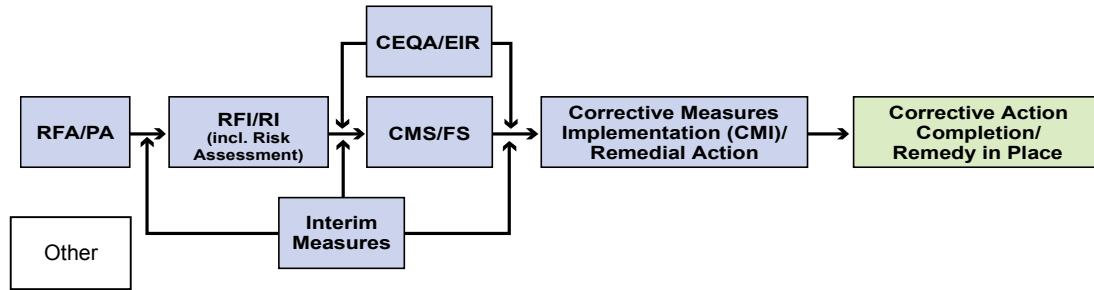


Topock Project Executive Abstract

<p>Document Title: Desert Tortoise Habitat Survey, Topock Compressor Station Evaporation Ponds and Access Roadway</p> <p>Final Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Date of Document: April 2, 2015</p> <p>Who Created this Document? (i.e. PG&E, DTSC, DOI, other): PG&E</p>
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<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:</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>What is the consequence of NOT doing this item? What is the consequence of DOING this item?</p> <p>This report addresses a tribal comment on 90% Design. Not performing the survey and preparing this report would impede analysis associated with the implementation associated with the Groundwater Remedy.</p>	<p>Is this a Regulatory Requirement?</p> <p><input checked="" type="checkbox"/> Yes <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 addresses a tribal comment on 90% Design. Not performing the survey and preparing this report would impede analysis associated with the implementation associated with the Groundwater Remedy.</p>	<p>Other Justification/s:</p> <p><input type="checkbox"/> Permit <input checked="" type="checkbox"/> Other / Explain: Completed in response to tribal comments on 90% Design</p>
<p>Brief Summary of attached document:</p> <p>The goal of this non-protocol desert tortoise survey was to assess the potential for tortoise habitat or active use in the area of the Evaporation Ponds and the access roadway. This desert tortoise habitat survey was conducted on January 29, 2015 by biologist William Lee of Transcon Environmental, Inc. Because this survey was conducted during the inactive season when tortoises would not likely be found outside of a burrow, the survey was focused on detecting wintering burrows within the ravines and washes. All burrows that could be accessed safely by walking or climbing were inspected. This survey did not reveal any evidence of current or active use by desert tortoises and it was concluded that the proposed groundwater remedy activities around the Evaporation Ponds and access roadway would not have a new and significant impact that was not previously disclosed in the EIR. It was also considered to be consistent with the 'not likely to adversely affect' determination in the PBA.</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 implementation of the Groundwater Remedy.</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

Desert Tortoise Habitat Survey, PG&E Topock Compressor Station Evaporation Ponds and Access Roadway

PREPARED FOR: Steve Long/CH2M HILL
Marjorie Eisert/CH2M HILL

PREPARED BY: Transcon Environmental, Inc.

DATE: April 2, 2015

Background

Pacific Gas and Electric Company (PG&E) owns and operates Topock Compressor Station (TCS) and associated natural gas pipeline facilities near Needles, San Bernardino County, California. PG&E has contracted with CH2M HILL to conduct groundwater investigations and implement remedial activities in areas surrounding TCS that have been affected by historical operations. The proposed groundwater remedy activities include design, construction, operation, maintenance, decommissioning, and restoration activities (the "Project"). Proposed Project activities will be performed in accordance with state and federal laws, including the requirements stated in the *Topock Compressor Station Groundwater Remediation Project Final Environmental Impact Report* (EIR) (Department of Toxic Substances Control [DTSC], 2011) and the *Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Final Remedy Report* (hereinafter referred to as the Programmatic Biological Assessment [PBA]) (CH2M HILL, 2014).

Since the EIR was released in 2011, the design of the Project has been refined and through the refinements, the EIR project area has increased, resulting in the Expanded Project Area. The EIR and PBA describe potential effects on federal- and state-protected species, including the desert tortoise, from the Project. These documents also propose mitigation and protective measures to reduce potential impacts to these species.

The purpose of this survey is to assess the potential for desert tortoise habitat along the access roadway near the TCS evaporation ponds that was not previously assessed. The survey was undertaken in response to a comment about tortoises becoming more active in this area; the comment came from the Fort Mojave Indian Tribes, Hualapai Tribe, and Cocopah Tribe (Attachments 1, 2, and 3 of the agencies' direction on remaining elements for 90 percent supplemental design, dated December 23, 2014). The survey was undertaken in accordance with mitigation measures described in Sections 3.4 and 5.2.3.8 of the PBA (CH2M HILL, 2014), and Mitigation Measure BIO-2b of the EIR Mitigation Monitoring and Reporting Program (MMRP) (DTSC, 2011).

The Mojave or Agassiz desert tortoise (*Gopherus agassizii*) is a herbivorous reptile that lives west and north of the Colorado River, in the Mojave Desert region of California, Arizona, Nevada, and Utah. The species is listed as threatened under Federal and State Endangered Species Acts. From 2004 to 2013, PG&E contracted with qualified biologists to conduct U.S. Fish and Wildlife (USFWS) protocol-level presence/absence desert tortoise surveys within the Action Area as defined on Figure 2 of the PBA, which includes, but is larger than, the EIR project area. No live desert tortoises were documented within the Action Area during these surveys; however, five sets of deteriorated bone fragments and carcasses, and five potential burrows were documented over a 9-year survey period (GANDA 2009). Because of the lack of live desert tortoise sightings over the extended survey period, USFWS and the Bureau of Land Management have lifted the requirement for PG&E to conduct annual protocol-level surveys (USFWS, 2010). However, PG&E is still required to conduct pre-activity surveys and monitoring for desert tortoise during field activities within suitable habitat (DTSC, 2011; CH2M HILL, 2014).

As described in the PBA, PG&E currently uses four evaporation ponds located within the Action Area, approximately 1,600 feet west of TCS as part of their normal TCS facility operations. In the current Project design, PG&E intends to include the use of the evaporation ponds in the management of wastewater generated from the Project, as described in the 90 percent design documents and the PBA. To accommodate the additional wastewater, PG&E will need to improve the ponds. The western portion of the area inside the ponds’ fenced area will be used for staging and laydown during installation of these planned improvements. The ponds are accessed by a well-maintained dirt access road that extends east from Park Moabi Road to the south of Interstate 40 (I-40). The pond improvement activities will temporarily increase vehicular traffic on the access road during the construction period. In response to direction from the Department of Interior and DTSC to further consider tribal input, including a request by the tribes for a desert tortoise survey in the pond area, CH2M HILL contracted Transcon Environmental Inc. (Transcon) to assess the potential for desert tortoise habitat or active tortoise use in that area, including the access roadway (hereinafter referred to as the Survey Area) (Figure 1).

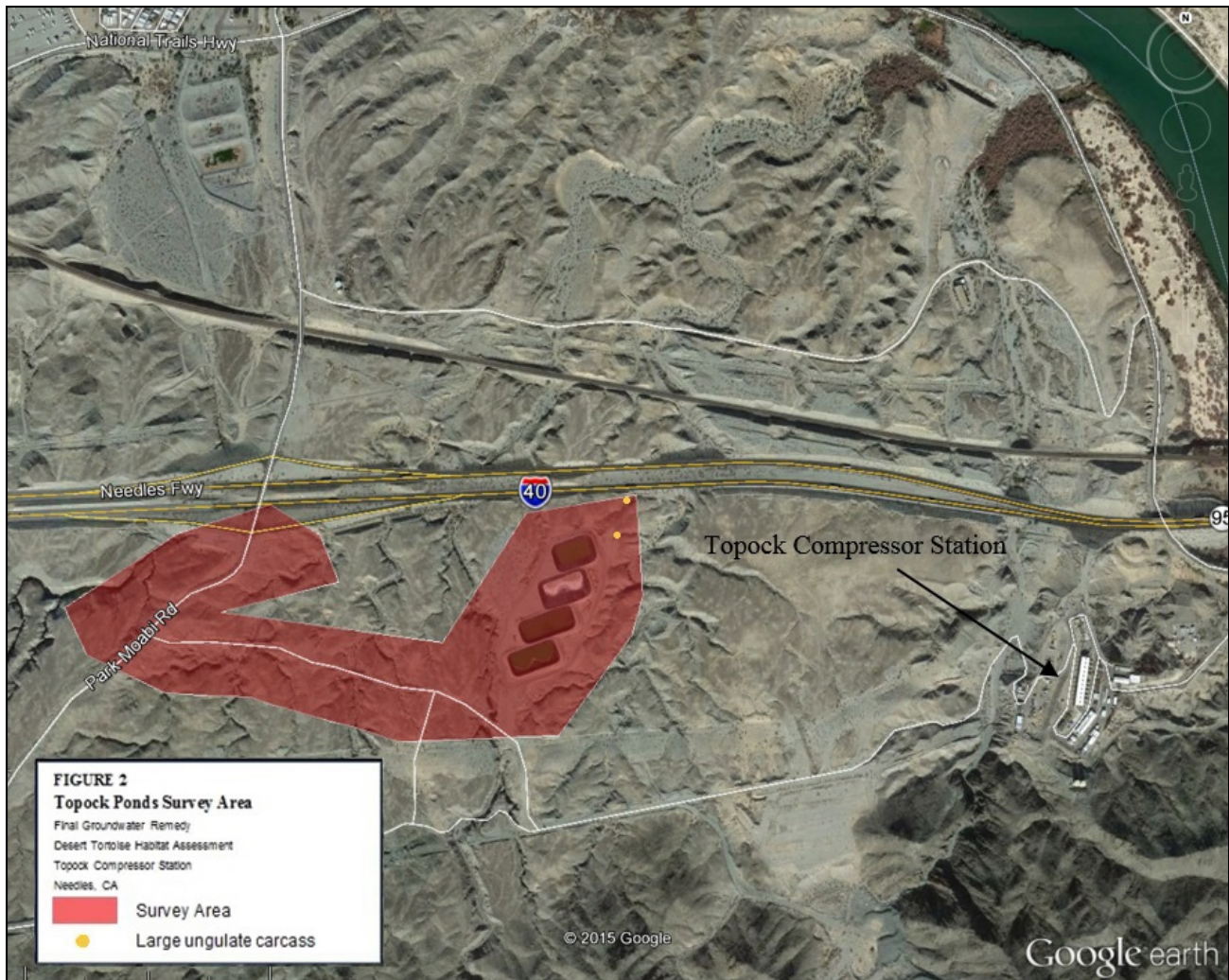


FIGURE 1
Aerial Image of the Area Surveyed with Ungulate Remains Plotted

Site Description

The TCS is located on approximately 65 acres of PG&E-owned land about 15 miles southeast of Needles, California. The site is accessed from Park Moabi Road off I-40. The TCS, which is located within the Project site, is situated approximately 600 feet west of the Colorado River and is surrounded by the Havasu National Wildlife Refuge. The Project site is culturally significant for certain area Native American Tribes.

The topography is made up of deep washes, arroyos, and ravines separated by steep slopes, rolling hills, and desert pavement. Photos 1 through 3 (see attachment) document the representative plant communities and topography of the area. Desert riparian vegetation occurs within dry washes throughout the Project area. Land cover around the TCS and the evaporation ponds is composed of upland communities dissected by ravines and desert washes.

The desert pavement and rolling hills are sparsely vegetated by species common in the creosote vegetation community, predominantly creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Mojave Desert wash scrub dominates the ephemeral washes and ravines, and ranges in density from sparse cover to areas that are impassable on foot. Prevalent species in the washes and ravines include cat-claw acacia (*Senegalia greggii*), palo verde (*Parkinsonia florida*), and desert lavender (*Hyptis emoryi*). TCS is bordered on the north by I-40, on the south by the Chemehuevi Mountains, and on the west by the deep canyon of Bat Cave Wash.

Survey (Methods)

On January 29, 2015, Transcon biologist, William Lee, met with representatives from the Hualapai Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribes, and the CH2M HILL project biologist, Steve Long. A protocol-level desert tortoise survey was not performed for this assessment. Rather, this reconnaissance-level survey sought to identify evidence of the presence of desert tortoise and assess potential habitat within the Survey Area. In order to assess the probability of desert tortoise presence, Mr. Lee examined the area surrounding the evaporation ponds and the access road leading from Park Moabi Road (Figure 1).

Before conducting the survey, Mr. Lee presented the tribal representatives with a general overview of desert tortoise biology; a description of their typical habitats, behaviors, size, and shape; and the topographical location of desert tortoise burrows. It was explained that desert tortoises rarely dig burrows in open, flat ground, and prefer to dig into banks or under vegetation and rock. Furthermore, the appearance and composition of desert tortoise scat and carcass classes were described.

Because the survey occurred during the inactive season, it was unlikely that a desert tortoise would be found outside of a burrow; therefore, the survey was focused on detecting wintering burrows. It was explained that the topography and sparsely vegetated landscape dissected by steep ravines and washes was poor habitat for the tortoise to dig a winter burrow. Given the sparse vegetation on the desert pavement and rolling hills, and steep slopes of the ravines, Mr. Lee determined that the highest probability of detecting a desert tortoise or sign would be to survey the washes and ravines where the slopes could be scanned for burrows and caliche caves that were then inspected. As many of the visible and accessible burrows as possible were inspected for desert tortoise or sign during the survey. Burrows and caliche caves high on the ravine walls that could not be reached safely were not inspected.

A member from the Hualapai Tribe and a member from the Fort Mojave Indian Tribes accompanied Mr. Lee for the entire time as he inspected the washes and slopes around the evaporation ponds and along the access road, while the remainder of the group stayed on top of the ridges and hills.

A hand-held global positioning system (GPS) unit was used for navigation. To ensure that the entire Survey Area was covered, the survey area coordinates were provided beforehand and downloaded into the unit. Any observed presence or activity signs of other protected species were also taken into consideration and documented using the GPS unit and photographs.

Results

Critical Habitat Assessment

The Project is not located within USFWS-designated critical habitat for the desert tortoise. The nearest designated critical habitat is approximately 9 miles to the west of the Project area.

Observations

There were no live desert tortoises or definite presence or activity signs in the Survey Area; moreover, no other sensitive or protected species, or presence or activity signs were discovered. Dozens of caliche caves, which could be used as temporary shelter for tortoises, occurring in the washes and slopes in the area were inspected (see Photos 4 and 5 in the attachment), but no presence or activity signs were detected. All caves were too shallow for a tortoise to winter in. It is most likely that small and large mammals use these burrows and caves. No desert tortoise scat, carcasses, or bone fragments were observed.

Incidental Species Observations

An approximately 12-inch-long tail with bone and fur still attached of an unknown ungulate species was discovered (Photo 6) in one of the dry washes northeast of the evaporation ponds. Additionally, the remains of a large ungulate, believed to be a separate carcass not associated with the tail, were also found within the Survey Area. Two large, 5- to 6-inch-wide vertebrae were found about 30 meters down the wash (Photo 7), and the remainder of the backbone with dried skin/fur still attached was discovered farther downstream (Photo 8). These remains were located at E0728722 N3844473 (North American Datum 83) and were not positively identified.

At I-40 to the north of the Project site and up the slope, the group observed a pile of bones, likely those of an animal hit on the highway. The bones were off the bank of the east-bound lane of I-40. The pile consisted of at least eight long (approximately 18 inches), thin rib bones. The bones were not inspected because of safety concerns associated with scaling a barbed-wire fence and working alongside the highway. The pile of bones was located at approximately E0728709 N3844570 (see Figure 1). It is believed that a vehicle hit the animal on the highway, and the remains were hauled up the wash by scavengers.

Discussion and Recommendations

The desert tortoise habitat survey described in this report did not reveal evidence of current or active use. As stated in the PBA, the final determination that the Project is “not likely to adversely affect” desert tortoise habitat was concluded in consideration of the direct, indirect, and cumulative potential impacts to the desert tortoise from Project activities. As stated in the EIR, with implementation of EIR Mitigation Measure BIO-2b, impacts to desert tortoise would be less than significant. Because of the lack of live desert tortoise sightings in the area over the course of nine annual protocol surveys, it is unlikely that a tortoise would be present within the Survey Area, which was surveyed as recently as January 29, 2015.

It also would be unlikely that a tortoise would migrate into this area from the north because I-40 provides a relatively impassable barrier, with the exception of several culverts under the highway. Alternately, tortoises could potentially access the Project Area by travelling along the base of the Chemehuevi Mountains to the south of the Project location. However, this route would require tortoises to navigate the steep washes and ravines, and travel across the rolling hills and desert pavement with high exposure to predators and elements. Because of these considerations, the probability of a tortoise being present around the evaporation ponds or along the access road, or being affected by Project activities is considered to be very low.

Based on the lack of findings of desert tortoises or evidence of presence or activity in the Survey Area, it is concluded that the improvement and use of the ponds for Project activities, the management of Project wastewater, and the resulting temporary increase of construction vehicular traffic along the access road from Park Moabi, would not have a new, significant impact not disclosed in the EIR and is consistent with the “not likely to adversely affect” determination in the PBA.

It is concluded that the general project management measures and the species-specific mitigation and protection measures listed in the PBA and EIR will be sufficient to protect desert tortoise during Project activities. Those measures (described in Section 3.4 and in Section 5.2.3.8 of the PBA) and Mitigation Measure BIO-2b of the EIR MMRP include pre-construction surveys that will cover the work area before the initiation of ground-disturbing activities and monitoring for the presence of tortoises during the execution of Project activities.

References

CH2M HILL. 2014. *Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station, Final Groundwater Remedy*. April.

Department of Toxic Substances (DTSC). 2011. *Topock Compressor Station Groundwater Remediation Project Final Environmental Impact Report*. January.

Garcia and Associates (GANDA). 2009. *Desert Tortoise Presence/Absence Surveys for the PG&E Topock Compressor Station*. September

U.S. Fish and Wildlife Service (USFWS). 2010. E-mail concurrence from Pamela Innis/USFWS, forwarded by Cathy Wolff-White/Bureau of Land Management to Yvonne Meeks/PG&E in response to February 24, 2010 letter, entitled "Proposed Frequency Modifications for Protocol Surveys Performed in Accordance with the Programmatic Biological Assessment for the Pacific Gas and Electric Company Topock Compressor Station." March 23.

Attachment 1
Survey Photos



PHOTO 1

Habitat and topography around the evaporation ponds and access road (facing south towards Chemehuevi Mountains).



PHOTO 2

Habitat and topography around the evaporation ponds (facing east towards TCS).



PHOTO 3
Habitat and topography around the evaporation ponds (looking up ravine from dry wash).



PHOTO 4
Example 1 of a caliche cave that could be used as a temporary shelter for a desert tortoise.



PHOTO 5

Example 2 of a caliche cave that could be used as a temporary shelter for a desert tortoise.



PHOTO 6

Tail with bone and fur still attached.



PHOTO 7
Vertebrae believed to belong to a large ungulate.



PHOTO 8
Backbone and remains believed to belong to a large ungulate.