer of the project site; however, no occurrences were in proximity to the project site.
<i>Navarretia myersii</i> spp. <i>myersii</i>	Pincushion navarretia	–	–	1B.1	Vernal pools.	65 – 1,085	April – May	Potential to occur. There is marginal vernal pool habitat on the project site. CNDDDB identified one occurrence of this species within a 10-mile buffer of the project site; however, no occurrences were in proximity to the project site.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	–	–	1B.2	Marshes and swamps (shallow freshwater)	0 – 2,135	May – October	Low potential to occur. There is marsh and seasonal wetland habitat that may be suitable for this species. CNDDDB identified six occurrences within a 10-mile buffer of the project area. No occurrences within proximity to the project site.

Notes for Table BR-1

Notes: CNDDDB = California Natural Diversity Database; CRPR = California Rare Plant Rank; Delta = Sacramento–San Joaquin Delta; msl = mean sea level

* **Potential for Occurrence:**

No Potential to Occur: No suitable habitat is present within or near the project site, the species' range does not include the project site, or the species is presumed extinct in California (CRPR 1A).

Unlikely to Occur: Project site is within the species' range; however, the species has not been recorded within the project site or vicinity, and habitat present is marginal for the species or habitat is reasonably suitable, but other factors, such as competition with nonnative plants or heavy disturbance (i.e., grazing, soil disking) indicate that presence of the species is not expected.

Low Potential to Occur: The species was identified during literature review as potentially occurring near the project site and habitat for the species is marginal or potentially suitable habitat may occur, but there are no records of species occurrence within the project site or its vicinity.

Potential to Occur: Project site is within the species' range and suitable habitat for the species is present; however, the species has not been recorded within the project site or existing records are historical and/or locational information is problematic/inaccurate, and species occurrence records may or may not occur in the project vicinity.

Known to Occur: The project site is within the species' range, suitable habitat for the species is present, and the species has been recorded within the project site and current conditions appear to approximate those at the time of the recorded occurrence.

California Rare Plant Rank (CRPR) Categories:

1B = Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under the federal Endangered Species Act or California Endangered Species Act)

2B = Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under the federal Endangered Species Act or California Endangered Species Act)

3 = Plants about which more information is needed (a review list); and

4 = Plants of limited distribution (a watch list).

California Rare Plant Rank (CRPR) Threat Rank Extensions:

.1 = Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)

.2 = Fairly endangered in California (20% to 80% of occurrences are threatened)

Sources: CDFW 2021; USFWS 2022; Baldwin et al. 2012

Table BR-1b. Special Status Wildlife Species with Potential for Occurrence in the SMUD Country Acres Region and their Potential to Occur in the Study Area

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
<i>Invertebrates</i>				
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	E	–/– PCCP covered species	Vernal pools and seasonal wetlands with moderately turbid water. Tulare County to Shasta County.	No potential to occur. There is suitable vernal pool habitat is present on the project site, however, the nearest observation is not within proximity to the project site. There was one CNDDDB occurrence identified within the Sheridan 7.5-minute quadrangle (CDFW 2021).
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T	–/– PCCP covered species	Vernal pools and other seasonal wetlands in valley and foothill grasslands. Tends to occur in smaller wetland features (less than 0.05 acre in size).	Potential to occur. There is suitable vernal pool habitat is present on the project site. The nearest CNDDDB observation is less than a mile from the northwestern portion of the project area. CNDDDB identified 10 occurrences within a 2-mile buffer of the project site.
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	E	–/– PCCP covered species	Vernal pools and other seasonal wetlands in valley and foothill grasslands that pond for sufficient duration to allow the species to complete its life cycle. Typically found in ponds ranging in size from 0.1 acre to 80 acres.	Potential to occur. Very little suitable (deep) vernal pool habitat is present on the project site. The nearest observations are within the Pleasant Grove 7.5 minute quadrangle (CDFW 2021). Eight occurrences were identified by CNDDDB within a 10-mile buffer of the project area. The closest occurrence is at the southwest of the intersection of Pleasant Grove Rd and Sankey Road.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T	–/– PCCP covered species	Requires elderberry shrubs; typically occur in riparian woodlands and upland habitats of the Central Valley.	No potential to occur. <u>No elderberry shrubs present on the project site.</u>

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
<i>Fish</i>				
Delta Smelt <i>Hypomesus transpacificus</i>	T	E/-	Inhabits open waters of bays, tidal rivers, channels, and sloughs; rarely occurs in water with salinity of more than 10–12 ppt; when not spawning, found where salt water and freshwater mix; typically spawns upstream, but some spawning events have been documented in estuaries.	No potential to occur. No suitable aquatic habitat in the project site. Critical habitat for the species occurs in the Delta. The project site is outside of the species known range.
Steelhead–Central Valley DPS <i>Oncorhynchus mykiss irideus</i> pop. 11	T	-/- PCCP covered species	Cool, clear streams with abundant cover and well-vegetated banks, with relatively stable flows. Pool and riffle complexes and cold gravelly streambeds for spawning.	Unlikely to occur. No suitable aquatic habitat in the project site. This species is known to occur in the Delta from Chipps Island to the San Joaquin River at Dos Reis and Sacramento River at Garcia Bend. CNDDDB identified a single occurrence within a 2-mile buffer of the project site in Roseville at Dry Creek and its tributaries, Secret Ravine and Miners Ravine.
Longfin Smelt <i>Spirinchus thaleichthys</i>	C	T/-	Uses estuaries, nearshore waters, and the lower portions of freshwater streams. Found in the San Francisco estuary and Delta, Humboldt Bay, and the estuaries of the Eel River and Klamath River.	No potential to occur. No suitable aquatic habitat in the project site. The species' main spawning grounds are in the Sacramento River, south of Rio Vista.
<i>Amphibians and Reptiles</i>				
California tiger salamander – Central California DPS <i>Ambystoma californiense</i> pop. 1	T	T/WL	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.	No potential to occur. Only marginal suitable habitat present (ponds, lakes or vernal pools) in the project site. No CNDDDB occurrences within a 10-mile buffer of the project site. Species was not observed by AECOM biologists during field surveys.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Western pond turtle <i>Emys marmorata</i>	–	–/SSC PCCP covered species	Forages in ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; nests in nearby uplands with low, sparse vegetation.	Low potential to occur. Pond turtles could potentially move through the project site during wet periods to disperse between aquatic sites and to nest within annual grassland habitats. CNDDDB showed a single occurrence for this species within a 10-mile buffer of the project site. The closest occurrence is within the Rio Linda 7.5-minute quadrangle on McClellan Air Force Base (approximately 8 miles).
Foothill yellow-legged frog <i>Rana boylei</i>	–	E/SSC PCCP covered species	Found in most major Pacific-slope Sierra Nevada watersheds between upper Sacramento River and the Tehachapi Mountains. Streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands from sea level to 6,700 feet. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools	No potential to occur. No suitable habitat in the project site, and no CNDDDB records within 10 miles of the project site (CDFW 2021).
California red-legged frog <i>Rana draytonii</i>	T	–/SSC PCCP covered species	Occurs throughout California and northern Baja California. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11–20 weeks of permanent water for larval development and must have access to aestivation habitat. Endemic to California and Baja California, at elevations ranging from sea level to 1,524 meters (5,000 feet). Has a distinct aquatic and upland habitat requirement that includes pools of slow-moving streams, perennial or ephemeral ponds, and upland sheltering habitats.	No potential to occur. No CNDDDB records within 10 miles of the project site. The project site is outside the species' range, and physical barriers prevent dispersal into the project site from the nearest occurrence.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Giant garter snake <i>Thamnophis gigas</i>	T	T/- PCCP covered species	Slow-moving streams, sloughs, ponds, marshes, inundated floodplains, rice fields, and irrigation/drainage ditches on the Central Valley floor with mud bottoms, earthen banks, emergent vegetation, abundant small aquatic prey, and absence or low numbers of large predatory fish. Requires permanent water during the active season. Also requires upland refugia not subject to flooding during the snake's inactive season.	Unlikely to occur. Marginally suitable habitat present in the project site. However, the site does not connect to any existing populations or records of the species, and large predatory fish in the Sacramento River likely preclude the species from migrating to the site. CNDDDB did not identify any occurrences within 2 miles of the project site, however, a database search identified 75 occurrences within 10 miles of the project site – predominantly occurring within the Taylor Monument and Verona 7.5-minute quadrangles (CDFW 2021). The closest occurrence is approximately 5 miles due east of the project site.
Western spadefoot <i>Spea Hammondi</i>	–	–/SSC	Open areas with gravelly, friable, or sandy soils in washes and vernal pools in the vicinity of grasslands, oak woodlands, coastal sage scrub, and chaparral. Breeds in ephemeral wetlands such as vernal pools and stock tanks, but occasionally breed in intermittent streams where larvae develop in isolated areas of the stream as it dries. Water temperatures in breeding pools must be between 9° C (48° F) and 30° Celsius (86° F) for reproduction and not contain exotic species such as American bullfrogs (<i>Rana catesbeianus</i>) and crayfish (Order Decapoda).	Low potential to occur. There is suitable habitat for this species within and adjacent to the project site. CNDDDB identified a single occurrence within 2 miles of the project site and 12 occurrences within 10 miles of the project site. This species was not observed by AECOM biologists during field surveys, however, this species spends a significant amount of time below ground and is most active during seasonal flooding.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Birds				
Tricolored blackbird <i>Agelaius tricolor</i> (nesting colony)	–	T/ SSC PCCP covered species	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Requires open water and protected nesting substrate, such as flooded, spiny, or thorny vegetation.	Potential to occur. Suitable nesting and foraging habitat in the project site. However, no nesting colonies recorded on-site; species was not observed by AECOM biologists during field surveys. CNDDDB identified 20 occurrences within 10 miles of the project site with the closest located approximately 1 mile northeast of the project site boundary (CDFW 2021).
Grasshopper sparrow <i>Ammodramus savannarum</i> (nesting)	–	–/SSC	Nests and forages in dense grasslands; favors a mix of native grasses, forbs, and scattered shrubs.	Unlikely to occur. Ruderal areas throughout the project site provide suitable nesting and foraging habitat; however, there is only one occurrence identified by CNDDDB within 10 miles of the project site (CDFW 2021).
Golden eagle <i>Aquila chrysaetos</i> (nesting and wintering)	–	–/FP, WL	Prefers open terrain for hunting, such as grasslands, meadows, deserts, savannas, and early successional stages of forest and shrub habitats. Nests in rugged, open habitats with canyons and escarpments, typically on cliffs and rock outcroppings; however, will also nest in large trees in open areas, including oaks, sycamores, redwoods, pines, and eucalyptus, overlooking open hunting habitat.	No potential to occur. No cliffs, large trees, or other structures for nesting are present on the project site. No nesting habitat. Golden eagles migrate through and winter in the Central Valley, but the valley floor is not within the core breeding range, and typical habitat is present in rolling foothills, mountains, and deserts. Species could perch in trees in the project site and could forage in ruderal habitat on the project site. No CNDDDB occurrences within 10 miles of the project site.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Burrowing owl <i>Athene cunicularia</i> (year-round)	–	–/SSC PCCP covered species	Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils. Suitable burrow sites consist of short, herbaceous vegetation with only sparse cover of shrubs or taller herbs.	Potential to occur. Ruderal grassland throughout the project site, particularly where there are ground squirrel burrows, represents suitable nesting and foraging habitat. The project site is within the year-round range of the species. The study area contains suitable burrow sites and nesting habitat for this species. No breeding activity has been documented in the project area (CDFW 2021). CNDDDB identified one occurrence within 2 miles of the project site however, the species was not observed by AECOM biologists during field surveys.
Swainson's hawk <i>Buteo swainsoni</i> (nesting)	–	T/– PCCP covered species	Forages in grasslands, irrigated pastures, and agricultural lands; nests in riparian and isolated trees.	Known to occur. There is suitable nesting and foraging habitat present on the project site. CNDDDB identified 6 occurrences within 2 miles of the project site. AECOM Biologists observed this species on three separate occasions during field surveys. It is possible that this species may nest or occur within or adjacent to the project site.
Mountain plover <i>Charadrius montanus</i>	–	–/SSC	Forages on grasslands and plowed fields. Will roost in depressions of ungulate hoof prints and plowed furrows.	No potential to occur. No CNDDDB occurrences within 10 miles of the project site. Seasonal flooding of agricultural fields may reduce habitat suitability for this species. Species was not observed by AECOM biologists during field surveys.
Yellow rail <i>Coturnicops noveboracensis</i>	–	–/SSC	Requires sedge marshes and meadows with moist soil and shallow standing water.	No potential to occur. No suitable habitat (sedge marsh or meadow) in the project site.
Northern harrier <i>Circus hudsonius</i> (nesting)	–	–/SSC	Uses a variety of open grassland, wetland, and agricultural habitats. Breeding habitats include marshy meadows, wet and lightly grazed pastures, and freshwater and brackish marshes; and dry upland habitats, such as grassland, cropland, drained marshland, and shrub-steppe in cold deserts.	Known to occur. There is suitable foraging and nesting habitat for this species within and adjacent to the project site. This species was observed by AECOM biologists within the study area during field surveys.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
White-tailed kite <i>Elanus leucurus</i> (nesting)	–	–/FP	Individuals prefer open grasslands with dispersed trees for nesting and perching. Frequently found along tree-lined river valleys with contiguous open areas.	Known to occur. The species is known to occur within the study area and was observed by AECOM Biologists on April 26 th , 2021. Ruderal vegetation and agricultural land-use throughout the project site provides suitable foraging habitat. There is potential nesting habitat within the few riparian/forested areas onsite. CNDDDB identified 10 occurrences within 10 miles of the project site.
American peregrine falcon <i>Falco peregrinus anatum</i>	D	D/FP	Distributed throughout the United States. The habitat of the peregrine falcon includes many terrestrial biomes in North America. Most often, breeding peregrine falcons use habitats containing cliffs and almost always nest near water (Wheeler 2003; White et al. 2002). Peregrine falcons generally use open habitats for foraging. Nonbreeding peregrine falcons may also occur in open areas without cliffs. Many artificial habitats like towers, bridges, and buildings are also used by peregrine falcons (White et al. 2002).	Unlikely to occur. Occurs seasonally throughout the central valley. Suitable foraging habitat is found within the project site. CNDDDB did not show any occurrences of the species within 10 miles of the project site (CNDDDB data suppressed).
Long-eared owl <i>Asio otus</i>	–	–/FP	Forests and shrub lands that are near to open areas, such as grasslands. They can be found from sea level up to 2000 m elevation. They are common in tree belts along streams in dry habitats. This species is commonly found nesting in cliffs and riparian areas (in old tree nests; chiefly magpie nests). Suitable foraging habitat includes forested and riparian areas as well as forested fringes bordering agricultural and ruderal areas.	Unlikely to occur. A CNDDDB search showed one occurrence within the Pleasant Grove 7.5-minute quadrangle. Long-eared owl was not observed by AECOM biologists during field surveys. There is low potential to occur within the project area.
Bald eagle <i>Haliaeetus leucocephalus</i> (nesting and wintering)	D	E/FP	Individuals forage primarily in large inland fish-bearing waters with adjacent large trees or snags; occasionally in uplands with abundant rabbits, other small mammals, or carrion. They often roost communally in winter.	Unlikely to occur. The nearest possible breeding territory would be centered on Grizzly Island approximately 4–5 miles west of the MHWRA (Estep Environmental Consulting 2018). The species could forage in the project site.

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Loggerhead shrike <i>Lanius ludovicianus</i> (nesting)	–	–/SSC	Forages in grasslands and agricultural fields, and nests in scattered shrubs and trees.	Known to occur. The species was observed foraging in the project site during field surveys in April 2021. The species is known to occur within the study area (AECOM 2021). The ruderal vegetation in the project site represents suitable foraging habitat. Nesting habitat is limited to scattered trees and shrubs. Agricultural fencing or sharp-leaved plants are part of a foraging requirement for this species, this requirement is present on and adjacent to the project site.
California black rail <i>Laterallus jamaicensis coturniculus</i>	–	T/FP	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays.	Unlikely to occur. No naturally occurring suitable habitat is present in the within or adjacent to the project site. The only potential nearby habitat exists along vegetated channels and tributaries of the Sacramento River. Some studies show that black rails may utilize/depend on flooded agricultural land to act as shallow-freshwater habitat. The closest CNDDDB occurrence was recorded within the Lincoln 7.5 minute quadrangle (CDFW 2021).
Song sparrow ("Modesto population") <i>Melospiza melodia mailliardi</i>	–	–/SSC	Prefers riparian willow thickets, valley oak riparian with understory of blackberry, ruderal areas along levees and irrigation canals, and cattail and tule marshes.	Low potential to occur. Suitable habitat is present in the project site. CNDDDB identified three occurrences within 10 miles of the project site. No occurrences were recorded within 2 miles of the project site (CDFW 2021). This species was not observed by AECOM biologists during field surveys.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	E	E/FP	Lives in brackish water marshes in dense pickleweed and cordgrass.	No potential to occur. No brackish marshes in the project site. No known occurrences have been documented within 10 miles of the project site (CDFW 2021).

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Bank swallow <i>Riparia riparia</i>	–	T/–	Forages in open riparian areas, grassland, wetlands, water, and cropland and nests in vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, and lakes.	Unlikely to occur. Two CNDDDB occurrence documented approximately 13 miles east of the project (CDFW 2021). There is marginal habitat for this species within and adjacent to the project site. This species was not observed by AECOM Biologists during field surveys.
Mammals				
American badger <i>Taxidea taxus</i>	–	–/SSC	Most abundant in the drier open stages of most shrub, forest, and herbaceous habitats with friable soils; generally associated with treeless regions, prairies, parklands, and desert areas. Needs open, uncultivated land.	Potential to occur. Ruderal and grassland areas in the project site represent suitable habitat; however, land disturbance from seasonal flooding for rice production may preclude establishment of burrows or den. No large dens were found, but badger sign in the form of claw marks and half-dug holes (likely from foraging for prey) were found in the grasslands in the northwestern portion of the project site during the field survey. CNDDDB did not identify any occurrences within 10 miles of the project site (CDFW 2021).
Pallid bat <i>Antrozous pallidus</i>	–	–/SSC	Grasslands, shrublands, oak woodlands, forests; most common in open, dry habitats; individuals roost in rock crevices, cliffs, caves, mines, and hollows of oaks and redwoods, and under sloughing bark, and human structures (e.g., bridges, buildings).	Low potential to occur. There is marginally suitable roost habitat (sloughing bark) present onsite. CNDDDB identified one occurrence of this species within 10 miles of the project site (CDFW 2021).
Western red bat <i>Lasiurus blossevillii</i>	–	–/SSC	Solitary foliage-roosting bat associated with riparian habitat (particularly willows, cottonwoods, sycamore, and eucalyptus), but individuals also use orchards, agricultural, and sometimes urban environments.	Low potential to occur. Marginally suitable roost trees are present on the project site in the form of young almond orchards and patchy willow and cottonwood canopy. CNDDDB did not identify any occurrences of this species within 10 miles of the project site (CDFW 2021).
Notes: CDFW = California Department of Fish and Wildlife; CNDDDB = California Natural Diversity Database; Delta = Sacramento–San Joaquin Delta; DPS = Distinct Population Segment; ppt = parts per thousand; SMUD = Sacramento Municipal Utility District				
¹ Legal Status Definitions:				

Species	Regulatory Status ¹		Habitat	Potential for Occurrence ²
	Federal	State/ CDFW/ PCCP		
Federal: E Endangered (legally protected) T Threatened (legally protected) D Delisted (no Endangered Species Act protection) PT Proposed as threatened R Under review – No status		State: E Endangered (legally protected) T Threatened (legally protected) CE Candidate endangered CDFW: FP Fully protected (legally protected) SSC Species of special concern (no formal protection other than CEQA consideration) WL Watch listed – No status		
² Potential for Occurrence: <u>No Potential to Occur:</u> The project site is outside the species' range or suitable habitat for the species is absent from the project site and adjacent areas. <u>Unlikely to Occur:</u> No occurrences of the species have been recorded within or immediately adjacent to the project site, and either habitat for the species is marginal or potentially suitable habitat may occur, but the species' current known range is restricted to areas far from the project site. <u>Low Potential to Occur:</u> The species was identified during literature review as potentially occurring near the project site and habitat for the species is marginal or potentially suitable habitat may occur, but there are no records of species occurrence within the project site or its vicinity. <u>Potential to Occur:</u> The project site is within the species' range, and no occurrences of the species have been recorded within the project site; however, suitable habitat for the species is present and recorded occurrences of the species are generally present in the vicinity. <u>Known to Occur:</u> The project site is within the species' range, suitable habitat for the species is present, and the species has been recorded from within the project site. Sources: CDFW 2021; USFWS 2022; data compiled by AECOM in 2021.				

Table BR-2. SMUD Country Acres Solar Project Consistency with PCCP Requirements

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
General Conditions	
<p>General Condition 1, Watershed Hydrology and Water Quality</p> <p>All Covered Activities shall comply with the State of California General Construction Permit—including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP)—and applicable NPDES program requirements as implemented by the County and the City of Lincoln.</p> <ul style="list-style-type: none"> • State Water Board Construction General Permit • West Placer Storm Water Quality Design Manual • HCP/NCCP Watershed Hydrology and Water Quality BMPs 	<p>SMUD will develop a project-based SWPPP and will comply with the California General Construction Permit and applicable NPDES program requirements as implemented by the County. SMUD will also follow any applicable CUP requirements related to hydrology and water quality.</p>
<p>General Condition 2, Conservation Lands: Development Interface Design Requirements</p> <p>Covered Activities that occur in or adjacent to the Reserve System, or adjacent to existing reserves, mitigation sites, and conservation banks, will incorporate design requirements to minimize the indirect effects of development on these types of conservation lands in the permit area.</p> <ul style="list-style-type: none"> • Conservation Lands: Development Interface Design Requirements 	<p>The project has been designed to avoid and minimize direct and indirect effects, such as stormwater runoff. All necessary BMPs will be implemented and conditions of the CUP applied, and the entire project area will be fenced.</p>
<p>General Condition 3, Land Conversion</p> <p>Covered Activities that would result in permanent conversion of natural land cover must pay fees or otherwise contribute to establishing the Reserve System and are subject to the maximum extent of take proposed under the Plan.</p> <p>Covered Activities will be assessed fees based on the parameters described in Chapter 9, Costs and Funding, and summarized in Table 9-6. In the Valley the fees will be applied when projects affect natural, semi-natural, and other agricultural communities. These communities include the following land-cover types:</p> <ol style="list-style-type: none"> a. Grassland b. Vernal Pool Complex c. Aquatic/Wetland Complex d. Riverine/Riparian Complex 	<p>SMUD intends to pay fees or otherwise contribute to an established mitigation bank for impacts to natural land cover as well as agriculture. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design.</p> <p>The following mitigation measure has been included in the DEIR to address impacts to agriculture:</p> <p>Mitigation Measure 3.2-1. Preserve Important Farmland</p> <p>SMUD shall implement one of the following methods to minimize the loss Farmland of Statewide Importance and Unique Farmland at a 1:1 ratio (i.e., 1 acre on which easements are acquired to 1 acre of Farmland of Statewide Importance and Unique Farmland removed from agricultural use):</p> <ul style="list-style-type: none"> • Acquire agricultural conservation easement(s) that provide in-kind or similar resource value protection in the region, with a strong preference for locating the agricultural conservation easement(s) in Placer County. This can be achieved by the acquisition of conservation easements, farmland deed restriction, or other appropriate farmland conservation mechanism to ensure the preservation of the land in perpetuity.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>e. Oak Woodland f. Valley Oak Woodland g. Rice Agriculture h. Field Agriculture i. Orchard and Vineyard Agriculture j. Rural Residential</p> <p>In the Valley, the land conversion fee will not apply to ground disturbance in urban (non-natural) communities except if a special habitat fee applies. Special habitat fees for restoration and enhancement will apply to any ground disturbance to a constituent habitat regardless of community type (see Chapter 3, Physical and Biological Setting, Table 3-6 for a list of constituent habitats). In urban (non-natural) communities, the land conversion fee would apply to the same area of ground disturbance as the special habitat fee.</p>	<ul style="list-style-type: none"> • Pay in-lieu fees to an established, agreed-upon (by County and SMUD) mitigation program with a presence in Placer County (e.g., Placer Land Trust) to fully fund the acquisition and maintenance of agricultural land or easements. • Alternatively, this may occur through the payment of fees into the PCCP's in-lieu fee program under a Memorandum of Understanding (MOU) with the PCA prior to issuance of improvement plans. (In-lieu fee payments would also address impacts on special-status species through loss for foraging habitat for burrowing owl and Swainson's hawk, and impacts on sensitive natural communities and wetlands and other waters of the US and state/County, as detailed in Mitigation Measures 3.4-8., 3.4-10 and 3.4-16 in Section 3.4 "Biological Resources" of this EIR). <p>Payments of in-lieu fees or acquisition of agricultural conservation easements may be spread out in alignment with construction phasing but must occur no later than the start of each new phase. The impact acreage requiring offset shall be based on the most current FMMP at the time of the County's issuance of the Conditional Use Permit.</p>
<p>General Condition 4, Temporary Effects</p> <p>Covered Activities that result in temporary effects [1 year] on natural land cover must pay fees and are subject to the maximum extent of take proposed under the Plan.</p>	<p>SMUD intends to pay fees or otherwise contribute to an established mitigation bank for temporary impacts to natural land cover. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design.</p>
<p>General Condition 5, Conduct Worker Training</p> <p>If project-specific conditions for avoidance or minimization apply during construction, all project construction personnel will participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations.</p>	<p>The following mitigation measure from the DEIR addresses worker training:</p> <p>Mitigation Measure 3.4-1. Worker Environmental Awareness Program (WEAP) and Biological Monitor Inspection</p> <p>SMUD will prepare a Worker Environmental Awareness Program that will educate staff regarding the presence or potential presence of all special-status species, sensitive natural communities, and protected wetlands with potential to occur, or that are known to occur, within the project area. The program shall describe their identification, habitat requirements, and penalties for species impacts, as well as immediate steps to take should special-status species be observed by staff on site.</p> <p>This WEAP shall include biological resource avoidance and minimization measures/mitigation measures from the project's CEQA Mitigation Monitoring and Reporting Program, and any resource permits or agreements, as applicable. The WEAP will educate workers regarding sensitive species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. The WEAP can be provided in the form of a handout and/or video presentation. All staff working onsite shall</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>attend the WEAP training prior to commencing onsite work. Staff that attend the training shall fill out a sign-in sheet indicating that they completed the training.</p> <p>Prior to construction, a qualified biological monitor shall inspect all areas within the project site with the potential to support sensitive biological resources to ensure the proper implementation of all avoidance and minimization and mitigation measures, agency permit requirements, and environmentally sensitive area exclusion flagging and/or fencing have been properly implemented, and to deliver WEAP training as needed.</p> <p>The biological monitor shall remain available on an on-call basis for the duration of project construction to conduct inspections and follow up surveys, as needed, and to ensure compliance with permit conditions. The qualified biological monitor shall have the experience, education and training necessary to conduct special-status species surveys and monitoring as described in the mitigation measures below.</p> <p>During operation and maintenance, an annual Environmental Awareness Training shall be provided to onsite personnel, covering any sensitive biological resources that could be present onsite.</p>
<p>Conditions to Avoid and Minimize Effects on Specific Natural Communities</p>	
<p>Community Condition 1, Wetland Avoidance and Minimization (Vernal Pool and Aquatic/Wetland Complex)</p> <p>Vernal pool constituent habitat includes vernal pool wetlands, seasonal wetland in vernal pool complex, and seasonal swales. Aquatic/wetland constituent habitat (also called other wetlands in this condition) encompasses fresh emergent marsh, non-vernal pool seasonal wetland, and lacustrine and includes all Waters of Placer County where avoidance buffers are not otherwise applied.</p>	<p>The project has been designed to avoid wetlands including vernal pools, seasonal wetlands in vernal pool complex, seasonal swales, fresh emergent marsh, non-vernal pool seasonal wetlands, and lacustrine. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design.</p> <p>Mitigation Measures from the DEIR include the following:</p> <p>Mitigation Measure 3.4-2. Establish Non-Disturbance Buffers around Vernal Pools and Seasonal Wetlands to protect Western Spadefoot during construction</p> <p>Based on the assumptions that all vernal pools and seasonal wetlands in the project areas could provide suitable habitat for western spadefoot, SMUD, in coordination with a qualified biologist, will establish a 250-foot no-disturbance buffer from the high-water mark of the vernal pool or seasonal wetland habitat prior to commencement of ground-disturbing activities. The perimeter of the no-disturbance buffer will be delineated with a wildlife-friendly fence that allows the movement of wildlife, including western spadefoot (and also wide-ranging wildlife, such as coyotes), through the area. The fence will be maintained for the duration of project construction and operation. Signage will be installed on the fence indicating the buffer is an environmentally sensitive area. The boundaries of vernal pools, seasonal wetlands and associated 250-foot buffers will also be clearly delineated on project plans and specifications boundaries. No construction or ground-disturbing activities shall occur within the 250-foot buffer.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>The fencing shall be kept in place for the duration of project construction and operations and shall be kept in good condition to prevent any construction, operation and maintenance activities from disturbing the sensitive habitat areas.</p> <p>Mitigation Measure 3.4-12. Avoid Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp During Construction</p> <p>Vernal pools and seasonal wetlands in the project area provide potentially suitable habitat for vernal pool fairy shrimp and tadpole shrimp. A 250-foot no-disturbance buffer area will be established from the high-water mark of the vernal pool or wetland habitat prior to construction and will be delineated by fencing as described in Mitigation Measure 3.4-2 and confirmed by a qualified biologist. The boundaries of vernal pools, seasonal wetlands and associated 250-foot buffers will also be clearly delineated on project plans and specifications boundaries. No construction or ground-disturbing activities shall occur within the 250-foot buffer. All construction activities are prohibited within this buffer area. With complete avoidance of ground-disturbing activities within vernal pools and seasonal wetlands and a 250-foot buffer beyond the boundaries of these aquatic features, no direct or indirect impacts will occur to vernal pool fairy shrimp or tadpole shrimp and no further avoidance or minimization measures are required.</p> <p>Information about avoidance and minimization measures for vernal pool fairy shrimp and vernal pool tadpole shrimp shall be included in the WEAP described above in Mitigation Measure 3.4-1.</p> <p>Mitigation Measure 3.4-16. Avoid, Minimize and Compensate for Impacts on Sensitive Natural Communities and Comply with Federal, State and Local Permits</p> <p>Prior to project implementation, SMUD shall refine potential impacts on sensitive natural communities based on advanced designs and obtain the necessary permits for impacts on any sensitive natural communities. These include the following permits:</p> <ul style="list-style-type: none"> • Section 1600 Streambed Alteration Agreement from CDFW (for impact on riparian area and other sensitive natural communities not considered Waters of the U.S. (WUS) or State) • CWA Section 404 permit from USACE for impacts to WUS • CWA Section 401 Clean Water Certification from the Regional Water Quality Control Board for impacts to WUS • Waste Discharge Permit from Regional Water Quality Control board for impacts to water of the state • Floodplain encroachment permit from the County, if necessary based on advanced designs

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> • As part of the permit applications, SMUD shall develop a habitat mitigation plan that will include mitigation for impacted sensitive natural communities on a no-net-loss basis. The plan may include onsite restoration, if feasible, offsite preservation, or purchasing mitigation credits from an agency-approved wetlands mitigation bank, paying an agency-approved in-lieu fee, and/or developing conservation lands to compensate for permanent loss of resources. Mitigation ratios shall be no less than 1:1 and shall be determined during the permitting process. This may also occur through the payment of fees into the PCCP's in-lieu fee program under a Memorandum of Understanding (MOU) with the PCA prior to issuance of improvement plans. In-lieu fee payments would address impacts to special-status species, sensitive natural communities, wetlands and other waters of the US and state/County, and impacts to agricultural lands resulting from the conversion of important farmland (see Mitigation Measure 3.2-1 in Section 3.2 "Agricultural Resources" of this Draft EIR). Payments may be spread out in alignment with construction phasing and will occur prior to the start of each new phase. • SMUD shall implement all conditions of the permits, including any performance monitoring, if required for onsite restoration and report on the results of the monitoring to the appropriate agencies at the frequency and duration included in the permits. • Sensitive natural communities shall be included in the WEAP described above in Mitigation Measure 3.4-1. <p>Mitigation Measure 3.4-17. Avoid impacts to jurisdictional features and sensitive natural communities by use of horizontal directional drilling.</p> <p>The following avoidance and minimization measures shall be implemented to protect listed and other special-status plants and animals, and to avoid impacts to wetlands and riparian zones:</p> <ul style="list-style-type: none"> • Boring activities and set-up activities for boring operations shall be situated outside of wetlands and riparian areas. An earthen or sandbag berm shall be installed around all drilling fluid mixing and pumping areas to contain any inadvertently spilled material. Sediment control devices shall be installed between the drilling staging areas and any waterways. This includes any culverts or drainage ditches that lead to a waterway. • HDD operations at the creek crossings and/or jurisdictional features shall be limited to daylight hours because of the difficulty in identifying the loss of bentonite or machine pressure without daylight. This shall be defined by the termination of drilling 30 minutes before dusk, and resumption of drilling at dawn. The contractor will make every effort to schedule drilling activities to be completed between dawn and 30 minutes to dusk. Should the drilling activities be within one hour of completion, 30 minutes before dusk, drilling

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>activities may be allowed to continue until completion if the Project environmental monitor and/or the CDFW or its agents determine that completing the drilling activities will result in less risk to the stream.</p> <ul style="list-style-type: none"> • Visual inspection along the bore alignment for frac-outs shall take place at all times while the drill is in operation. The monitor shall be in radio contact with the boring machine operator at all times. A biologist/monitor's presence shall be required during all boring activities (i.e. boring, back reaming, etc.) within CDFW jurisdiction unless the drainage is dry. • The HDD Operator shall design, pre-plan, and direct the HDD operation in such a way as to minimize the risk of spills of all types. The HDD Operator shall prepare and implement a Frac-Out Contingency Plan and submit it to SMUD and CDFW for review and approval 30 days prior to construction, which includes the boring plans and frac-out and clean-up plans, in the event of the accidental release of drilling lubricants through fractures in the streambed or bank ("frac-outs"). In substrates where frac-outs are likely to occur, the HDD Operator shall operate in a manner that will reduce risk, such as using lower pressure and greater boring depths. The Contingency Plan shall be kept on site at all times. • A non-toxic fluorescent water-soluble dye shall be added to the drilling muds to allow for frac-outs to be seen in muddy waters. The dye shall be used in a concentration which allows the monitors to easily determine the source of the frac-out, and shall be a type of dye approved for use by the local Regional Water Quality Control Board. • All equipment required to contain and clean up a frac-out release shall be available at the work site. • Boring plans should include: <ul style="list-style-type: none"> ○ A sketch of the construction site, including equipment staging areas, approximate location of drill entry and exit points and the approximate location of access roads in relation to the surrounding area, ○ Proposed depth of bore and statement of streambed or wetland condition (subsurface strata and percent of gravel and cobble) that support the depth of the bore, ○ Approximate length of bores (50-foot increments), ○ Type and size of boring equipment to be used (categorized as mini, mid or maxi), ○ Estimated time to complete bore, ○ List of lubricants and HDD additives to be used including Material Safety Data Sheets (MSDS), and

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> ○ Name of Operator’s agents and cell phone numbers. ● Frac-out prevention and clean-up plans should include: <ul style="list-style-type: none"> ○ Name(s) and phone numbers of biological monitor(s) and crew supervisor(s), ○ Site specific resources of concern (if applicable, include factors such as possible presence of sensitive species), ○ Monitoring protocols (include biological monitoring and frac-out monitoring), and ○ Containment and clean-up plan (include staging location of vacuum trucks and equipment, equipment list, necessary hose lengths, special measures needed for steep topography, etc. at each location). ● If a frac-out or spill occurs in a sensitive resource, the Operator shall immediately notify the SMUD Environmental Monitor. ● If a frac-out occurs, the SMUD Environmental Monitor, shall determine whether clean-up actions are warranted. If containment and clean-up is needed to prevent additional impacts, the Contractor shall begin the following containment and clean up measures immediately. Where water flows allow, the Contractor shall immediately construct a sandbag well around the frac-out or place a standing pipe (such as a 55-gallon drum with the top and bottom removed, heavy PVC pipe or CMP or culvert type material) around the frac-out to contain the drilling mud. A trailer-mounted vacuum or vacuum truck shall be deployed to vacuum out spilled drilling fluids that continue to leak. Removed drilling fluids shall not be placed where they are likely to re-enter the stream. All cleanup and containment efforts shall adhere to the Frac-out Contingency Plan approved by the SMUD for spill response.
<p>Community Condition 1.1, Avoidance of Vernal Pool Complex Constituent Habitat</p> <p>Covered Activities are required to mitigate for impacts, generally through payment of fees if project activities encroach on a vernal pool constituent habitat wetland or its immediate watershed.</p> <p>Impact evaluation will consider whether ground disturbance from a Covered Activity encroaches on (1) the Delineated Wetland or (2) the Immediate Watershed of a vernal pool constituent habitat feature.</p>	<p>SMUD has conducted a wetland delineation and the project has been designed to avoid wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17 of the DEIR.</p>
<p>Community Condition 1.2, Avoidance of Aquatic/Wetland Complex Constituent Habitat</p>	<p>SMUD has conducted a wetland delineation and the project has been designed to avoid wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
Covered Activities are required to mitigate for impacts, generally through payment of fees if project activities encroach on a non-vernal pool wetland (other wetlands) or its buffer.	Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17 of the DEIR.
<p>Community Condition 1.3, Aquatic/Wetland Complex Impact Minimization Measures</p> <p>Covered Activities that minimize effects on the Aquatic/Wetland Complex constituent habitat may qualify to count those effects as temporary rather than permanent. If activities associated with Covered Activities are proposed to occur within other wetlands and their associated buffers, the activities must comply with Wetland Impact Minimization Criteria (below) to have project effects count as temporary instead of permanent.</p>	SMUD has conducted a wetland delineation and the project has been designed to avoid wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17 of the DEIR.
<p>Community Condition 1.4, Salvage of Vernal Pool Constituent Habitat</p> <p>Covered Activities that result in the conversion of vernal pool constituent habitat must grant adequate and timely access to allow for salvage as directed by the permitting jurisdiction or PCA.</p>	N/A - The project has been designed to avoid wetlands including vernal pools and seasonal wetlands in vernal pool complex with appropriate buffers. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17 of the DEIR.
<p>Community Condition 1.5, Wetlands Restoration</p> <p>Covered Activities that permanently or temporarily affect vernal pool constituent habitat and other wetlands, must contribute to restoration or creation of these resources as mitigation.</p>	SMUD has conducted a wetland delineation and the project has been designed to avoid wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17 of the DEIR.
<p>Community Condition 2, Riverine and Riparian Avoidance and Minimization</p> <p>This condition, focusing specifically on the riverine and riparian constituent habitat components of the Riverine/Riparian Complex community, is supplemental to Stream System Condition 1, Stream System Avoidance and Minimization.</p>	SMUD has conducted a wetland delineation and the project has been designed to avoid riverine, riparian, and wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-16 and 3.4-17 of the DEIR.
<p>Community Condition 2.1, Riverine and Riparian Avoidance</p> <p>Covered Activities that avoid effects on the riparian constituent habitat by excluding construction or other ground disturbance from existing riparian vegetation are not subject to special habitat fees.</p>	See response above.
<p>Community Condition 2.2, Minimize Riverine and Riparian Effects</p> <p>Where riverine and riparian constituent habitat avoidance is not feasible, Covered Activities shall minimize effects on riverine and riparian constituent</p>	SMUD has conducted a wetland delineation and the project has been designed to avoid riverine, riparian, and wetlands with appropriate buffers, to the extent feasible. Any impacts to wetlands will be mitigated per agency requirements, which may include paying fees or

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>habitat by following design, construction, and operations minimization measures.</p>	<p>contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-16 and 3.4-17 of the DEIR. All CUP conditions and any necessary BMPs for construction and operations will be implemented.</p>
<p>Community Condition 2.3, Riverine and Riparian Restoration Covered Activities that affect riverine or riparian constituent habitat must contribute to restoration as mitigation to compensate for loss of riverine or riparian constituent habitat.</p>	<p>See response above.</p>
<p>Community Condition 2.4, Placer County Water Agency Operations and Maintenance Best Management Practices Placer County Water Agency will apply Operations and Maintenance Best Management Practices in addition to any other applicable community and species conditions.</p>	<p>All CUP conditions and any necessary BMPs for O&M will be implemented.</p>
<p>Community Condition 3, Valley Oak Woodland Avoidance, Minimization, and Mitigation This Community Condition addresses issues related to valley oak woodlands.</p>	<p>N/A. No oak trees or oak woodland will be impacted by the project.</p>
<p>Community Condition 3.1, Valley Oak Woodland Avoidance Covered Activities that avoid effects on valley oak woodland wherever it occurs by excluding construction or other ground disturbance from existing valley oak woodland will not be assessed the land conversion fee.</p>	<p>N/A. No oak trees or oak woodland will be impacted by the project.</p>
<p>Community Condition 3.2, Valley Oak Woodland and Individual Valley Oak Trees Restoration Covered Activities must compensate for loss of Valley Oak Woodland natural community, and individual valley oak trees.</p>	<p>N/A. No oak trees or oak woodland will be impacted by the project.</p>
<p>Conditions to Avoid, Minimize, and Mitigate Effects on the Stream System</p>	
<p>Stream System Condition 1, Stream System Avoidance and Minimization Design and implement Covered Activities in such a way as to avoid and minimize adverse effects on the Stream System.</p>	<p>SMUD has conducted a wetland delineation and the project has been designed to avoid riverine, riparian, and wetlands with appropriate buffers, to the extent feasible. Any impacts to the stream system will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-16 and 3.4-17 of the DEIR. Also, SMUD will implement Mitigation Measure 3.10-1 as described below.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>Mitigation Measure 3.10-1: Locate Construction Equipment and Material Storage Areas Outside of the 100-Year Floodplain During the Winter Rainy Season.</p> <p>In order to protect human life, water quality, and designated in-stream beneficial uses of waterbodies, the construction contractor shall implement the following:</p> <ul style="list-style-type: none"> • The on-site construction trailer and its associated portable restrooms, fencing, power supply, and parking area, shall not be located within a 100-year floodplain. • During the winter rainy season (i.e., November 1 through April 1), construction materials and equipment shall not be stored in a 100-year floodplain. <p>Additionally, CUP conditions and any necessary BMPs for construction and operations will be implemented.</p>
<p>Stream System Condition 2, Stream System Mitigation: Restoration</p> <p>Where Covered Activities result in the permanent or temporary impacts on the Stream System, regardless of the community or constituent habitat type affected, effects shall be mitigated by appropriate restoration or enhancement.</p>	<p>Any impacts to the stream system will be mitigated per agency requirements, which may include paying fees or contributing to an existing mitigation bank. Please see DEIR Table 3.4-6 Impact Acres by Vegetation Community/Habitat Type Based on 10% Design and Mitigation Measures 3.4-16 and 3.4-17 of the DEIR.</p>
<p>Regional Public Programs</p>	
<p>Regional Public Projects Condition 1, Transportation and Other Infrastructure Projects Design Requirements</p> <p>Implement design requirements for applicable public transportation projects located in the RAA to reduce the effects of barriers in potential conservation lands and minimize effects on Covered Species, natural communities, and wildlife movement.</p>	<p>N/A.</p>
<p>Regional Public Projects Condition 2, Transportation and Other Infrastructure Projects Construction BMPs</p> <p>Implement construction BMPs for applicable transportation or other infrastructure projects located in the rural portion of the Plan Area where appropriate and feasible to reduce the effects of construction on natural communities and native species.</p>	<p>N/A. However, SMUD will implement a SWPPP and all necessary BMPs required for the project including CUP requirements.</p>
<p>Regional Public Projects Condition 3, Operation and Maintenance BMPs</p> <p>O&M BMPs for applicable transportation or other infrastructure projects in the rural portion of the Plan Area will be implemented where appropriate and feasible to reduce the effects of construction on natural communities and native species.</p>	<p>N/A. However, SMUD will implement all necessary O&M BMPs required for the project including CUP requirements.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
Conditions to Minimize Effects on Covered Species	
<p>Surveys for Select Covered Wildlife Species</p> <p>The timing of species habitat surveys, pre-construction surveys, and construction monitoring relative to impacts are described below. For projects that occur over multiple years, including projects that are phased, the frequency and timing of required surveys will be determined by the Permittee reviewing the application in consultation with the Wildlife Agencies. At a minimum, surveys and monitoring (if required) will be conducted prior to each construction phase if the entire project area is not continuously disturbed between phases.</p> <p>Surveys will be conducted by qualified biologists, as defined in Section 6.1.5, Qualified Biologist/Qualified Professional. If survey results indicate that a Covered Species that is subject to a Species Condition is present, then applicable avoidance and minimization measures and construction monitoring, as specified in the corresponding Species Condition, must be implemented.</p> <p>Surveys are required when certain land-cover types and other conditions are present on a project site. See Species Conditions and Table 6-3 for a description of the locations and land-cover types that trigger species surveys.</p>	<p>SMUD has conducted surveys for sensitive species habitat and will conduct additional surveys for specific species including western pond turtle, giant garter snake, California black rail, western burrowing owl, Swainson's hawk, tricolored blackbird, American badger, and nesting birds and raptors. Buffers will also be established around sensitive species habitat prior to the start of construction.</p>
<p>Survey Documentation</p> <p>If applicable community types, constituent habitat, or habitat features are present on site, the applicant must describe in the HCP/NCCP participation package which surveys were conducted, detail the results of those surveys, and provide a map that displays where the surveys were conducted and where Covered Species, if any, were detected.</p> <p>As described in Section 6.2.4, HCP/NCCP Participation Package, the HCP/NCCP participation package will be prepared and approved before project construction. To ensure compliance with pre-construction survey requirements, the Permittee will determine which surveys are required, when they will be performed, and how they will be applied to the project (Item 8 of the HCP/NCCP participation package). This description will follow the requirements in the Species Conditions and will be incorporated into the conditions of project approval.</p> <p>The survey report submitted to the local jurisdiction and PCA will also document the condition of all occurrences found on the project. Reports will include CNDDDB California Native Species Field Survey Form; copies of these</p>	<p>A Draft Biological Resources Report has been prepared and a Biological Assessment is in the process of being prepared. Also, an Aquatic Resources Delineation Report was prepared based on the wetland delineation conducted in the field in 2021. Additional survey reports will be prepared for any additional surveys.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
forms will also be submitted to the CNDDDB and the Wildlife Agencies as part of the Annual Report.	
<p>Construction Monitoring for Certain Covered Wildlife</p> <p>Occupied breeding habitat (or for giant garter snake, suitable aquatic habitat) will trigger the species surveys described in Table 6-3 and Species Conditions. Construction monitoring will be carried out by a qualified biologist to ensure that these avoidance and minimization requirements are being implemented properly and that they are adequately protecting the target species. Because the selected wildlife species are rare in the Plan Area, it is expected that few projects will require construction monitoring. If required, the construction monitoring frequency and protocols are described for the appropriate species in the Species Conditions.</p>	Mitigation Measures 3.4-1 includes biological monitoring and other mitigation measures have been included in the DEIR for species specific biological monitoring where necessary.
<p>Exemptions from Species Surveys, Pre-construction Surveys, and Construction Monitoring</p>	N/A
<p>Exemptions from Setbacks from PCA Reserves</p>	N/A
<p>Species Condition 1, Swainson’s Hawk</p> <p>Conditions for the Swainson’s hawk are based on avoidance, minimization, and mitigation guidelines from the <i>Draft Staff Report: Recommended Mitigation Strategies for the Swainson’s Hawk (Buteo swainsoni) within the California Breeding Range</i> (California Department of Fish and Game 1994) and measures developed to avoid and minimize effects on Swainson’s hawks by activities covered by the East Contra Costa County HCP/NCCP (2006).</p>	<p>The following mitigation measures from the DEIR address Swainson’s hawk:</p> <p>Mitigation Measure 3.4-9. Conduct Pre-Construction Surveys for Swainson’s Hawk and Implement Protective Buffers.</p> <p>Preconstruction Surveys. A qualified biologist will conduct preconstruction surveys for Swainson’s hawks during the nesting season (March 1 through August 21) within the project footprint and of all suitable nesting habitat within line of sight of construction activities within a 0.25-mile radius of the project footprint. The surveys will be conducted no more than 15 days prior to ground disturbance and will be conducted using methods consistent with guidelines provided in Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley (SHTAC 2000)with the following exceptions:</p> <ul style="list-style-type: none"> • Surveys will be required within a 0.25 miles (1,320-foot) radius around the project site. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist will scan all potential nest tree(s) from the adjacent property, road sides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for Swainson’s hawk nesting activity; • Surveys will be required from February 1 to September 15 (or sooner if it is found that birds are nesting earlier in the year); and

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> If a Swainson’s hawk nest is located and presence confirmed, only one follow-up visit is required (to avoid disturbance of the nest due to repeated visits). <p>Nest Buffers. If active Swainson’s hawk nests are found, appropriate buffers shall be established around active nest sites, in coordination with CDFW, to provide adequate protection for nesting raptors and their young. No project activity shall commence during the nesting season within the buffer areas until the qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment.</p> <p>Nest Monitoring. Monitoring of the nest by a qualified biologist during construction activities may be required if the qualified biologist determines that the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the qualified biologist has confirmed that the chicks have fledged.</p> <p>Information about avoidance and minimization measures for Swainson’s hawk shall be included in the WEAP described above in Mitigation Measure 3.4-1.</p> <p>Mitigation Measure 3.4-10. Compensate for the Loss of Swainson’s Hawk Foraging Habitat</p> <p>To offset net impacts on foraging habitat for breeding Swainson’s hawks SMUD will mitigate the loss of Swainson’s hawk foraging habitat in accordance with CDFW recommendations (DFG 1994) by providing mitigation lands or securing Swainson’s hawk mitigation bank credits as follows:</p> <ul style="list-style-type: none"> Foraging habitat permanently lost within 5 miles of an active Swainson’s hawk nest tree but more than 1 mile from the nest tree will be replaced with 0.75 acre of mitigation land for each acre of foraging habitat permanently lost because of project construction (0.75:1 ratio). Foraging habitat for nests that are within 1 mile of the project site will be mitigated at a 1:1 ratio. All mitigation lands protected under this requirement shall be protected in a form acceptable to CDFW (e.g., through fee title acquisition or conservation easement) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson’s hawk. This may occur through the payment of fees into the PCCP’s in-lieu fee program under a Memorandum of Understanding (MOU) with the PCA prior to issuance of improvement plans. In-lieu fee payments would address impacts to special-status species, sensitive natural communities, wetlands and other waters of the US and state/County, and impacts to agricultural lands resulting from the conversion of important farmland (see Mitigation Measure 3.2-1 in Section 3.2 “Agricultural Resources” of this Draft EIR). Payments may be spread out in alignment with construction phasing and will occur prior to

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	the start of each new phase. Management authorization holders/project sponsors will provide for management of the mitigation lands in perpetuity by funding a management endowment.
<p>Survey Requirements</p> <p>Surveys for Swainson’s hawk nests are required on the following communities in the Valley, within 0.25 mile (1,320 feet) of the project site:</p> <ul style="list-style-type: none"> • Valley oak woodland • Grassland (if trees are present) • Riparian • Semi-natural (if trees are present) • Other agricultural (if trees are present) • Rural residential (if trees are present) • Urban (if trees are present) <p>In addition, a CNDDDB record search is required to determine whether any active nests are present within 1,320 feet of the project site. A nest is assumed active if it has been used within the previous 5 years.</p> <p>Swainson’s Hawk 1. Swainson’s hawk surveys and CNDDDB record searches are required well in advance of project construction to determine whether Swainson’s hawk is nesting on or within 1,320 feet of the project site. If the project cannot be designed to avoid active Swainson’s hawk nest trees and the construction must occur during the nesting season (approximately February 1 to September 15), a preconstruction survey must be conducted no more than 15 days prior to ground disturbance. Surveys will be conducted consistent with current guidelines (Swainson’s Hawk Technical Advisory Committee 2000), with the following exceptions:</p> <ul style="list-style-type: none"> • Surveys will be required within a 1,320-foot radius around the project site. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist will scan all potential nest tree(s) from the adjacent property, road sides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for Swainson’s hawk nesting activity; 	Swainson’s hawk surveys will be conducted in 2022 and prior to construction. See Mitigation Measures 3.4-9 and 3.4-10 above.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<ul style="list-style-type: none"> • Surveys will be required from February 1 to September 15 (or sooner if it is found that birds are nesting earlier in the year); and • If a Swainson's hawk nest is located and presence confirmed, only one follow-up visit is required (to avoid disturbance of the nest due to repeated visits). 	
<p>Applicable Measures</p> <p>If surveys determine that a Swainson's hawk nest is occupied, the project must adopt the minimization measure listed below:</p> <p>Swainson's Hawk 2. During the nesting season (approximately February 1 to September 15 or sooner if it is found that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under construction will be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided that they do not stress the breeding pair.</p> <p>If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver of this avoidance measure. A qualified biologist would be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment. If a qualified biologist determines nestlings have fledged, Covered Activities can proceed normally.</p> <p>Swainson's Hawk 3. Active (within the last 5 years) nest trees on a project site will not be removed during the nesting season. If a nest tree must be removed (as determined by the PCA), tree removal shall occur only between September 15 and February 1, after any young have fledged and are no longer dependent on the nest and before breeding activity begins.</p>	<p>See Mitigation Measures 3.4-9 and 3.4-10 above.</p>
<p>Construction Monitoring</p> <p>Swainson's Hawk 4. Construction monitoring will be conducted by a qualified biologist and will focus on ensuring that activities do not occur within the buffer zone. The qualified biologist performing the construction monitoring will ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer will be increased if space allows (e.g., move staging areas farther away). If</p>	<p>See Mitigation Measures 3.4-9 and 3.4-10 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>space does not allow, construction will cease until the young have fledged from the nest (as confirmed by a qualified biologist).</p> <p>The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson’s hawks are minimized. The qualified biologist will train construction personnel on the avoidance procedures and buffer zones.</p>	
<p>Species Condition 2, California Black Rail</p>	
<p>Survey Requirements</p> <p>Take of black rail occurrences are limited by the Plan (see Section 5.3.1.6.2, California Black Rail). Therefore, surveys are critical for determining whether the wetland that may be affected is occupied, and for tracking take of California black rail. As such, surveys are required to determine the presence/absence of California black rails, if a Covered Activity is within 500 feet of the perimeter of a fresh emergent wetland greater than 0.2 acre in size.</p> <p>California Black Rail 1. Surveys will be initiated sometime between March 15 and May 31, preferably before May 15. A minimum of four surveys will be conducted. The survey dates will be spaced at least 10 days apart and will cover the time period from the date of the first survey through the end of June to early July. This will allow the surveys to encompass the time period when the highest frequency of calls is likely to occur. Projects must conduct surveys during this time period, regardless of when the project is scheduled to begin, and shall be conducted the year in which ground disturbance activities commence.</p> <p>This survey requirement also applies to Covered Activities that will alter the supply of water feeding potential breeding habitat for California black rails (e.g., fixing a leak in an irrigation canal). Some wetlands supported by leaks from water conveyance structures such as irrigation canals may also be supported hydrologically by other sources of water. Fixing a leak in an irrigation canal may therefore not substantially alter the extent and/or quality of the wetland habitat for California black rail. In such cases, the project proponent may provide the results of a hydrological study of the affected wetland to the PCA and Wildlife Agencies to determine whether altering the</p>	<p>The following mitigation measure from the DEIR addresses California black rail:</p> <p>Mitigation Measure 3.4-6. Survey for California Black Rails and Implement Avoidance Measures</p> <ul style="list-style-type: none"> • Preconstruction Call-Playback Surveys for California Black Rail. A qualified biologist will conduct a preconstruction survey in potentially suitable habitat for this species in the project footprint and a 500-foot buffer to the project footprint. Surveys will be initiated sometime between March 15 and May 31, preferably before May 15. A minimum of four surveys will be conducted. The survey dates will be spaced at least 10 days apart and will cover the time period from the date of the first survey through the end of June to early July. This will allow the surveys to encompass the time period when the highest frequency of calls is likely to occur. Projects must conduct surveys during this time period, regardless of when the project is scheduled to begin, and shall be conducted the year in which ground disturbance activities commence. Surveys will follow a standardized tape call-playback/response protocol similar to that of Evens et al. 1991 and Richmond et al. 2008 or other CDFW-approved method. The surveys will document the presence or absence of black rail. CDFW will be notified within 2 business days of any identified black rail detections. • If California black rails are detected during preconstruction surveys, the following additional measures will be implemented in association with occupied California black rail habitats: • SMUD will establish and maintain a non-disturbance buffer of up to 500 feet around all identified occupied wetland habitat, depending on site-specific conditions and at the discretion of a qualified biologist in consultation with CDFW. Where feasible, all construction-related activities will be excluded from the buffer for the duration of project implementation. • Where maintaining the non-disturbance buffer for the duration of the project is not feasible, at minimum, all construction-related activities will be excluded from the buffer for the

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>source of water would result in take of a wetland occupied by California black rail.</p> <p>Surveys must be conducted using survey protocol based on the methods used in Richmond et al. (2008) or guidance agreed upon by the Permittees and Wildlife Agencies. Surveys will be conducted if a fresh emergent wetland greater than 0.2 acre in size occurs on an adjacent parcel that is within 500 feet of the project site (as determined by aerial photographs), using survey methods that rely on call playback to elicit response from California black rails (e.g., those used by Richmond et al. 2008). Calls will be played from edge of the adjacent parcel, or where most appropriate to elicit a response, without trespassing.</p> <p>If a California black rail is determined to be present, no project activities are permitted within 500 feet of the outside perimeter of the occupied wetland. Project proponents may conduct activities within 500 feet of an occupied wetland based on site-specific conditions (e.g., noise barriers) and if approved by the PCA and the Wildlife Agencies and an qualified biologist monitors construction activities within 500 feet to ensure that California black rail nests are not disturbed.</p>	<p>duration of the breeding season (March through September, or for lesser duration as approved by CDFW).</p> <ul style="list-style-type: none"> • If project activities are necessary within the established non-disturbance buffer or within occupied habitat, including potential alterations to hydrological conditions that support black rail habitat, SMUD will consult with CDFW to identify a strategy that will avoid take of the year-round resident California black rail. This may or may not include work windows outside the breeding season, installation of wildlife exclusion fencing, and/or methods for passive exclusion of individuals out of the temporary and permanent impact area such as through the hand removal of vegetation before other project-related ground disturbances, as determined in consultation with CDFW. A qualified biologist will be present for any construction activities occurring within the non-disturbance buffer; the intensity and frequency of the monitoring will be established in consultation with CDFW. • Information about avoidance and minimization measures for California black rails shall be included in the WEAP described above in Mitigation Measure 3.4-1.
<p>Applicable Measures</p> <p>Projects in occupied wetlands will not be permitted unless approval is granted by the PCA. When granting approval, the PCA will consider if take is available under the Plan.</p> <p>California Black Rail 2. If the PCA does not grant take coverage, a buffer around the avoided wetland will be demarcated 500 feet from the outside perimeter of the occupied wetland with an exclusion fence to prevent construction activities from encroaching into the buffer zone and to identify the occupied wetland and buffer zone as a no-work area within the covered project. If the work would dewater occupied habitat and the PCA does not grant coverage, the activity could not take place under the Plan.</p> <p>California Black Rail 3. If the PCA grants take coverage, clearing of the habitat (or dewatering) will occur between September 15 and February 1 (outside the breeding season). For ground disturbing activities, if the project will not convert all of the wetland habitat present, a buffer around the avoided wetland will be demarcated with exclusion fencing to prevent construction</p>	<p>See Mitigation Measure 3.4-6 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>activities from encroaching into California black rail habitat and to identify the occupied wetland and buffer zone as a no-work area.</p>	
<p>Construction Monitoring</p> <p>California Black Rail 4. A qualified biologist will monitor on-site during construction to ensure that no Covered Activities occur within the buffer zone established around the occupied wetland, or if take allowance is granted outside of the breeding season, to ensure that adverse effects are minimized.</p> <p>The frequency of monitoring will be approved by the PCA based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases daily monitoring may be appropriate to ensure that direct effects on California black rail are minimized. The qualified biologist may increase the buffer size if s/he determines that activities are particularly disruptive (e.g., use of dynamite, or other explosives).</p> <p>Prior to the start of construction, the qualified biologist will train construction personnel on the avoidance procedures and buffer zones.</p>	<p>See Mitigation Measure 3.4-6 above.</p>
<p>Species Condition 3, Western Burrowing Owl</p> <p>The following measures will be implemented to avoid or minimize effects of Covered Activities on western burrowing owls. This condition is based on the <i>Staff Report on Burrowing Owl Mitigation</i> (California Department of Fish and Game 2012) and measures to avoid and minimize effects in the East Contra Costa County HCP/NCCP (2006).</p>	<p>The following mitigation measures from the DEIR address Western burrowing owl:</p> <p>Mitigation Measure 3.4-7 Avoid and Minimize Impacts on Burrowing Owl</p> <ul style="list-style-type: none"> • SMUD will have preconstruction burrowing owl surveys conducted in all areas that may provide suitable nesting habitat according to CDFW (CDFG 2012) guidelines. A qualified wildlife biologist shall conduct take avoidance surveys, including documentation of burrows and burrowing owls, in all suitable burrowing owl habitat within 250 feet of proposed construction. Two surveys will be conducted within 15 days prior to ground disturbance to establish the presence or absence of burrowing owls. The surveys will be conducted at least 7 days apart (if burrowing owls are detected on the first survey, a second survey is not needed) for both breeding and non-breeding season surveys. All burrowing owls observed will be counted and mapped. • During the breeding season (February 1 to August 31), surveys will document whether burrowing owls are nesting in or within 250 feet of the project area. • During the non-breeding season (September 1 to January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any area to be disturbed. Survey results will be valid only for the season (breeding or non-breeding) during which the survey was conducted.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> • The qualified biologist will survey the proposed footprint of disturbance and a 250-foot radius from the perimeter of the proposed footprint to determine the presence or absence of burrowing owls. The site will be surveyed by walking line transects, spaced 20 to 60 feet apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 300 feet, the surveyor, with use of binoculars, shall scan the entire visible project area for burrowing owls. During walking surveys, the surveyor will record all potential burrows used by burrowing owls, as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls; therefore, observers will also listen for burrowing owls while conducting the survey. • Adjacent parcels under different land ownership will be surveyed only if access is granted. If portions of the survey area are on adjacent sites for which access has not been granted, the qualified biologist will get as close to the non-accessible area as possible and use binoculars to look for burrowing owls. • The presence of burrowing owl or their sign anywhere on the site or within the 250-foot accessible radius around the site will be recorded and mapped. Surveys will map all burrows and occurrence of sign of burrowing owl on the project site. Surveys must begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total) or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. <p>If a burrowing owl or evidence of presence at or near a burrow entrance is found to occur within 250 feet of the project site, the following measures will be implemented:</p> <ul style="list-style-type: none"> • Burrowing Owl 2. If burrowing owls are found during the breeding season (approximately February 1 to August 31), the project applicant will: <ul style="list-style-type: none"> ○ Avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). ○ Establish a 250-foot non-disturbance buffer zone around nests. The buffer zone will be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> ○ Construction may only occur within the 250-foot buffer zone during the breeding season only if a qualified raptor biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Measures such as visual screens may be used to further reduce the buffer with Wildlife Agency approval and provided a biological monitor confirms that such measures do not cause agitated behavior. ● Burrowing Owl 3. If burrowing owls are found during the non-breeding season (approximately September 1 to January 31), the project applicant will establish a 160-foot buffer zone around active burrows. The buffer zone will be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a biological monitor confirms that such measures do not cause agitated behavior. ● Burrowing Owl 4. During the non-breeding season only, if a project cannot avoid occupied burrows after all alternative avoidance and minimization measures are exhausted, as confirmed by CDFW, a qualified biologist may passively exclude birds from those burrows. A burrowing owl exclusion plan must be developed by a qualified biologist consistent with the most recent guidelines from CDFW (e.g., California Department of Fish and Game 2012) and submitted to and approved by CDFW. Burrow exclusion may be conducted for burrows located in the project footprint and within a 160-foot buffer zone as necessary. ● Information about avoidance and minimization measures for western burrowing owl shall be included in the WEAP described above in Mitigation Measure 3.4.1. <p>Mitigation Measure 3.4-8. Compensate for the Loss of Burrowing Owl Habitat</p> <p>If burrowing owls are documented as breeding in the project area, compensatory mitigation shall be provided for permanent impacts on (removal of) burrowing owl nesting and foraging habitat. Burrowing owl foraging and nesting habitat will still be available after installation of solar panels. However, if the project results in a net loss of nesting or grassland foraging habitat due to conversion of 57.2 acres of grassland habitat to project infrastructure the loss of habitat will be mitigated as described in CDFW guidelines (CDFG 2012) in consultation with CDFW. The performance standard for compensatory mitigation for nesting and foraging habitat will be to achieve no net loss of habitat value to the burrowing owl. Compensatory mitigation for habitat loss shall be consistent with guidance by CDFW (CDFG 2012) and may include development and implementation of a land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls on the project site, acquisition of credits in a burrowing owl mitigation bank, or another form of mitigation acceptable to CDFW, such as payment of fees into the PCCP's in-lieu fee program under a</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>Memorandum of Understanding (MOU) with the PCA prior to issuance of improvement plans. In-lieu fee payments would address impacts to special-status species, sensitive natural communities, wetlands and other waters of the US and state/County, and impacts to agricultural lands resulting from the conversion of important farmland (see Mitigation Measure 3.2-1 in Section 3.2 “Agricultural Resources” of this Draft EIR). Payments may be spread out in alignment with construction phasing and will occur prior to the start of each new phase. The compensatory mitigation will be consistent with the PCCP goal of maintaining or increasing the population size of overwintering western burrowing owl and promoting expansion of breeding populations of burrowing owls and will be approved by CDFW. Compensatory mitigation will include the following requirements as described in CDFG 2012:</p> <ul style="list-style-type: none"> • Permanently protect mitigation land through a conservation easement deeded to a non-profit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. This may occur through the payment of fees into the PCCP’s in-lieu fee program under a Memorandum of Understanding (MOU) with the PCA prior to issuance of improvement plans. In-lieu fee payments would address impacts to special-status species, sensitive natural communities, wetlands and other waters of the US and state/County, and impacts to agricultural lands resulting from the conversion of important farmland (see Mitigation Measure 3.2-1 in Section 3.2 “Agricultural Resources” of this Draft EIR). Payments may be spread out in alignment with construction phasing and will occur prior to the start of each new phase. If the project is located within the service area of a CDFW-approved burrowing owl conservation bank, the project proponent may also purchase available burrowing owl conservation bank credits. • Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls. • Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
<p>Survey Requirements</p> <p>Surveys for burrowing owl must be conducted for projects that occur on the following communities and features in the Valley, or as determined by a qualified biologist, to ensure that occupied burrowing owl nests are not taken:</p> <ul style="list-style-type: none"> • Grassland • Vernal pool complex • Semi-natural (agriculture) 	<p>See DEIR Mitigation Measures 3.4-7 and 3.4-8 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<ul style="list-style-type: none"> • Other agricultural • Rural residential and urban community if potential burrow sites are available • Man-made structures such as underground pipes, irrigation canal banks, ditches • Banks of intermittent drainages if potential burrow sites are available <p>Burrowing Owl 1. Two surveys will be conducted within 15 days prior to ground disturbance to establish the presence or absence of burrowing owls. The surveys will be conducted at least 7 days apart (if burrowing owls are detected on the first survey, a second survey is not needed) for both breeding and non-breeding season surveys. All burrowing owls observed will be counted and mapped.</p> <p>During the breeding season (February 1 to August 31), surveys will document whether burrowing owls are nesting in or within 250 feet of the project area.</p> <p>During the non-breeding season (September 1 to January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any area to be disturbed. Survey results will be valid only for the season (breeding or non-breeding) during which the survey was conducted.</p> <p>The Qualified Biologist will survey the proposed footprint of disturbance and a 250-foot radius from the perimeter of the proposed footprint to determine the presence or absence of burrowing owls. The site will be surveyed by walking line transects, spaced 20 to 60 feet apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 300 feet, the surveyor, with use of binoculars, shall scan the entire visible project area for burrowing owls. During walking surveys, the surveyor will record all potential burrows used by burrowing owls, as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls; therefore, observers will also listen for burrowing owls while conducting the survey. Adjacent parcels under different land ownership will be surveyed only if access is granted. If portions of the survey area are on adjacent sites for which access has not been granted, the qualified biologist will get as close to the non-accessible area as possible, and use binoculars to look for burrowing owls.</p> <p>The presence of burrowing owl or their sign anywhere on the site or within the 250-foot accessible radius around the site will be recorded and mapped.</p>	

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>Surveys will map all burrows and occurrence of sign of burrowing owl on the project site. Surveys must begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total) or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites.</p>	
<p>Applicable Measures</p> <p>If a burrowing owl or evidence of presence at or near a burrow entrance is found to occur within 250 feet of the project site, the following measures must be implemented:</p> <p>Burrowing Owl 2. If burrowing owls are found during the breeding season (approximately February 1 to August 31), the project applicant will:</p> <ul style="list-style-type: none"> • Avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). • Establish a 250-foot non-disturbance buffer zone around nests. The buffer zone will be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction may only occur within the 250-foot buffer zone during the breeding season only if a qualified raptor biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Measures such as visual screens may be used to further reduce the buffer with Wildlife Agency approval and provided a biological monitor confirms that such measures do not cause agitated behavior. <p>Burrowing Owl 3. If burrowing owls are found during the non-breeding season (approximately September 1 to January 31), the project applicant will establish a 160-foot buffer zone around active burrows. The buffer zone will be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with Wildlife Agency approval and</p>	<p>See DEIR Mitigation Measures 3.4-7 and 3.4-8 above</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>provided a biological monitor confirms that such measures do not cause agitated behavior.</p> <p>Burrowing Owl 4. During the non-breeding season only, if a project cannot avoid occupied burrows after all alternative avoidance and minimization measures are exhausted, as confirmed by the Wildlife Agencies, a qualified biologist may passively exclude birds from those burrows. A burrowing owl exclusion plan must be developed by a qualified biologist consistent with the most recent guidelines from the Wildlife Agencies (e.g., California Department of Fish and Game 2012) and submitted to and approved by the PCA and the Wildlife Agencies. Burrow exclusion will be conducted for burrows located in the project footprint and within a 160-foot buffer zone as necessary.</p>	
<p>Construction Monitoring</p> <p>Burrowing Owl 5. A biological monitor will be present on site daily to ensure that no Covered Activities occur within the buffer zone. The qualified biologist performing the construction monitoring will ensure that effects on burrowing owls are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer will be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction will cease until the young have fledged from all the nests in the colony (as confirmed by a qualified biologist) or until the end of the breeding season, whichever occurs first.</p> <p>A biological monitor will conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone (i.e., outside the buffer zone).</p>	<p>See DEIR Mitigation Measures 3.4-7 and 3.4-8 above</p>
<p>Species Condition 4, Tricolored Blackbird</p> <p>The following measures will be implemented to avoid or minimize effects of Covered Activities on tricolored blackbird nesting colonies and actively used foraging habitat.</p>	<p>The following DEIR mitigation measure will be implemented for tricolored blackbird:</p> <p>Mitigation Measure 3.4-11. Conduct Focused Pre-Construction Surveys for Nesting Tricolored Blackbird and Avoid Impacts During Construction</p> <ul style="list-style-type: none"> • Preconstruction Tricolored Blackbird Surveys. Before any ground-disturbing activities or vegetation clearing that may result in effects on potential habitat for Tricolored Blackbird (TRBL), a qualified biologist will conduct a preconstruction survey in potentially suitable nesting habitat (i.e., blackberry thickets and cattail marsh) for this species in the project footprint and a 500-foot buffer to the project footprint. The biologist will conduct three separate surveys, one each in mid-April, mid-May, and mid-June (Beedy, pers. comm., 2022a), and will use methods consistent with survey protocol used by surveyors for the

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<p>Western Riverside County MSHCP 2018 https://www.wrc-rca.org/species/survey_protocols/2018_Tricolored_Blackbird_Survey_Protocol.pdf). If an active nesting colony is detected during the surveys CDFW will be consulted to provide any guidance on appropriate avoidance and minimization measures in addition to those described below.</p> <ul style="list-style-type: none"> • Avoidance and Minimization. Project activities will avoid occupied TRBL nesting habitat. If TRBL colonies are identified during the breeding season, an approximate buffer of up to 500 feet will be established around the colony, depending on site-specific conditions and at the discretion of a qualified biologist in consultation with CDFW. Any construction-related activities will be excluded from the buffer until the end of the breeding season. • Construction Monitoring. If construction takes place during the breeding season when an active colony is present within 500 feet of construction activities, a qualified biologist will regularly monitor construction to ensure that the buffer zone is enforced and to verify that construction is not disrupting the colony. The intensity and frequency of the monitoring will be established in consultation with CDFW. If monitoring indicates that construction outside of the buffer is affecting a breeding colony, the buffer will be increased, as needed, in consultation with CDFW. • Information about avoidance and minimization measures for tricolored blackbird shall be included in the WEAP described above in Mitigation Measure 3.4-1.
<p>Survey Requirements</p> <p>The PCA will provide a map of active colony sites to help determine where a survey for tricolored blackbird must occur. A colony site is considered active if it has been used for nesting in the prior 10 years. Surveys for nesting tricolored blackbird must occur if the PCA-provided map indicates an active colony site occurs on the project site or within 1,300 feet of a colony site. Surveys for nesting tricolored blackbird must also be conducted for project sites below 300 feet elevation, within the following communities.</p> <ul style="list-style-type: none"> • Aquatic/Wetland complex • Field Agriculture when planted in wheat, grain, triticale, or similar crop • Patches of thorny or spiny vegetation such as blackberry, nettle, or thistle (blackberry is often associated with the riparian constituent habitat) <p>If an active colony site is within 3 miles of the project site and construction will occur within the nesting season (March 15 to July 31), then a survey of</p>	<p>See DEIR Mitigation Measure 3.4-11 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>foraging habitat at and immediately surrounding the project site will be conducted within the following communities.</p> <ul style="list-style-type: none"> • Grassland • Rice Agriculture • Field Agriculture • Aquatic/Wetland Complex • Vernal Pool Complex <p>Tricolored Blackbird 1. Preconstruction Surveys – Nest Colony Sites. Prior to initiation of Covered Activities in all project work areas and within 1,300 feet of project work areas, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist will scan all potential nest colony site(s) from the adjacent property, road sides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.</p> <p>Surveys should be conducted at least twice with at least one month between surveys during the nesting season 1 year prior to initial ground disturbing for the Covered Activity if feasible, and the year of ground disturbing for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within 5 days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the Wildlife Agencies based on site-specific conditions.</p> <p>If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required. Preconstruction surveys are still required, however, as described below in Tricolored Blackbird 2.</p> <p>Tricolored Blackbird 2. Preconstruction Surveys – Foraging Habitat. If an active colony is known to occur within 3 miles of the project site, a qualified biologist will conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether</p>	

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist will map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys will be conducted approximately one week apart, with the second survey occurring no more than 5 calendar days prior to ground-disturbing activities. Two surveys are required because tricolored blackbirds may not visit a site during a single survey period, as they may be foraging elsewhere.</p> <p>Each survey shall last 4 hours, and begin no later than 8:00 a.m. The qualified biologist will survey the entire project site and a 1,300-foot radius around the project site by observing and listening from accessible vantage points that provide views of the entire survey area. If such vantage points are not available, the qualified biologist will survey from multiple vantage points to ensure that the entire survey area is surveyed. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist will scan all foraging habitat from the adjacent property, road sides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird foraging activity. The qualified biologist will map the locations on the site and within a 1,300-foot radius around the project site where tricolored blackbirds are observed and record an estimate of the numbers of tricolored blackbirds observed (estimated by 10s, 100s, or 1,000s), the frequency of visits (e.g., if individuals or a flock makes repeated foraging visits to the site during the survey period), whether tricolored blackbirds are leaving the site with food in their bills, and the direction they fly to/from.</p>	
<p>Applicable Measures</p> <p>If a tricolored blackbird nesting colony is found, the project applicant will abide by the following measures:</p> <p>Tricolored Blackbird 3. Nesting Colony – Avoidance and Minimization. Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, will be prohibited during the nesting season (March 15 through July 31 or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near</p>	<p>See DEIR Mitigation Measure 3.4-11 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer will be applied to extend beyond the nest colony site as follows.</p> <ul style="list-style-type: none"> • If the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony. • If the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. <p>This buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the Wildlife Agencies where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the Wildlife Agencies and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.</p> <p>Tricolored Blackbird 4. Actively used Foraging Habitat – Avoidance and Minimization. Construction activity or other covered activities that may disturb foraging tricolored blackbirds, as determined by a qualified biologist, will be prohibited within 1,300-feet of the foraging site to the extent feasible during the nesting season (March 15 through July 31 or until the chicks have fledged or the colony has been abandoned on its own) if the foraging habitat was found to be actively used by foraging tricolored blackbirds during at least one of the two foraging habitat surveys conducted under Tricolored Blackbird 2. If survey results indicate that the area provides marginal foraging habitat (e.g., tricolored blackbirds were observed foraging, but only briefly, and most were not successfully capturing prey), or site specific conditions may warrant a reduced buffer, the PCA technical staff will consult with the Wildlife Agencies to evaluate whether the project needs to avoid the foraging habitat or whether</p>	

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>a reduced buffer may be appropriate. In such cases, additional surveys may be needed to assess site conditions and the value of the foraging habitat.</p> <p>The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone. This buffer may be modified to a minimum of 300 feet, with written approval from the Wildlife Agencies, in areas with dense forest, buildings, or other features between the Covered Activities and the actively used foraging habitat; where there is sufficient topographic relief to protect foraging birds from excessive noise or visual disturbance; or in consultation with the Wildlife Agencies if other conditions warrant reduction of the buffer distance. If tricolored blackbird begins using foraging habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the Wildlife Agencies and PCA.</p> <p>Similar to Tricolored Blackbird 3, the intent of this condition is to allow actively nesting colonies on or near project sites to complete their nesting cycle prior to the loss of the foraging habitat on site. Protecting actively used-foraging habitat during the nesting season will help to enable the tricolored blackbird nesting colony complete its nesting cycle, as loss of valuable foraging habitat could cause the nesting colony to fail. This condition is not intended to preserve suitable foraging habitat on project sites in the long term.)</p>	
<p>Construction Monitoring</p> <p>Tricolored Blackbird 5. Nesting Colony – Construction Monitoring. Active nesting colonies that occur within the no-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist will train construction personnel on the avoidance procedures and buffer zones.</p> <p>If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be</p>	<p>See DEIR Mitigation Measure 3.4-11 above.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.</p> <p>Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and Wildlife Agencies within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the Wildlife Agencies to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and Wildlife Agencies shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.</p> <p>Tricolored Blackbird 6. Actively used Foraging Habitat – Construction Monitoring. Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring will be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist will train construction personnel on the avoidance procedures and buffer zones.</p> <p>If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s)</p>	

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.</p>	
<p>Species Condition 5, Giant Garter Snake</p> <p>The following measures will be implemented to avoid or minimize effects of Covered Activities on giant garter snakes. This condition is based on the USFWS's <i>Standard Avoidance and Minimization Measures during Construction Activities in Giant Garter Snake (Thamnophis gigas) Habitat</i> (U.S. Fish and Wildlife Service 1999a).</p>	<p>Although giant garter snake is not expected to be present in the project area, out of abundance of caution, the following mitigation measure was included in the DEIR:</p> <p>Mitigation Measure 3.4-5. Conduct Pre-Construction Surveys for Giant Garter Snake and Implement Avoidance and Minimization Measures</p> <ul style="list-style-type: none"> • Project ground-disturbing activities in aquatic habitat and adjacent upland habitat within 200 feet of aquatic habitat will be conducted during the giant garter snake's active season (i.e., after May 1 and before October 1), to the extent feasible. During this period, the potential for direct mortality is reduced, because snakes are expected to actively move and avoid danger. If project activities in aquatic habitat and adjacent upland habitat within 200 feet of aquatic habitat must be implemented outside of the snake's active season, the following mitigation measures must be implemented: <ul style="list-style-type: none"> ○ Within 24-hours prior to commencement of construction activities within 200 feet of potential giant garter snake habitat, the site shall be inspected by a qualified biologist who is approved by the CDFW and USFWS. If construction activities stop for a period of 2 weeks or more, another preconstruction clearance survey will be conducted within 24 hours before resuming construction activity. If snakes, or evidence of snakes, are encountered during preconstruction surveys, a biological monitor shall be present during construction activities in aquatic habitat and adjacent upland habitat within 200 feet of aquatic habitat. ○ The monitoring biologist shall be present during construction within 200 feet of potential aquatic habitat for giant garter snake (i.e., drainages that contain water) for the duration of the project. If a snake is encountered during construction activities, the monitoring biologist shall have the authority to stop construction activities until appropriate corrective measures have been completed or it is determined that the snake will not be harmed. The monitor will remain in the area for the remainder of the workday to ensure the snake is not harmed or, if it leaves the site, does not return. The qualified biologist will work with the PCA, USFWS, and CDFW to redirect the snake away from the disturbance area within 3 days of reporting the snake's presence at the construction site to USFWS and CDFW.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
	<ul style="list-style-type: none"> • The project biologist shall report any observations of giant garter snake to CDFW and USFWS within 24 hours of detection. • Information about avoidance and minimization measures for giant garter snake shall be included in the WEAP described above in Mitigation Measure 3.4-1.
<p>Survey Requirements</p> <p>If the communities listed below are present on or adjacent to a project site and within the geographic range of giant garter snake habitat in the Plan Area (see Appendix D, Species Accounts), a qualified biologist will conduct a survey to assess whether the communities provide suitable habitat for giant garter snake. Giant garter snake surveys will be conducted according to the USFWS’s Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake (<i>Thamnophis gigas</i>) Habitat or the current Wildlife Agency–approved protocol. If there is any deviation in the written text below and the formal USFWS guidelines, then the USFWS guidelines or otherwise current Wildlife Agency–approved protocol takes precedence. Project-by-project mitigation requirements do not apply. Mitigation will be addressed through the requirements of the conservation strategy, as described in Section 5.4.5, <i>Giant Garter Snake</i>.</p> <ol style="list-style-type: none"> Aquatic/Wetland Complex (Fresh Emergent Marsh, seasonal wetlands, and ponds) Rice Agriculture Riverine/Riparian in Low-gradient Streams Managed Open Water (sloughs, small lakes, irrigation and drainage canals) <p>If there is any question about the suitability of the habitat to support giant garter snakes and/or potential for species occurrence, USFWS and CDFW may be consulted. If the surveyor cannot legally access neighboring land within 200 feet of a project site, the qualified biologist may survey the adjacent parcel with binoculars or a spotting scope.</p>	<p>See DEIR Mitigation Measure 3.4-5 above.</p>

Applicable Measures

Giant Garter Snake 1. To avoid effects on giant garter snake aquatic habitat, the project proponent will conduct no in-water/in-channel activity and will maintain a permanent 200-foot non-disturbance buffer from the outer edge of suitable habitat. If the project proponent cannot avoid effects of construction activities, the project proponent will implement the following measures to minimize effects of construction projects.

- Conduct preconstruction clearance surveys using USFWS and CDFW-approved methods within 24 hours prior to construction activities within identified giant garter snake aquatic and adjacent upland habitat. If construction activities stop for a period of 2 weeks or more, conduct another preconstruction clearance survey within 24 hours of resuming construction activity.
- Restrict all construction activity involving disturbance of giant garter snake habitat to the snake's active season, May 1 through October 1. During this period, the potential for direct mortality is reduced, because snakes are expected to actively move and avoid danger.
- In areas where construction is to take place, encourage giant garter snakes to leave the site on their own by dewatering all irrigation ditches, canals, or other aquatic habitat (i.e., removing giant garter snake aquatic habitat) between April 15 and September 30. Dewatered habitat must remain dry, with no water puddles remaining, for at least 15 consecutive days prior to excavating or filling of the habitat. If a site cannot be completely dewatered, netting and salvage of giant garter snake prey items may be necessary to discourage use by snakes.
- Provide environmental awareness training for construction personnel. Training may be implemented through the distribution of approved brochures and other materials that describe resources protected under the Plan and methods for avoiding effects. If a live giant garter snake is encountered during construction activities, immediately notify the project's biological monitor and USFWS and CDFW. The monitor will stop construction in the vicinity of the snake, monitor the snake, and allow the snake to leave on its own. The monitor will remain in the area for the remainder of the work day to ensure the snake is not harmed or, if it leaves the site, does not return. The qualified biologist will work with the PCA, USFWS, and CDFW to redirect the snake away from the disturbance area

See DEIR Mitigation Measure 3.4-5 above.

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>within 3 days of reporting the snake's presence at the construction site to USFWS and CDFW.</p> <ul style="list-style-type: none"> • Employ the following management practices to minimize disturbances to habitat. <ul style="list-style-type: none"> ○ Install temporary fencing to identify and protect adjacent marshes, wetlands, and ditches from encroachment from construction equipment and personnel. ○ Maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetative buffer strips, or other accepted practices. No plastic, monofilament, jute, or similar erosion control matting that could entangle snakes or other wildlife will be permitted. 	
<p>Species Condition 6, California Red-legged Frog, Foothill Yellow-legged Frog, and Western Pond Turtle</p> <p>California red-legged frog, foothill yellow-legged frog, and western pond turtle are all species that rely on aquatic habitats for a portion of their life cycles. Many of the avoidance measures in this chapter focus on the avoidance and minimization of impacts on these aquatic habitats, addressing minimizing converted land as well as degradation of habitat (water quality and other indirect effects). Conditions on Covered Activities that provide avoidance and minimization for California red-legged frog, foothill yellow-legged frog, and western pond turtle include:</p> <ul style="list-style-type: none"> • General Condition 1, Watershed Hydrology and Water Quality • Community Condition 1.1, Avoidance of Vernal Pool Complex Constituent Habitat • Community Condition 1.2, Avoidance of Aquatic/Wetland Complex Constituent Habitat • Community Condition 2, Riverine and Riparian Avoidance and Minimization • Community Condition 3, Valley Oak Woodland Avoidance, Minimization, and Mitigation • Stream System Condition 1, Stream System Avoidance and Minimization • Regional Public Projects Condition 1, Transportation and Other Infrastructure Projects Design Requirements 	<p>CRLF - No potential to occur. No CNDDDB records within 10 miles of the project site. The project site is outside the species' range, and physical barriers prevent dispersal into the project site from the nearest occurrence.</p> <p>FYLF – No potential to occur. No suitable habitat in the project site, and no CNDDDB records within 10 miles of the project site (CDFW 2021).</p> <p>The DEIR includes the following mitigation measures to address Western Pond Turtle:</p> <p>Mitigation Measure 3.4-3. Conduct Pre-Construction Surveys for Western Pond Turtle</p> <ul style="list-style-type: none"> • Project ground-disturbing activities will be conducted outside of western pond turtle's active breeding and dispersal season (i.e., after May 1 and before September 15), to the extent feasible. If project activities must be implemented during the breeding and dispersal season, they will not start until 30 minutes after sunrise and must be completed 30 minutes prior to sunset. • A qualified biologist shall conduct a pre-construction survey for western pond turtle within 48 hours prior to the start of construction activities within 300 feet of suitable habitat (e.g., any adjacent waterway, marsh, or emergent wetland). Concurrently with the pre-construction survey, searches for nesting sites shall be conducted and any identified sites shall be delineated with high-visibility flagging or fencing and avoided during construction activities. If avoidance is not possible, the nest and/or turtle shall be removed by a qualified biologist and relocated to an appropriate location in consultation with CDFW. <p>Mitigation Measure 3.4-4. Avoid Impacts on Western Pond Turtle during Construction</p> <p>If turtles and/or nests are encountered during the pre-construction survey, a qualified biologist shall be present during grubbing and clearing activities in suitable habitat (aquatic) to monitor</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<ul style="list-style-type: none"> • Regional Public Projects Condition 2, Transportation and Other Infrastructure Projects Construction BMPs • Regional Public Projects Condition 3, Operation and Maintenance BMPs • Species Condition 4, Tricolored Blackbird • Species Condition 7, Central Valley Steelhead and Central Valley Fall-/Late Fall-Run Chinook Salmon (Salmonids) <p>In addition to these avoidance and minimization measures, General Condition 3, Land Conversion, provides a process for accounting for loss of natural and semi-natural that is more encompassing than standard practice. This approach better addresses the piecemeal loss of high-quality, contiguous habitat that would occur without a plan such as that HCP/NCCP.</p> <p>Finally, Chapter 5, Conservation Strategy, provides guidance on how impacts that cannot be avoided and minimized are mitigated. Mitigation not only includes addressing loss of aquatic resources, but surrounding uplands and loss of habitat connectivity as well. Because the effects on California red-legged frog, foothill yellow-legged frog, and western pond turtle are addressed through the approach to assessing impact and applying extensive avoidance and minimization measures, no additional avoidance and minimization measures specific to these species are required.</p>	<p>for western pond turtle. If a turtle is observed in the active construction zone, construction shall cease within a 100-foot buffer. Construction may resume when the biologist has, in consultation with CDFW, either hand-captured and relocated the turtle to nearby suitable habitat outside the construction zone, or, after thorough inspection, determined that the turtle has moved away from the construction zone.</p> <p>On-site personnel will observe a 20-mile-per-hour speed limit at all times.</p> <p>Information about avoidance and minimization measures for western pond turtles shall be included in the WEAP described above in Mitigation Measure 3.4-1.</p>
<p>Species Condition 7, Central Valley Steelhead and Central Valley Fall-/Late Fall-Run Chinook Salmon (Salmonids)</p>	<p>N/A. Steelhead–Central Valley DPS <i>Oncorhynchus mykiss irideus</i> pop. 11</p> <p>Unlikely to occur. No suitable aquatic habitat in the project site. This species is known to occur in the Delta from Chipps Island to the San Joaquin River at Dos Reis and Sacramento River at Garcia Bend. CNDDDB identified a single occurrence within a 2-mile buffer of the project site in Roseville at Dry Creek and its tributaries, Secret Ravine and Miners Ravine.</p>
<p>Species Condition 8, Valley Elderberry Longhorn Beetle</p> <p>The following measures will be implemented to avoid or minimize effects of Covered Activities on valley elderberry longhorn beetle.</p> <p>Surveys for valley elderberry longhorn beetle are required for Covered Activities within the following habitat features when below 650 feet elevation (above mean sea level):</p> <ol style="list-style-type: none"> a. Riparian constituent habitat b. Valley oak woodland community 	<p>Surveys for elderberry shrubs and trees was conducted by AECOM in 2021. No elderberry shrubs or trees were found within the project site.</p>

PCCP Requirements for Covered Activities	Country Acres Solar Project Consistency
<p>c. Stream System (excluding frequently disked or flooded agricultural lands such as rice that would not likely support elderberry shrubs)</p> <p>The project applicant will apply avoidance and minimization measures as specified in the USFWS's <i>Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> (U.S. Fish and Wildlife Service 1999b) or the current Wildlife Agency-approved avoidance and minimization protocol. When take is authorized the project applicant must coordinate with the PCA to provide transplants and seedlings/cuttings for planting in suitable habitat on the Reserve System consistent with the USFWS Guidelines/Framework. Project-by-project mitigation requirements for valley elderberry longhorn beetle cannot be applied to the restoration requirements of 6.3.2.2.3 (Community Condition 2.3, Riverine and Riparian Restoration) for a project's associated riparian native trees/shrubs impacts to be planted as replacement habitat (i.e., mitigation for impacts to valley elderberry longhorn beetle [transplants and plantings of seedlings/cuttings] does not count as mitigation for impacts to riverine and riparian [restoration of riverine and riparian]). The distinction between valley elderberry longhorn beetle impacts and riverine/riparian impacts will be addressed through project-specific mitigation requirements that provide for restoration of natural communities, including riverine/riparian complex (i.e., restoration dependent on effects; see Table 5-4).</p>	
<p>Species Condition 9, Conservancy Fairy Shrimp</p>	<p>N/A – No potential to occur. There is suitable vernal pool habitat is present on the project site, however, the nearest observation is not within proximity to the project site. There was one CNDDDB occurrence identified within the Sheridan 7.5-minute quadrangle (CDFW 2021). Avoidance of all vernal pools and seasonal wetlands.</p>
<p>Species Condition 10, Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp</p>	<p>N/A – Avoidance of all vernal pools and seasonal wetlands. See Mitigation Measures 3.4-2, 3.4-12, 3.4-16, and 3.4-17.</p>
<p>Reserve Management Conditions</p>	<p>N/A – Not within the Reserve Management Area.</p>