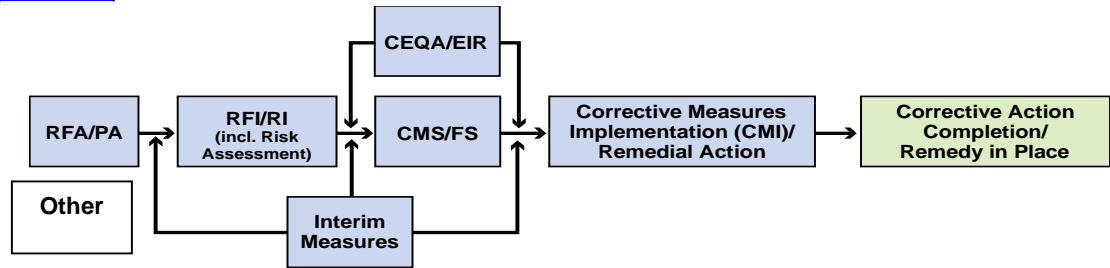


Topock Project Executive Abstract

<p>Document Title:</p> <p>Preliminary Habitat Analysis for Bat Use at PG&E Topock Remediation Project, San Bernardino County, California</p> <p>Final Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Date of Document: March 2, 2015</p> <p>Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other)</p> <p>PG&E</p>
<p>Priority Status: <input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW</p> <p>Is this time critical? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Action Required:</p> <p><input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Review & Comment</p>
<p>Type of Document:</p> <p><input type="checkbox"/> Draft <input type="checkbox"/> Report <input type="checkbox"/> Letter <input type="checkbox"/> Memo</p> <p><input checked="" type="checkbox"/> Other / Explain: Letter report</p>	<p>Return to: _____</p> <p>By Date: _____</p> <p><input type="checkbox"/> Other / Explain:</p>
<p>What does this information pertain to?</p> <p><input type="checkbox"/> Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA)</p> <p><input type="checkbox"/> RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment)</p> <p><input type="checkbox"/> Corrective Measures Study (CMS)/Feasibility Study (FS)</p> <p><input type="checkbox"/> Corrective Measures Implementation (CMI)/Remedial Action</p> <p><input type="checkbox"/> California Environmental Quality Act (CEQA)/Environmental Impact Report (EIR)</p> <p><input type="checkbox"/> Interim Measures</p> <p><input checked="" type="checkbox"/> Other / Explain: Biological Reports</p>	<p>Is this a Regulatory Requirement?</p> <p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>If no, why is the document needed?</p>
<p>What is the consequence of NOT doing this item? What is the consequence of DOING this item?</p> <p>This report was requested by DTSC to support the Soil Investigation EIR. Not performing the survey and preparing this report would impeded analysis associated with the Soil Investigation EIR.</p>	<p>Other Justification/s:</p> <p><input type="checkbox"/> Permit <input checked="" type="checkbox"/> Other / Explain: Requested by DTSC</p>
<p>Brief Summary of attached document:</p> <p>The goal of this bat habitat survey was to assess the potential for bat roosting and foraging habitat in the proposed soil investigation areas. The bat survey was conducted on January 29 and 30, 2015 by Dr. Pat Brown and Dr. William Rainey. Many of the bat species that might be present are inactive in the winter, so this survey was used to assess habitat conditions and to plan more definitive surveys in the spring. Five bat species were detected during the evening of January 29 using Anabat ultrasonic detectors: Yuma myotis; California myotis, western canyon bat; pallid bat, and Mexican free-tailed bat. No Townsend's big eared bats were detected. Based on review of the proposed project and primarily the location of soil investigation activities, the project is not anticipated to have a significant adverse impact on bats. To be sure that impacts remain less than significant, avoiding certain activities during the maternity season is recommended.</p> <p>Written by: PG&E</p>	
<p>Recommendations:</p> <p>This report is for information only.</p>	
<p>How is this information related to the Final Remedy or Regulatory Requirements:</p> <p>The survey and this report provides information to support the Soil Investigation EIR analysis.</p>	
<p>Other requirements of this information?</p> <p>None.</p>	

Related Reports and Documents:

Click any boxes in the Regulatory Road Map (below) to be linked to the Documents Library on the DTSC Topock Web Site (www.dtsc-topock.com).



Legend

- RFA/PA – RCRA Facility Assessment/Preliminary Assessment
- RFI/RI – RCRA Facility Investigation/CERCLA Remedial Investigation (including Risk Assessment)
- CMS/FS – RCRA Corrective Measure Study/CERCLA Feasibility Study
- CEQA/EIR – California Environmental Quality Act/Environmental Impact Report

Version 10

March 2, 2015

To: Marjorie A. Eisert
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From: Patricia Brown, Ph.D.
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Regarding: **Preliminary Habitat Analysis for Bat Use at PG&E Topock Remediation Project, San Bernardino County, CA**

The goal of the field study conducted January 29 and 30, 2015 was to assess the potential for bat roosting and foraging habitat on the Project site. Bat biologists Dr. Patricia Brown and Dr. William Rainey met with ESA senior wildlife biologist, Tom Moolio and CH2M HILL project biologist, Steve Long, as well as tribal monitors from the Hualapai, Fort Mohave, and the Colorado River Indian Tribes. PG&E Site Representative Chris Smith was also present.

The weather was cool with rain predicted. Over the course of the two days we reviewed all of the areas that could be potentially affected by the proposed soil remediation project. Six Anabat ultrasound detectors were placed before dark on January 29 in areas with potential for roosting or foraging habitat. When rain began before midnight, the detectors were removed because they were not protected within waterproof containers, and because bat activity is inhibited by rain. The prediction of more rain on January 30 precluded recording of further acoustic data.

Results

Many of the bat species that could use the site for foraging and/or roosting are inactive during the winter (see Table 1). This includes Townsend's big-eared bat (*Corynorhinus townsendii*), currently a California Department of Fish and Wildlife Candidate for Threatened or Endangered status. Based on research conducted by Dr. Brown along the Lower Colorado River between 1968 to the present utilizing roost surveys, mist netting and acoustic recordings, the bats listed in the appended table could occur at some season on the project site. The echolocation signals recorded by the Anabat detectors were for the five species noted in bold face on Table 1. The best foraging habitat for most of the vespertilionid bats (including Townsend's big-eared bat) and California leaf-nosed bats (*Macrotus californicus*) is in the microphyllid woodland of palo verde and ironwood trees within Bat Cave Wash and the East Ravine.

Many of the species that could occur on the Topock site are crevice-roosting species, and potential roosting habitat occurs in locations scattered throughout the project area, including the sides of Bat Cave Wash, the East Ravine and the red rock exposed adjacent to the Lower Colorado River near the pipeline crossing. The larger cavities in the banks along Bat Cave Wash downstream from the Topock Compressor Station and within the rock face adjacent to the Colorado River near the outlet of the East Ravine could provide roosting habitat for Townsend's big-eared bat.

Discussion:

Additionally, more definitive surveys will be conducted during the Spring when resident and reproductive bat species are active. These surveys will include acoustic surveys throughout the project area and mist netting, especially within Bat Cave Wash and the East Ravine. Most of the crevices and cavities that could be used by bats are relatively inaccessible, but observations with night vision equipment (augmented with infrared lights) after sunset may identify areas of bat emergence. These focused surveys will be completed in the spring prior to the initiation of soil investigation activities.

Based on review of the proposed project and primarily the location of soil investigation activities, the project is not anticipated to have a significant adverse impact on bats. To be sure that impacts remain less than significant, it is recommended that any potential soil investigation activities in the vicinity of the sides of Bat Cave Wash downstream of the Topock compressor station and within the East Ravine should be scheduled to avoid the maternity season. This extends from when pregnant females first aggregate through the weaning of the juvenile bats and dispersal of the colony. Since multiple species are involved, with asynchronous reproductive timing, the maternity season in the Topock area is mid-March through August.

Table 1. BATS POTENTIALLY OCCURRING NEAR THE PG&E TOPOCK REMEDIATION SITE

Family/Scientific Name	Common Name	USFWS	CDFW
Chiroptera (Bats)			
Phyllostomidae (American leaf-nosed bats)			
<i>Macrotus californicus</i>	California leaf-nosed bat	SC	CSC
Vespertilionidae (Vesper bats)			
<i>Myotis yumanensis</i>	Yuma myotis	SC	-
<i>Myotis velifer</i>	Cave myotis	SC	CSC
<i>Myotis occultus</i>	Arizona myotis	SC	CSC
<i>Myotis californicus</i>	California myotis	-	-
<i>Parastrellus hesperus</i>	Western canyon bat	-	-
<i>Eptesicus fuscus</i>	Big brown bat	-	-
<i>Lasiurus blossevillii</i>	Western red bat	-	CSC
<i>Lasiurus xanthinus</i>	Southern yellow bat	-	-
<i>Lasiurus cinereus</i>	Hoary bat	-	-
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SC	Candidate T/E
<i>Antrozous pallidus</i>	Pallid bat	-	CSC
Molossidae (Free-tailed bats)			
<i>Tadarida brasiliensis</i>	Mexican free-tailed bat	-	-
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	-	CSC
<i>Nyctinomops macrotis</i>	Big free-tailed bat	SC	CSC
<i>Eumops perotis</i>	Western mastiff bat	SC	CSC

USFWS

U.S. Fish and Wildlife Service

Federal Species of Concern

SC = Former Category 2 candidate

CDFW

California Department of Fish and Wildlife

CSC = California Species of Concern

Bold = Detected in current acoustic survey