

November 16, 2018
(2018-047.006)

Mr. Steve Gibson
Senior Environmental Scientist (Specialist)
CA Department of Fish and Wildlife
4665 Lampson Avenue, Suite C
Los Alamitos, CA 90720

Subject: Protected Species Preconstruction Surveys for the Devil's Gate Reservoir Restoration Project, in the City of Pasadena, California

Dear Mr. Gibson,

This letter report has been prepared to present the results of preconstruction surveys for protected species conducted by ECORP Consulting, Inc. (ECORP) for Los Angeles County Department of Public Works' (LACDPW) Devil's Gate Reservoir Restoration Project in the City of Pasadena, Los Angeles County, California. The preconstruction surveys for protected species were conducted to comply with Condition 2.10 in the California Department of Fish and Wildlife (CDFW) Streambed Alteration Agreement (SAA) 1600-2015-0263-R5 that was issued for the Devil's Gate Sediment Removal and Management Project (Project) on March 21, 2017.

According to the SAA, protected species are defined as "a species fully protected under state law; a species listed under the California Endangered Species Act (Fish and Game Code § 2050 et seq.) and/or Endangered Species Act (16 U.S.C. § 1531 et seq.); a species identified by CDFW as a species of special concern; or any other species for which take is prohibited under state or federal law". The protected species in the SAA are listed in Table 1 below.

Table 1. Protected Species in SAA

Common Name	Scientific Name	Special-Status Designation*
Plants		
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Fed: END CA: END
Reptiles and Amphibians		
Two-striped garter snake	<i>Thamnophis hammondi</i>	Fed: none CA: SSC
Coast range newt	<i>Taricha torosa torosa</i>	Fed: none CA: SSC
Western pond turtle	<i>Actinemys marmorata</i>	Fed: none CA: SSC
Coast patch-nosed snake	<i>Salvadora hexalepis</i>	Fed: none CA: SSC
Birds		
Burrowing owl	<i>Athene cunicularia</i>	Fed: none CA: SSC

Common Name	Scientific Name	Special-Status Designation*
Yellow warbler	<i>Dendroica petechia</i>	Fed: none CA: SSC
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Fed: END CA: END
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Fed: END CA: END
Yellow breasted chat	<i>Icteria virens</i>	Fed: none CA: SSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	Fed: none CA: SSC
Bats		
Western mastiff bat	<i>Eumops perotis californicus</i>	Fed: none CA: SSC
Western yellow bat	<i>Lasiurus xanthinus</i>	Fed: none CA: SSC
Pallid bat	<i>Antrozous pallidus</i>	Fed: none CA: SSC

* END – endangered; SSC – Species of Special Concern

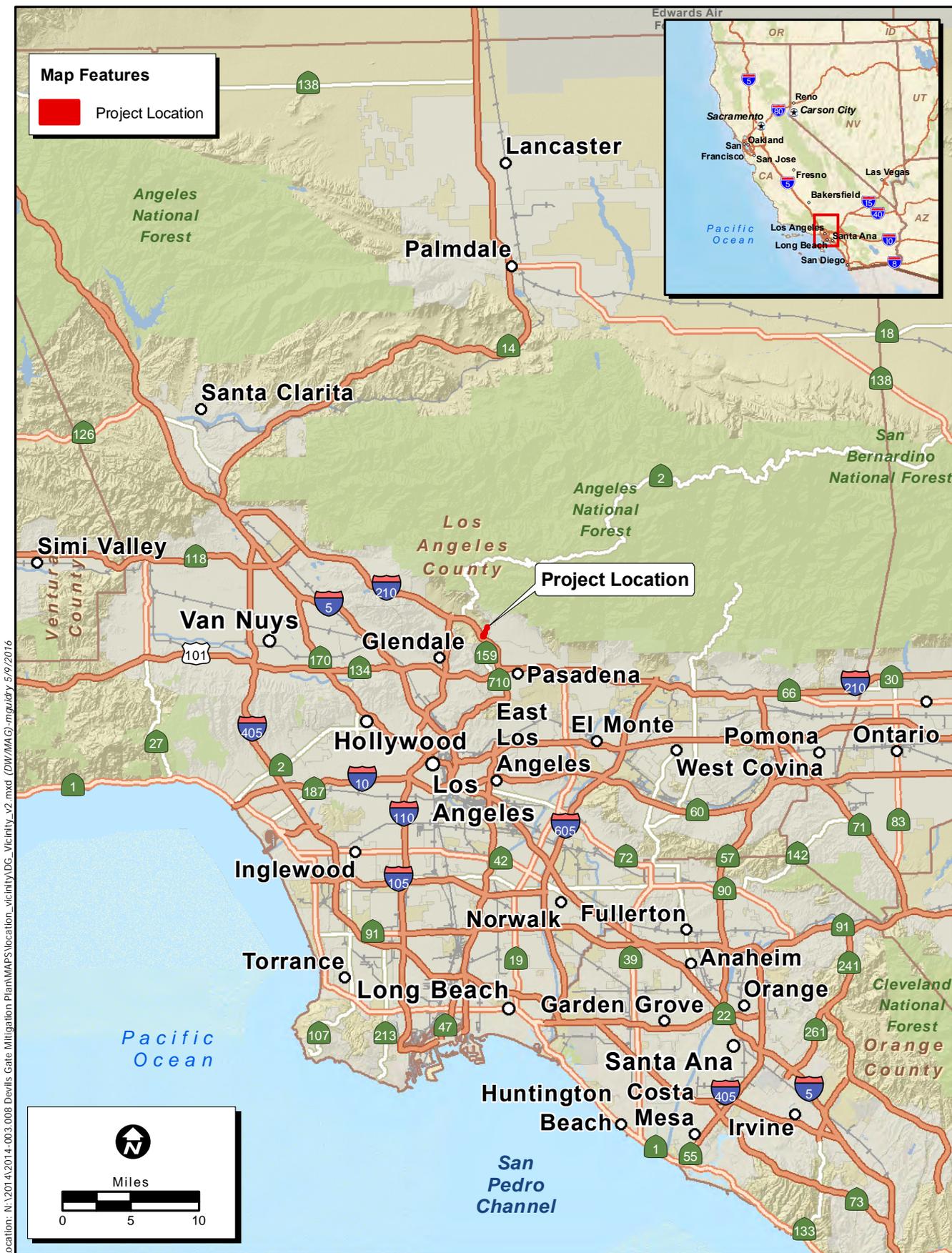
Site Description

The Project is located within the City of Pasadena in the upper portion of the Arroyo Seco Watershed and within the City's Hahamongna Watershed Park. Downtown Los Angeles is approximately 14 miles to the south of the Project, the San Gabriel Mountains are located just north of the Project, and the City of La Cañada Flintridge and the unincorporated community of Altadena are located to the west and east, respectively (Figure 1. Project Vicinity, Figure 2. Project Location). The Project is located within the "Pasadena, California" 7.5-minute quadrangle.

The topography in the vicinity of the proposed Project consists of rolling terrain with a decline into the Arroyo Seco basin. The San Gabriel Mountains are located to the north of the proposed Project and are characterized by both the foothills and steep slopes associated with mountainous terrain. The ISRA is composed primarily of black willow thickets (*Salix gooddingii* Woodland Alliance) and mulefat thickets (*Baccharis salicifolia* Shrubland Alliance) towards the southern end and scalebroom scrub (*Lepidospartum squamatum* Shrubland Alliance) towards the northern end. Additionally, some areas towards the southern end of the ISRA were classified as disturbed and/or dominated by weedy species.

METHODS

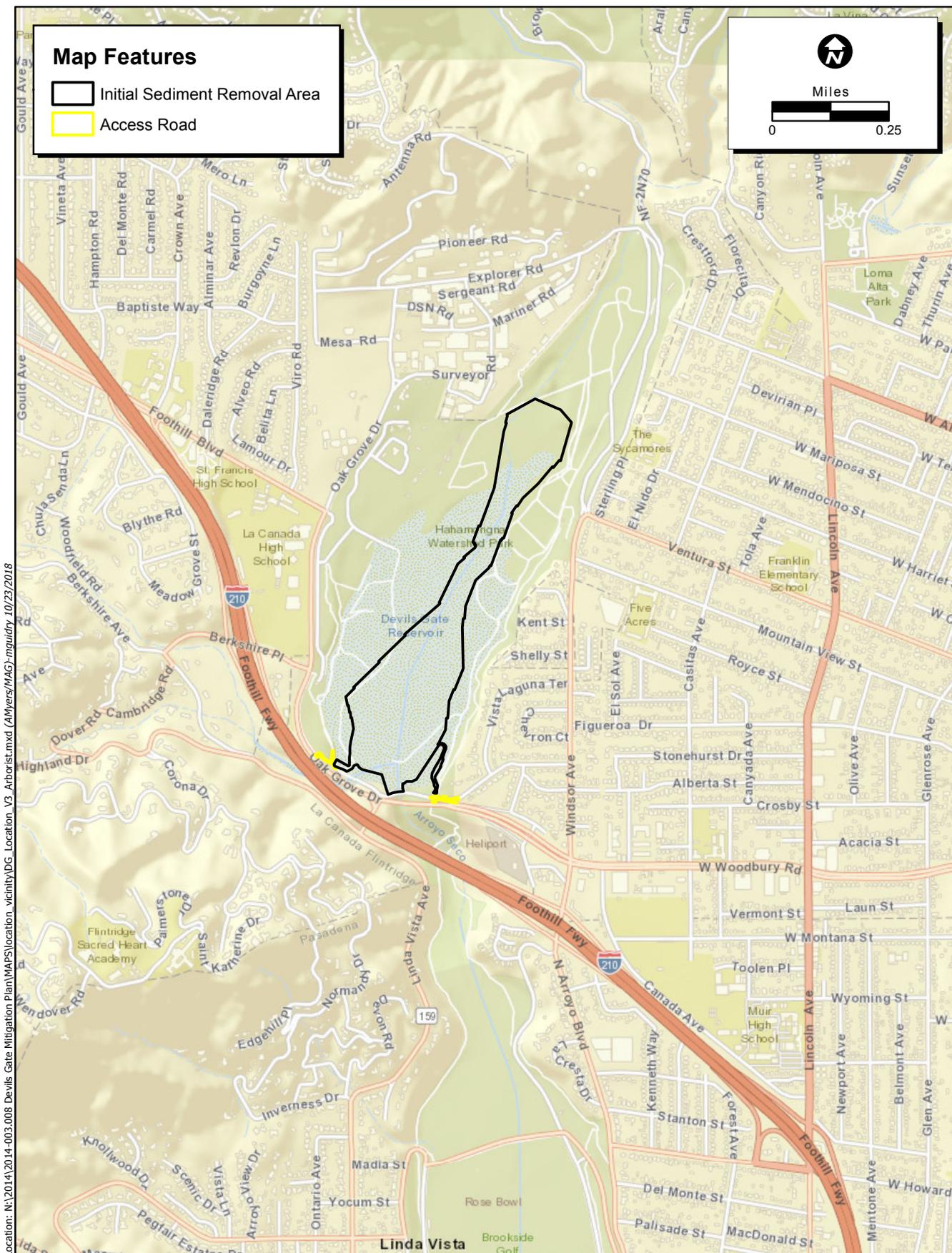
Preconstruction surveys for each protected species group (plants, reptiles and amphibians, birds, bats) were conducted following the survey techniques described in the Protected Species Survey Techniques Report submitted to CDFW on October 16, 2018 and approved by CDFW on October 18, 2018. (Attachment A).



Location: N:\2014\2014-003_008 Devils Gate Mitigation Plan\MAPS\location_vicinity\2014-003_008 Devils Gate Mitigation Plan\MAPS\location_vicinity_v2.mxd (DW/MAG/mgrudy 5/9/2016)

Map Date: 2/2/2016
 Service Layer Credits: Sources: USGS, ESRI, TANA, AND

Figure 1. Project Vicinity



Location: N:\2014\2014-003.008 Devils Gate Mitigation Plan\MAPS\location_vicinity\DG_Location_V3_Arborist.mxd (AMyers\MAG\nguidry_10/23/2018)

Map Date: 10/23/2018
Source: ESRI

Figure 2. Project Location

RESULTS

The preconstruction surveys for protected species were each lead by CDFW-approved Designated Biologists for each appropriate species group. The dates, personnel, survey focus, and weather conditions for each survey are presented in Table 1. Representative photographs of the project site during surveys are provided in Attachment B, field survey datasheets are provided in Attachment C.

Table 1. Weather Conditions during Surveys

Date	Survey Focus	Surveyors*	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
			start	end	start	end	start	end	start	end
11/1/2018	Birds	LS, CL	0720	1400	59	83	0	65	0-1	0-1
11/1/2018	Plants	CL, LS	0720	1400	59	83	0	65	0-1	0-1
11/2/2018	Reptiles & Amphibians	BZ, TD	1042	1354	88	90	0	0	1-4	0-1
11/6/2018	Bats	LS, TD	1100	1840	72	62	0	0	0-2	0-1
11/7/2018	Bats	LS, TD	1200	1815	70	60	0	0	0-1	1-4
11/8/2018	Bats	LS, TR	1625	1824	69	68	0	0	0-3	4-10
11/12/2018	Reptiles & Amphibians	AS, TD	0800	1330	61	77	0	0	0-2	0-2

*LS = Lauren Simpson, CL = Carley Lancaster, BZ = Brian Zitt, TD = Taylor Dee, TR = Torrey Rotellini, AS = Adam Schroeder

Plants

Slender-horned spineflower was not identified during the preconstruction surveys for protected species. A complete list of all plant species observed during the preconstruction surveys is provided in Attachment D.

Reptiles and Amphibians

No protected reptile or amphibian species listed in the SAA were identified during the preconstruction surveys for protected species. A juvenile coastal whiptail (*Aspidoscelis tigris stejnegeri*), a CDFW Species of Special Concern, was observed during the survey on November 2, 2018 at 12:35 pm on the eastern edge of the Project boundary (34.19140487, -118.17242617). The coastal whiptail is not a target protected species listed in the SAA. A California Natural Diversity Database (CNDDDB) California Native Species Field Survey Form will be prepared and submitted for the observation. A complete list of all reptiles, amphibians, and other wildlife species observed during the preconstruction surveys is provided in Attachment E.

Birds

No protected bird species were identified during the preconstruction surveys for protected species. A complete list of all birds and other wildlife observed during the preconstruction surveys is provided in Attachment E. Three additional preconstruction surveys for least Bell's vireo (*Vireo pusillus belli*) will be conducted on three separate days within one week prior to project initiation.

Bats

No protected bat species were identified during the focused preconstruction bat surveys. The results of the preconstruction surveys for bats are described in the Preconstruction Bat Survey Report for the Project transmitted to CDFW on November 16, 2018.

Discussion

No protected species listed in the SAA were observed during any of the preconstruction surveys. Based on the negative findings of the pre-construction presence/absence surveys, it was determined that protected species listed in the SAA were not present on the Project site and Project activities will not affect these protected species at this time. Measures implemented during biological monitoring during initial vegetation removal activities should provide adequate protection to avoid impacts to coastal whiptail during Project activities.

If you have any questions regarding the contents of this letter report, please contact me at (714) 648-0630 or lsimpson@ecorpconsulting.com.

SIGNED: 
Lauren Simpson
Staff Biologist
ECORP Consulting, Inc.
1801 Park Court Place, Building B. Ste 103.
Santa Ana, CA 92701

DATE: November 16, 2018

Attachments:

Attachment A: Devil's Gate Protected Species Survey Techniques

Attachment B: Representative Site Photos

Attachment C: Field Datasheets

Attachment D: Plant Compendium

Attachment E: Wildlife Compendium

ATTACHMENT A

Devil's Gate Protected Species Survey Techniques

October 16, 2018
(2018-047.006)

Mr. Steve Gibson
Senior Environmental Scientist (Specialist)
CA Department of Fish and Wildlife
4665 Lampson Avenue, Suite C
Los Alamitos, CA 90720

Subject: Protected Species Survey Techniques for the Devil's Gate Reservoir Sediment Removal and Management Project, in the City of Pasadena, California.

Dear Mr. Gibson,

This letter report has been prepared to provide survey techniques for protected species in accordance with Condition 2.10 in the California Department of Fish and Wildlife (CDFW) Streambed Alteration Agreement (SAA) 1600-2015-0263-R5 that was issued for the Devil's Gate Sediment Removal and Management Project (Project) on March 21, 2017.

ECORP is proposing the following survey techniques for approval by the CDFW for the protected species listed in the SAA. According to the SAA, protected species are defined as "a species fully protected under state law; a species listed under the California Endangered Species Act (Fish and Game Code § 2050 et seq.) and/or Endangered Species Act (16 U.S.C. § 1531 et seq.); a species identified by CDFW as a species of special concern; or any other species for which take is prohibited under state or federal law". The protected species found in the SAA are listed in Table 1 below.

Table 1. Protected Species in SAA

Common Name	Scientific Name	Special-Status Designation*
Plants		
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Fed: END CA: END
Reptiles and Amphibians		
Two-striped garter snake	<i>Thamnophis hammondi</i>	Fed: none CA: SSC
Coast range newt	<i>Taricha tarosa tarosa</i>	Fed: none CA: SSC
Western pond turtle	<i>Actinemys marmorata</i>	Fed: none CA: SSC
Coast patch-nosed snake	<i>Salvadora hexalepis</i>	Fed: none CA: SSC
Birds		
Burrowing owl	<i>Athene cunicularia</i>	Fed: none CA: SSC

Common Name	Scientific Name	Special-Status Designation*
Yellow warbler	<i>Dendroica petechia</i>	Fed: none CA: SSC
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Fed: END CA: END
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Fed: END CA: END
Yellow breasted chat	<i>Icteria virens</i>	Fed: none CA: SSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	Fed: none CA: SSC
Bats		
Western mastiff bat	<i>Eumops perotis californicus</i>	Fed: none CA: SSC
Western yellow bat	<i>Lasiurus xanthinus</i>	Fed: none CA: SSC
Pallid bat	<i>Antrozous pallidus</i>	Fed: none CA: SSC

* END – endangered; SSC – Species of Special Concern

Survey Techniques

Plants

Survey techniques for slender-horned spineflower (*Dodecahema leptoceras*) will include pedestrian transect surveys spaced approximately 30 feet apart within areas of suitable habitat in the project impact areas and 100-foot buffer. Survey techniques will be consistent with the accepted methodologies outlined by the United States Fish and Wildlife Service (USFWS 1996)¹, CDFW (CDFW 2018)², and the California Native Plant Society (CNPS 2001)³, but the timeframe will be altered to adhere to the project schedule and conditions of Project permits.

Reptiles and Amphibians

Survey techniques for the three protected reptile species (two-striped garter snake [*Thamnophis hammondi*], western pond turtle [*Actinemys marmorata*], and coast patch-nosed snake [*Salvadora hexalepis*]), and one protected amphibian species (coast range newt [*Taricha tarosa tarosa*]) will include visual encounter surveys to be conducted within the proposed work areas and a 500-foot buffer.

¹ United States Fish and Wildlife Service (USFWS). 1996. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. Available at http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/Listed_plant_survey_guidelines.pdf

² California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California, California Natural Resources Agency Department of Fish and Wildlife, March 20, 2018.

³ California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. California Native Plant Society, Sacramento, CA. December 9, 1983. Revised June 2, 2001. Available at http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf.

In accordance with Mitigation Measure (MM) BIO-3 for the Project (Chambers Group 2014⁴) and SAA 2.10, qualified biologists will conduct a survey for sensitive wildlife within 90 days prior to the commencement of ground disturbing activities. In general, visual encounter techniques for protected herpetofauna will follow accepted methodologies for western pond turtle by Holland (1991, 1994)^{5,6} and the United States Geological Society (2006)⁷. Two surveys will be conducted by CDFW-approved designated biologists familiar with the identification, life history, and behaviors of each species. Each survey will be conducted on a separate day and will be conducted when weather conditions are favorable. The habitat requirements for each species, as described on CaliforniaHerps.com⁸ and Stebbins (2003)⁹ will be reviewed prior to conducting surveys.

Surveys will focus on searching all potential habitats using binoculars and/or spotting scopes, as well as looking under various natural or artificial cover objects. Biologists will scan areas ahead of them, searching from a distance, before proceeding in a slow and quiet manner. When turning cover objects, biologists will carefully return each cover object to its original location in an attempt to keep potential impacts to a minimum. All open water habitats, including potential basking or haul-out sites, will be searched. Survey transects performed during the survey will be captured with the tracking on a handheld global positioning system (GPS) unit. Documentation of the transects completed will be provided as an appendix to the preconstruction survey report.

To help prevent the spread of disease, fungus, and invasive species, all field equipment will be free of weeds and when entering aquatic habitats will go through the CDFW Aquatic Invasive Species Disinfection/Decontamination Protocols. Areas of suitable habitat and capture and transport techniques for each Protected Species shall be identified prior to conducting the survey to allow any Protected herpetofauna observed during the surveys to be captured and relocated effectively.

Birds

Survey techniques for the six protected bird species (burrowing owl [*Athene cunicularia*], yellow warbler [*Dendroica petechia*], southwestern willow flycatcher [*Empidonax traillii extimus*], least Bell's vireo [*Vireo bellii pusillus*], yellow breasted chat [*Icteria virens*], and loggerhead shrike

⁴ Chambers Group, Inc. 2014. Devil's Gate Reservoir Sediment Removal and Management Project Final Environmental Impact Report (FEIR), Los Angeles County, California. Submitted to Los Angeles County Flood Control District, Water Resources Division, October 2014.

⁵ Holland, D. C. 1991. A synopsis of the ecology and status of the western pond turtle (*Clemmys marmorata*) in 1991. Prepared for the U.S. Fish and Wildlife Service, National Ecology Research Center, San Simeon, CA.

⁶ Holland, D. C. 1994. The western pond turtle: Habitat and history. Prepared for: U.S. Dept. of Energy, Bonneville Power Administration. Portland, OR. 303 pp.

⁷ United States Geological Survey. 2006. DRAFT Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion. Western Ecological Research Center, US Department of Interior, Sacramento, CA. 60 pp.

⁸ CaliforniaHerps.com: A Guide to the Amphibians and Reptiles of California. [web application] Accessed: September 27, 2018.

⁹ Stebbins, R. C. 2003. A field Guide to Western Reptiles and Amphibians. 3rd Edition. Boston: Houghton Mifflin Co. 533 pp.

[*Lanius ludovicianus*]) will include visual and auditory encounter surveys to be conducted within the proposed work areas and a 500-foot buffer.

Surveys for protected birds will begin at dawn and will continue until weather conditions become unfavorable for bird activity or until the bird activity level ceases. Surveys will focus on all potential habitats using binoculars and/or spotting scopes as necessary. Biologists will walk through the entire Project site and scan areas ahead of them, searching and listening from a distance, before proceeding in a slow and quiet manner. All birds observed both visually and audibly will be recorded and GPS points will be taken at all protected bird species observation locations. The surveys will be conducted by CDFW-approved designated biologists with experience surveying for sensitive riparian and upland bird species.

In addition to the surveys for protected bird species, three preconstruction surveys for least Bell's vireo will be conducted within seven days prior to Project initiation. These preconstruction surveys will be consistent with the methodologies in the least Bell's vireo survey protocol (USFWS 2001¹⁰) but the timeframe will be altered to adhere to the project schedule and conditions of Project permits (e.g. the three surveys will be conducted outside of the breeding season). The surveys will be conducted by a CDFW-approved designated biologist familiar with the identification, vocalizations, and behaviors of the species to determine the presence/absence of the species. Each survey will be conducted on a separate day and will be conducted between dawn and 11:00 a.m. when weather conditions are favorable.

Bats

Survey techniques for the three protected bat species (western mastiff bat [*Eumops perotis californicus*], western yellow bat [*Lasiurus xanthinus*], and pallid bat [*Antrozous pallidus*]) will include a daytime habitat and roost assessment and nighttime acoustic and emergence surveys to be conducted within the proposed work areas and a 300-foot buffer.

In accordance with MM BIO-5 and Condition 2.14 of the SAA, preconstruction bat surveys will be performed within 30 days prior to the commencement of vegetation or structure removal activities to avoid the direct loss of bats that could result from removal of trees and/or structures that may provide day or night roost habitat. CDFW-approved designated biologists will survey the project site, 300-foot buffer, and all trees and manmade structures (i.e. bridges, utility poles, kiosks, etc.) proposed to be directly impacted or removed to identify potential roost sites.

The initial bat survey will be performed in two parts, daytime surveys to identify potential roost sites within the impact area and evening surveys to perform emergence counts and acoustical monitoring of the potential roost sites. The diurnal portion of the survey will be done by a thorough visual inspection of the trees and structures within the impact areas to look for larger openings, cavities, crevices, loose bark, and other features that may provide roosting habitat.

⁹ US Fish and Wildlife Service. 2001. Least Bell's Vireo Survey Guidelines. Carlsbad Fish and Wildlife Office, CA. 3 pp.

The biologists will document any bat individuals or roosting colonies that are observed during the survey. Locations of potential roost trees will be recorded using a GPS unit in the field and discretely marked for biologists to revisit during the evening survey portion. Survey transects performed during the survey will be captured with the tracking on a handheld GPS unit. Documentation of the transects completed will be provided as an appendix to the bat survey report.

During the following evenings biologists will observe the potential roost trees using night-vision equipment to determine if the emergence of bats from the tree(s) occurs. Echometer Touch 2 PRO detectors will be used next to the trees during emergence to determine the species emerging, where possible. ECORP biologists will also collect acoustic data using passive Anabat™ detectors at various spots throughout the survey areas. Although these data will be imprecise as to the origin of detected bat species, the information will be useful as a tool to identify bat species that are foraging and may be roosting in the project site.

A second survey will be performed no later than seven days prior to construction activities. Designated biologists will conduct an exit survey with night vision equipment for any previously identified day-roosts (if applicable). Any occupied day roosts will be recorded and CDFW will be notified immediately to determine the next course of action and appropriate avoidance and minimization measures.

The surveys for protected bat species will be conducted separately from the other protected species surveys and a separate bat survey report will be generated and transmitted to CDFW prior to Project initiation.

General Survey Provisions

All surveys for protected wildlife will be conducted under favorable weather conditions. Surveys will not be conducted during extreme temperatures, sustained high winds, or heavy rain. All surveys for protected wildlife will be led by designated biologists that have been pre-approved by CDFW to survey for the appropriate species groups. Prior to conducting surveys, areas of suitable habitat and capture and transport techniques for each protected species shall be identified so capture and relocation can occur to keep protected species out of harm's way.

Biologists will record an inventory of searched habitats along with any species observed. All species detected during the surveys will be recorded on standardized field sheets, and when possible, photographs will be taken. Weather conditions at the start and end of the surveys will be recorded. Any protected species detected will be mapped on an aerial photo and the location will be recorded with a handheld GPS unit. The number of individuals, sex, age/size class, and any distinguishing features will be recorded for each sighting. All observations of protected species will be submitted to the CDFW's California Natural Diversity Database (CNDDDB). Survey transects performed during the surveys will be captured using handheld GPS units track logging to ensure 100 percent coverage of the work areas and associated buffers.

Documentation of the transects completed will be provided as an appendix to the preconstruction survey report(s).

ECORP will prepare a report that presents the findings of the protected species surveys to be transmitted to CDFW prior to project initiation. The report will include methods used to conduct the surveys, a description of the existing biological conditions, and an analysis of any protected species that were found to or have the potential to occur within the project site. The report will also contain copies of field notes, survey maps, representative photographs of the site, and CNDDDB forms for any protected special detected during the surveys.

If you have any questions regarding the contents of this letter report, please contact me at (714) 648-0630 or lsimpson@ecorpconsulting.com.

SIGNED: 

Lauren Simpson
Staff Biologist
ECORP Consulting, Inc.
1801 Park Court Place, Building B. Ste 103.
Santa Ana, CA 92701

DATE: October 16, 2018

ATTACHMENT B
Representative Site Photos



Photo 1. View of initial sediment removal area, facing north



Photo 2. View of central portion of initial sediment removal area, facing south



Photo 3. View from the base of the northside of the dam, facing northwest



Photo 4. California striped racer shed skin found on project site.



Photo 5. View of native California buckwheat scrub, facing northwest



Photo 6. View of Riversidean alluvial fan scrub, facing northeast



Photo 7. View of dense black willow thickets, facing east



Photo 8. Side-blotched lizard observed on the project site

ATTACHMENT C
Field Datasheets

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Surveyor Names: Carley Lancaster & Lauren Simpson Date: 11/1/18

Location(s): Devil's Gate Project Area + Buffer

Targeted Species: Slender-horned spineflower (Podocahema leptoceras)

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	0720	59	0-1	0
END	1100	71	0-1	20%

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
None observed	- Habitat was present in the RAFFS & CSS portions of the project area & buffer. DADLEP was not observed during the survey

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 11/1/18

ADDITIONAL NOTES:
(e.g., site description, existing disturbances, other sensitive species identified?)

Plant species obs

FRANHD	ERICAN	LEPSQU	PINPOW
MELAUB	MARVUL	SALLAS	HETARB
PLARAC	ARTDOU	STEVIR	PRULLI
RUMCRI	HELCUR	XANSTR	ENCFAR
QUEAGR	CONMAE	EUCGLO	BACPIC
SALGOD	LEPLAT	EUCCAM	SALAPI
BAESAL	NICEILA	OPULIT	FICCAR
AMBPSI	BROMAD	SALCOL	CALDEC
ERLEAS	SOLNIG	RHACAL	RUBURS
ARTCAL	HESWHI	SALLAE	CUSCAL
SALMEL	CENMEL	HIRINC	ALNRHO
HETGRA	SCHMOL	ARUDON	Bougainvillea
BRANIG	SAMMEX	ACMELA	ATLACT
POPFRE	RICCOM	RHASAT	PSUBEN
ARTDRA	MALLAU	TOXDIV	CERBET
DATWRI	OLEEUR	OPUENI	LACSER
EROCIC		AMAAUB	GINDAC
			RIBAUR
			TRITER
			ADEFAS
			SYAROM

INCIDENTAL SPECIES OBSERVED
(include sign: tracks, carcass, feathers, scat, etc.)

ACWO	HOFI	CA ground squirrel
WCSP	EUST	desert cottontail
CALT	RTHA	w. fence lizard
SO SP	LEGO	Common side-blotch lizard
CASJ	RSHA	bobcat
YRWA	SAPH	
BEWR	SPTO	
BLPH	NOEL	
ANHU	BUSH	
RCKI	WEBL	
	CAGU	

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 02 NOV 2018

Surveyor Names: Brian Zitt ; Taylor Dee

Location(s): Eastern portion of project area, including 500' buffer

Targeted Species: Western pond turtle, coast range newt, two-striped garter snake, coast patch nosed Snake

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	1042	88	1-4	0
END	1354	90	0-1	0

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
Western pond turtle	NOT OBSERVED Open water habitat observed along a drainage feature (run off) adjacent dirt road to south. Pool approximately 10x30' with depths of 2'; trash littered the banks of floating surface. No basking habitat. Upland aestivation habitat present.
Coast range newt	NOT OBSERVED Habitats present although at reduced function due to disturbances
two-striped garter snake	NOT OBSERVED Habitat present
Coast patch-nosed snake	NOT OBSERVED - Suitable habitat exist mostly in surrounding buffer

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 02 NOV 2018

ADDITIONAL NOTES:

(e.g., site description, existing disturbances, other sensitive species identified?)

Basins (man-made) located to the eastern side of survey area are dry. Culvert/drainage feature contained moist soils/grasses. Basins were recently mowed/maintained. Several CA ground squirrel burrows, large boulders mostly near flood gates between basins could provide shelter. Obs. backhoe operator transitioning along dirt road by basins. Equestrians, hikers, and tracks of bikes (motorized or mechanical) observed in wash. All natural cover objects were inspected, most were brittle and dry. No arachnids were discovered under cover. Along the eastern slope its steep with oaks and chaparral, as you approach the dam there's a dense willow community with several drainage/erosion features. ^{Abundant leaf litter,} Undercuts, root masses, heavy canopy are all present within these drainage features. Along the dirt road on the southeast portion a culvert runoff fed a small pool (~10'x30'). The pool was littered w/ trash. No species were observed. This was the only standing water observed during the survey.

INCIDENTAL SPECIES OBSERVED

(include sign: tracks, carcass, feathers, scat, etc.)

100's of side blotched lizards (juv; adult); w. fence lizards, orange-throated whiptail, coastal whiptail desert cottontail, CA ground squirrel, HUWI, BLDH, NDMO, CAKI, ACWO, CALT, LEGO (34.19140487, -118.17242617)
NOFL, CATH, YRWA, WSJA, WCSP, MODO, HOFI, NUWO, WEME, COYE, BASH, SPTO, SOSP, TUVU, RTHA, AMCR

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 11/12/2018

Surveyor Names: Adam Schroeder, Taylor Dee

Location(s): Western end of project area including 500 ft Buffer

Targeted Species: Western Pond Turtle, Coast Range Newt, Two-striped Garter Snake, Coast patch-nosed snake

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	0800	61	0-2	0
END	1330	77	0-2	0

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
Western Pond Turtle	- Not observed - No ponds or running water observed. Upland destination habitat present, but lack of water indicates species not likely to be present
Coast Range Newt	- Not observed - No ponds or running water observed. Upland habitat present, but lack of water indicates species not likely to be present.
Two-striped Garter snake	- Not observed - No ponds or running water observed. Upland habitat present, but lack of water indicates species not likely to be present.
Coast patch-nosed Snake	- Not observed - Marginal habitat on site and there is potential for this species to occur.

Devil's Gate Reservoir Project Protected Species Preconstruction Survey
Date: 11/12/2018
ADDITIONAL NOTES:

(e.g., site description, existing disturbances, other sensitive species identified?)

No sensitive species observed during the survey. Herp Species observed included western fence lizard and side blotted lizard. Numbers of side blotted and fence lizards were low across the site based on what would be expected. Surveyed internal and external trails on west end of the site, and retention basins on east end of the site. Surveyed through oak woodland, riparian woodland/scrub, and alluvial fan. Disturbances included unauthorized trail creation, various shelters/structures built w/ dead wood, equestrian use, trash.

Additional herp species sign included a shed snake skin, believed to be from a California striped racer, found in the wash, and a partial carcass of a western toad found in one of the retention basins.

INCIDENTAL SPECIES OBSERVED

(include sign: tracks, carcass, feathers, scat, etc.)

CA striped racer (shed), Bobcat (tracks), Coyote (scat, vocalizations), woodrat (middie), Desert cottontail, BSHA, NOFL, NUWD, ROPI, CALT, CSTA, CORA, BEWA, WREN, EUST, WEME, ACWO, SPTO, HOFI, BUSH, AMER, ANHU, SOSP, LEGG, CAKI, WCSP, BLPH, COHA, YRWA, CA ground squirrel, side blotted lizard, western fence lizard, western toad (carcass).


Devil's Gate Reservoir Project Protected Species Preconstruction Survey

 Surveyor Names: Lauren Simpson, Carley Lancaster Date: 2018-11-01

 Location(s): Devil's Gate Reservoir + 500ft buffer

 Targeted Species: Protected Birds: Burrowing owl, yellow Warbler, Southwestern willow Flycatcher, Least-Bells Vireo, Yellow-breasted Chat, Loggerhead Shrike

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	0720	59	0-1	0
END	1400	83	0-1	65

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
Burrowing Owl	- Not observed - Potential habitat observed in basins with high ground squirrel activity along SE portion of site. No sign observed.
Yellow Warbler	- Not observed - Riparian woodlands on-site provide habitat but species is only expected in the region during breeding season/migration
Southwestern willow Flycatcher	- Not observed - Marginal habitat in riparian woodlands. Species not expected in the region outside the breeding season.
Least-Bells Vireo	- Not observed - Marginal habitat in riparian woodlands/scrub. Species not expected in the region outside the breeding season
Yellow-breasted Chat	- Not observed - Riparian woodlands on-site provide habitat but species is only expected in the region during the breeding season
Loggerhead Shrike	- Not observed - Woodland / alluvial scrub habitats on-site may provide habitat



Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 2018-11-01

ADDITIONAL NOTES:

(e.g., site description, existing disturbances, other sensitive species identified?)

- No sensitive species observed.
- Surveyed through alluvial fan, oak woodland, and riparian woodland/scrub. Walked all external and internal trails.
- Disturbances on site include extensive non-native species & equestrian use/ unauthorized trail creation.

INCIDENTAL SPECIES OBSERVED

(include sign: tracks, carcass, feathers, scat, etc.)

American Crow	Parrot sp.	Mourning dove	Cooper's Hawk
Yellow-rumped warbler	Song Sparrow	Bewick's wren	whiptail lizard
White-crowned sparrow	European starling	Hutton's vireo	Lesser goldfinch
Acorn woodpecker	Anna's hummingbird	Rock pigeon	Hermit-thrush
Northern Flicker	Red-shouldered hawk	Song's phoebe	Red-tailed hawk
Ruby-crowned kinglet	California Quail	Cassin's kingbird	California ground
Oak titmouse	House finch	Cottontail	Squirrel
California scrub jay	Black phoebe	Western fence lizard	
California Towhee	Wren tit	Bobcat	
Northern mockingbird	Burn tit	Coyote (scat)	
Spotted-towhee	Nuttall's woodpecker		

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 2018-11-06

Surveyor Names: Lauren Simpson, Taylor Dee

Location(s): Project Impact Area (sediment removal + access roads) + 300-ft buffer

Targeted Species: Roosting Bats (sp Pallid Bat, western mastiff bat, western yellow bat)

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	1100	72	0-2	0
END	1500	73	1-4	0

SUITABLE HABITAT/SPECIES OBSERVATIONS?

TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
- No Targeted species observed	- 1 fan palm observed (potential yellow bat habitat) within impact area. - no cliff faces / boulder crevasses on site
Roost Bridge 1 34.18587589, -118.17716581	Carried Oak Grove drive over Arroyo Seco. Abutments accessible from south side of bridge. Concentrated guano piles present but no apparent day roosting features in bridge. No bats / chatter observed. Likely night roost location odor present.
Roost Bridge 2 34.18609817, -118.17870584	Carried 1-210 over arroyo seco. Can only access northern abutment. scattered guano present. Features for day-roosting available (crevices in expansion joint) but no bats / Chatter observed.

ADDITIONAL NOTES:

(e.g., site description, existing disturbances, other sensitive species identified?)

- Both Bridges observed are potential night roosts, 1-210 bridge has day-roost features but no bats were observed. Both bridges are outside of the project impact area and would experience no direct impacts from the project. Both are above arroyo seco. -will check bridges for night-roost use during nighttime survey.

* See attached tree roost survey datasheet for tree roost ^{potential} observations *

INCIDENTAL SPECIES OBSERVED

(include sign: tracks, carcass, feathers, scat, etc.)

Oak Titmouse	Acorn woodpecker	Bush tit	Cooper's Hawk
Black phoebe	Cassin's Kingbird	House Finch	American Kestrel
Western fence lizard	White-crowned sparrow	Mourning Dove	Eurasian Collared-Doe
Common raven	Lesser goldfinch	Turkey Vulture	Red-shouldered hawk
California Scrub jay	Anna's hummingbird	European Starling	Parrots p.
California Towhee	Bewick's wren	Yellow-rumped c. warbler	
California Ground Squirrel	Ruby Crowned Kinglet	Nuttall's woodpecker	
	Northern Flicker	Bobcat	

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 2018-11-06

Surveyor Names: Lauren Simpson & Taylor Dee

Targeted Species: Roosting bats (sp. Pallid Bat, western mastiff bat, western yellow bat)

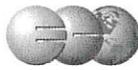
NIGHTTIME SURVEY CONDITIONS					
	Time	Temp (F)	Wind (mph)	% Cloud Cover	Moon Phase
START	<u>1625</u>	<u>70</u>	<u>1-3</u>	<u>0</u>	<u>100% waning crescent</u>
END	<u>1840</u>	<u>62</u>	<u>0-1</u>	<u>0</u>	<u>100% waning crescent</u>

Sunset Time: 1655 Type of Equipment Used: Anabat Express (2) Echometer-Touch 2 Pro (2), Nightvision (1)

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
OBSERVER LOCATION	NOTES (time of first bat observation, level of bat activity, approximate number of bats observed and where, etc.)
① A+ Tree ID 002 Untrimmed Fan Palm	- No bats observed emerging from palm tree. - 1st bat observed at 1644 approaching from SE direction and flying N. heard 2nd bat at 1733. - General Bat activity low - Artificial Street-lighting at tree high.
② A+ Tree ID 001 Large Salix Snay	- No bats observed emerging from target tree. - 1st bat observed at 1722 - flying W to E coming from behind observer. 2 bats recorded acoustically near tree. - General activity Low.

ADDITIONAL NOTES:
Anabat 1 placed at 34.18623397, -118.17788264 Anabat 2 placed at 34.18521821, -118.17329594 - After initial emergence period / observers could no longer see out-flights observers checked 2 bridges for night-roosting bats. A single night-roosting Myotis sp. was observed beneath the oak grove drive bridge. No bats were observed beneath the I-210 bridge. - overall insect activity generally low - Artificial lighting high in study area. - Myotis heard later in night

INCIDENTAL SPECIES OBSERVED (include sign: tracks, carcass, feathers, scat, etc.)
WTSW, CALT, Parrot Sp., Bush, GtHw



Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Surveyor Names: Lauren Simpson & Taylor Dee Date: 2018-11-07

Location(s): Project Impact Area (Sediment Removal) + Access Road) + 300-ft buffer

Targeted Species: Roosting Bats (Pallid Bat, W. Yellow bat, W. Mastiff Bat)

SURVEY CONDITIONS				
	Time	Temp (F)	Wind (mph)	% Cloud Cover
START	1200	70	0-1	0
END	1530	68	2-6	0

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
TARGET SPECIES	NOTES (coordinates, photo numbers, # individuals, sex, age/size class behaviors)
NO Target species observed.	- continued to survey within survey area for roost trees and roost structures.
	- no bat sign / roosts observed.

ADDITIONAL NOTES:
(e.g., site description, existing disturbances, other sensitive species identified?)
- Most large / medium trees on the project site would be considered Type 3 trees and/or would provide roosting habitat for foliage roosting species (Hoary bat)
* see attached tree roost datasheet for info on potential roost trees *

INCIDENTAL SPECIES OBSERVED			
(include sign: tracks, carcass, feathers, scat, etc.)			
Acom woodpecker	Cassin's Kingbird	Yellow-rumped warbler	Spotted Towhee
Red-shouldered hawk	California Towhee	White-crowned sparrow	Parrot sp.
CA Ground Squirrel	Northern Flicker	Song Sparrow	
Side-blotched lizard	Bewick's wren	Lesser goldfinch	
California Scrub Jay	Anna's hummingbird	European Starling	
Muttall's woodpecker	Blue-gray gnatcatcher	House Finch	
Common raven	Bush tit	Wren tit	
		Cottontail	

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Date: 2018-11-07

Surveyor Names: Lauren Simpson + Taylor Dee

Targeted Species: Roosting Bats (sp. Pallid bat, w. mastiff bat, w. yellow bat)

NIGHTTIME SURVEY CONDITIONS					
	Time	Temp (F)	Wind (mph)	% Cloud Cover	Moon Phase
START	1630	65	1-4	0	clear new moon
END	1815	60	1-4	0	clear

Sunset Time: 1654 Type of Equipment Used: Anabat Express (2), Geometer Touch 2 pro (2), Night Vision (1)

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
OBSERVER LOCATION	NOTES (time of first bat observation, level of bat activity, approximate number of bats observed and where, etc.)
Tree ID 012 Salix Snags	- No bats observed emerging from target trees - 1st bat heard at 1735 - 2 additional bats detected (1739+1747) - General bat activity very low
Tree ID 014+015 Salix Snags	- No bats observed emerging from target trees - 1st bat observed / heard at 1658 emerged from tall eucalyptus tree forest west of observer and flew east (LACI) - approximately 4 to 5 additional bats observed foraging overhead within 15-20 mins after sunset

ADDITIONAL NOTES:
- Insect activity generally low. - Artificial light level in the reservoir is extremely high due to adjacent lighting of JPL parking lot and High School field. Although <u>no moon</u> observers could see very well without use of flashlights. Anabat 1 at: 34.190122647, -118.170686736813 - Myotis heard later in night Anabat 2 at: 34.190620374, -118.17363766904

INCIDENTAL SPECIES OBSERVED (include sign: tracks, carcass, feathers, scat, etc.)
California Towhee Great Horned Owl (Heard) Cottontail Bush-tit Spotted Towhee Coyote

Devil's Gate Reservoir Project Protected Species Preconstruction Survey

Surveyor Names: Lauren Simpson + Torrey Rotellini Date: 2018-11-08

Targeted Species: Roosting Bats (sp. Pallid bat, W. Yellow bat, W. mastiff Bat)

NIGHTTIME SURVEY CONDITIONS					
	Time	Temp (F)	Wind (mph)	% Cloud Cover	Moon Phase
START	18 1625	69	0-3	0	1% waxing
END	1824	68	4-10	0	crescent

Sunset Time: 1653 Type of Equipment Used: Anabat Express (2), Echometer Touch 2 Pro (2), Night Vision (1)

SUITABLE HABITAT/SPECIES OBSERVATIONS?	
OBSERVER LOCATION	NOTES (time of first bat observation, level of bat activity, approximate number of bats observed and where, etc.)
Tree ID 006 Large Eucalyptus snag	- No bats observed emerging from targeted tree - 1st bat observed emerging from live Eucalyptus tree immediately behind target tree (class 3) before sunset (1626) - hoary bat (acoustic+visual) - one individual observed to return to same tree approx 1hr later - additional ~ 4 4 to 5 bats observed foraging in area
Tree ID 007 Two Large Eucalyptus snags	- No bats observed emerging from targeted trees - 1st bat heard/observed flying west to east at 1635 - Appx 3 additional individuals detected acoustically - ~ 1730 one great-horned owl landed on branch of one target tree

ADDITIONAL NOTES:
- Hoary bats emerged very early (~ 30 mins before sunset) appear to be roosting in Eucalyptus trees. - Artificial lighting is high and great horned owls have been present on each survey night. Bat predation risk in the reservoir is likely high. Anabat 1: 34.1883660341, -118.1741814875 Anabat 2: 34.19230410367, -118.172305030858

INCIDENTAL SPECIES OBSERVED (include sign: tracks, carcass, feathers, scat, etc.)	
Bush-tit American Kestrel Cooper's Hawk Acorn Woodpecker Yellow-rumped warbler	2 Coyote (heard) Red-shouldered hawk Great-horned owl Common poorwill.

ATTACHMENT D
Plant Compendium

PLANT SPECIES OBSERVED

Scientific Name	Common Name
VASCULAR PLANTS	
ANGIOSPERMS (DICOTYLEDONS)	
Adoxaceae	Elderberry Family
<i>Sambucus nigra</i> ssp. <i>cerulea</i> (= <i>S. mexicana</i>)	blue elderberry
Agavaceae	Century Plant Family
<i>Hesperoyucca whipplei</i>	chaparral yucca
Amaranthaceae	Amaranth Family
<i>Amaranthus albus</i> *	tumbleweed
Anacardiaceae	Sumac or Cashew Family
<i>Malosma laurina</i>	laurel sumac
<i>Schinus mole</i> *	Peruvian pepper tree
<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	Carrot Family
<i>Conium maculatum</i> *	poison hemlock
Arecaceae	Palm Family
<i>Syagrus romanzoffiana</i> *	queen palm
Asteraceae	Sunflower Family
<i>Ambrosia psilostachya</i>	western ragweed
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia dracunculus</i>	tarragon
<i>Artemisia douglasiana</i>	California mugwort
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i>	mulefat
<i>Centaurea melitensis</i> *	totalote
<i>Encelia farinosa</i>	brittlebush
<i>Erigeron canadensis</i>	horseweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Lactuca serriola</i> *	prickly lettuce
<i>Lepidospartum squamatum</i>	scale broom
<i>Pseudognaphalium beneolens</i>	cudweed
<i>Stephanomeria virgata</i>	twiggy wreath plant
<i>Xanthium strumarium</i>	cockleburr
Betulaceae	Birch Family
<i>Alnus rhombifolia</i>	white alder
Boraginaceae	Borage Family
<i>Heliotropium curassavicum</i>	salt heliotrope
Brassicaceae	Mustard Family
<i>Brassica nigra</i> *	black mustard
<i>Hirschfeldia incana</i> *	short-pod mustard
<i>Lepidium latifolium</i> *	perennial pepperweed
<i>Raphanus sativus</i> *	wild radish
Cactaceae	Cactus Family
<i>Opuntia engelmannii</i> var. <i>engelmannii</i>	Engelmann prickly pear
<i>Opuntia littoralis</i>	coast prickly pear

Convolvulaceae	Morning-Glory Family
<i>Cuscuta californica</i>	dodder
Cupressaceae	Cypress Family
<i>Calocedrus decurrens</i>	incense cedar
Euphorbiaceae	Spurge Family
<i>Ricinus communis*</i>	castor bean
Fabaceae	Legume Family
<i>Acmispon glaber (= Lotus scoparius)</i>	deerweed
<i>Melilotus albus</i>	white sweetclover
Fagaceae	Oak Family
<i>Quercus agrifolia</i>	coast live oak
Geraniaceae	Geranium Family
<i>Erodium cicutarium*</i>	red-stemmed filaree
Grossulariaceae	Gooseberry Family
<i>Ribes aureum</i>	golden currant
Lamiaceae	Mint Family
<i>Marrubium vulgare*</i>	white horehound
<i>Salvia apiana</i>	white sage
<i>Salvia columbariae</i>	chia sage
<i>Salvia mellifera</i>	black sage
Moraceae	Mulberry Family
<i>Ficus carica*</i>	common fig
Myrtaceae	Myrtle Family
<i>Eucalyptus camaldulensis*</i>	red gum
<i>Eucalyptus globulus*</i>	blue gum
Nyctaginaceae	Four O'Clock Family
<i>Bougainvillea spectabilis*</i>	great bougainvillea
Oleaceae	Olive Family
<i>Olea europaea*</i>	olive
<i>Fraxinus uhdei*</i>	shamel ash
Pinaceae	Pine Family
<i>Pinus ponderosa</i>	Ponderosa pine
Plantanaceae	Sycamore Family
<i>Platanus racemosa</i>	western sycamore
Polygonaceae	Buckwheat Family
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Rumex crispus*</i>	curly dock
Rhamnaceae	Buckthorn Family
<i>Frangula californica</i>	California coffeeberry
Rosaceae	Rose Family
<i>Adenostoma fasciculatum</i>	chamise
<i>Cercocarpus betuloides</i>	mountain mahogany
<i>Heteromeles arbutifolia</i>	toyon
<i>Prunus ilicifolia</i>	holly leaf cherry
<i>Rubus ursinus</i>	California blackberry

Salicaceae	Willow Family
<i>Populus fremontii</i>	Fremont cottonwood
<i>Salix gooddingii</i>	black willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	Arroyo willow
Simaroubaceae	Simarouba Family
<i>Ailanthus altissima</i> *	tree of heaven
Solanaceae	Nightshade Family
<i>Datura wrightii</i>	jimson weed
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum nigrum</i> *	black nightshade
Zygophyllaceae	Caltrop Family
<i>Tribulus terrestris</i> *	puncture vine
ANGIOSPERMS (MONOCOTYLEDONS)	
Poaceae	Grass Family
<i>Arundo donax</i> *	giant reed
<i>Bromus madritensis</i> *	red brome
<i>Cynodon dactylon</i> *	Bermuda grass

*Nonnative species

**CDFW California Species of Special Concern/CDFW Fully Protected Species/Watch List Species

***Federally endangered or threatened/State endangered or threatened

ATTACHMENT E
Wildlife Compendium

WILDLIFE SPECIES OBSERVED

Scientific Name	Common Name
REPTILES	
Colubridae	Colubrid Snakes
<i>Coluber lateralis lateralis</i>	California striped racer (shed skin)
Phrynosomatidae	Spiny Lizards
<i>Sceloporus occidentalis</i>	western fence lizard
<i>Uta stansburiana</i>	common side-blotched lizard
Teiidae	Whiptails
<i>Aspidoscelis tigris stejnegeri**</i>	coastal whiptail
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail
AMPHIBIANS	
Bufonidae	True Toads
<i>Anaxyrus boreas</i>	western toad (carcass)
BIRDS	
Accipitridae	Hawks
<i>Accipiter cooperii*</i>	Cooper's hawk
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo lineatus</i>	red-shouldered hawk
Aegithalidae	Bushtits
<i>Psaltriparus minimus</i>	bushtit
<i>Thryomanes bewickii</i>	Bewick's wren
Apodidae	Swifts
<i>Aeronautes saxatalis</i>	white-throated swift
Caprimulgidae	Nightjars
<i>Phalaenoptilus nuttallii</i>	common poorwill
Cathartidae	Vultures
<i>Cathartes aura</i>	turkey vulture
Columbidae	Pigeons and Doves
<i>Columba livia</i>	rock pigeon
<i>Streptopelia decaocto</i>	Eurasian collared-dove
<i>Zenaida macroura</i>	mourning dove
Corvidae	Jays and Crows
<i>Aphelocoma californica</i>	California scrub-jay
<i>Corvus corax</i>	common raven
<i>Corvus brachyrhynchos</i>	American crow
Falconidae	Falcons and Caracaras
<i>Falco sparverius</i>	American kestrel
Fringillidae	Finches
<i>Spinus psaltria</i>	lesser goldfinch
<i>Haemorhous mexicanus</i>	house finch
Icteridae	Blackbirds and Orioles
<i>Sturnella neglecta</i>	western meadowlark
Mimidae	Mockingbirds and Thrashers
<i>Mimus polyglottos</i>	northern mockingbird

<i>Toxostoma redivivum</i>	California thrasher
Odontophoridae	New World Quail
<i>Callipepla californica</i>	California quail
Paradoxornithidae	Wrentits
<i>Chamaea fasciata</i>	wrentit
Paridae	Titmice
<i>Baeolophus inornatus</i>	oak titmouse
Parulidae	New World Warblers
<i>Geothlypis trichas</i>	common yellowthroat
<i>Setophaga coronata</i>	yellow-rumped warbler
Passerellidae (previously Emberizidae)	Sparrows and Towhees
<i>Melospiza melodia</i>	song sparrow
<i>Pipilo crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
Picidae	Woodpeckers
<i>Colaptes auratus</i>	northern flicker
<i>Dryobates nuttallii</i>	Nuttall's woodpecker
<i>Melanerpes formicivorus</i>	acorn woodpecker
Psittacidae	Old World Parrots
<i>Amazona sp.</i>	parrot sp.
Regulidae	Kinglets
<i>Regulus calendula</i>	ruby-crowned kinglet
Strigidae	True Owls
<i>Bubo virginianus</i>	great horned owl
Sturnidae	Starlings
<i>Sturnus vulgaris</i>	European starling
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's hummingbird
Turdidae	Thrushes
<i>Catharus guttatus</i>	hermit thrush
<i>Sialia mexicana</i>	western bluebird
Tyrannidae	Tyrant Flycatchers
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	Say's phoebe
<i>Tyrannus vociferans</i>	Cassin's kingbird
Vireonidae	Vireos
<i>Vireo huttoni</i>	Hutton's vireo
MAMMALS	
Canidae	Dogs, Wolves, and Foxes
<i>Canis latrans</i>	coyote (scat and vocalizations)
Cricetidae	New World Rats and Mice
<i>Neotoma sp.</i>	woodrat sp. (middens)
Felidae	Cats
<i>Lynx rufus</i>	bobcat

Leporidae	Hares and Rabbits
<i>Sylvilagus audubonii</i>	desert cottontail
Sciuridae	Squirrels
<i>Otospermophilus beecheyi</i>	California ground squirrel

*Nonnative species

**CDFW California Species of Special Concern/CDFW Fully Protected Species/Watch List Species

***Federally endangered or threatened/State endangered or threatened