
*Whitewater River/Colorado River Aqueduct
Siphon Scour Protection, Whitewater Mine Pit
Reclamation and Cabazon Radial Gate Project*



**Mitigation Monitoring
and Reporting Program**
State Clearinghouse No. 2005071069
Metropolitan Report No. 1272B

The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012



August 2012

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	Introduction.....	1
2.0	Mitigation Measures, Construction Requirements, and Monitoring Requirements.....	2
3.0	Project Description and Regulatory/Permit Requirements	11
	3.1 Introduction.....	11
	3.2 Project Description Elements by Topic	11
	3.3 List of Permit Requirements by Agency.....	12

THIS PAGE INTENTIONALLY LEFT BLANK

1.0 INTRODUCTION

The California Environmental Quality Act (CEQA) requires a lead or public agency that approves or carries out a project for which an environmental impact report has been certified which identifies one or more significant environmental effects and where finding with respect to changes or alterations in the project have been made, to adopt a “reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment” (CEQA, Public Resources Code Sections 21081, 21081.6). A Mitigation Monitoring and Reporting Program (MMRP) is required to ensure that adopted mitigation measures are successfully implemented for the Whitewater River/Colorado River Aqueduct Siphon Scour Protection, Whitewater Mine Pit Reclamation, and Cabazon Radial Gate Project (Project). The Metropolitan Water District of Southern California (Metropolitan) is the lead agency for the proposed Project and is responsible for implementation of the MMRP. This report describes the MMRP for the proposed Project and identifies the departments within Metropolitan that will be responsible for implementation of the individual mitigation measures in the MMRP.

The EIR for the Project recommended feasible mitigation measures designed to reduce or avoid potentially significant effects of the Project with respect to air quality, biological resources, and cultural resources. Section 2.0 of this document identifies the specific monitoring and reporting requirements, including the party responsible for monitoring mitigation implementation and the implementation phase.

Section 3.0 of this document describes project elements and regulatory/permit requirements that are not part of the MMRP but are included herein to convey how the proposed Project would comply with government codes, ordinances, or regulations and reduce further the less-than-significant Project effects. The environmental categories detailed in this section are air quality, biological resources, geology and soils, hazards, hydrology and water quality, and noise.

2.0 MITIGATION MEASURES, CONSTRUCTION REQUIREMENTS, AND MONITORING REQUIREMENTS

AIR QUALITY

ADVERSE IMPACT	Significant short-term impacts from oxides of nitrogen (NO _x) emissions would occur during project construction.
MITIGATION MONITORING AND REPORTING PLAN	
Mitigation:	<p>AIR-1 Fleet Modernization for Onroad Trucks.</p> <ol style="list-style-type: none"> 1. Idling shall be restricted to a maximum of five minutes when not in use. 2. Standards/Specifications: <ul style="list-style-type: none"> All onroad heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used on site or to transport materials to and from the site shall require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if construction contractor determines that 2010 model year or newer diesel trucks cannot feasibly be obtained then the contractors shall use trucks that meet Environmental Protection Agency (EPA) 2007 model year NO_x emissions requirements. <p>AIR-2 Fleet Modernization for Construction Equipment.</p> <ol style="list-style-type: none"> 1. Construction equipment shall incorporate, where feasible, emissions savings technology such as hybrid drives and specific fuel economy standards. 2. Prohibit vehicle and engine idling in excess of five minutes and ensure that all off-road equipment is compliant with the California Air Resources Board's (CARB) in-use off-road diesel vehicle regulation and SCAQMD Rule 2449. 3. During project construction, all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 2 emissions standards, or higher according to the following: <ul style="list-style-type: none"> <u>For equipment purchased between January 1, 2012, to December 31, 2014:</u> All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what

MITIGATION MONITORING AND REPORTING PLAN (cont.)	
	<p>could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</p> <p><u>For equipment purchased post-January 1, 2015:</u> All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</p> <p>A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.</p> <p>Metropolitan shall encourage construction contractors to apply for AQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm</p>
Party Responsible for Monitoring Mitigation Implementation:	The Metropolitan Water District of Southern California
Implementation Phase:	Pre-Construction/Construction

BIOLOGICAL RESOURCES

<i>ADVERSE IMPACT</i>	Significant short-term impacts to sensitive vegetation communities/habitats at the Whitewater River/CRA Siphon Scour Protection, WMP Reclamation, Cabazon Spoil, and Cabazon Radial Gate sites.
<i>MITIGATION MONITORING AND REPORTING PLAN</i>	
<i>Mitigation:</i>	BIO-1 Detailed restoration plans shall be prepared for habitat restoration for the Whitewater River/CRA Siphon Scour Protection, WMP Reclamation, Cabazon Spoil, and Cabazon Radial Gate sites. These restoration plans shall include provisions for topsoil salvage and reuse; use of seeds or plant material native to, and collected from, local areas; an irrigation plan or a plan for successful plant establishment (i.e., from seeds) in the absence of irrigation; specific success criteria for installed native plants as well as for non-native weed control; monitoring to gauge success; and contingency measures.
<i>Party Responsible for Monitoring Mitigation Implementation:</i>	The Metropolitan Water District of Southern California
<i>Implementation Phase:</i>	Pre-Construction

BIOLOGICAL RESOURCES (cont.)

<i>ADVERSE IMPACT</i>	Significant short-term impacts to U.S. Army Corps of Engineers (Corps) and/or California Department of Fish and Game (CDFG) jurisdictional areas at the Whitewater River/CRA Siphon Scour Protection, WMP Reclamation and Cabazon Spoil sites.
<i>MITIGATION MONITORING AND REPORTING PLAN</i>	
<i>Mitigation:</i>	<p>BIO-2 Impacts to jurisdictional areas for the subject project shall be mitigated at a 1:1 ratio through restoration of impacted wetland and streambed areas to pre-project conditions, which would comply with the Corps and CDFG's "no-net-loss" policy regarding wetlands and other jurisdictional areas. As with vegetation communities, jurisdictional areas shall be restored following project completion and be monitored and maintained in accordance with the regulatory agencies' requirements.</p> <p>Final mitigation for impacts to jurisdictional waters and non-wetland waters of the U.S. shall be determined through the permitting processes of the involved regulatory agencies.</p>
<i>Party Responsible for Monitoring Mitigation Implementation:</i>	The Metropolitan Water District of Southern California
<i>Implementation Phase:</i>	Pre-Construction

BIOLOGICAL RESOURCES (cont.)

ADVERSE IMPACT	Significant potential impacts from destruction of active burrowing owl nests and harm to individual owls.
MITIGATION MONITORING AND REPORTING PLAN	
Mitigation:	BIO-3 No disturbance shall occur within 50 meters (approximately 160 feet) of occupied burrows during the non-breeding season of September 1 through January 31 or within 75 meters (approximately 250 feet) during the breeding season of February 1 through August 31. A pre-construction survey (30 days prior to initiation) shall be conducted to determine where the owls are located within the proposed work areas. If active burrows are present within project work areas following the preconstruction survey, the owls occupying the burrows shall be relocated to avoid impacts pursuant to the guidelines prepared by the California Burrowing Owl Consortium (1993). Relocation shall only take place outside the breeding season (i.e., from September 1 to January 31). Relocation can include passive relocation or active relocation. Passive relocation entails blocking active burrows with one-way doors, allowing the owls to escape the burrow, and then carefully excavating the burrow to ensure owls are no longer present before continuing to work in the area. Active relocation involves capture of owl pairs and physical relocation to another site. Any relocation efforts shall only be conducted in close consultation with CDFG.
Party Responsible for Monitoring Mitigation Implementation:	The Metropolitan Water District of Southern California
Implementation Phase:	Pre-Construction

BIOLOGICAL RESOURCES (cont.)

<i>ADVERSE IMPACT</i>	Significant potential impacts associated with disturbance of any nesting raptor under the MBTA and California Fish and Game Code.
<i>MITIGATION MONITORING AND REPORTING PLAN</i>	
<i>Mitigation:</i>	BIO-4 Vegetation removal (i.e., clearing and grubbing) shall be conducted outside of the bird nesting season (the nesting season lasts February through August) in all three of the study areas, if active nests are present. Alternatively, if work is conducted during the bird nesting season, a preconstruction survey shall be conducted by a qualified biologist to identify and locate all active bird nests within the impact footprint. If any active nests are present, periodic (e.g., weekly) monitoring of the nests shall be conducted by a qualified biologist to ensure that nesting is not adversely disturbed by project construction.
<i>Party Responsible for Monitoring Mitigation Implementation:</i>	The Metropolitan Water District of Southern California
<i>Implementation Phase:</i>	Pre-Construction/Construction

CULTURAL RESOURCES

ADVERSE IMPACT	Potentially significant impacts to historical and/or archaeological resources at the Cabazon Spoil site.
MITIGATION MONITORING AND REPORTING PLAN	
Mitigation:	<p>CUL-1 During the project's design phase, a qualified archaeologist shall be consulted on the design of the access road and work area around or between known locations of residential buildings associated with the Cabazon Camp, based on historical accounts. If the access road and work areas can avoid identified historic resources, no subsurface testing in the area between the access road and the spoil piles shall be required. If it is determined that the access road and work area cannot avoid identified historic resources, subsurface testing shall be required. If subsurface testing is required, it shall occur during the design phase (and prior to ground-disturbing activities). Subsurface testing shall be conducted in areas that would be disturbed below the surface. Subsurface testing shall include a series of backhoe trenches in the areas of direct impact, such as the proposed staging area and areas where the road modification would occur. Potentially significant features exposed shall require full recordation and possible manual recovery if artifact-filled features are discovered. A workplan detailing the approach to testing shall be developed and implemented during the project's design phase. The workplan shall detail the focus for the testing efforts and provide guidelines for data recovery and artifact curation, as necessary.</p> <p>CUL-2 Prior to the start of any construction activities at the Cabazon Spoil site, the construction contracting crew shall be provided awareness training of what constitutes potentially significant archaeological deposits. The awareness training shall be conducted by a qualified archaeologist.</p> <p>CUL-3 Prior to the implementation of construction activities, including the placement of construction equipment at the Cabazon Spoil site, temporary fencing shall be installed on areas identified during the design phase as environmentally sensitive for cultural resources. Temporary fence installation shall be monitored by a qualified archaeological monitor. The fencing shall remain in place for the duration of construction activities. In addition, during this fence installation, spot check monitoring by a qualified archaeologist shall occur, as determined by the archaeologist.</p> <p>CUL-4 During removal of material from the large, original spoil pile, a qualified archaeologist shall be present for selective monitoring of spoils to be removed. The frequency of selective monitoring shall be determined by a qualified archaeologist based on ground disturbance, spoil removal, and construction activity in areas of heightened sensitivity. During the onset of ground-disturbing</p>

CULTURAL RESOURCES (cont.)

	<p>activities associated with the spoil site, monitoring shall occur at least twice weekly, until a qualified archaeologist determines that less frequent monitoring is appropriate.</p> <p>CUL-5 During construction, the construction contractor shall not access any areas of the Cabazon Spoil site other than the road, staging areas, and the construction areas.</p> <p>CUL-6 Any known historical feature that would be destroyed shall be mitigated through detailed documentation, such as measured drawings and large format photography, according to Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey (HABS/HAER/HALS) standards. This includes roads and their components, such as culverts, individual features, and underground remnants of buildings.</p> <p>CUL-7 Phase III monitoring of all ground-disturbing activities and selective spoils removal shall be conducted at the Cabazon Spoil site where there is potential to impact potentially significant resources. Phase III monitoring shall include exploratory excavations that shall be undertaken in areas that would be disturbed below the surface where historically significant resources are known to occur. Exploratory excavations shall be undertaken prior to any subsurface disturbance at the Cabazon Spoil site. Excavation shall include a series of backhoe trenches in the areas of direct impact, such as the staging areas and road modification, if they are in segments of the site where archaeological deposits are anticipated. Any potentially significant features that are exposed during the excavation shall require full recordation and possible manual recovery, if artifact-filled features are discovered. A workplan detailing the approach to excavation shall be developed and implemented during the project's design phase (prior to ground disturbing activities). The workplan shall detail the focus for the recovery efforts and provide guidelines for data recovery and artifact curation, as necessary.</p>
Party Responsible for Monitoring Mitigation Implementation:	The Metropolitan Water District of Southern California
Implementation Phase:	Pre-Construction/Construction

CULTURAL RESOURCES (cont.)

<i>ADVERSE IMPACT</i>	Potentially significant impacts to historical resources at the Cabazon Radial Gate site.
<i>MITIGATION MONITORING AND REPORTING PLAN</i>	
<i>Mitigation:</i>	<p>CUL-8 The removal of the gate at the Cabazon Radial Gate site and alteration to the discharge shall be photographed as documentation.</p> <p>CUL-9 Historic research suggested that each gate contained a plaque identifying the company that manufactured the gate. The plaque or plaques on the gate, if present, shall be removed by the construction contractor and provided to Metropolitan. Metropolitan shall retain plaques for exhibit and documentation at Metropolitan headquarters in downtown Los Angeles.</p>
<i>Party Responsible for Monitoring Mitigation Implementation:</i>	The Metropolitan Water District of Southern California
<i>Implementation Phase:</i>	Pre-Construction/Construction

3.0 PROJECT DESCRIPTION AND REGULATORY/ PERMIT REQUIREMENTS

3.1 INTRODUCTION

This section describes those elements of the Project that would be incorporated into the Project description or implemented to comply with previously approved environmental documents, government codes, ordinances, or regulations. These elements are not part of the MMRP but are presented here to convey information about other commitments made as part of the Project that would reduce Project effects.

3.2 PROJECT DESCRIPTION ELEMENTS BY TOPIC

3.2.1 *Air Quality*

- A dust abatement program would be implemented in compliance with SCAQMD Rule 403. Examples of standard dust abatement measures would include watering or otherwise stabilizing soils, tarping/covering haul trucks, employing speed limits on unpaved roads, minimizing vegetation clearing, and revegetating exposed surfaces during post-construction.
- The construction contractor would utilize at least one of the following measures at each vehicle egress from the project site to a paved public road:
 - Install a pad consisting of washed gravel maintained in clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;
 - Pave the surface extending at least 100 feet long and at least 20 feet wide;
 - Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages; or
 - Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- Measures for reducing fugitive dust would be implemented in compliance with SCAQMD 1157. Measures would include, but not be limited to, removal of material spillage and routine sweeping on internal paved roads, and use of dust suppressants and chemical stabilization.
- Measures for reducing fugitive dust on unpaved roadways would be implemented in compliance with SCAQMD Rule 1186. Measures would include, but not be limited to, partial paving using typical roadway materials and applying chemical stabilization.

3.2.2 *Biological Resources*

- Restoration and/or monitoring plans would be implemented. Plans would include methods for implementation, performance standards, monitoring criteria and adaptive management techniques¹ during construction. Fencing and flagging programs to protect special-status species or sensitive habitats would also be implemented. This would include the use of high-visibility

¹ Adaptive management is a systematic approach for improving management by learning from past experiences. This approach continuously adjusts management objectives based on new information gathered through monitoring.

habitat fencing around protected areas, marking trees to be retained, and use of signs (e.g., no refueling signs) in areas of high sensitivity. Construction activities would be performed in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc.

3.2.3 Geology and Soils

- Proper slope stabilization techniques and design features would be used by the contractor(s) to prevent slope failures during and after construction. Those techniques may include shoring failing side slopes, constructing temporary and permanent slopes using stable slope ratios, and removing spoils in a manner that would maintain worker safety. Final reclaimed slopes along the rim of the former WMP and in the Cabazon Spoil site would be inclined at a ratio no steeper than 2:1 with a graded bottom and rounded tops to prevent unstable conditions.

3.2.4 Hazards

- Metropolitan would take precautions during construction to preclude the exposure of people or structures to significant risk. These precautions would include (but are not limited to): smoking would only be allowed in certain designated areas; fire extinguishers would be available near or on construction equipment; and equipment and trucks would be located in such a way that exhaust would be directed away from combustible materials. The project would comply with standard Occupational Safety and Health Administration safety requirements.

3.2.5 Hydrology/Water Quality

- Erosion control BMPs would be implemented, and could include minimizing land clearing during the rainy season, installing silt fencing and fiber rolls, and using temporary soil stabilization techniques on stockpiles and slopes, pursuant to the intent of the General Construction Activity Permit from the State Water Resources Control Board (SWRCB). Metropolitan would require the preparation of a Storm Water Pollution and Prevention Plan (SWPPP) by the contractors in accordance with the SWRCB General Construction Activity Storm Water Permit. The proposed project would conform to applicable National Pollutant Discharge Elimination System (NPDES) requirements as set forth by the RWQCB.

3.2.6 Noise

- Metropolitan would utilize noise reduction features (mufflers, engine shrouds, etc.) that are no less effective than those originally installed by the manufacturer for construction equipment used within the proposed project. Adherence to local construction noise and/or construction vibration ordinances by the contractor would also be required where applicable.

3.3 LIST OF PERMIT REQUIREMENTS BY AGENCY

In addition to the proposed mitigation measures described in the MMRP, the EIR identified the following permits or approvals that would be required from other agencies.

- United States Army Corps of Engineers, Clean Water Action (CWA) Section 404 Permit for discharge of fill material in waters of the U.S. in the Whitewater River and Section 404(b)(1) guidelines compliance.
- California Department of Fish and Game, California Fish and Game Code Section 1602 Streambed Alteration Agreement for alterations of the Whitewater River.

- California Water Resources Control Board, CWA Section 402 NPDES Permit for construction in Whitewater River.
- California Regional Water Quality Control Board, CWA Section 401 certification or waiver for actions covered by the above-listed CWA Section 404 permit.
- County of Riverside, Reclamation Plan Approval under Public Resources Code, Division 2, Chapter 9, Section 2710 et seq. and California Code of Regulations (CCR) Title 14, Chapter 8, Article 1, Section 3500 et seq., Article 9 Section 3700 et seq. for reclaiming (filling) the WMP. Reclamation Plan Approval under Riverside County Ordinance No. 555 (as amended through 555.18).
- County of Riverside, Grading Permit requirements under Riverside County Ordinance No. 457.

THIS PAGE INTENTIONALLY LEFT BLANK