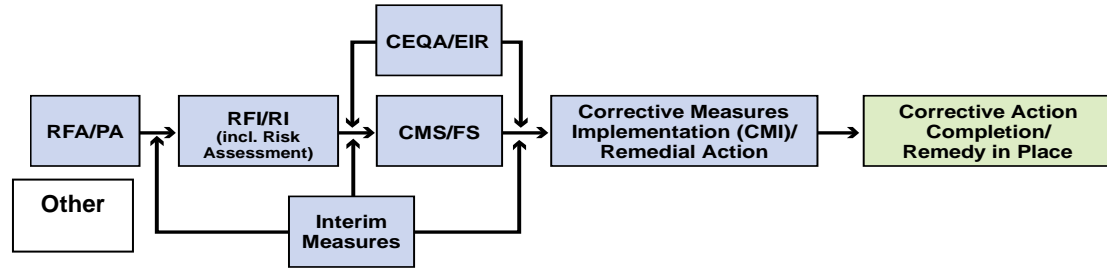


Topock Project Executive Abstract

<p>Document Title: <i>Biological Resources Completion Report for MW-38 Repair and Excavation of Abandoned Well TCS-4</i></p> <p>Submitting Agency: BLM, USFWS</p> <p>Final Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Date of Document: June 3, 2014</p> <p>Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other) – PG&E</p>
<p>Priority Status: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input checked="" type="checkbox"/> LOW</p> <p>Is this time critical? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Action Required: <input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Review & Comment</p> <p>Return to: _____</p> <p>By Date: _____</p> <p><input type="checkbox"/> Other / Explain:</p>
<p>Type of Document: <input type="checkbox"/> Draft <input checked="" type="checkbox"/> Report <input type="checkbox"/> Letter <input type="checkbox"/> Memo</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: Programmatic Biological Assessment (PBA) General Project Management Measure 23</p>
<p>What is the consequence of NOT doing this item? What is the consequence of DOING this item?</p> <p>This report is required by the approved PBA. Not performing the survey and preparing the report constitutes non-compliance with the PBA.</p>	<p>Is this a Regulatory Requirement? <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 is required by the approved PBA. Not performing the survey and preparing the report constitutes non-compliance with the PBA.</p>	<p>Other Justification/s: <input type="checkbox"/> Permit <input type="checkbox"/> Other / Explain:</p>
<p>Brief Summary of attached document:</p> <p>The Biological Resources Completion Report for the MW-38 <i>Repair and Excavation of Abandoned Well TCS-4</i> was prepared to determine if there were any adverse effects on species protected under the federal Endangered Species Act resulting from investigative activities during the well rehabilitation and excavation that was conducted in support of the Groundwater Monitoring Program at the Topock Compressor Station. The General Project Management Measures described in the PBA, and followed throughout the well rehabilitation and excavation, were effective in minimizing impacts to the work area and surrounding lands. The project was conducted under a “may affect, but not likely to adversely affect” determination in the 2007 PBA for the southwestern willow flycatcher, Mojave desert tortoise, Yuma clapper rail, razorback sucker, and bonytail chub and under a “no effect” determination for the Colorado pikeminnow. In compliance with these determinations, there was no take of these species.</p> <p>Written by: PG&E</p>	
<p>Recommendations: This report is for your information only.</p>	
<p>How is this information related to the Final Remedy or Regulatory Requirements: This report is a requirement of the PBA upon completion of construction activities.</p>	
<p>Other requirements of this information? 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



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June 3, 2014

Ms. Kimber Liebhauser
U.S. Department of the Interior
Bureau of Land Management
2610 Sweetwater Avenue
Lake Havasu City, Arizona 86406

Ms. Carrie Marr
U.S. Fish and Wildlife Service Project Manager
2321 W. Royal Palm Road, Suite 103
Phoenix, AZ 85021

Subject: *Biological Resources Completion Report for MW-38 Repair and Excavation of Abandoned Well TCS-4, PG&E Topock Compressor Station, Needles, California*

Dear Ms. Liebhauser and Ms. Marr:

This letter transmits the *Biological Resources Completion Report for MW-38 Repair and Excavation of Abandoned Well TCS-4* at the Topock Compressor Station. This document is submitted in conformance with the January 2007 *Programmatic Biological Assessment for the Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions* (PBA). This report have been prepared in compliance with the General Project Measure 23 of the PBA. This condition requires that a brief report discussing the mitigation measures implemented during the construction activities shall be prepared and submitted to the Bureau of Land Management and the U.S. Fish and Wildlife Service.

PG&E appreciates your consideration of the attached report. Please contact Virginia Strohl (PG&E Senior Terrestrial Biologist) at (559) 263-7417 or me at (805) 234-2257 with any questions or concerns.

Sincerely,

Yvonne Meeks
Topock Project Manager

Enclosure

Biological Resources Completion Report for MW-38 Repair and Excavation of Abandoned Well TCS-4, PG&E Topock Compressor Station, Needles, California

cc: Aaron Yue/DTSC
Amanda Dodson/ BLM

Biological Resources Completion Report for MW-38 Repair and Excavation of Abandoned Well TCS – 4, PG&E Topock Compressor Station, Needles, California

Prepared for
United States Bureau of Land Management
United States Fish and Wildlife Services

On behalf of
Pacific Gas and Electric Company



May 2014

WSA Technical Report No. 2013-29

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ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
DOI	United States Department of the Interior
DTSC	Department of Toxic Substances Control
ESA	Endangered Species Act
FCR	Field Contact Representative
GPMM	General Project Management Measures
HNWR	Havasu National Wildlife Refuge
PBA	Programmatic Biological Assessment
PG&E	Pacific Gas and Electric Company
RCRA	Resource Conservation and Recovery Act
RFI/RI	RCRA facility investigation/CERCLA remedial investigation
TCS	Topock Compressor Station
USFWS	United States Fish and Wildlife Service

1.0 Introduction

Pacific Gas and Electric Company (PG&E) is addressing chromium in groundwater at the Topock Compressor Station (Station) located in eastern San Bernardino County, California, approximately 15 miles (24 km) southeast of Needles, California. Figure 1 provides a site location map for the Station. As part of addressing the chromium groundwater contamination, PG&E has been conducting investigative and remedial activities at the Station and in the surrounding area.

Investigative and remedial activities are being performed under the Resource Conservation and Recovery Act (RCRA) corrective action process under an agreement between PG&E and the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), as well as under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) under an agreement between PG&E and the U. S. Department of the Interior (DOI). Under the terms of these agreements, PG&E is conducting the RCRA facility and remedial investigation (RFI/RI) to identify and evaluate the nature and extent of hazardous waste and constituent releases at the compressor station.

Part of the RCRA facility investigation and CERCLA remedial investigation effort, PG&E installed groundwater monitoring wells MW-38S and MW-38D, within Bat Cave Wash. These wells were installed in April 2004. In January 2010, large storm events significantly damaged the two wells and rendered them non-functional. PG&E developed a plan to repair and rehabilitate the two monitoring wells, which was originally submitted to DTSC in July of 2010 and revised in February 2011 (CH2M HILL 2011). The repair and rehabilitation activities were authorized by DTSC on March 27, 2013. Repair work commenced on April 1, 2013, for work to repair MW-38S and again on May 13, 2013, for work to overdrill and replace MW-38D.

In addition to repairing and rehabilitating the two monitoring wells, geophysical studies were also conducted to evaluate the possible existence of a separate, previously abandoned well (TCS-4, previously referred to as the “old well”) in Bat Cave Wash (CH2M HILL 2011). Based on geophysical data, excavation for the abandoned well took place on July 30, 2013 to confirm the location. After confirming the location, the excavation was backfilled and a traffic cone was placed directly over the well location. On September 11, 2013, the well was re-excavated in order to attach a temporary casing that would extend above the ground surface and remained in place while the well was repaired and received a video investigation. The abandoned well TCS-4 repair, which involved drilling to remove earth materials from inside the well casing, took place between March 24 and 26, 2014. The video investigation within the well took place on April 1, 2014.

Primary field tasks conducted during this well repair and rehabilitation work included:

- Pre-mobilization field activities/kick-off meeting/environmental awareness training
- Biological resource survey in the immediate work area and on all associated access routes prior to repair activities
- Surface geophysical survey
- Evaluation of MW-38S, repair of well casing, and well development

- Evaluation of MW-38D, reconstruction of well, and well development
- Installation of above ground well pad and steel casing
- Post-construction biological resource survey
- Excavation and backfill in Bat Cave Wash for abandoned well TCS-4
- Repair and investigation of abandoned well TCS-4

These activities were completed in accordance with applicable General Project Management Measures (GPMM) in the 2007 Programmatic Biological Assessment (PBA) (CH2M HILL 2007), the United States Fish and Wildlife Service (USFWS) letter of concurrence (USFWS, 2007), the USFWS 5-year extension and modification letter (USFWS, 2012) and applicable minimization measures in the adopted Mitigation Monitoring and Reporting Plan for the Topock Compressor Station Groundwater Remediation Project, dated January 2011 (DTSC, 2011a and b).

1.1 Regional Environmental Setting

The Topock Compressor Station is located in a sparsely populated, rural area. Much of the nearby surrounding land is publicly owned by the federal government and has important spiritual meaning to local Indian tribes. Public lands in the area are owned and/or managed by a number of federal and regional agencies, including the Bureau of Land Management (BLM), USFWS, Bureau of Reclamation, and San Bernardino County.

Dominant features of the area include the Colorado River to the east; the Chemehuevi Mountains to the south; the Burlington Northern Santa Fe railroad tracks and bridge; and Interstate 40, which links Barstow, California, and Topock, Arizona. Topography in the area is rugged, ranging from an elevation of approximately 450 feet (137 m) at the Colorado River to over 1,200 feet (365 m) within 1 mile (1.6 km) to the south and southwest.

The area is characterized by arid conditions and high temperatures. The surrounding land consists of a series of terraces divided by desert washes. The landscape within the project area is considerably eroded and can most suitably be described as badlands. The lands are made of small to moderately sized terraces with very steep slopes. Terraces occurring in the project area are homogeneous, composed of rocky soils with very sparse vegetation. Structurally diverse vegetation in the project area is primarily limited to the Colorado River floodplain and the ephemeral washes.

1.2 Report Objectives and Organization

This biological completion report documents field activities associated with performing well repairs at MW-38D and MW-38S and the re-excavation and investigation of abandoned well TCS-4 in Bat Cave Wash from April 1, 2013 through April 1, 2014.

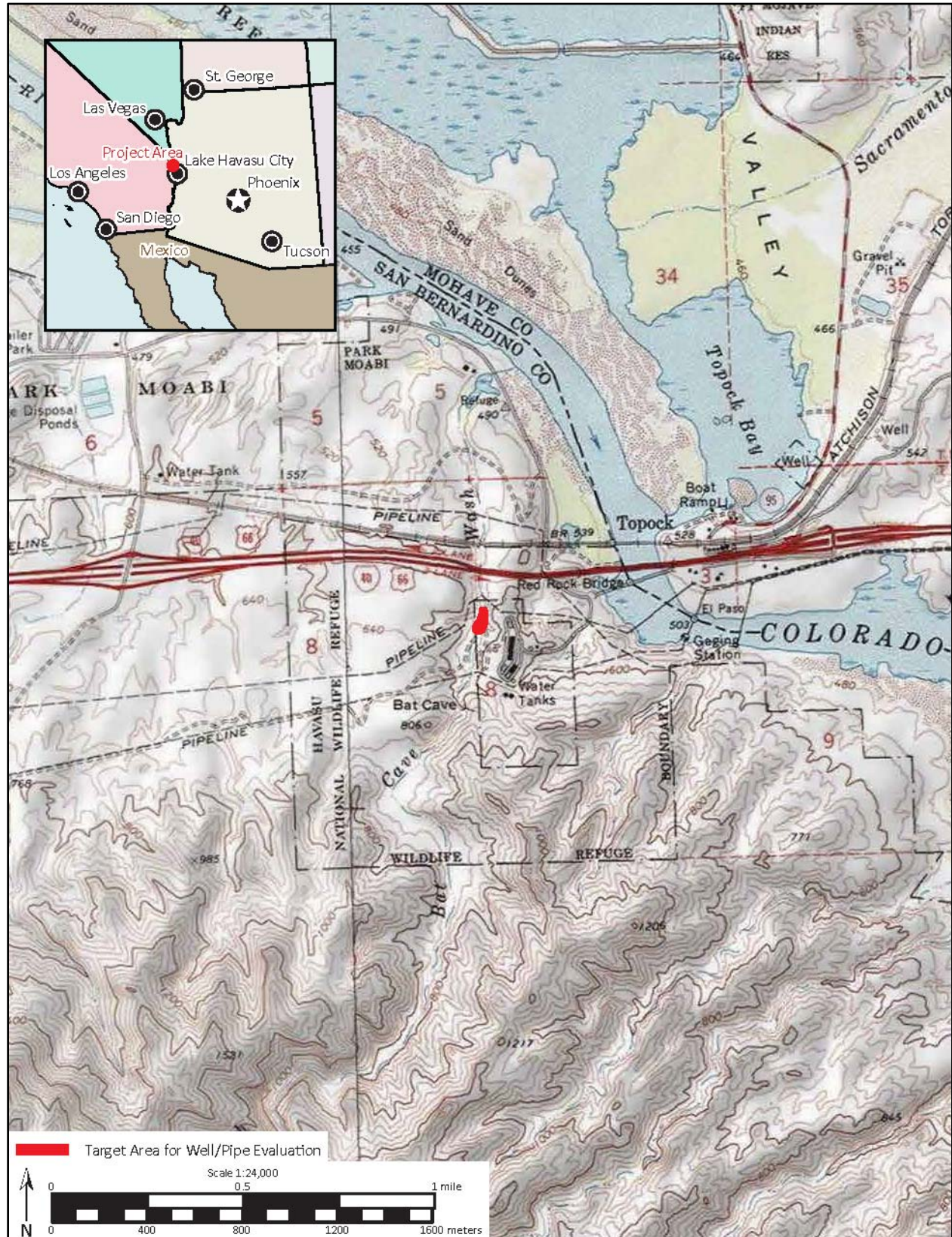


Figure 1. Project location map.

The PBA (CH2M HILL 2007) was prepared to determine any potential effect on species protected under the federal Endangered Species Act (ESA) resulting from remedial and investigative activities at the Topock Compressor Station. The USFWS concurred with the determinations provided in the PBA, as documented in a letter dated February 8, 2007 (USFWS 2007). The field activities addressed in this report are included in the PBA; therefore, this report, as part of the PBA, serves as supporting documentation under the ESA for the evaluation of project effects to federally listed species and resulting determinations under the PBA.

This report has been prepared in compliance with the GPMM No. 23 of the PBA (CH2M HILL 2007). This condition requires that a brief report shall be prepared for the BLM and the Havasu National Wildlife Refuge (HNWR) within 60 days of completion of construction activities. This report shall document the effectiveness of the mitigation measures, make recommendations for modifying the measures to enhance species protection, and provide information on survey and monitoring activities, observed listed species, and the actual acreage disturbed by the project.

To comply with these requirements, this report contains:

- Documentation of awareness training and compliance monitoring
- Project location and existing disturbed areas
- Pre- and post-activity surveys, including the observed listed species
- Conclusions, including a discussion of the effectiveness of the mitigation measures and recommendations for modifying the measures to enhance species protection

2.0 Awareness Training and Compliance Monitoring

In accordance with GPMM No. 5 described in the PBA, awareness training was provided to personnel before the start of construction activities that focused on mitigation measures outlined in the PBA. A WSA biologist, Gabriel Valdes provided training to onsite personnel during the initial kickoff meeting held at the PG&E Topock Compressor Station on April 1, 2013. Training included a description of each species; its habitat, natural history, threats, and legal protection under the ESA; potential penalties; current survey findings; management; and protection measures in the PBA.

A second training session was conducted on May 13, 2013, for the new crewmembers that were brought on site to complete the work on MW-38D. A third training was conducted on July 30, 2013 for the crewmembers conducting the re-excavation of the previously abandoned well, TCS-4. Additional awareness training was provided on September 11, 2013 and March 24, 2014 for the new crewmembers working on the previously abandoned well TCS-4.

During project activities, the designated WSA field contact representative (FCR), Gabriel Valdes, provided compliance monitoring. In accordance with GPMM No. 2, the field contact representative was responsible for overseeing compliance with the mitigation measures.

3.0 Project Location and Existing Disturbance

One of the largest channels in the project area is Bat Cave Wash, which runs roughly in a southwest to northeast direction from the Chemehuevi Mountains to the Colorado River.

3.1 Well Locations

Monitoring wells MW-38S and MW-38D are located in the bottom of Bat Cave Wash approximately 330 feet (100.5 m) south of the Interstate 40 eastbound lanes. The site can be accessed from the north or south via a well-maintained unpaved roadway that leads into the wash from the Topock Compressor Station. Vegetation is sparse in this part of Bat Cave Wash. The area is dominated by a sandy gravel and cobble stone substrate with few shrubs in the middle of the wash and along the banks. Heavy equipment and vehicles were able to easily access the work area without impacting the surrounding perennial vegetation.

The geophysical investigation was concentrated in the wash directly south of the two well locations (see Figure 2). Excavation for the abandoned well TCS-4 took place within a small area of the investigation site. Figure 2 shows the well location area, geophysical investigation area, and access routes.

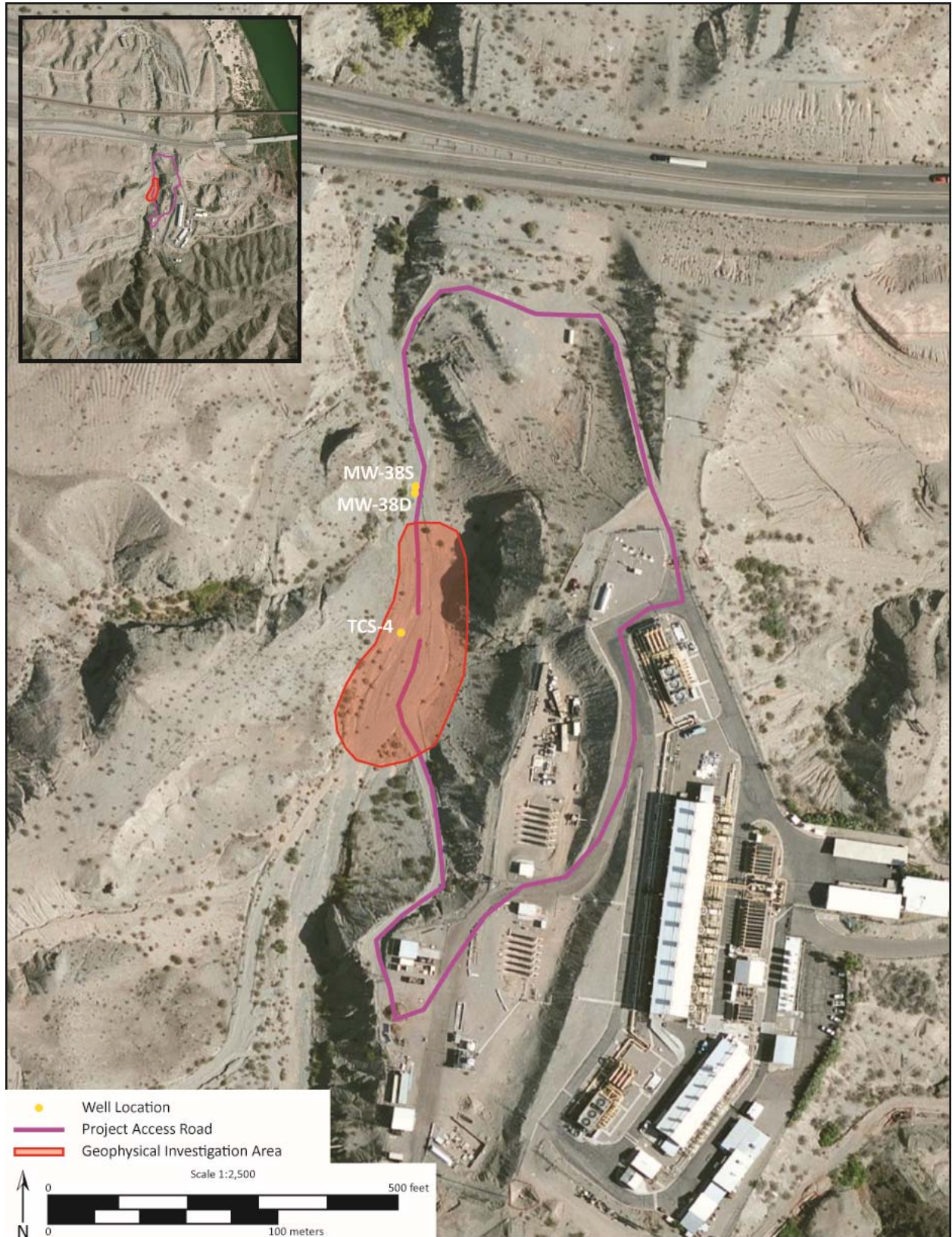


Figure 2. Project area detail, indicating the well location area, geophysical area, and access routes.

4.0 Pre- and Post-Activity Surveys

4.1 Pre-activity Surveys

Prior to the start of the well repair and investigation activities, USFWS-qualified biologist, Gabriel Valdes/WSA, surveyed the work sites and surrounding areas for sensitive biological resources. No listed species or nesting birds were observed during the pre-activity survey. The area is within the range of the Mojave desert tortoise (*Gopherus agassizii*) and potential habitat is present within the project area. No tortoises or signs of tortoises were observed. Table 1 contains the list of plants and wildlife (or sign) that were observed in the Bat Cave Wash work area.

Table 1. List of observed plants and wildlife incidental to pre-construction surveys.

Common Name	Scientific Name
Plants	
Beavertail cactus	<i>Opuntia basilaris</i>
Brittlebush	<i>Encelia farinosa</i>
Catclaw acacia	<i>Senegalia greggii</i>
Cheeseweed	<i>Hymenoclea salsola</i>
Creosote bush	<i>Larrea tridentata</i>
Desert trumpet	<i>Eriogonum inflatum</i>
Four-wing saltbush	<i>Atriplex canescens</i>
Ghost flower	<i>Mohavea confertifolia</i>
Screwbean mesquite	<i>Prosopis pubescens</i>
Stork's bill	<i>Erodium cicutarium</i>
Reptiles	
Chuckwalla	<i>Sauromalus obesus</i>
Desert iguana	<i>Dipsosaurus dorsalis</i>
Birds	
House sparrow	<i>Passer domesticus</i>
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Mammals	
Coyote	<i>Canis latrans</i>
Wild burro	<i>Equus asinus</i>

4.2 Post-activity Surveys

Following the well repair, investigation, development, and demobilization, a post-activity survey was conducted on June 5, 2013, to document field conditions. An additional post-activity survey was conducted on July 30, 2013 following demobilization of excavation activities at the previously abandoned well, TCS-4. WSA conducted a final post-activity survey of Bat Cave Wash on April 22, 2014. All surveys were conducted by WSA biologist, Gabriel Valdes. No listed species were observed during the post-activity survey. All existing perennial vegetation was completely avoided and remained intact. All work activities were confined to areas with pre-existing disturbance or within active channels in the desert wash that were mostly devoid of vegetation. Photographs of pre- and post-activity conditions are provided in Appendix A.

5.0 Conclusion

In conformance with the PBA GPMMs, personnel were provided with awareness training, and a qualified biologist conducted pre- and post-activity surveys in all areas that were included in the well repair and rehabilitation activities. The designated FCR remained onsite during all construction activities.

The GPMMs described in the PBA were effective in minimizing impacts to the work area and surrounding lands. The project was conducted under a “may affect, but not likely to adversely affect” determination for the Mojave desert tortoise. In compliance with these determinations, (CH2M HILL 2007; USFWS 2007) there was no take of a desert tortoise or its habitat or any other sensitive species or habitat during any of the well repair, geophysical investigation, or excavation activities within Bat Cave Wash.

6.0 References

CH2M HILL, Inc.

2007. *Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions*. Prepared for Pacific Gas and Electric, January. Available at <http://www.dtsc-topock.com> ; Accessed June 2013.

2011. Final Revised Implementation Plan for Repair of Monitoring Wells MW-38S and MW-38D and Old Well/Pipe Reconnaissance. Prepared for Pacific Gas and Electric, February 11, 2011.

California Department of Toxic Substances Control

2011a. Final Environmental Impact Report for the Topock Compressor Station Groundwater Remediation Project: Volume II. January.

2011b. Mitigation Monitoring and Reporting Program, Exhibit 2 to Attachment B, Memorandum to Karen Baker from Aaron Yue regarding Certification of the PG&E Topock Compressor Station Groundwater Remediation Final Environmental Impact Report. January 31.

U.S. Fish and Wildlife Service (USFWS)

2007. Letter to Field Manager, Lake Havasu Field Office, Bureau of Land Management. "Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial Investigative Actions, January 2007." On file, Bureau of Land Management, Havasu Field Office, Lake Havasu, Arizona. February 8.

Appendix A
Project Photographs
