Great Basin Unified
Air Pollution Control District

2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan

Mitigation Monitoring Program

State Clearinghouse Number 2007021127

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SECTION I
INTRODUCTION

The California Environmental Quality Act [CEQA; Public Resources Code (PRC), Section 21000 et seq.] requires a Lead Agency or Responsible Agency that approves or carries out a project, where an Environmental Impact Report (EIR) has identified significant environmental effects, to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" [PRC, Section 21081.6 (a)(1)]. The Great Basin Unified Air Pollution Control District (District) is the Lead Agency for the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (project). A public agency shall "provide that measures to mitigate or avoid significant impacts on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design" [PRC, Section 21081.6 (b)].

The 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (project) will principally involve the following improvements.

II.1 PROJECT ELEMENTS

The project addresses 15.1 square miles (9,664 acres) for the placement of potential dust control measures (DCMs) to ensure that the Great Basin Unified Air Pollution Control District (District) will meet the National Ambient Air Quality Standards (NAAQS) after 2010. Pursuant to the 2003 State Implementation Plan (SIP), the air pollution control officer (APCO) determined on December 21, 2005, that supplemental control requirements were required to meet the NAAQS. Based on discussions between the District and the City of Los Angeles Department of Water and Power (City), DCMs would be required on at least 12.7 more square miles of dry lake bed and they may be required on up to 15.1 square miles (EIR Figure 2.7.1-1, *Proposed Project Elements*). The 15.1 square miles consists of 12.7 square miles of supplemental dust control areas (DCAs) (consisting of 9.2 square miles of Shallow Flooding and 3.5 square miles of Moat & Row DCMs), 0.5 square mile of Channel Area that would require DCMs and/or an alternative form of DCMs, and 1.9 square miles of Study Area of which some or all may require controls after 2010. The Moat & Row DCM areas for this project include 0.5 square mile of test sites that were approved by the California State Lands Commission (CSLC) and evaluated in previous environmental documentation.[1,2] By 2010, a total of at least 42.57 square miles of DCMs are to be operational. As much as a total of 44.92 square miles of lake bed may require controls at some point. The purpose of the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Environmental Impact Report (EIR) is to subsequently analyze, based on the 2003 SIP EIR, the impacts from the construction, operation, and maintenance of supplemental DCMs on an additional 15.1 square miles of lake bed, which includes 12.7 square miles of mandatory DCAs, 0.5 square mile of Channel Area, and 1.9 square miles of Study Area (Table II.1-1, *Comparison of Project Elements*).

TABLE II.1-1
COMPARISON OF PROJECT ELEMENTS

Supplemental Dust Control Area/Measure	Square Miles	Acres	Percentage
Shallow Flood	9.2	5,888	61%
Moat & Row	3.5	2,240	23%
Study Area	1.9	1,216	13%
Channel Area	0.5	320	3%
Total Project Area	15.1	9,664	100%

Of the additional 15.1 square miles that may need DCMs, approximately 8.5 square miles (5,440 acres) have been analyzed in previous environmental documents on at least a programmatic level. Environmental documents may either analyze impacts at the programmatic or project level.

[1] California State Lands Commission. May 2007. CSLC Lease to LADWP for Construction, Operation, Maintenance, and Monitoring of a Moat & Row Demonstration Project from May 2007 to May 2010. Lease PRC 8745.9. California State Lands Commission, Title Unit, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825-8202.

[2] CSLC environmental document for lease, either Negative Declaration or Exemption

Programmatic-level documentation analyzes impacts at a broad level, whereas project-level documentation requires more in-depth impact analysis based on a detailed project description. However, of the additional 15.1 square miles that may need DCMs, less than 2 percent of the area was covered in terms of project-level documentation. Therefore, the purpose of the 2008 SIP EIR is to subsequently analyze, based on the 2003 EIR, on a project level, the impacts of constructing supplemental DCMs on these 15.1 square miles of potentially emissive lake bed (EIR Figure 2.7.1-1). The project consists of applying DCMs specified in the approved 2003 SIP[3] and 1998 SIP,[4] as well as the application of a new DCM, Moat & Row, beyond the 29.8 square miles of DCMs applied by the City through 2006.

The District has committed to considering modifications to the 2003 SIP to incorporate new knowledge, provide for additional DCMs (including the new Moat & Row DCM), and provide for attainment of the PM_{10} NAAQS after April 1, 2010. The consideration of the application of DCMs to an expanded area of the bed of Owens Lake is consistent with the adopted 2003 SIP and 1998 SIP. However, the area requiring DCMs has been refined in light of data collected after approval of the 2003 SIP. The 1998 SIP and District Board Order required the City to continue to implement control measures on an additional 2 square miles of lake bed in 2004 and every year thereafter until the NAAQS is attained. The 2003 SIP and Board Order required the City to implement and have in operation DCMs on all additional areas of the lake bed that may require controls in order to meet the NAAQS. Based on recent data, the District estimates that, in addition to the areas controlled by the end of 2006, up to 15.1 additional square miles (9,664 acres) of emissive lake bed may require DCMs to meet the NAAQS after 2010.

The project consists of revisions to the 1998 and 2003 SIP dust control program analyzed in the 1997 and 2003 Program EIR and the 1998 Addendum, including changes in the location and size of the emissive DCAs.[5,6,7] Program-level environmental analysis is provided for these changes to develop and operate up to 15.1 square miles of new DCMs identified in the revised SIP. In addition, operational environmental monitoring programs proposed through mitigation measures in the 2008 SIP EIR shall be used in the operation of previously developed DCMs to provide project consistency and efficiency.

II.1.1 Dust Control Measures

DCMs are defined as those measures of PM_{10} abatement that could be placed onto portions of the playa, and when in place, are effective in reducing the PM_{10} emissions from the surface of the playa. Since 1989, the District has pursued a comprehensive research and testing program to develop PM_{10}

[3] Great Basin Unified Air Pollution Control District. February 2004. *2003 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Integrated Environmental Impact Report*. State Clearinghouse House Number 2002111020. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

[4] Great Basin Unified Air Pollution Control District. 1998. *Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report*. State Clearinghouse Number No. 96122077. Bishop, CA.

[5] Great Basin Unified Air Pollution Control District. 1998. *Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report*. State Clearinghouse Number No. 96122077. Bishop, CA.

[6] Great Basin Unified Air Pollution Control District. February 2004. *2003 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Integrated Environmental Impact Report*. State Clearinghouse House Number 2002111020. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

[7] Great Basin Unified Air Pollution Control District. 1998. *Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report*. State Clearinghouse Number No. 96122077. Bishop, CA.

control measures that are effective in the unique Owens Lake playa environment. The District, in cooperation with the City, has developed three PM_{10} control measures that it has found to be feasible and effective: Shallow Flooding, Managed Vegetation, and Gravel Cover. In addition, the project includes a new alternative DCM known as Moat & Row.

II.1.1.1 Shallow Flooding

This DCM consists of applying water to emissive lake bed areas. To attain the required PM_{10} control efficiency, at least 75 percent of each square mile of the dust control area must be wetted to produce standing water or surface-saturated soil between October 1 and June 30 of each year. The evaluation of this alternative is based on the assumption that between 3 and 4 acre-feet of water would be required annually to control PM_{10} emissions from an acre of lake bed. Except for limited habitat maintenance flows, water will be turned off between July 1 and September 30 to allow for facility maintenance activities. This is typically a period when dust storms do not occur.

II.1.1.2 Moat & Row

The general form of the Moat & Row DCM is an array of earthen berms (rows) about 5 feet high with sloping sides, flanked on either side by ditches (moats) about 4 feet deep. As analyzed, the Moat & Row would include placement of up to a 5-foot-high sand fence on the top of the row. Moats serve to capture moving soil particles, and rows physically shelter the downwind lake bed from the wind. The performance standard for the Moat & Row DCM consists of achieving PM_{10} control efficiency through the construction of moats and rows, aligned generally perpendicular to the predominant wind direction such that the majority of the saltating particles are retained within the height of the uppermost feature of the row. The City proposes to achieve the performance standard through the construction of individual Moat & Row elements that would generally be aligned parallel to one another, and spaced at variable intervals, to minimize the fetch between rows along the predominant wind directions. The predominant winds are from the north and the south, with the north-blowing wind being the strongest but less frequent. It is anticipated that the Moat & Row berms would primarily be oriented perpendicular to the primary wind vector, and may be serpentine where necessary to control emissions under the full range of principal wind directions.

Initial pre-test modeling indicates that Moat & Row spacing will generally vary from 250 to 1,000 feet, depending on the surface soil type and the PM_{10} control effectiveness required on the Moat & Row area. For the purpose of the analyses in the 2008 SIP EIR, it was assumed that the Moat & Row elements would be spaced a minimum of 250 feet apart and would not be separated by more than 1,000 feet, thus allowing up to 21 Moat & Row elements per square mile treated with this DCM (5,280 feet per mile divided by 250 feet between Moat & Row elements). Thus, for the purpose of the environmental analysis in the 2008 SIP EIR, it was assumed that the Moat & Row DCM would affect up to 33 percent of the ground surface in the Moat & Row areas (85 feet per Moat & Row element times 21 elements per mile divided by 5,280 feet per mile). For purposes of the analysis in the 2008 SIP EIR, both the moats and rows were assumed to have sloped sides and not pose a barrier to wildlife movements. If moats or rows are recommended to be formed with vertical sides, additional environmental analysis would be required.

It is anticipated that the PM_{10} control effectiveness of Moat & Row could be enhanced by combining it with various approved DCMs and appurtenant measures, including Augmentation, Shallow Flooding, Application of Brine, Armoring, and Managed Vegetation. These enhancements would ensure that if significant dust sources (hot spots) develop within the Moat & Row areas, they would be promptly addressed. Any single method or combination of the enhancements could be implemented for both

primary and secondary wind vector mitigation, where demonstrated to be in substantial conformance with the performance standards for the Moat & Row DCM and within or below the impact analysis parameters. The primary Moat & Row DCM elements include earthen Moat & Row topped with a sand fence. Enhancements to the primary Moat & Row include Managed Vegetation and irrigation and fertilization as required, Shallow Flooding facilities, and enhancing existing vegetation and natural topographic and surface drainage features at Owens Lake. Moat & Row earthwork and sand fences may also be enhanced through a number of additional methods. These measures include placing sand fences on the open playa between Moat & Row elements (as long as the total number of sand fence elements and Moat & Row elements combined did not exceed a ground disturbance of 33 percent and/or a density of 21 per mile), adding bands of Managed Vegetation, adding water from surrounding Shallow Flooding DCAs, and enhancing or protecting existing vegetation and natural topographic and surface drainage features at Owens Lake. If utilized, these enhancements would be added during Phase 7 construction or during a later phase.

II.1.1.3 Study Areas

Included in the total 15.1 square miles of the total project area are 1.9 square miles of Study Areas. These are areas where the exact location and magnitude of dust emissions is uncertain. In order to provide as extensive an impact analysis as possible, these areas would be treated as other areas requiring dust control. The District would continue to collect data in these four areas to determine their emissivity through the course of the project. If dust controls are required on the Study Areas, the District will order them to be implemented after May 1, 2010.

II.1.1.4 Channel Areas

In addition to the listed DCMs, this EIR addresses potential impacts to 0.5 square mile of Channel Areas. These areas contain natural drainage channels that have been observed to be emissive and require some level of dust control. These areas may have potentially significant resource issues and regulatory constraints that could affect the type and location of DCMs within these areas.

II.1.2 Other Project Elements

II.1.2.1 Water Supply Conservation

An additional element of the project analyzed in the 2008 SIP EIR is the refinement of the amount of water used to control dust in Shallow Flood DCM areas. The District's Shallow Flood research conducted in the 1990s indicated that 99-percent control was achieved when 75 percent of an area consisted of standing water or surface-saturated soil. This is considered a conservative requirement; the actual amount of water required to provide 99-percent control may be less than 75 percent. The City will conduct limited field testing on no more than 1.5 square miles of existing Shallow Flood areas to refine the amount of water required to achieve 99-percent control. Based on data collected from January 2000 through June 2006, the level of control required to reduce lake bed emissions to below the federal standard has been identified for areas of the lake bed known as the minimum dust control efficiency (MDCE). The MDCEs for the new DCAs vary from 99 percent to 0 percent. Although some of the new Shallow Flood DCM areas will be constructed and operated to provide less than 99-percent dust control efficiency, existing Shallow Flood DCMs will require 99-percent control efficiency and thus 75 percent of wetted area.

II.1.2.2 Water Supply and Conveyance

Expanded water conveyance pipeline systems would be tied into existing mainlines on the project site. The mainline capacity shall be increased by tying the existing brine line into the mainline and using the brine line in parallel with the mainline for transmission of water. In addition, paralleling of the mainline in selected reaches is also being considered. Those mainline improvements would be in existing disturbed operational areas or in the areas already analyzed in the 2008 SIP EIR. The estimated water demand for the project ranges between 0 and 4 acre-feet per acre per year depending on the control measures selected and climatic and operational conditions. The source of water for the project is from the Los Angeles Aqueduct. The City may seek to utilize other sources of water for dust control in the future, such as groundwater from Inyo County. However, utilization of water for dust control from sources other than the Los Angeles Aqueduct would require separate environmental review and is not covered in the 2008 SIP EIR.

II.1.2.3 Access Roads

Unpaved and gravel-paved, permanent all-year access roads would be constructed and used for construction, operation, and maintenance of the DCAs. New secondary access roads would connect to existing primary access roads. Secondary access roads would be about 10 feet wide, with centerline elevation 2 feet above existing grade and shoulder slopes of 3:1. The elevation of the access roads may increase to about 4 feet above existing grade on portions of the lake bed. Access is currently provided from U.S. Highway 395 via the existing north and south mainline pipeline access roads, from State Route 136 via the existing Sulfate Road, and from State Route 190 via the existing Dirty Socks access road. Two new secondary access roads would be constructed directly off U.S. Highway 395 for the northwestern areas of the DCAs, with the pathway being built on existing dirt roads rather than completely new construction for access. It is not anticipated that pipelines and buried power lines would be constructed along these access roads as part of Phase 7. If required, pipelines and buried power lines would be placed and constructed under, along, or close to these access roads. All lake bed roads are to be maintained in a substantially nonemissive condition through the use of water, brine, and/or gravel. Improvements to access roads may be nonpermanent and performed when necessary, as required. These may include, but are not limited to, mats, grading, fill, compaction, and base-course at any "soft spots" encountered. Improvements to existing access road to DCA No T37-1 shall not be made, as it falls under the Bureau of Land Management's jurisdiction.

II.1.2.4 Power Supply

Up to 2,000 kilovolts of electrical power may be required to operate the project facilities, including the Shallow Flooding facilities. This power would be supplied from existing line power facilities to the site provided by the City. Underground power lines would be buried 18 to 30 inches below ground surface and would be located generally in the vicinity of access roads and pipelines. Up to several thousand feet of underground power line may be installed.

Existing overhead power lines run along the north end and down the east side of Owens Lake, generally paralleling the historic shoreline on the north and State Route 136 on the east. Power drops from nearby overhead lines are connected to the underground power lines that carry power to the lake bed control measure facilities.

In addition, small portable generators mounted on construction vehicles would provide some temporary construction and emergency power.

II.1.2.5 Water Distribution Facilities

Shallow Flooding areas would be subdivided into smaller flooding-area blocks to improve water use efficiency. It is anticipated that approximately half of the units would be operated simultaneously, with water being supplied nearly continuously during peak demand periods.

Water distribution facilities within the flooding-area blocks may include submain pipelines, lateral pipelines, water delivery risers, drain pump stations, ponds, whiplines, tailwater pumping stations, and sideslope and downslope berms. The number and size of the individual flooding-area blocks may vary based on the final design and layout. However, the anticipated facilities would be similar to existing facilities.

II.1.2.6 Staging Areas

Two existing staging areas have been established to provide contractor(s) currently working on ongoing implementation of approved DCMs with storage and placement of heavy equipment and construction materials and supplies. One contractor staging area is located south of Sulfate Road and west of State Route 136 near their junction, just above the eastern historic shoreline of Owens Lake. A second contractor staging area is located above the southeast shoreline of the lake bed near Dirty Socks Spring. A third staging area is proposed at T-37 near the northwest corner of the lake bed. It is anticipated that these areas would also suffice as staging areas for construction activities associated with the proposed project.

II.1.2.7 Effectiveness Monitoring Program

A dust emissions monitoring program, known as the Dust ID Program, has been established by the District. The program consists of air monitoring devices, a grid of sand motion monitoring devices deployed on the lake bed, remote cameras, visual observations, and global positioning system mapping to measure and map dust emissions from the lake bed. The District and the City, with assistance of third-party technical experts, would work cooperatively to improve the Dust ID Program by 2010. The Dust ID Program will continue to operate during and after DCM installation. The City would also install and operate additional air monitoring devices within the project area.

II.2 CONSTRUCTION SCENARIO

Development of the project would require approximately 1.5 years to complete from August 2008 through March 2010. The new Moat & Row DCM areas would be completed and fully operational by October 1, 2009, and the new Shallow Flooding DCM areas would be completed and operational by April 1, 2010.

The construction elements that would be required for the 15.1 square miles of new DCMs to meet the NAAQS standard for PM_{10} emissions by 2010 consists of eight primary activities:

- Site preparation (surface grading and earth moving)
- Berm construction and access road grading
- Mainline water delivery and drain line construction (trenching, pipeline installation, trench backfilling)
- DCM area dewatering
- Water distribution system installation within the DCM areas
- Power line and DCM controls installation

- Moat & Row shaping and enhancing
- Shallow Flooding DCM flooding

Supporting activities would include fence installation, material delivery, and transportation of crews. All site preparation and construction activity would be undertaken in accordance with applicable federal, state, and Inyo County codes.

Construction of DCMs would require a 50-foot buffer around the area of construction, except in sensitive areas amounting to a temporary construction impact of 0.3 square mile (Table II.2-1 *Temporary Construction Impact Areas*). Therefore, temporary impacts related to construction of the DCMs would result in the addition of these construction buffer zones. The City's construction requirements have been refined since the initial implementation of dust controls, in which a 200-foot-wide construction buffer zone was utilized.

Construction on Owens Lake is significantly harder and more challenging than construction on unimproved areas due to the variation in the soil conditions and the presence of water tables very close to the surface. The construction equipment is generally wider and equipped with wide tracts as well as floatation devices in order to avoid sinking into the soft playa. In certain places, plates and mats must be used in conjunction with the wide-tract equipments. The larger equipment utilized on the lake bed typically requires greater turning radius. In addition, the buffer would allow for transportation of construction materials for the construction of the DCMs to ensure that construction activities are not halted in order to transport these materials throughout the construction site. In addition, survey stakes and monuments would be placed within these buffer zones for the construction of DCMs, and must be placed away from the construction activities in order to safeguard them and allow for uninterrupted operations.

TABLE II.2-1
TEMPORARY CONSTRUCTION IMPACT AREAS

Supplemental Dust Control Area/Measure	Dust Control Area (Square Mile)	Temporary Construction Impact Areas (Square Mile)	Total Temporary and Permanent Impact Areas (Square Mile)
Shallow Flood	9.2	0.1	9.3
Moat & Row	3.5	0.1	3.6
Study Area	1.9	0.1	2
Channel Area	0.5	0	0.5
Total Proposed Project Area	15.1	0.3	15.4

A summary of the types of construction activities for each component of the project and construction labor and equipment requirements is provided in Table II.2-2, *Anticipated Construction Equipment and Work Crews*. It is anticipated that the peak construction period for the revision of the 2003 SIP (2008 SIP) would not exceed that experienced during installation of the 1998 SIP DCMs. The peak period of construction experienced in conjunction with the 1998 SIP occurred in late spring and early summer of 2002, when approximately 250 pieces of equipment and 200 construction personnel were mobilized on site. Similarly, it is anticipated that peak construction for the 2008 SIP DCMs would be expected between late spring 2009 and early summer 2009, during installation of the Moat & Row DCM. Construction activities are expected to occur six days a week for 12 hours a day. However, construction activities may occur seven days a week for 24 hours a day to complete construction on schedule, contingent on County ordinances that define acceptable timeframes for authorized

construction activities. It is anticipated that, at the end of each shift, construction crews who have just completed their shift would generally leave the site and return home and that the next crews would already be on site and would start working when the shift changes. During construction, as-needed nighttime lighting would be directed away from the roads and communities to the maximum extent practicable.

TABLE II.2-2
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORK CREWS

Construction Activity	Brief Description	Activity Length (Estimate)	Equipment Requirement per Crew	Crew Composition (Estimate)	Number of Crews
Site preparation	Clearing the proposed site of mainly existing surface features, leveling and clearing of minimal vegetation and other debris	30 days	1 bulldozer 1 front-end loader 1 grader 2 dump trucks 1 scraper	4 operators 2 surveyors 4 laborers 1 foreman	1
Earth moving	Excavation, grading for drainage, and ripping the project area	60 days	2 bulldozer w/ disc plow 1 scraper	3 operators 1 foreman	2
Storm water control berms	Construction of earth berms along perimeter of project site includes excavation, backfill, grading, and compaction	30 days	1 excavator 1 front-end loader 1 compactor 1 water truck 1 job pickup 1 scraper 2 haul trucks	6 operators 5 laborers 1 foreman	1
Shallow Flooding and pond berms	Construction of earth berms in Shallow Flooding area includes excavation, backfill with soil, grading, compaction, and riprap placement	150 days	2 excavator 1 front-end loader 1 compactor 1 water truck 2 job pickups 4 scraper 4 haul trucks	12 operators 1 foreman 6 laborers	2
Dewatering	Dewatering and discharge of on-site groundwater within and outside project limits	300 days	2 job pickups, pumps	2 laborers 1 foreman	1
Turnout mainline pipelines	Excavation, pipeline delivery, pipeline excavation, installation, and backfilling	60 days	1 tracked excavator/trencher w/conveyor 1 tracked chain machine trencher 1 bulldozer 1 front-end loader 1 crane/pipelayer 1 compactor 3 pipe delivery trucks 3 job pickups	5 operators 1 grade checker 2 welders 3 laborers 1 foreman	1

TABLE II.2-2
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORK CREWS, Continued

Construction Activity	Brief Description	Activity Length (Estimate)	Equipment Requirement per Crew	Crew Composition (Estimate)	Number of Crews
Supply submain installation	Excavation, pipeline delivery, pipeline excavation, installation, and backfilling	90 days	1 tracked excavator/ trencher w/ conveyor 1 tracked chain-machine trencher 1 bulldozer 1 crane/pipelayer 1 compactor 2 pipe delivery trucks 2 job pickups	6 operators 1 grade checker 3 laborers 1 foreman	2
Lateral drains installation	Excavation, pipeline delivery, pipeline excavation, installation, and backfilling	120 days	1 tracked excavator/ trencher w/ conveyor 1 tracked chain-machine trencher 1 bulldozer 1 front-end loader 1 compactor 2 pipe delivery trucks 2 job pickups	5 operators 1 grade checker 4 laborers 1 foreman	4
Collector drains installation	Excavation, pipeline delivery, pipeline excavation, installation, and backfilling	90 days	1 tracked excavator/ trencher w/ conveyor 1 tracked chain-machine trencher 1 crane/pipelayer 1 bulldozer 1 compactor 2 material delivery trucks 2 job pickups	5 operators 3 laborers 1 foreman	2
Shallow Flooding drains installation	Excavation, pipeline delivery, pipeline excavation, installation, and backfilling	60 days	1 tracked excavator/ trencher w/ conveyor 1 tracked chain-machine trencher 1 crane/pipelayer 1 bulldozer 1 compactor 1 material delivery truck 2 job pickups	5 operators 3 laborers 1 foreman	1

TABLE II.2-2
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORK CREWS, Continued

Construction Activity	Brief Description	Activity Length (Estimate)	Equipment Requirement per Crew	Crew Composition (Estimate)	Number of Crews
Power line and Supervisory Control And Data Acquisition (SCADA) line installation	Site and area power and control distribution pole lines and/or underground conduits, service meter and switchboard, and distribution switchgear	75 days	1 post-hole digger/ crane truck 2 backhoes 1 come-a-long vehicle 2 cable reel truck 1 delivery truck 1 job pickup truck	8 operators 4 laborers 1 foreman	1
Road construction	Construction of elevated roads on berms using native materials, placement of soils, compaction, grading, and gravel placement	75 days	1 excavator 2 compactor 2 grader 3 haul trucks 1 water truck 1 job pickup 1 scraper	9 operators 4 laborers 1 foreman	1
Management activities	Construction management and field inspection	312 days	10 job-site vehicles	2 contractor superintendents 3 field engineers 6 inspectors 4 office staff	1
Environmental mitigation crews	Environmental mitigation crews would conduct environmental surveys and mitigation monitoring activities	Ongoing	All-terrain vehicles, 4-wheel-drive passenger vehicles	2 to 6 people per survey	7

All hazardous materials would be stored, handled, disposed, and transported in accordance with local ordinances, and state and federal regulatory requirements. Hazardous materials expected to be utilized during construction include fuels, oils, lubricants, and solvents associated with the construction. Chemicals used during construction and operations would be contained in tanks placed on concrete slabs within containment walls, double-wall tanks, or berms and would comply with existing chemical safety and storage regulations. The City would be required to obtain a Certified Unified Program Agency (CUPA) permit from the Inyo County Health Services Department and would disclose to the local fire emergency services any stored, handled, or disposed hazardous materials wastes prior to construction. All combustible materials would be handled in accordance with fire and safety requirements. All unused construction materials would be removed from the project site upon completion of improvements. Solid waste generated during construction or operation of the project would be transported to a permitted solid waste disposal facility. The project site would be monitored for excessive erosion as documented in the project's Waste Discharge Permits with the Regional Water Quality Control Board. If such erosion is observed, the City would take immediate corrective action, including implementation of best management practices (BMPs). A typical construction crew would be composed of about 10 workers. The majority of construction activities would involve one to three work crews. Local construction crews would be used as much as possible to keep lodging and housing demands to a minimum; otherwise, non-local construction crews would be used. In the event that temporary housing is needed, lodging at local motels in Lone Pine would be arranged. Sanitation

service would be provided by portable units. Medical treatment would be available at the Northern Inyo Hospital in Bishop or Southern Inyo Hospital in Lone Pine.

Trailer-mounted temporary lights would be used during night construction to illuminate areas where there is substantial construction activity. Each illuminated construction area would be approximately 400 to 500 square feet. Other areas would be illuminated minimally and only as necessary to ensure adequate safety for access and egress. The existing construction staging areas would have minimal lighting at night associated with the contractor's trailers, repair work, and safety lighting. Approximately ten 50-horsepower diesel generators may be used to power lights used for nighttime construction activities. Additional lights would be mounted on heavy construction vehicles such as scrapers, loaders, tractors, and dozers, and other equipment as necessary to provide adequate lighting for nighttime construction activities. Construction lights would be directed away from roads and communities to the maximum extent possible. With the exception of the delivering of plant material for vegetation, nighttime delivery of equipment and materials would be minimized.

SECTION III
MONITORING PROGRAM

The mitigation monitoring program (MMP) contained herein satisfies the requirements of the California Environmental Quality Act (CEQA) as they relate to the Environmental Impact Report (EIR) for the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (project). The Draft EIR, dated September 16, 2007, was circulated for a 45-day public review and comment period.

The EIR identifies mitigation measures that have been incorporated into the project to avoid, reduce, and mitigate significant impacts to air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, traffic and transportation, and utilities and service systems. This MMP has been designed to ensure compliance with mitigation measures defined in the EIR during implementation of the project. This MMP would be adopted by the Great Basin Unified Air Pollution Control District (District) Governing Board. Table III-1, *Mitigation Monitoring Plan for the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan,* lists those mitigation measures required by the District to mitigate or avoid significant impacts anticipated in association with the EIR project description. It shall be the responsibility of the District, the City of Los Angeles Department of Power and Water, and the California State Lands Commission to carry out the MMP by imposing the requirements of the mitigation measures throughout the implementation of the project. The District commits to the preparation of an Environmental Quality Assurance Program (EQAP) to ensure compliance with the MMP, namely the collection, storage, review, and organization of the environmental quality control reports required by several mitigation measures and review of the compliance plans submitted by the City of Los Angeles Department of Water and Power, as required by the majority of mitigation measures, to determine their adequacy.

The monitoring program element of the MMP describes each required mitigation measure organized by impact area, with an accompanying delineation of the following:

- The agency or agencies (or private parties) responsible for implementation
- The period of the project during which implementation of the mitigation measure is to be monitored
- The Enforcement Agency (the agency with the power to enforce the mitigation measure)
- The Monitoring Agency (the agency to whom the reports are made)

As the indicated mitigation measures are completed, the Monitoring Agency will sign and date the MMP to indicate that the required mitigation measure has been completed for the subject period. The Monitoring Agency will also note the documentation (title of the monitoring report) that was submitted for each mitigation measure.

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Air Quality						
Measure Air-1, Construction Activities Fugitive Dust Emissions Control and Minimization Fugitive dust emissions during construction shall be controlled and minimized, to comply with Great Basin Unified Air Pollution Control District Rules 400 and 401 (EPA 1992), through the City of Los Angeles Department of Water and Power's application of best available control measures during construction activities from unpaved roads and areas affected by the construction work specified in this 2008 Revised SIP, or related transportation and staging of equipment and materials. This may include, but would not be limited to, the use of, surface coverings, windbreaks, water trucks, and water sprays twice a day, or comparable measures that prevent visible dust from occurring. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation. The City of Los Angeles Department of Water and Power shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by the City of Los Angeles Department of Water and Power and approved by the Great Basin Unified Air Pollution Control District prior to the start of construction and the submission of weekly monitoring reports to the Great Basin Unified Air Pollution Control District and the California State Lands Commission. The Great Basin Unified Air Pollution Control District shall monitor the application of best available control measures at least once a week on an ongoing basis during the construction phase of the proposed project, and maintain a monitoring log on file.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency)
Measure Air-2, Construction Equipment Low-emissions Tune-ups Schedule To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall develop a schedule of low-emissions tune-ups for all equipment operating on site for more than 10 working days, and maintain a log of required tune-ups and submit a monthly copy to the Great Basin Unified Air Pollution Control District during the project's construction phase. Prior to implementation of the schedule, the City of Los Angeles Department of Water and Power shall submit the schedule to the Great Basin Unified Air Pollution Control District and the California State Lands Commission. The Great Basin Unified Air Pollution Control District shall ensure conformance of the equipment operation with the approved schedule.	City of Los Angeles Department of Water and Power	Preconstruction and Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Air-3, Low-emission Construction Equipment Utilization To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. The Great Basin Unified Air Pollution Control District should monitor the application of low-emission equipment/mobile construction equipment, or other approved equipment at least once a week on an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Air-4, Low-sulfur Fuel Utilization during Construction To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall apply best available control measures during construction by utilizing low-sulfur and/or alternative fuels for on-site stationary equipment. Stationary sources of air emissions, such as pumps, compressors, and generators shall be line-powered, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. The Great Basin Unified Air Pollution Control District should monitor the application of low-sulfur and/or alternative fuels for on-site stationary equipment, or other approved on-site stationary equipment at least once a week on an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency)
Measure Air-5, Low-emission Mobile Vehicle Utilization during Construction To mitigate the air quality impact related to greenhouse gas emissions, low-emission or alternative-fueled mobile vehicles during the proposed project's construction shall be utilized for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by the City of Los Angeles Department of Water and Power to reduce vehicular emissions.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California State Lands Commission	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Air-6, Low-emission Mobile Vehicle Utilization during Operation To mitigate the air quality impact related to greenhouse gas emissions during the proposed project's operation, hybrid, low-emission (CA LEV II; PZEV, SULEV; or ULEV) or alternative-fueled mobile vehicles, such as electric or fuel cells, shall be utilized for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. The City of Los Angeles Department of Water and Power shall provide the Great Basin Unified Air Pollution Control District with its purchasing policy procedures that shall provide provisions that encourage the use of low-emission or alternative-fueled mobile vehicles before operation of the project. In addition, carpooling of operations and maintenance workers should be considered and encouraged by the City of Los Angeles Department of Water and Power to reduce vehicular greenhouse gas emissions.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California State Lands Commission	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Biological Resources						
Construction Measures						
Measure Biology-1, Lake Bed Worker Education Program To minimize potential direct impacts to western snowy plover from construction activities to below the level of significance, the City of Los Angeles Department of Water and Power shall continue the lake bed worker education program consistent with the previous approach and per California Department of Fish and Game recommendations. The program shall mirror the program instituted for workers for the 1997 EIR and shall focus on western snowy plover identification, basic biology and natural history, alarm behavior of the snowy plover, and applicable mitigation procedures required of the City of Los Angeles Department of Water and Power and construction personnel. The program shall be conducted by a biologist familiar with the biology of the western snowy plover at Owens	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Worker Education Program Summary Report and Monthly Worker Education Program Reports for newly-trained personnel	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Lake and familiar with special status plant and wildlife species of the Owens Lake basin. The biologist shall be approved by the Great Basin Unified Air Pollution Control District prior to implementation of the education program. The qualifications of the biologist shall be submitted to the California Department of Fish and Game for review. The education program shall be based on the 1997 program EIR and shall include relevant updates by the biologist. The education program shall explain the need for the speed limit in the snowy plover buffer areas and the identification and meaning of buffer markers. All construction, operation, and maintenance personnel working within the project area shall complete the program prior to their working on the lake bed. A list of existing personnel who have completed the program shall be submitted to the Great Basin Unified Air Pollution Control District prior to the start of any work on the lake bed. A list of new personnel who have participated and completed the education program shall be submitted monthly to the Great Basin Unified Air Pollution Control District. A copy of the worker education program shall be provided to the California Department of Fish and Game and California State Lands Commission.						
Measure Biology-2, Preconstruction Surveys for Western Snowy Plover To minimize potential direct impacts to western snowy plover within the project area due to construction activities, the City of Los Angeles Department of Water and Power shall conduct a preconstruction survey for western snowy plover in all potential snowy plover habitat prior to any construction activity that is performed during the snowy plover breeding season (March 15 to August 15). Preconstruction surveys shall be performed no more than seven days prior to the start of ground-disturbing activities. The City of Los Angeles Department of Water and Power shall place a 200-foot buffer around all active snowy plover nests that are discovered within the construction area. This buffer shall protect the plover nest from both destruction and construction noise. Green-colored stakes of less than 60 inches in height with yellow flagging shall be used to mark buffer edges, with stakes spaced at eight approximately equidistant locations. The location of the nest (global positioning system coordinates) and current status of the nest shall be reported within 24 hours of discovery to the Great Basin Unified Air Pollution Control District. Maps of snowy plover nest locations shall be posted at the construction office and made available to all site personnel and Great Basin Unified Air Pollution Control District staff. The activity of the nest shall be monitored by a biological monitor approved by the Great Basin Unified Air Pollution Control District, as per existing guidelines for the North Sand Sheet and Southern Zones dust control projects and any revisions to the monitoring protocol that have been approved by the California Department of Fish and Game. Active snowy plover nests shall be monitored at least weekly. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. The nest buffer shall remain in place until such time as the biological monitor determines that the nest is no longer active and that fledglings are no longer in danger from proposed construction activities in the area. Buffers shall be more densely marked where they intersect project-maintained roads. Vehicles shall be allowed to pass through nest buffers on maintained roads at speeds less than 15 miles per hour, but shall not be allowed to stop or park within active nest buffers. Permitted activity within the nest buffer shall be limited to foot crews working with hand tools and shall be limited to 15-minute intervals, at least one hour apart, within a nest buffer at any one time. Compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District through issuance of a weekly written report by the City of Los Angeles Department of Water and Power to the Great Basin Unified Air Pollution Control District.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Weekly Monitoring Reports (provided until construction is complete)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Biology-3, Snowy Plover Nest Speed Limit To minimize potential direct and cumulative impacts to western snowy plover and other sensitive biological resources from vehicles construction activities, the City of Los Angeles Department of Water and Power shall implement a speed limit of 30 miles per hour within all active construction areas on Owens Lake during construction of dust control measures. Speed limits shall be 15 miles per hour within active snowy plover nest buffers. Designated speed limits for other construction areas outside of active nest buffers shall be maintained at 30 miles per hour where it is determined to be safe according to vehicle capabilities, weather conditions, and road conditions. Site personnel and Great Basin Unified Air Pollution Control District staff shall be informed daily of locations where active nest buffers overlap with roads in the construction area. Signs shall be posted that clearly state required speed limits. Speed limit signs shall be posted at all entry points to the lake. The number of speed limit signs shall be kept at a minimum near active snowy plover nest areas to reduce potential perches for raptors and other snowy plover predators and shall be outfitted with Nixalite or the functional equivalent if greater than 72 inches (increased from the original 60 inches) in height at entry points to the lake and 60 inches in height by active snowy plover nest areas. Compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District through issuance of a summary written report by the City of Los Angeles Department of Water and Power to the Great Basin Unified Air Pollution Control District after posting of speed limits. A copy of the summary report shall be provided to the California Department of Fish and Game.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Compliance Summary Report (provided within 30 days of completion of education seminar and installation of speed-limit signs)	_____ (Signature/Date of Monitoring Agency)
Measure Biology-4, Lighting Best Management Practices To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, the City of Los Angeles Department of Water and Power shall institute all best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and California Department of Fish and Game recommendations. Best management practices include those listed below, and are included in the Project Description of the 2008 State Implementation Plan Environmental Impact Report. Previous construction has occurred during nighttime hours to complete construction schedules and to prevent personnel from working during times of high temperatures. If night work is deemed necessary, then construction crews shall make every effort to shield lighting on equipment downward and away from natural vegetation communities or playa areas, and especially away from known nesting areas for snowy plovers during the nesting season (March to August). All lighting, in particular any permanent lighting, on newly built facilities shall be minimized to the greatest extent possible, while still being in compliance with all applicable safety requirements. Required lighting shall be shielded so that light is directed downward and away from vegetation or playa areas. Proof of compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District, and a copy of the compliance record shall be provided to the California Department of Fish and Game.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Compliance Summary Report (provided until construction is complete)	_____ (Signature/Date of Monitoring Agency)
Measure Biology-5, Marking of Nonemissive Wetland and Upland Scrub Areas To minimize the potential direct impacts to nonemissive wetland and upland scrub vegetation communities from construction activities to below the level of significance, the City of Los Angeles Department of Water and Power shall clearly mark the boundary of construction zones (including the 50-foot buffer) within 50 feet of the boundary of nonemissive wetland areas and upland scrub communities to prevent incursion into these vegetation communities. No construction zone buffer is allowed for construction areas immediately adjacent to wetland or sensitive areas. Construction zone buffers are not allowed to impact wetland or sensitive areas. Construction zone boundaries near	City of Los Angeles Department of Water and Power	Preconstruction and Construction	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Compliance Summary Report (provided to the Great Basin Unified Air Pollution Control District prior to the start of construction)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
nonemissive areas shall be marked using stakes less than 72 inches (originally 60 inches) high, spaced 10 feet apart, along the edges of spring mounds, and spaced 100 feet apart along other wetland and vegetated edges. Marking shall occur prior to the initiation of construction activities. Construction buffer areas outside of the dust control boundaries shall not exceed 50 feet in width and shall be reduced as required to prevent construction activities from impacting adjacent vegetated areas. No temporary or permanent access routes through vegetated areas shall be established, except those specified in the Project Description. Incursions into established vegetated areas, including vegetated areas within the temporary impact area of the 50-foot construction zone buffer, that cause measurable loss of plant cover shall require revegetation with suitable local, native plant species. Proof of compliance with this mitigation measure shall be verified by submitting a written report to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game that details the location of markings and the type and locations of delineated wetland and upland areas that are marked. This report shall be submitted prior to the start of construction activities. A written mitigation plan for those vegetated areas where plant cover loss has been measured must be submitted to the Great Basin Unified Air Pollution Control District following the completion of construction. The mitigation plan must contain a schedule and protocol for achieving revegetation within two years of any impacts to vegetation caused by access routes or construction activities outside the areas specified in the Project Description.						
Operations and Maintenance Measures						
Measure Biology-6, Wetland Mitigation Program To minimize direct impacts to riparian and wetland communities caused by installation of dust control measures to below the level of significance, the City of Los Angeles Department of Water and Power shall obtain a Programmatic Streambed Alteration Agreement for all existing or proposed activities that may impacts areas subject to the jurisdiction of the California Department of Fish and Game pursuant to Section 1600 of the California Department of Fish and Game Code that require the approval of the California Department of Fish and Game in the form of a Streambed Alteration Agreement. If previous phases or the proposed work covered by the 2008 State Implementation Plan and Environmental Impact Report do not require a Streambed Alteration Agreement, then they will not be incorporated into the Programmatic Streambed Alteration Agreement. The City of Los Angeles Department of Water and Power shall institute a wetland mitigation program prior to the initiation of construction activities as recommended by the California Department of Fish and Game. The program shall be designed to emphasize restoration of equivalent functions and values of wetlands within the project area as compared to pre-project impacts. The wetlands mitigation program shall include mitigation goals, target success criteria, identification of impact areas, an implementation plan, plant species and spacing, irrigation design, post-implementation monitoring plan, and maintenance requirements. Managed Vegetation is deemed to have equivalent functions and values to dry transmontane alkali meadow that would be impacted by the project at a ratio of 2 acres of Managed Vegetation created for every 1 acre of dry transmontane alkali meadow impacted. Up to 413 acres of dry transmontane alkali meadow may be converted to dust control measures as a result of the project. The creation-to-impact ratio for the proposed project would be approximately 2:1. A Managed Vegetation area of up to 826 acres, based on actual impact area identified, shall be designated as the wetland mitigation area within the prescribed Managed Vegetation areas as proposed in the project description. The City of Los Angeles Department of Water and Power shall designate the wetland mitigation area within a Managed Vegetation area that is on the bed of Owens Lake. The City of Los Angeles	City of Los Angeles Department of Water and Power	Preconstruction and Construction	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission U.S. Army Corps of Engineers	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission U.S. Army Corps of Engineers	Designated Wetland Mitigation Map, Management Plan (provided to the Great Basin Unified Air Pollution Control District prior to the start of construction of any managed vegetations), and Monitoring Reports	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Department of Water and Power currently has a bank of 53.9 acres of excess installed transmontane alkali meadow that may count toward the total number of acres that would be required as mitigation. Potential mitigation areas may include the Sulfate Well outflow area and Swansea outflow area. Potential mitigation areas may not include state-owned lands currently used for cattle grazing. Banked mitigation (Table 2.4.4-1) credits may be applied for in-kind mitigation. A design and plan for the designated wetland mitigation area shall be provided to the Great Basin Unified Air Pollution Control District and California State Lands Commission for approval prior to construction of any Managed Vegetation. Included in the plan shall be the location, plant species, schematics, schedule, irrigation requirements, performance criteria, and contingency measures. A copy of the plan shall be provided to the California Department of Fish and Game, U.S. Army Corps of Engineers, and the California State Lands Commission. A transmontane alkali meadow management plan shall be created by the City of Los Angeles Department of Water and Power that sets forth a program to monitor the designated wetland mitigation areas for appropriate coverage of native plant species, for change in the extent of transmontane alkali meadow over a five-year period postconstruction, and for management of invasive, nonnative plant species in wetland areas in and within 500 feet of the project area. The transmontane alkali meadow management plan shall be approved by the Great Basin Unified Air Pollution Control District prior to the initiation of construction activities. A copy of the management plan and subsequent monitoring reports shall be provided to the California Department of Fish and Game, U.S. Army Corps of Engineers, and to the California State Lands Commission. Calculations of dry transmontane alkali meadow impacts from implementation of the project are estimates based on the mapped extent of transmontane alkali meadow areas within the project area and a determination of whether an area is emissive or nonemissive based on dust monitoring data. The total acreage of wetland mitigation for dry transmontane alkali meadow shall be two times the actual direct and indirect impact area caused to dry transmontane alkali meadow by both construction and postconstruction activities. If any unanticipated indirect postconstruction impacts to riparian communities proximal to Shallow Flood dust control measures occur as a result of project construction or operation, the City of Los Angeles Department of Water and Power shall designate additional wetland mitigation areas and incorporate design parameters that would result in the replacement of equivalent functions and values to the impacted moist or saturated transmontane alkali meadow wetlands within two years of the initiation of the replacement effort. Significant impacts would include loss of vegetative cover due to ground disturbance or change in species composition attributable to drying of springs or ponds, which does not self-repair within two years of detection. Managed Vegetation would not be suitable mitigation for impacts to moist or saturated transmontane alkali meadow communities. The City of Los Angeles Department of Water and Power shall compensate for all loss of transmontane alkali meadow that occurs. Mitigation for impacts to all transmontane alkali meadow associated with construction and operation of dust control measures constructed between 1998 and 2008 (prior to the project) shall be replaced at a ratio of 1 acre of wetland replacement for every acre of wetland impact (1:1 replacement ratio). Replacement wetlands shall consist of similar habitat function and values as the wetland that is lost. Banked mitigation (described in EIR Table 2.4.4-1) credits may be applied for in-kind mitigation. All wetland replacement described in this mitigation measure shall be approved by the Great Basin Unified Air Pollution Control District, California Department of Fish and Game, U.S. Army Corps of Engineers, and California State Lands Commission. All wetland replacements for anticipated impacts shall be constructed and fully functional no later than April 1, 2010. All wetland replacements for unanticipated impacts shall be constructed and fully functional within two years of when the impact was determined.						

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Biology-7, Toxicity Monitoring Program To avoid direct and cumulative impacts to native wildlife communities that may potentially result from bioaccumulation of toxic substances resulting from naturally occurring heavy metals and other potential toxins in lake bed deposits to below the level of significance, the City of Los Angeles Department of Water and Power shall implement a toxicity monitoring program to investigate the potential of bioaccumulation of heavy metals and other potential toxins in wildlife from feeding in dust control areas throughout the Owens Lake bed. A copy of the long-term monitoring program shall be submitted to the California State Lands Commission and Great Basin Unified Air Pollution Control District for review and comment at least 60 days prior to the start of operation of new water-based dust control measures. Monitoring shall take place in all dust control areas within the Owens Lake as well as at all spring and outflow areas within 500 feet of the construction boundaries. The purpose of the monitoring program shall be to determine if bioaccumulation of toxins is occurring within native wildlife populations attributable to the Dust Control Mitigation Program. Procedures for bioaccumulation monitoring shall follow existing permits issued by the Lahontan Water Quality Control Board (Lahontan Water Quality Control Board) and any subsequent water quality monitoring requirements deemed necessary by the Lahontan Water Quality Control Board. All monitoring shall be conducted by individuals familiar with the native wildlife species of the Owens Lake bed. Monitoring personnel shall be approved by the Great Basin Unified Air Pollution Control District prior to implementation of the long-term monitoring. The monitoring plan shall include adaptive management procedures and mitigation procedures to follow in the instance that signs of toxicity do develop in native wildlife populations that are attributable to the Dust Control Mitigation Program. Management procedures would be implemented depending on the type and extent of impact that was observed and could potentially, but not necessarily, include covering of dust control areas to prevent wildlife utilization, hazing of wildlife to prevent utilization of dust control areas, or any other appropriate measures. Any adaptive management measures that would potentially be implemented shall be approved by the Great Basin Unified Air Pollution Control District, and the California Department of Fish and Game prior to implementation. The monitoring shall be conducted as described in Table 3.2.5-1, *Biology-7, Postconstruction Bioaccumulation Monitoring Schedule*. In order to have the 2003 State Implementation Plan and 2008 State Implementation Plan monitoring schedules coincide, the final year for monitoring in 2003 State Implementation Plan areas has been moved from 2020 to 2023. Monitoring shall be conducted on a semiannual basis (summer and winter) during each year that monitoring is conducted. If, after the completion of the 14-year monitoring schedule as described in mitigation measure Biology-7, it is determined that there is no evidence of toxicity issues in native wildlife populations, then the monitoring program may be discontinued. If monitoring determines that impacts to native wildlife species are occurring, then the monitoring shall continue on a semiannual basis (summer and winter) in every year until significant impacts are not detected, and the monitoring sequence shall resume at the Year 3 monitoring event and shall continue at the intervals shown in Table 3.2.5-1. Written monitoring reports shall be provided to the Great Basin Unified Air Pollution Control District, the California Department of Fish and Game, Lahontan Water Quality Control Board, and the California State Lands Commission by the approved biological monitor within four months following the end of the monitoring year. Any changes in the existing monitoring requirements by the Regional Water Quality Control Board shall be included into this mitigation measure.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission Lahontan Regional Water Quality Control Board	Long Term Toxicity Monitoring Program (provided to the Great Basin Unified Air Pollution Control District prior to the start of construction) and Annual Bioaccumulation Monitoring Reports	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
TABLE 3.2.5-1 **BIOLOGY-7, POSTCONSTRUCTION BIOACCUMULATION MONITORING SCHEDULE** **2003 SIP areas only** | **2003 SIP areas only** | **Year 1 monitoring event*** | **Year 2 monitoring event*** | **Year 3 monitoring event†** 2008 | 2009 | 2010 | 2011 | 2012 **Year 4 monitoring event*** | **Year 5 monitoring event†** | **Year 6 monitoring event*** | **Year 9 monitoring event†** | **Year 14 monitoring event*** 2013 | 2014 | 2015 | 2018 | 2023 **NOTE:** * 2003 and 2008 SIP areas monitored † 2008 SIP areas only						
Measure Biology-8, Exotic Pest Plant Control Program To minimize indirect impacts to native vegetation communities that may result from the project construction and operations and to prevent creating an environment for weedy plant species to become established in native plant communities, the City of Los Angeles Department of Water and Power shall continue the exotic pest plant control program initiated in 2007 per the 2003 State Implementation Plan within all current and previously constructed designated dust control areas after full build-out of the project (April 1, 2010). The spread of exotic, invasive plant species, such as salt cedar (*Tamarix* spp.), has detrimental effects on habitat quality for native plant and wildlife species and, in the case of species like salt cedar, can reduce the availability and quality of water within native vegetation areas for plant and wildlife species. The goals of the program shall be consistent with the goals specified in the Inyo County General Plan, the Inyo County Inter-Agency Weed Management Program, and the U.S. Fish and Wildlife Service Owens Basin Wetland and Aquatic Species Recovery Plan for the portion of the Recovery Plan included within the project area. The program shall be written by a pest management specialist or other person familiar with exotic plant species management and shall be submitted to the Great Basin Unified Air Pollution Control District no later than April 1, 2010. Measures for control shall include all best management practices, which include prudent and safe use of control measures such as herbicides, brushing, direct weed removal, tire washing, or comparable measures such that no increase in invasive plant cover occurs. The program shall include yearly monitoring to ensure that exotic plant species are being sufficiently controlled. The draft exotic plant species control program shall be submitted to both the Great Basin Unified Air Pollution Control District and California State Lands Commission and approved by the Great Basin Unified Air Pollution Control District prior to the initiation of exotic plant control activities. All pesticide use shall be undertaken by a state-certified and licensed pesticide applicator. Annual written monitoring reports documenting exotic plant location, type, pretreatment abundance, control type used, and control efficacy shall be delivered to the Great Basin Unified Air Pollution Control District within four months following the end of each calendar year (by April 30). A copy of the control program and resulting monitoring reports shall be provided to the California State Lands Commission and to the California Department of Fish and Game.	City of Los Angeles Department of Water and Power	Construction and Operation	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission	Annual Monitoring Summary Reports and Exotic Pest Plant Control Program (provided until deemed unnecessary by the Great Basin Unified Air Pollution Control District)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Biology-9, Plover Identification Training To minimize potential direct, indirect, and cumulative impacts to western snowy plover resulting from required maintenance within Shallow Flooding dust control areas during the western snowy plover breeding season (March to August), foot crews and all-terrain vehicle (ATV) operators that must enter Shallow Flooding panels within the entire Owens Lake bed during the snowy plover breeding season shall be briefed in plover identification, nest identification, and adult alarm behavior, and the identification and meaning of buffer markers. Crews shall receive this training from a biologist knowledgeable in western snowy plover biology at Owens Lake as part of the contractor education program as described in mitigation measure Biology-1. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. Maintenance crews shall utilize hand tools and ATVs only to conduct maintenance activities during this time period in Shallow Flooding panels where snowy plovers may be present. Crews shall minimize time within the Shallow Flooding and playa areas to the greatest extent possible. In the event that a crew discovers an active nest, a biologist shall be contacted to mark the nest buffer. If crews are working within an active nest buffer, they shall be limited to 15 minutes out of every hour within the buffer. If an unanticipated take to western snowy plovers or an active snowy plover nest occurs during any maintenance activities, a project biologist shall document the impact and report the incident to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game within 48 hours of the event. A take in this case would be defined as mortality to adults, chicks, or fledglings, or a modification in adults' behavior due to human pressure that results in a loss of a nest and its contents. Proof of compliance with this mitigation measure shall be verified by submitting copies of any incident reports to the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the California Department of Fish and Game. Emergency repair activities are exempt from the requirements of this provision. An emergency is defined in the State of California Environmental Quality Act Guidelines, Section 15269, as "a sudden, unexpected occurrence that presents a clear and imminent danger, demanding action to prevent or mitigate loss of or damage to life, health, property, or essential public services." Emergency repairs as defined under the 2003 State Implementation Plan revision and the 1998 State Implementation Plan are further defined as those repairs that must be completed immediately to protect human health and safety, ensure the project is in compliance with required air quality standards, or protect project infrastructure from significant and immediate damage that could result in the failure of a dust control measure to maintain compliance with required air quality standards. In the event that an emergency repair must be performed on a Shallow Flooding panel during the snowy plover breeding season, a qualified biological monitor shall be present on site during the duration of the repair activity to document any impacts to western snowy plover adults, juveniles, or active nests. The Great Basin Unified Air Pollution Control District and the California Department of Fish and Game shall be notified within 24 hours of the start of all emergency repair activities. A copy of the biological monitor's written report shall be provided to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game within 48 hours of completion of the emergency repair activity. Any appropriate mitigation that may be required from impacts to western snowy plovers shall be negotiated between City of Los Angeles Department of Water and Power and the California Department of Fish and Game based on the report provided by the biological monitor. A copy of the resultant mitigation that is negotiated between City of Los Angeles Department of Water and Power and the California Department of Fish and Game shall be provided to the Great Basin Unified Air Pollution Control District and California State Lands Commission.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission	Subsequent Incident Reports and Emergency Repair Activities Report	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Biology-10, Long-Term Monitoring Program for Western Snowy Plover To minimize potential direct, indirect, and cumulative impacts resulting from operation and maintenance of dust control measures to western snowy plover, the City of Los Angeles Department of Water and Power shall implement a long-term snowy plover population monitoring program for the entire Owens Lake bed. Long-term monitoring is required due to long-term implementation of the proposed project. Long-term population monitoring allows for the distinction between natural population fluctuations and human-induced population changes. Postconstruction surveys implemented under the 2003 State Implementation Plan shall be continued under the 2008 State Implementation Plan 1, 2, 3, 4, 5, 7, 9, and 14 years after project implementation. The final western snowy plover monitoring schedule for all dust control measures on Owens Lake bed shall be coordinated so that long-term monitoring for all dust control measures covered within this document, as well as for preceding environmental documents, are conducted simultaneously. The long-term monitoring shall begin in 2010 or at such time that full build-out is completed. The goals of the monitoring are to confirm that overall numbers of snowy plovers within the dust control areas do not decrease due to implementation of the 2008 State Implementation Plan relative to baseline plover population numbers prior to implementation of the 2003 State Implementation Plan as shown by the 2002 plover report for Owens Lake, which found the population to be 272 plovers. Monitoring shall be conducted during the months of May and June by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. The monitoring methodology shall be consistent with the methodology used for the Owens Lake 2002 plover surveys. Annual summary reports for the monitoring efforts shall be filed with the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the California Department of Fish and Game by December 31 of each monitoring year. The Great Basin Unified Air Pollution Control District shall require adaptive management changes to operation and maintenance of dust control measures if it determines that a decline in snowy plover numbers is occurring that is directly attributable to operation or maintenance procedures of the Owens Lake Dust Mitigation Program. The Great Basin Unified Air Pollution Control District shall consult with the City of Los Angeles Department of Water and Power, California State Lands Commission, and the California Department of Fish and Game prior to requiring adaptive management changes. Monitoring shall continue for a minimum of five years after implementation of adaptive management procedures to ensure that the procedures are having the desired effect on the lake-wide snowy plover population. If after the Year 5 monitoring event it is determined that no adverse impacts to the western snowy plover population at Owens Lake are occurring as a result of the project, then the long-term monitoring program and subsequent reporting may be discontinued. Specified calendar years for conducting lake-wide plover population surveys are provided in Table 3.2.5-2, *Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule*. Lake-wide surveys in 2008 and 2009 shall be conducted per the 2003 State Implementation Plan. Beginning in 2010, lake-wide surveys shall conform to the 2008 State Implementation Plan schedule. Proof of compliance with this mitigation measure shall be through issuance of a written monitoring summary report for each monitoring year specified in Table 3.2.5-2. Reports shall be submitted to the Great Basin Unified Air Pollution Control District by December 31 of each monitoring year. The report shall document survey locations and dates, the number of plovers observed, and an estimate of	City of Los Angeles Department of Water and Power	Operation and Maintenance	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission	Annual Monitoring Summary Reports (for years 1 to 5, 7, 9, 14, and thereafter until determined to be unnecessary by the Great Basin Unified Air Pollution Control District)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
the total plover population. A copy of the yearly summary reports shall be provided to the California Department of Fish and Game and the California State Lands Commission. **TABLE 3.2.5-2** **BIOLOGY-10, POSTCONSTRUCTION LAKE-WIDE PLOVER POPULATION MONITORING SCHEDULE** **Year 1 monitoring event** / **Year 2 monitoring event** / **Year 3 monitoring event** / **Year 4 monitoring event** 2010 / 2011 / 2012 / 2013 **Year 5 monitoring event** / **Year 7 monitoring event** / **Year 9 monitoring event** / **Year 14 monitoring event** 2014 / 2016 / 2018 / 2023						
Measure Biology-11, Corvid Management Plan To reduce potential direct and cumulative impacts to western snowy plover and other migratory shorebirds within the project area due to increased predation on shorebird young and eggs from potential corvid population increases on Owens Lake resulting from construction of dust control measures, the City of Los Angeles Department of Water and Power shall continue to implement the corvid management plan resulting from the 2003 State Implementation Plan with an extension of one year within the project area, or comparable corvid control measures, to the satisfaction of the California Department of Fish and Game that are capable of achieving the same performance standard of no substantial net increase in corvid predation of native nesting shorebirds (including eggs). The corvid management plan was implemented in 2005 and may conclude in 2011 depending on success. Components of the corvid management plan include lake bed trash management procedures associated with dust control measures, utilization of Nixalite or the functional equivalent on all structures greater than 72 inches in height (increased from the original 60 inches in height) to minimize perching of corvids and raptor species on dust control equipment where they can easily observe shorebirds during the nesting season, burial of power and communication lines on all lake bed areas below the elevation of 3,600 feet, and use of harassment techniques for corvids in specific instances where corvids are proving to be particularly harmful to nesting shorebirds. Specifically in conjunction with the Moat & Row DCM, the corvid management techniques shall be expanded to specify that the sand fence fabric shall be sufficiently flexible and that the post caps shall be designed to prevent perching by corvids, within 0.25 mile of occupied nesting shorebird habitat. The use of sand fencing in Moat & Row areas will be considered under this mitigation measure as exceeding the height of 72 inches, thereby requiring the utilization of Nixalite or the functional equivalent on top of sand fencing. The corvid management plan shall be implemented by a wildlife biologist familiar with the sensitive shorebird populations within the project area and familiar with corvid management techniques. The qualifications of the wildlife biologist shall be submitted to the California Department of Fish and Game for review. Lethal methods of corvid control such as shooting or poisoning shall not be implemented initially due to public and government agency concerns in the project region for such control methods and to prevent putting workers at risk from such control measures. If it is later determined that corvids are having a significant impact on shorebird populations within the project area and direct removal of corvids is a viable alternative, proposed control methods would be presented to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game for approval prior to implementation of the additional control measures. The corvid management plan includes a yearly written report estimating the lake bed nesting and foraging corvid population size, documenting the results of the corvid management	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Corvid Management Plan and Annual Monitoring Summary Reports (for five years and thereafter until deemed unnecessary by the Great Basin Unified Air Pollution Control District)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
techniques, documenting the observed effectiveness of the techniques in minimizing corvid impacts on shorebirds within the lake bed, and suggesting improvements for corvid management within the lake bed. Effectiveness may be determined based on the corvid population size on the lake bed. Copies of the yearly reports shall be submitted to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game no later than December 31 of each corvid management year. If after the sixth year of reporting in 2011, the Great Basin Unified Air Pollution Control District determines that the corvid management program is effective, and corvids are not impacting snowy plover populations, then the reporting schedule shall phase out in the same time frame as shown in Table 3.2.5-1. However, the corvid management practices shall be continuously implemented.						
Measure Biology-12, Habitat Management Program for Nesting Snowy Plovers To minimize potential direct and cumulative impacts to nesting western snowy plover from shutdown of all Shallow Flooding panels on June 30, a habitat management program shall be implemented by the City of Los Angeles Department of Water and Power on all Owens Lake bed Shallow Flooding areas to mimic the natural summer drying of seeps and springs in the area. Each year Shallow Flooding shall be slowly turned off from July 1 to July 21 to allow snowy plover broods to complete their nesting cycle. Consult Figure 3.2.5-1, *Conceptual Owens Lake Operational Calendar*, and Figure 3.2.5-2, *Shallow Flooding Management for the Month of July*, for a conceptual picture of Shallow Flooding panel operation. The schedule for decreasing the percentage of wetness in Shallow Flooding areas shall follow Table 3.2.5-3, *Biology-12, Schedule of Percent Surface Area Wetted Required to Achieve Level of Control Efficiency After June 30*. The City of Los Angeles Department of Water and Power has the option of surveying within 0.5 mile of Shallow Flooding areas for snowy plovers, and if active snowy plover nests or young are not present on or within a 0.5-mile radius of Shallow Flooding areas, then the habitat flows described above would not be needed in those areas and those Shallow Flooding panels may be shut down as the City of Los Angeles Department of Water and Power determines necessary. Surveying shall be conducted by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin and must be conducted within seven calendar days of planned shut down. The qualifications of the biologist who conducts the snowy plover surveys shall be submitted to the California Department of Fish and Game for review. A final operations plan detailing the drying operations shall be submitted to the Great Basin Unified Air Pollution Control District for approval, and a copy shall be provided to the California Department of Fish and Game prior to startup of new Shallow Flooding operations. Any changes made to the operations plan related to the drying of Shallow Flooding areas at the end of the dust season must be submitted in writing to the Great Basin Unified Air Pollution Control District for approval at least one month prior to implementation, and a copy of the changes shall be provided to the California Department of Fish and Game. **TABLE 3.2.5-3** **BIOLOGY-12, SCHEDULE OF PERCENT SURFACE AREA WETTED REQUIRED TO ACHIEVE LEVEL OF CONTROL EFFICIENCY AFTER JUNE 30** **July 1–7** | **July 8–14** | **July 15–21** | **July 22** ~50% wetted area | ~20% wetted area | ~15% wetted area | Off	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Final Operations Plan / Habitat Management Program	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Measure Biology-13, Wildlife Movement Gaps To minimize potential direct impacts to migratory corridors, used by wildlife such as flightless juvenile shorebirds and herpetofauna, from the installation of sand fencing, either atop the rows of Moat & Row areas or as enhancements between Moat & Row elements, or from the moats themselves, the City of Los Angeles Department of Water and Power shall include gaps in sand fencing and appropriate moat design that allow wildlife movement on the lake bed. For purposes of the analysis in this EIR, moats in Moat & Rows were assumed to have sloped sides and not pose a barrier to wildlife movements. If moats or rows are recommended to be formed with vertical sides, additional environmental analysis would be required. Gaps in the fences shall be no more than 0.25 mile apart and may consist of breaks in the fencing or openings within a fence. Alternatives to gaps may be utilized in place of gaps. Alternatives may include culverts and/or passage holes where wildlife could travel under berms or rows, voids in the fencing mesh, gaps between segments, and open row ends. Moats shall be required to be designed to prevent trapping of wildlife. Potential methods may include, but are not limited to, gentle side slopes and ramps. The size of gaps or alternatives to gaps in the sand fencing and the design of moats shall be submitted to and approved by the California Department of Fish and Game. Proof of compliance with this mitigation measure shall be verified by submitting a written report to the Great Basin Unified Air Pollution District and California Department of Fish and Game detailing the locations, size, and spacing of gaps and moat design for wildlife movement in Moat & Row areas.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Great Basin Unified Air Pollution Control District California Department of Fish and Game	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Biology–14, Long-term Habitat Management Plan To avoid direct and cumulative impacts to native wildlife communities that may result from the proposed project, a Long-term Habitat Management Plan shall be prepared, pursuant to the California Department of Fish and Game requirements, by a qualified biologist familiar with the habitats and species present at Owens Lake and knowledgeable of wildlife management techniques. The qualifications of the biologist shall be submitted to the California Department of Fish and Game for review. The Long-term Habitat Management Plan shall be submitted to both the California Department of Fish and Game and the California State Lands Commission for comment, with final approval by the California Department of Fish and Game by April 1, 2009. The approved Long-term Habitat Management Plan shall be fully implemented by April 1, 2010. The Long-term Habitat Management Plan area shall encompass all emissive areas subject to dust control measures on lands owned y the California State Lands Commission and lands owned by the City of Los Angeles Department of Water and Power. In recognition of the public trust values related to resident and migratory wildlife resources at Owens dry lake, the California Department of Fish and Game and the California State Lands Commission have acknowledged the benefit of a Long-term Habitat Management Plan as a tool for ensuring compatibility between the construction, maintenance, and operation of the State Implementation Plan and the protection of public trust values. The plan shall include, at a minimum, the following objectives: • Achieve no net loss of riparian or aquatic baseline habitat functions and values or total acres of these habitats. • Manage 1,000 acres in perpetuity for shorebirds in Zone II, in consultation with the California Department of Fish and Game. • Manage 137 acres in perpetuity as habitat shallow flood in the vicinity of Dirty Socks, in consultation with the California Department of Fish and Game.	City of Los Angeles Department of Water and Power	Operation and Maintenance	California Department of Fish and Game	Great Basin Unified Air Pollution Control District California Department of Fish and Game California State Lands Commission	Habitat Management Plan and Annual Monitoring Summary Reports	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
• Manage 1,000 acres (that comprise areas that are 100 acres or greater in size) in perpetuity of deep-water habitat at a water depth equal to or deeper than 12 inches, in consultation with California Department of Fish and Game, to support focal migratory waterfowl determined to be present during 1995–1997 baseline surveys in support of the 1998 SIP, including wood duck (*Aix sponsa*), green-winged teal (*Anas crecca*), mallard (*Anas platyrhynchos*), blue-winged teal (*Anas discors*), gadwall (*Anas strepera*), and American wigeon (*Anas americana*), among others. • Maintain a baseline population of 272 snowy plovers. • In addition to the 1,000 acres of shorebird habitat in Zone II, the City of Los Angeles Department of Water and Power shall maintain a minimum of 523 acres of habitat for snowy plovers in perpetuity at Owens Lake in consultation with the California Department of Fish and Game. Suitability of Shallow Flooding habitat for western snowy plover consists of a mix of exposed sandy or gravelly substrate suitable for nesting in close proximity to standing water equal to or less than 12 inches in depth. • Ensure that the 17.5 acres of proposed DCMs that are within California Department of Fish and Game Cartago Springs Wildlife Area is compatible with the designated land use. The California Department of Fish and Game has determined that habitat shallow flooding or habitat restoration would be compatible with the Cartago Springs Wildlife Area's designated use (Figure 3.2.5-3, *Cartago Springs Wildlife Area*). Components of the plan shall also include, at a minimum, a description of baseline conditions of plant and wildlife resources, effects on biological resources as a result of implementation of dust control measures, descriptions of biological elements targeted for management, and a description of the operations and maintenance tasks required to complete each goal. Preparation of the Long-term Habitat Management Plan shall be subject to the oversight of the California Department of Fish and Game. The California State Lands Commission shall be consulted for comments on the plan. As the landowner, California State Lands Commission shall be provided copies of all monitoring and compliance reports prepared pursuant to the plan. The Long-term Habitat Management Plan shall include yearly monitoring, including a written report documenting the results of the management techniques, recording the observed effectiveness of the techniques, and suggesting improvements for habitat management within the lake bed. Copies of the yearly reports shall be submitted to the California State Lands Commission, Great Basin Unified Air Pollution Control District, and the California Department of Fish and Game no later than December 31 of each calendar year. If after five years of reporting in 2015, the California Department of Fish and Game determines that the Long-term Habitat Management Plan is effective, then the reporting schedule shall phase out in the same time frame as shown in Table 3.2.5-1. However, the habitat management practices shall be continuously implemented.						

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Cultural Resources						
Paleontological Resources						
Measure Cultural-1, Paleontological Resources Construction Monitoring The impacts to cultural resources directly or indirectly related to the destruction of unique paleontological resource that has the potential to be present within the eastern and southern Owens Lake playa shall be reduced to below the level of significance through monitoring of ground-disturbing activities during construction and salvage of paleontological resources within 1 mile of the historic shoreline on the eastern border of the Owens Lake bed (Figure 3.3.4.1-1, *Paleontologically Sensitive Areas*). Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. Where any such ground-disturbing activity is anticipated in early Pleistocene to late Holocene units within the area shown on Figure 3.3.4.1-1 in conjunction with the construction of dust control measures, the Great Basin Unified Air Pollution Control District shall require construction monitoring. The Great Basin Unified Air Pollution Control District shall require that construction monitoring, salvage, and recovery of unique paleontological resources be consistent with standards for such recovery established by the Society of Vertebrate Paleontology (SVP): • A qualified paleontologist shall be retained to provide professional paleontological services. The paleontologist shall be responsible for implementation of the mitigation plan and maintenance of professional standards of work. A "qualified paleontologist" is defined as a practicing scientist who meets the qualifications established by the SVP. The qualifications of the paleontologist shall be submitted to the responsible agency (California State Lands Commission) for approval. • Shallow Flooding without any excavation, trenching, and grading does not require mitigation; however, excavations required for the berms to implement this measure require monitoring. In addition, planned grading, trenching, and excavation activities associated with Moat & Row (or flooding areas associated with early Pleistocene to late Holocene units in the eastern and southern Owens Lake playa as shown on Figure 3.3.4.1-1) shall be monitored. This measure may be modified by the qualified paleontologist for specific locations as the depth of recent sediments varies across the project area. In conjunction with the subsurface work, the monitor shall inspect exposed sediments, including microscopic examination of matrix, to determine if fossils are present. In addition, the qualified paleontologist shall be available on call to respond to unanticipated discoveries. • The monitor may be a qualified paleontological monitor or a cross-trained archaeologist, biologist, or geologist working under the supervision of a qualified principal paleontologist. The function of the monitor is to identify potential resources and recover them with appropriate scientific data. • Paleontological Resources Sensitivity Training is required for all project personnel, if the monitor will not be present full-time. This 15-minute field training shall review what fossils are, what fossils might potentially be found, and the appropriate procedures to follow if fossils are found.	City of Los Angeles Department of Water and Power Great Basin Unified Air Pollution Control District	Construction	Great Basin Unified Air Pollution Control District California State Lands Commission	Great Basin Unified Air Pollution Control District California State Lands Commission	Monitoring Reports and Recovered Fossils Technical Report (submitted to the Great Basin Unified Air Pollution Control District within 90 days of completion of paleontological monitoring)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
• Discovery of fossil-producing localities shall require that stratigraphic columns be measured and that geologic samples be taken for analysis. • If fossil localities are discovered, the paleontologist shall collect controlled samples for processing. All fossils recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the lead agency. The qualified paleontologist shall be required to secure a written agreement with a recognized repository, regarding the final disposition, permanent storage, and maintenance of any significant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e., preparation, identification, curation, cataloguing, etc.) required before the fossil collection would be accepted for storage. In addition, a technical report shall be completed. The final disposition of paleontological resources recovered on State lands must be approved by the California State Lands Commission. • Within 90 days of the completion of the paleontological monitoring, the qualified paleontologist shall submit a final mitigation report to the Great Basin Unified Air Pollution Control District and the California State Lands Commission with an appended, itemized inventory of the specimens. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered, and any technical or specialist's reports as appendices. The report and inventory, when submitted to the Great Basin Unified Air Pollution Control District, shall signify the completion of the program to mitigate impacts to paleontological resources.						
Archaeological and Historical Resources						
Measure Cultural-2, Cultural Resources Investigations The Great Basin Unified Air Pollution Control District shall ensure that potentially impacted prehistoric and historic archaeological sites be assessed for significance, as defined by Public Resources Code Section 21083.2 or State of California Environmental Quality Act Guidelines Section 15064.5(a), through the implementation of Phase II investigations. Impacts to those sites found to be significant shall be mitigated to below the level of significance through a Phase III data recovery program. Resources found to be not significant shall not require mitigation. Coordination with the California State Lands Commission shall be undertaken to mitigate impacts consistent with California State Lands Commission practices for the mitigation of archaeological sites that occur on lands under their jurisdiction. This coordination shall include the issuance of permits for Phase II testing and Phase III data recovery programs, and reviews and comments, when appropriate. The Great Basin Unified Air Pollution Control District shall consult with the State Historic Preservation Officer as required by 15064.5 (b)(5) of the State of California Environmental Quality Act Guidelines for state-owned historical resources. Construction shall not occur on state property until concurrence from the State Historic Preservation Officer is obtained concerning determinations of eligibility and that mitigation has reduced the impact to cultural resources to below the level of significance. In addition, coordination with interested Native American tribes identified by the Native American Heritage Commission shall be	City of Los Angeles Department of Water and Power Great Basin Unified Air Pollution Control District	Construction	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Native American Heritage Commission	Permits for Phase II and Phase III, comprehensive research designs for Phase II and Phase III, and final reports	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
undertaken. Local tribes shall be contacted by the qualified archaeologist specified for the project, and a Native American monitor(s) shall be retained to be present on site during all ground-disturbing activities, including but not limited to archaeological evaluation, excavation, Phase II investigations and Phase III data recovery (if needed), and construction activities. The Native American monitor(s) shall coordinate with the qualified project archaeologist, the Great Basin Unified Air Pollution Control District, and the City of Los Angeles Department of Water and Power to ensure responsible remediation of Native American sites and sacred materials. Should human remains be discovered, the Inyo County Coroner shall be notified within 24 hours. Phase II A total of 12 newly recorded prehistoric archaeological sites (OL Sites 1, 2, 5, 6, 7, 12, 14, 15, 16, 17, 20, and 21), one previously recorded prehistoric site (CA-INY-6375), 12 newly recorded historic archaeological sites (OL Sites 3H, 4H, 8H, 10H, 11H, 18H, 19H, 22H, 23H, 24H, 25H, and 26H), 2 previously recorded historic sites (P14-8141 and CA-INY-6375H), and any additional prehistoric or historic archaeological sites located on the 9,664-acre proposed project site, including those sites recorded by Jones & Stokes (JS Site 1 and 2), shall be assessed for significance as defined by the California Environmental Quality Act prior to the initiation of construction activities in those areas where the sites are located. This requires the following measures: • Development of a research design that guides assessments of site significance and scientific potential. This design shall be an update, expansion, and refinement of research designs that have guided previous Phase II evaluations in the Study Area. • Mapping and systematic collection of a representative sample of surface artifacts • Subsurface investigation through shovel test pits, surface scrapes, or 1 by 1 meter excavation units; a combination of such methods; or equivalent methods • Analysis of recovered material to determine significance pursuant to the State of California Environmental Quality Act • Preparation of a report, including evaluation of site significance and recommendations for mitigation if appropriate • Transmittal of report to the Eastern Information Center at the University of California, Riverside • Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the California State Lands Commission Phase III A Phase III data recovery effort, in accordance with the State of California Environmental Quality Act [Section 21083.2 (d)], shall be implemented by the Great Basin Unified Air Pollution Control District for those sites determined to be significant, pursuant to the State						

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
of California Environmental Quality Act, through Phase II testing and evaluation. The Great Basin Unified Air Pollution Control District shall ensure that data recovery has been completed prior to the issuance of a construction permit for any area containing a site determined to be significant and for which it can be demonstrated that consequential scientific information can be recovered. The Phase III data recovery program shall include: • Development of a comprehensive research design to answer questions addressed during the Phase II on a broader regional level and to provide a procedural framework for the collection of data at sites determined to be significant. • Mapping and systematic collection of surface artifacts, possibly complete data recovered depending on site size • Subsurface investigation through methods, such as controlled hand-excavation units, machine excavations, deep testing, or a combination of methods. When applicable, other techniques, such as geophysical testing methods may also be used • Analysis of recovered material through visual inspection, and chemical analysis when applicable • Preparation of a report • Transmittal of report to involved parties and Eastern Information Center at the University of California, Riverside • Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the California State Lands Commission						
Measure Cultural-3, Cultural Resources Monitoring Program Impacts to surface and subsurface cultural resources not identified during the Phase I (survey), Phase II (testing and evaluation), or Phase III (data recovery) shall be mitigated through the implementation of a monitoring program during construction or any ground-disturbing activities. Native American consultation shall be undertaken as part of this mitigation measure. Previous monitoring efforts have demonstrated that there is a high potential for the unanticipated discovery of cultural resources during construction on the Owens Lake bed, even in those areas that have been previously surveyed. This is a consequence of the movement of sediment by wind and/or water across the lake bed, which results in the exposure and covering of cultural materials on the surface of the lake bed on a regular basis. Monitoring shall be required only during initial grading and earthmoving activities. The Great Basin Unified Air Pollution Control District shall require that the following program be implemented and that the requirement be duly noted in the plans and specifications: • **Retain a Qualified Archaeologist.** A qualified archaeologist shall be retained to implement a monitoring and recovery program in any area identified as having the potential to contain unique archaeological resources as defined by Public Resources Code Section 21083.2 or	City of Los Angeles Department of Water and Power	Preconstruction and Construction	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Native American Heritage Commission	Daily Monitoring Logs, Quarterly Monitoring Reports, and Final Monitoring Report	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
historical resources as defined by the State of California Environmental Quality Act Guidelines Section 15064.5(a) and Public Resources Code Sections 5020.1(k) and 5024.1(g). • **Agreement for Disposition of Recovered Artifacts.** The selected archaeologist shall be required to secure a written agreement with a recognized museum repository, such as the University of California, Davis and the San Bernardino County Museum, regarding the final disposition and permanent storage and maintenance of any unique archaeological resources or historical resources recovered as a result of the archaeological monitoring, as well as corresponding geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e, preparation, identification, curation, cataloging, etc.) required before the collection would be accepted for storage. The ultimate decision regarding the disposition of artifacts collected during Phase I (survey), Phase II (testing and evaluation), Phase III (data recovery), or monitoring efforts on lands administered by the California State Lands Commission shall be made by the California State Lands Commission. Artifacts collected during past efforts on California State Lands Commission lands have been sent to the University of California, Davis, if they had been recovered from a site that was eligible for the National Register of Historic Places or the California Register of Historical Resources. The California State Lands Commission has indicated that those artifacts collected from sites that were not eligible for the National Register of Historic Places or the California Register of Historical Resources will be returned to the tribes. The final disposition of artifacts recovered from lands administered by other agencies (e.g., Bureau of Land Management) shall be determined in accordance with the policies of those agencies. • **Preconstruction Briefing.** The selected archaeologist, or an equally qualified designee, shall attend a preconstruction briefing to provide information regarding regulatory requirements for the protection of unique archaeological resources, historical resources, and human remains. Construction personnel shall be briefed on procedures to be followed in the event that a unique archaeological resource, historical resource, or human remains are encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing. The archaeologist(s) shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary. • **Unanticipated Discovery of Human Remains on State Lands** (Public Resources Code 5097). The archaeologists shall ensure that all construction personnel shall be informed of the requirement to notify the coroner of the County within 24 hours of the discovery of human remains on state lands.						

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any that are reasonably suspected to overlie adjacent human remains until the following conditions are met: ▪ The Inyo County Coroner has been informed and has determined that no investigation of the cause of death is required, and if the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. • **Unanticipated Discovery of Human Remains on Federal Lands** (Native American Graves Protection and Repatriation Act). Whenever any person inadvertently discovers human remains on public lands, including lands administered by the Bureau of Land Management, 43 Code of Federal Regulations 10.4 requires the individual to notify the land manager in writing of such discovery. If the discovery occurs in connection with an authorized use, the activity that caused the discovery is to cease and the materials are to be protected until the land manager can respond to the situation. Upon receipt of written confirmation of the discovery, 43 Code of Federal Regulations 10.4 requires the manager to do the following: (1) certify receipt of the notification; (2) take immediate steps, if necessary to further protect the materials; (3) notify by telephone, with written confirmation, the tribes likely to be culturally affiliated with the materials; and (4) initiate consultation with such tribes. If, after consultation with tribes, the manager determines that the material will be adequately protected in situ, without the need to excavate or remove the material from the area of discovery, then the requirements under the Native American Graves Protection and Repatriation Act have been completed. The materials remain in federal ownership, adequately protected by the manager as provided for in the law. If, after consultation with tribes, the manager determines that the circumstances warrant intentional excavation or removal of the materials from the area of discovery, then 43 Code of Federal Regulations 10.3 applies, and the manager must complete the steps outlined therein for intentional excavations. • **Construction Monitoring.** A qualified archaeologist shall monitor earthmoving activities in areas that are likely to contain unique archaeological resources or historical resources. The archaeologist shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered. Prior to the resumption of grading activities in the immediate vicinity of the cultural remains, the project proponent shall provide the archaeologist with the necessary resources to identify and implement a program for the appropriate disposition (as specified by Section 15064.5 (e) of the State of California Environmental Quality Act Guidelines). • **Monitoring Report.** The monitor shall maintain daily monitoring logs that shall be submitted quarterly to the Great Basin Unified Air Pollution Control District. A complete set of the daily monitoring logs shall be kept						

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
on site throughout the earthmoving activities and be available for inspection. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, assigned personnel, and the results of monitoring, including the recovery of archaeological material, sketches of recovered materials, and associated geographic site data. Within 90 days of the completion of the archaeological monitoring, a monitoring report shall be submitted to the Great Basin Unified Air Pollution Control District, the City of Los Angeles Department of Water and Power, the California State Lands Commission, and to the Eastern Information Center at the University of California, Riverside. The report, when submitted to the Great Basin Unified Air Pollution Control District, shall signify the completion of the program to mitigate impacts to unique archaeological resources or historical resources.						
Hazards and Hazardous Materials						
Measure Hazards-1, Hazardous Materials Transport To minimize impacts related to the unauthorized release of hazardous materials during routine transport, use, or disposal of hazardous materials, prior to construction work specified in the 2008 State Implementation Plan, the City of Los Angeles Department of Water and Power shall ensure through its construction permitting process, or through enforcement of contractual obligations for its own projects, that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines established by the California Code of Regulations (Title 13, Division 2, Chapter 6); the California Department of Transportation; and the California Regional Water Quality Control Board, Lahontan Region, prior to construction. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Power and Water shall submit proof of incorporation of this requirement in all construction contracts related to work specified in the 2008 State Implementation Plan to the Great Basin Unified Air Pollution Control District and Inyo County. The City of Los Angeles Department of Water and Power shall submit an operation plan for the routine transport, use, storage, handling, and disposal of hazardous materials to the Great Basin Unified Air Pollution Control District and Inyo County prior to the operation of dust control measures specified in the 2008 State Implementation Plan. The City of Los Angeles Department of Water and Power shall provide to the Great Basin Unified Air Pollution Control District and Inyo County an annual update as required for the transport, use, storage, handling, and disposal of hazardous materials.	City of Los Angeles Department of Water and Power	Construction	Inyo County	California State Lands Commission Great Basin Unified Air Pollution Control District Inyo County	Operations Plan Report and Annual Updates	_____ (Signature/Date of Monitoring Agency)
Measure Hazards-2, Spill Prevention Control and Countermeasure Program To minimize impacts related to the unauthorized release of hazardous materials into the environment, the City of Los Angeles Department of Water and Power shall prepare a Spill Prevention Control and Countermeasure Program applicable to all statutes and regulations. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Water and Power shall submit a Spill Prevention Control and Countermeasure Program to Inyo County and California State Lands Commission for review and approval. The City of Los Angeles Department of Water and Power shall demonstrate approval of the Spill Prevention Control and Countermeasure Program by Inyo County to the Great Basin Unified Air Pollution Control District prior to the use, storage, and handling of hazardous materials in conjunction with construction or operation of work specified in the Revised 2008 State Implementation Plan. The Spill	City of Los Angeles Department of Water and Power	Construction, Operation, and Maintenance	California State Lands Commission	California State Lands Commission Great Basin Unified Air Pollution Control District Inyo County	Spill Prevention Control and Countermeasure Program	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Prevention Control and Countermeasure Program shall address all aboveground storage tanks within the fertilizer injection and water treatment systems in accordance with all federal, state, and local laws and regulations. The City of Los Angeles Department of Water and Power shall enclose all the fertilizer injection and water treatment systems with a minimum 6-foot-high, barb-wire-topped, chain-link fence or equivalent enclosure and locked gate to prevent unauthorized access. The City of Los Angeles Department of Water and Power shall amend its existing lease with the California State Lands Commission to allow for the improvement specified in this measure. The Spill Prevention Control and Countermeasure Program shall be in place throughout construction, operation, and maintenance of work specified in the 2008 State Implementation Plan.						
Measure Hazards-3, Emergency Response Business Plan To minimize impacts related to the unauthorized release of hazardous materials into the environment, the City of Los Angeles Department of Water and Power shall develop a business plan for emergency response for the routine transport, use, storage, handling, and disposal of hazardous materials. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Power and Water shall ensure that the business plan for emergency response addresses preparation for possible emergencies involving hazardous materials. The City of Los Angeles Department of Water and Power shall provide copies of the approved business plan for emergency response to the Great Basin Unified Air Pollution Control District and Inyo County. The City of Los Angeles Department of Water and Power shall provide to the Great Basin Unified Air Pollution Control District and Inyo County an annual update to the approved business plan as required for the transport, use, storage, handling, and disposal of hazardous materials.	City of Los Angeles Department of Water and Power	Construction and Operation	California State Lands Commission	California State Lands Commission Great Basin Unified Air Pollution Control District Inyo County	Business Plan for Emergency Response and Annual Updates	_____ (Signature/Date of Monitoring Agency)
Measure Hazards-4, Fire Protection Services To minimize the direct, indirect, and cumulative impacts related to the occurrence of wildland fires during construction and operation of work specified in the 2008 State Implementation Plan, the City of Los Angeles Department of Water and Power shall provide for fire protection services for all dust control areas to the satisfaction of Inyo County. Fire protection services shall be provided prior to any further construction on the lake bed. Fire protection services shall include provision of adequate equipment and personnel as determined by Inyo County. Proof of compliance with this mitigation measure shall be submitted by the City of Los Angeles to Inyo County and the Great Basin Unified Air Pollution Control District prior to construction of any additional dust control measures.	City of Los Angeles Department of Water and Power	Construction and Operation	Inyo County	Great Basin Unified Air Pollution Control District Inyo County	Fire Protection Services Compliance Report	_____ (Signature/Date of Monitoring Agency)
Hydrology and Water Quality						
Measure Hydrology-1, Acquire and Adhere to National Pollution Discharge Elimination System General Permit To mitigate for direct, indirect, and cumulative surface water quality impacts caused by construction pollutants contacting storm water, products of erosion moving off the proposed project site into receiving waters, and unauthorized non-storm-water discharges, the City of Los Angeles Department of Water and Power shall obtain and adhere to the requirements of the National Pollution Discharge Elimination System General Permit for the 15.1 square miles of new work area specified in the 2008 State Implementation Plan. This includes the development and implementation of a Storm Water Pollution Prevention Plan, which specifies best management practices that shall prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters; the elimination or reduction of unauthorized non-storm-water discharges; and inspections of best management practices.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Storm Water Pollution Prevention Plan and National Pollution Discharge Elimination System General Permit	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
The Storm Water Pollution Prevention Plan shall also identify best management practices for controlling temporary construction dewatering discharges and may include temporary sediment control measures such as the addition of low-flow dispersal methods for minimizing erosion. The City of Los Angeles Department of Water and Power shall also be required to comply with the Guidelines for Erosion Control as listed in the Water Quality Control Plan for the Lahontan Region. The City of Los Angeles Department of Water and Power shall submit the final Storm Water Pollution Prevention Plan to the Great Basin Unified Air Pollution Control District and the California State Lands Commission after its approval by the Regional Water Quality Control Board for the Lahontan Region.						
Measure Hydrology-2, Water Quality Monitoring and Reporting Program The City of Los Angeles Department of Water and Power, prior to issuing any Notices to Proceed for construction of work in the areas specified in the 2008 State Implementation Plan, shall implement a Water Quality Monitoring and Reporting Program to ensure that there is no substantial degradation of water quality and to mitigate direct, indirect, and cumulative impacts to surface and groundwater quality and off-site groundwater levels. The Water Quality Monitoring and Reporting Program shall monitor operational water volumes and flows, and analyze the quality of project surface waters and groundwater. This shall also include the existing but newly exposed groundwater in Moat & Row areas. The Water Quality Monitoring and Reporting Program shall include a monitoring plan of surface water and groundwater, along with an evaluation of the monitoring data and a plan for corrective actions should impacts be observed to ensure that the proposed project is operating within the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake. The monitoring program shall be submitted to the Great Basin Unified Air Pollution Control District and the California State Lands Commission prior to the start of construction in the areas designated for dust control in the 2008 State Implementation Plan. All chemical analyses shall be performed by a laboratory with National Environmental Laboratory Accreditation Program certification. Monitoring reports shall be completed and submitted to the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the Regional Water Quality Control Board within 60 days of the end of the monitoring period as described in Table 3.5.5-1, *Hydrology Monitoring and Reporting Schedule*. The reports shall include a summary of monitoring results and any corrective actions proposed or undertaken for any observed violations of water quality limitations or impacts to off-site groundwater levels. The water quality limitations are defined as a substantial (statistically significant based on a statistical analysis of current and baseline data) variation from the long-term baseline water data collected by the Great Basin Unified Air Pollution Control District for surface and groundwater quality and groundwater levels. The Great Basin Unified Air Pollution Control District shall continue to collect this baseline water data during project construction and operation. Periodic reductions in monitoring and reporting requirements, when justified by a documented review and evaluation of monitoring results, shall be implemented as authorized by the Regional Water Quality Control Board. Until monitoring results justify a reduction in monitoring requirements, monitoring shall be completed as follows: • Flow rates and total volumes of flow to all dust control measure areas shall be monitored for each day and month for the first five years of work specified in the 2008 State Implementation Plan and thereafter as specified in Table 3.5.5-1.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Water Quality Monitoring Reports (submitted to the Great Basin Unified Air Pollution Control District and Lahontan Regional Water Quality Control Board within 60 days of end of monitoring period, and monitoring and reporting continued until monitoring completion in 2023 unless deemed unnecessary by the Great Basin Unified Air Pollution Control District)	_____ (Signature/Date of Monitoring Agency)

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<tr><th rowspan="2">Mitigation Measure</th><th rowspan="2">Responsible Implementation Party</th><th rowspan="2">Monitoring Period</th><th rowspan="2">Enforcement Agency</th><th rowspan="2">Monitoring Agency</th><th colspan="2">Documentation of Compliance</th></tr>
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- Surface water monitoring of Shallow Flood, Moat & Row, and Managed Vegetation areas and groundwater monitoring of perimeter project observation wells shall be completed as described in Table 3.5.5-1 for total dissolved solids (TDS), chloride, chlorine, dissolved oxygen (DO), pH, electrical conductivity (EC), ammonia, aluminum, arsenic, barium, boron, cadmium, calcium, iron, lead, magnesium, manganese, nitrate, nitrite, potassium, selenium, sodium, carbonate, bicarbonate, phosphate, sulfate, vanadium, total alkalinity, total organic carbon (TOC), copper, chromium, zinc, bromide, Treflan (or Trifluralin), and sulfur.

TABLE 3.5.5-1
HYDROLOGY MONITORING AND REPORTING SCHEDULE

Description	Monitoring Schedule							
	2010	2011	2012	2013	2014	2016	2018	2023
Flow rates and total volumes of flow to all DCM areas	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)	Daily (report monthly)
Surface water quality of Shallow Flood areas	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Surface water quality of Managed Vegetation areas, if any	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Quality of groundwater that becomes exposed in Moat and Row areas	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Groundwater monitoring of perimeter project observation wells	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)

NOTE:
DCM = dust control measure

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Measure Hydrology-3, Shallow Flood Water Retention Berms

The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta. The design of flood protection berms is subject to California State Lands Commission staff

</td><td>City of Los Angeles Department of Water and Power</td><td>Operation</td><td>Great Basin Unified Air Pollution Control District

California State Lands Commission</td><td>California State Lands Commission

Great Basin Unified Air Pollution Control District

Lahontan Regional Water Quality Control Board</td><td>Final Plans and Specifications</td><td>_____
(Signature/Date of Monitoring Agency)</td></tr>
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TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.						
Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Hydrology-5, Berm Failure Emergency Management Plan The City of Los Angeles Department of Water and Power shall develop an emergency management plan for potential berm failures. This plan shall include the immediate notification of the down-gradient trona mineral extraction operation on the lake and all other lake bed personnel to ensure the safety to personnel and equipment on the lake bed. The plan shall also include a commitment by the City of Los Angeles Department of Water and Power to take prompt action to repair failed berms and shall set forth the actions to be taken by the City of Los Angeles Department of Water and Power to do so. The plan shall include provisions for notification to the California State Lands Commission and the Great Basin Unified Air Pollution Control District. The emergency management plan shall be reviewed and approved by the California State Lands Commission prior to operation of the proposed project dust control measures.	City of Los Angeles Department of Water and Power	Operation	California State Lands Commission Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Land Use and Planning						
Implementation of the project would not result in significant impacts to land use and planning. However, in order to continue to lessen and/or alleviate the potential impacts related to land use and planning, as found in the 2003 SIP, that would occur if the project were implemented, the following measure would be required.						
Measure Land Use and Planning–1, Resident Insect Control Program Due to increased areas of potential standing water, to minimize potential impacts to local residents from a potential increase in mosquitoes and other biting insects as a result of dust control measure construction and operation from the proposed project, the City of Los Angeles Department of Water and Power shall institute a program for nearby residents whereby windows of existing residences in the potentially impacted communities of Swansea, Keeler, Cartago, and Olancha within three (3) miles of a water-based dust control measure will be screened or other insect control devices will be provided to residents to reduce nuisance insect populations in the vicinity of their residence. Residents shall provide proof of residence in identified, potentially affected areas prior to the issuance of screening or insect control devices. In addition, the City of Los Angeles Department of Water and Power shall continue to pay for Inyo County vector control treatments on the dust control measure areas and within impacted communities as required to control mosquitoes and other biting insects. A study shall be required to evaluate the cause of insects in the adjacent communities and to require continued support of treatment methods if the dust control measures have been found to cause insect pest problems. This study shall be conducted by the City of Los Angeles Department of Water and Power, approved by Inyo County, and implemented before April 1, 2010.	City of Los Angeles Department of Water and Power	Operation	Inyo County	Inyo County Great Basin Unified Air Pollution Control District	Insect Control Program, Final Study Report, and Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Mineral Resources						
The mineral resources impacts identified in this section may be reduced to below the level of significance through the adoption of mitigation measure Minerals-1 and mitigation measures Hydrology-3 and Hydrology-4 from Section 3.9.6, *Hydrology*, *Mitigation Measures*. The measures listed below may mitigate impacts to mineral resources by protecting the mineral lease areas.						
Measure Minerals-1, U.S. Borax Lease Area Approval and Compensation The City of Los Angeles Department of Water and Power shall be required to obtain approval from the California State Lands Commission prior to working in the areas that overlap with the areas leased to U.S. Borax. In addition, the City of Los Angeles Department of Water and Power shall be required to compensate the California State Lands Commission for associated staff time to prepare the legal description for any transfers of mineral lease areas to dust control areas. This includes areas requiring rerouting of access roads under mineral leases PRC 5464.1 and PRC 3511.1.	City of Los Angeles Department of Water and Power	Operation	California State Lands Commission	California State Lands Commission	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Hydrology-3, Shallow Flood Water Retention Berms The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta. The design of flood protection berms is subject to California State Lands Commission staff approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California State Lands Commission	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)
Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Transportation and Traffic						
Measure Traffic-1, Traffic Work Safety Plan The City of Los Angeles Department of Water and Power shall work with the State of California Department of Transportation to determine the necessity for traffic safety equipment to be installed and maintained on U.S. Highway 395, State Route 136, and State Route 190 in order to ensure traffic safety during construction of the proposed project by developing a Traffic Work Safety Plan. The Traffic Work Safety Plan shall specify the measures to be implemented and maintained by the City of Los Angeles Department of Water and Power for each location on U.S. Highway 395, State Route 136, and State Route 190 that would be affected by the construction phase of the project to ensure traffic safety. The plan should include measures such as signage to warn oncoming motorists of large slow-moving trucks ahead and flag persons to warn motorists of large slow-moving trucks ahead during peak periods and times of large load deliveries. The City of Los Angeles Department of Water and Power shall document to the Great Basin Unified Air Pollution Control District and California State Lands Commission that State of California Department of Transportation has approved the Traffic Work Safety Plan prior to the initiation of construction work specified by the 2008 Revised State Implementation Plan, or related transportation and staging of equipment and materials. Operation and maintenance of the approach known as Willow Dip from U.S. Highway 395 to the lake bed is subject to a permit issued by the California Department of Transportation to U.S. Borax. Should the City of Los Angeles Department of Water and Power wish to share the Willow Dip access with U.S. Borax, the California Department of Transportation would require that a new permit be issued for the road connection/maintenance in both names. Use of the paved access at U.S. Highway 395, Post Miles 50.52 and 53.27 and any required improvements by the City of Los Angeles Department of Water and Power would be subject to an encroachment permit from the California Department of Transportation. Use of the paved access at State Route 190, Post Mile 14.58, Dirty Socks Springs Road requires the assignment of a county road number if it is not a county road, and use of the road and any required improvements by the City of Los Angeles Department of Water and Power would be subject to an encroachment permit from the California Department of Transportation.	City of Los Angeles Department of Water and Power	Construction and Operation	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District State of California Department of Transportation	Final Traffic Work Safety Plan	_____ (Signature/Date of Monitoring Agency)
Measure Traffic-2, Traffic Work Safety Plan Conformance The City of Los Angeles Department of Water and Power shall be responsible for funding, installing, and conforming to the measures specified in the approved Traffic Work Safety Plan prior to the use of U.S. Highway 395, State Route 136, and State Route 190 for gravel hauling or other heavy truck trips such as the delivery of materials, heavy equipment, and construction vehicles to the proposed project site to ensure traffic safety during the construction operations. The City of Los Angeles Department of Water and Power shall demonstrate conformance with the measures specified in the approved Traffic Work Safety Plan by submitting quarterly compliance reports to the Great Basin Unified Air Pollution Control District, California State Lands Commission, and State of California Department of Transportation throughout the duration of the construction work specified by the 2008 Revised State Implementation Plan, and related transportation and staging.	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District State of California Department of Transportation	Final Traffic Work Safety Plan and Quarterly Compliance Reports (submitted until construction is complete)	_____ (Signature/Date of Monitoring Agency)
Measure Traffic-3, Regional Transportation Network Damage Repair The City of Los Angeles Department of Water and Power shall be required to repair damage to the regional transportation network (U.S. Highway 395, State Route 136, and State Route 190) from construction activities required for the 2008 Revised State Implementation Plan to pre-project conditions. Prior to initiating construction of work specified by the 2008 Revised State Implementation Plan, or related transportation and staging of equipment and materials, the City of Los Angeles Department of Water and	City of Los Angeles Department of Water and Power	Construction	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District	Final Plans and Specifications and Final Compliance Report (within 12 months of completing construction)	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
Power shall retain a qualified pavement consultant engineer to document the existing condition of all regional transportation network roadways used for access, egress, and haul routes by the construction activities required for the 2008 Revised State Implementation Plan. A California Department of Transportation representative shall participate with the qualified pavement consultant engineer. The City of Los Angeles Department of Water and Power or its contractor must be on-call to revisit the documented roadway sections and delineate physical damages that are directly attributed to construction activities required for the 2008 Revised State Implementation Plan and repair any damage immediately or in short term, or as specified by California Department of Transportation. The City of Los Angeles Department of Water and Power shall provide in-lieu fees for remediation of construction-generated impacts on the regional transportation network, or a comparable measure to the mutual satisfaction of the City of Los Angeles Department of Water and Power, Inyo County, and the California Department of Transportation, demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired. Within 12 months after construction activities for the 2008 Revised State Implementation Plan is completed, the City of Los Angeles Department of Water and Power shall provide written documentation to the Great Basin Unified Air Pollution Control District, California State Lands Commission and State of California Department of Transportation demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired. The California Department of Transportation has specified the requirement that construction monitoring be undertaken at six intersections within the regional roadway system: • U.S. Highway 395, Post Mile 39.7, Willow Dip • U.S. Highway 395, Post Mile 48.94, Bartlett Road • U.S. Highway 395, Post Mile 50.52 • U.S. Highway 395, Post Mile 53.27, Boulder Creek RV Park • State Route 136, Post Mile 14.44 • State Route 190, Post Mile 14.58, Dirty Socks Springs Road				State of California Department of Transportation		
Utilities and Service Systems						
The utility impacts as identified in this section (specifically, impacts to the flood control system on the lake) may be reduced to below the level of significance through the adoption of mitigation measures Hydrology-3 and Hydrology-4.						
Measure Hydrology-3, Shallow Flood Water Retention Berms The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District California State Lands Commission	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)

TABLE III-1
MITIGATION MONITORING PLAN FOR THE 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN, Continued

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
					Source	Signature/Date
The design of flood protection berms is subject to California State Lands Commission staff approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.						
Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.	City of Los Angeles Department of Water and Power	Operation	Great Basin Unified Air Pollution Control District	California State Lands Commission Great Basin Unified Air Pollution Control District Lahontan Regional Water Quality Control Board	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency)