CALENDAR ITEM
41

A 34 12/17/09
PRC 8079.9
S 17 J. Brown
S. Mindt

CONSIDER APPLICATION FOR
AMENDMENT OF A GENERAL LEASE – PUBLIC AGENCY USE

LESSEE:
City of Los Angeles, Department of Water and Power
William Van Wagoner
111 North Hope Street, Room 1460
Los Angeles, CA 90012

AREA, LAND TYPE, AND LOCATION:
Sovereign lands in Owens Lake, Inyo County.

AUTHORIZED USE:
Research and monitoring at the South Sand Sheet, implementation of shallow flooding and monitoring at the North Sand Sheet, and the construction and operation of the South Zone Dust Control Project. Construction, installation, operation and monitoring of shallow flooding dust control measures (DCMs) associated with Phases IV, V, and VII of the Owens Lake Dust Control project. Construction, installation, operation, and monitoring of 0.5 square mile of channel area improvements in support of the Phase VII Owens Lake Dust Control Project.

EXISTING IMPROVEMENTS:
The installation of the Owens Lake South Sand Sheet Air Quality and Sand Fence Effectiveness Monitoring System, consisting of air monitoring towers and meteorological instrumentation, and sand trapping devices.

Seven Lease Amendments have been executed for construction and maintenance of DCMs on the dry bed of Owens Lake.

LEASE TERM:
20 years, beginning May 1, 1999

CONSIDERATION:

The public health and safety; with the State reserving the right at any time to set a monetary rent if the State Lands Commission (Commission) finds such action to be in the State's best interest.

STAFF SUMMARY AND RECOMMENDATION:

On August 11, 2009, Commission staff presented an informational report to the Commission (Calendar Item 52) regarding the status of the city of Los Angeles, Department of Water and Power's (City) application for a dust control project on Owens Lake, called "Moat and Row", application and described the unresolved comments on the Supplemental Environmental Impact Report (SEIR) prepared by the City. At the conclusion of the staff's presentation and public testimony, the Commission Chair directed staff to work with City staff to resolve the concerns with the SEIR as much as possible and requested more information about the advantages and disadvantages of managed vegetation and gravel compared with the Moat and Row DCM and whether they are feasible in the area proposed for the Moat and Row DCMs.

On September 15, 2009, the City certified the SEIR, adopted Findings of Fact, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program. The changes to the SEIR previously requested by Commission staff were not made.

For the reasons set forth below, Commission staff recommends that the Commission find that the proposed application for lease amendment is not in the best interests of the State; disapprove the proposed lease amendment to the City; and deny the City's application for the revised Moat and Row DCM Project. The discretionary action to be taken by the Commission is ultimately a policy decision taking into account all relevant factors, including consistency with the Public Trust, in determining whether the project is in the best interests of the State. Each time the Commission takes action to approve or reject a project, it is exercising its authority and responsibility as trustee of the State's public trust lands as authorized by law (Public Resources Code sections 6301 and 6216).

Should the Commission decide to approve the proposed Project, alternate findings are attached as Exhibits E through H to this Calendar Item (Exhibit E - Alternate Commission Findings and Recommendations for Approving a Lease Amendment to the City; Exhibit F- CEQA Findings for Approving a Lease Amendment to the City; Exhibit G - CEQA Statement of Overriding Considerations for Approving a Lease Amendment to the City; and Exhibit H - CEQA Mitigation Monitoring Program for Approving a Lease Amendment to the City.

Additionally, should the Commission decide to approve the proposed Project, a lease amendment suggested by Commission staff is attached as Exhibit D. A different lease amendment proposed by City staff is attached as Exhibit C.

Comparison of Substantive Lease Amendment Provisions

Amendment Provision	**City of Los Angeles**	**State Lands Commission**
1:1 Mitigation for impacts to biological resources	No	Yes
Agreement to participate in long-term conservation plan with legally binding requirements	No	Yes
Detailed written program for the maintenance of the Moat and Row design that will minimize impacts to public trust lands and wildlife resources for ***Lessor's review and approval****	No (Does not include Lessor's review and approval)	Yes
Indemnification of US Borax	No	Yes
If Moat and Row determined ineffective by the District and remedy will involve more than 33% of disturbed area for all Moat and Row areas, City to apply for lease amendment	No	Yes
No improvements or modifications to the design or location of Moat and Row components	No	Yes
Removal of abandoned structures and responsibility for obtaining necessary permits, and past/future costs associated with the study, analysis, environmental review for CEQA (as required), removal, transportation, and disposal	No	Yes
Acknowledgement that there is no assurance that future use of Moat and Row at Owens Lake will be allowed by the Commission	No	Yes
Maintain public access within the lease premises	No	Yes

BACKGROUND

One hundred twenty-five years ago, the water of Owens Lake covered 110 square miles and was over 50 feet deep. A steamboat carried cargo across its broad expanse. Early settlers diverted water from the Owens River to grow crops and irrigate pasture for livestock. Wildlife, waterfowl, and local residents depended on and benefited from Owens Lake. This Lake was an important feeding and resting stop for millions of waterfowl each year. After the City began

operating the Los Angeles Aqueduct in 1913, the Lake level rapidly declined. Within approximately 25 years, only a small brine pool remained of the original 110 square mile lake, the rest of the area left as a dry lakebed. Today, dust storms may carry away as much as four million tons (3.6 million metric tons) of dust from the lakebed each year, causing respiratory problems for residents in the Owens Valley.

The United States Environmental Protection Agency (U.S. EPA) has designated the southern part of the Owens Valley as a Serious Non-Attainment Area for PM_{10}. " PM_{10}" is an abbreviated reference for suspended particulate matter (dust) less than or equal to ten microns in mean aerodynamic diameter (approximately 1/10 the diameter of a human hair). The Great Basin Unified Air Pollution Control District (District) subsequently designated the Non-Attainment area as the "Owens Valley PM_{10} Planning Area."

The District has determined that dust emissions from the dry lakebed of Owens Lake are responsible for causing the air in the Owens Valley PM_{10} Planning Area to exceed the PM_{10} national ambient air quality standards and that water diversions by the City have caused Owens Lake to become dry and the lakebed to be in a condition that produces dust.

In 2007, the Commission authorized the issuance of a three-year General Lease to the City for a Moat and Row demonstration project at two locations on Owens Lake for a total of 319 acres.

On August 8, 2007, the City submitted an application to the Commission to amend Lease No. PRC 8079.9 for construction and operation of an additional 9.2 square miles of shallow flooding, 3.5 square miles of a new dust control measure called Moat and Row, and two access roads on the west shore of the dry bed of Owens Lake. This project was known as Phase VII of the Owens Lake Dust Control Project.

Commission staff expressed concerns, both verbally and in writing, to the staffs of the District and the City that the Moat and Row design components of the Phase VII dust control project may not be consistent with the Public Trust needs and values of Owens Lake.

In addition, the City's construction bid package contained revised design elements for the Moat and Row DCM that were not analyzed in the District's 2008 FEIR certified earlier. The EIR prepared by District staff included a statement that the DCM designs may not have a significant impact upon wildlife, that spacing of the Moat and Row dust control units/arrays in the 2008 EIR would be constructed at a minimum spacing of 250 feet apart, and that rows with

sloping sides would not exceed a ratio of 2:1. The new design components that required additional analysis included perpendicular features (grid pattern), sand fencing, increased density of moat and row arrays, and increased steepness of slopes among other things.

In a letter to Commission staff dated August 21, 2008, the City withdrew its lease amendment application for the Moat and Row component of the dust control project to facilitate Commission approval of the shallow flooding. On August 22, 2008, the Commission authorized only the Shallow Flooding components of the City's lease amendment application.

On March 24, 2009, the City submitted a new application to the Commission for consideration of the Moat and Row dust control project. This application is the subject of this staff report.

PUBLIC TRUST:

Owens Lake is State sovereign land held in trust for the people of the State under the Public Trust Doctrine. This common law doctrine ensures the public's right to use California's waterways for navigation, fishing, boating, and other water-oriented activities. Preservation of lands in their natural state to protect scenic and wildlife habitat values is also an appropriate Public Trust use (*Marks* v. *Whitney (1971)* 6 Cal.3d 251). Uses that do not protect or promote Public Trust values, are not water dependent or oriented, and exclude rather than facilitate public access and use are not consistent with the trust. The Commission has the responsibility to manage Owens Lake on behalf of the public to protect these rights and values.

CRITERIA FOR COMMISSION REVIEW:

The Commission's authority and conduct is primarily governed by the California Public Resources Code section 6000 et seq., and Title 2, section 1900 et seq., California Code of Regulations.

The Commission's Application Guidelines, General Information and Application Materials Regarding Surface Leasing of State Lands Form, Revised 06/06/06, Page iv, summarizes the circumstances that may cause the Commission to deny a project. One of the circumstances is the inconsistency with Public Trust restrictions, resources, or values or that the project is not in the best interest of the State as required by Public Resources Code section 6005. The following information is provided to support the staff's recommendation for denial.

PROPOSED PROJECT DESCRIPTION:

The Owens Lake Revised Moat and Row Dust Control Measures cover a 3.5 square mile area and may include:

Moat and Row With Sand Fences: 20.8 miles of earthen berms (rows) five feet high with 1.5:1 side slopes and 4 to 5.5 feet deep. Three inches of base course (crushed rock and soil) would be applied to the tops of the berms to prevent erosion. A moat measuring 17 feet wide across the top and three to five feet wide across the bottom with 1.5:1 side slopes would be constructed on each side of the berm. Sand fences five feet high would be mounted on wooden fence posts measuring eight inches or ten inches square;

Moat and Row Without Sand Fences: 42.3 miles of earthen berms five feet high with 1.5:1 side slopes and 4 to 5.5 feet deep. Six inches of base course would be applied to the tops of the berms to prevent erosion. A moat measuring 16 feet across the top and three to five feet wide across the bottom with 1.5:1 side slopes would be constructed on each side of the berm;

Sand Fence Only: 3.8 miles of sand fence five feet high would be installed in area T1A-1 using wooden fence posts measuring eight inches or ten inches square;

Maintenance Access: up to 190,673 cubic yards of crushed rock would be applied between the moats and rows for maintenance vehicle access to the moats, rows, and fences;

Culvert Crossing: one culvert crossing would be constructed in T37-2 using 14 high density polyethylene (HDPE) culvert pipes measuring 24 inches in diameter and approximately 60 feet long;

Barrier Gate: one galvanized steel barrier gate (cattle guard) measuring 40 feet wide would be installed in T32-1 (The swinging gate is above ground but the posts would be embedded in concrete 4.5 feet below ground. There are two different vehicle barrier gates, each one is 20 feet wide);

Outlets: three irrigation outlets would be installed in T1A-1. Each outlet would consist of a HDPE riser, with diameters ranging from eight to 12 inches, surrounded by a 40-foot square area of riprap;

Riprap Berms: two berms made of riprap, each measuring approximately 1,000 feet long, 1.5 feet high, and 6.5 feet wide would be installed adjacent to T1A-1 and T1A-3 cell areas;

T1A-1 Submains: 2,015 feet of 16-inch, 415 feet of 12-inch, 2,540 feet of 10-inch, and 1,410 feet of eight-inch HDPE submain pipe would be installed along with various valves for control of irrigation water;

T1A-1 Turnout Facility: a concrete equipment pad measuring 30 feet by six feet by two feet thick would be poured to support various valves (flow control, pressure control, and air release valves), a flow meter, stainless steel piping, and various appurtenances;

Irrigation Extensions: two irrigation extensions, each 12-inch diameter HDPE pipe approximately 700 feet in length would connect to 12-inch butterfly valves each surrounded by two cubic yards of riprap;

Temporary Construction Fencing: approximately 2,550 feet of temporary construction sand fencing would be installed at T32-1 and T37-1 prior to start of other construction activities.

DESCRIPTION OF ISSUES

Public Trust: Public Trust uses at Owens Lake include public access, recreation, wildlife habitat, and aesthetic enjoyment among others. The proposed Moat and Row Project, as designed, will not enhance but rather diminish these Public Trust values. For years, the City has been diverting water from Owens Lake, which has forever changed and almost eliminated the Public Trust resources at Owens Lake. However, since the City began implementing DCMs at Owens Lake with shallow flooding and managed vegetation, the bird population of the Lake has increased tremendously. As the City is required to control the dust at Owens Lake in perpetuity, the impacts from Moat and Row to the public trust could be permanent.

After implementation of the shallow flooding and managed vegetation measures, Owens Lake has become a nationally significant Important Bird Area (IBA) as designated by the National Audubon Society and a significant bird migratory stopover. The Lake was designated as an IBA due to the thousands of shorebirds that migrate through each fall and spring between the Arctic and Central and South America and also because of the large numbers of snowy plovers that nest there. Additionally, several thousand snow geese and ducks winter at the Lake.

Public access has already been restricted by existing DCMs. The City has posted signs at the public road access points to Owens Lake indicating that all visitors must contact the City before entering the area. Vehicles are subject to low speed limits and must remain on existing roadways. Staff believes that the

public use and enjoyment of Owens Lake will likely be further restricted if the Moat and Row Project is approved. Recreational uses on the Lake include hiking, sightseeing, bird watching, seasonal hunting (with posted limitations), and access by horseback riding. The Moat and Row DCMs may be potentially hazardous to the public as well as wildlife due to sloughing of the moat sides and the potential for falling into a moat.

Biologically, the Moat and Row area would consist of an inhospitable environment that would impede wildlife movement and likely entrap birds and animals in the moats. The California Department of Fish and Game (DFG) advised Commission staff that they agree with this assessment.

Lastly, the Moat and Row Project would be aesthetically offensive as viewed from the lake bed and would further obstruct and degrade the public's view of the scenic Owens Lake valley due to the density, height, and length of the structures (five-foot high fences on top of five-foot high rows extending 20.8 miles). The extensive grid pattern over 3.5 square miles would have an industrial appearance, out of character with the surrounding natural environment. It is also likely that the Moat and Row DCMs, if approved, would be visible from a great distance away, degrading the view of the open valley.

The City has stated its belief that the Project is consistent with the Public Trust apparently based on the false assumption that the beneficial use of water for domestic and agricultural uses under the California Water Code constitutes compliance with the Public Trust. This is not correct. The Public Trust deals with publicly beneficial uses that depend on the *interrelationship* between land and water and does not address the use of water that is separated from the land. Public Trust needs require water – habitat for wildlife, waterfowl, open space, navigation, fishing, commerce, and for public uses such as wildlife viewing and bird watching.

In contradistinction to the City's assertions, the California Supreme Court concluded in *National Audubon Society* v. *Superior Court of Alpine County* that the Public Trust Doctrine is not subsumed in the California water rights system. Instead, "the public trust doctrine and the appropriative water rights system are parts of an integrated system of water law. The public trust doctrine serves the function in that integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources." (*National Audubon Society* v. *Superior Court of Alpine County* (1983) 33 Cal. 3d 419, 452.)

For the reasons stated above, staff recommends that the Commission find that the Moat and Row Project as proposed is inconsistent with the Public Trust needs, resources, and values of Owens Lake.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

A Subsequent EIR and Mitigation Monitoring Program (SCH # 2007021127) were prepared and certified on January 28, 2008, for the Phase VII project, including Moat and Row, by the District. Commission staff reviewed the document and Mitigation Monitoring Program adopted by the District. Due to changes in the design, as described above, a Supplemental EIR (SCH # 2008121074) was prepared and certified by the City of Los Angeles, Department of Water and Power, on September 15, 2009, for the Revised Moat and Row DCM Project. The California State Lands Commission staff has reviewed such document and Mitigation Monitoring Program adopted by the City.

Commission staff provided comments on the Notice of Preparation for the SEIR to the City and throughout the CEQA process for the Owens Lake Revised Moat and Row Dust Control Measures Project. In a letter dated July 22, 2009, Commission staff provided comments on the DSEIR to the City. After review of the FSEIR, released September 8, 2009, the Commission's staff was concerned that the City's staff had not responded sufficiently to the major concerns of proposed biological entrapment, proposed aesthetic impacts as viewed from the lakebed, and proposed air quality impacts from maintenance required on the many miles of proposed moats. In support of this position, the Commission's staff sent an 11-page letter to City staff dated September 14, 2009. The three areas of concern are biological resources, aesthetic impacts, and air quality.

Biological Resources: Staff continues to have concerns with the adaptive management proposed in mitigation measure 3.1-12. Staff does not believe that CEQA mitigation can be deferred as proposed in this measure until a threshold of observed mortality, entrapment or injured animals is reached, prior to implementing any mitigation measure to reduce those potential impacts. Additionally, the wording in the mitigation measures states "to the maximum extent feasible without substantially compromising overall dust control effectiveness," suggesting that there is a question of the feasibility of those mitigation measures. The SEIR should have developed and required mitigation measures and determined their feasibility.

Visual Resources Impacts: The FSEIR concluded that the visual impact for the Moat and Row project would be less than the visual impacts for managed vegetation, even though the ten-foot height of the moat and row elements (a five-foot high row topped with a five-foot high fence) is inconsistent with the natural

setting of the Lake bed, whereas the managed vegetation would be no more than two feet in height and would resemble natural native vegetation.

Greenhouse Gas Emissions (GHG): The City has not provided the Operation and Management component of the GHG emissions analysis as requested in a meeting with City staff on August 26, 2009, and in Commission staff's September 9, 2009, letter.

COMPARISON OF SHALLOW FLOODING, MANAGED VEGETATION, AND GRAVEL COVER WITH MOAT AND ROW:

The three alternatives analyzed in the previous subsequent EIR and the supplemental EIR were shallow flooding, managed vegetation and gravel cover. A brief comparison follows.

Shallow Flooding

Benefits of Shallow Flooding:

- Provides wildlife habitat
- Visually similar to historic lake
- Will meet District requirements for dust control efficiencies

Significant Impacts from Shallow Flooding:

- GHG emissions from construction equipment and associated activities. Impact would be less than gravel cover and greater than managed vegetation.

Less than Significant Impacts with Mitigation:

- Archaeological and historical resources. Similar to gravel cover and more than managed vegetation.
- Hazards and hazardous materials. Reduced use and generation of chemicals. Impact would be less than gravel and managed vegetation.
- Utilities and services. This option requires installation of more infrastructure than gravel or managed vegetation.

Managed Vegetation: Commission staff believes that Managed Vegetation should be preferred to Moat and Row because it is an approved Best Available Control Measure (BACM) that is consistent with the Public Trust needs and values of Owens Lake. The FSEIR indicates that because managed vegetation requires water to be initially successful, this alternative is not feasible; however, the City did not evaluate more efficient use of the existing water supply for approved deep flood and shallow flooding areas freeing water for managed vegetation uses in additional dust control areas.

DFG and the District have indicated that there is the potential to convert some existing deep flood areas to shallow flood and to more efficiently utilize and manage water on

existing shallow flood areas. The resultant water savings could be used to create the development of additional shallow flood and/or managed vegetation areas. LADWP, in a recent document titled "Draft Owens Lake Habitat Management Plan", pages 23-30, outlines various water conservation practices that are expected to result in the use of less water per acre in shallow flood areas.

Benefits of Managed Vegetation:

- Requires about one-fourth to one-third of the amount of water as Shallow Flooding (2008 FEIR). Once the target cover of 50 percent is attained, saltgrass stands can be sustained at or above this level of cover with 1.0 to 1.3 acre-feet per year (2008 FEIR).
- Provides wildlife habitat. Evidence of use by birds, rabbits, mice, kangaroo rats, gophers, foxes, coyotes, and a diverse group of invertebrates has been found on saltgrass test plots established by the District on the playa (pp 5-13; 2008 FEIR).
- Visually similar to native shoreline vegetation as native species are used.
- Meets District requirements for dust control efficiencies.

Significant Impacts from Managed Vegetation:

- None

Less than Significant Impacts with Mitigation:

- Irrigation, fertigation, and subsurface drainage will likely be required
- Cultural Resources
- Air Quality; GHG emissions from construction, maintenance, and criteria pollutants

Additional:

- There is a period of time (up to several years) required to establish vegetation and may not be suited to some soil conditions.
- Native vegetation is not commercially available in the large quantities needed.
- Project operation and maintenance would occur year-round. Facility maintenance would include changing valves, pipeline sections, pumps, and electronic components.
- Net contribution of operational impacts to GHG emissions were not evaluated as it is very likely the net CO_2 contribution would be much less than associated with the construction phase of the proposed project. However, mitigation measure Air-6 addresses and reduces operational related GHG emissions (2008 FEIR).
- Native drought and salt-tolerant vegetation will be used.

Gravel Cover: The impacts associated with Moat and Row compared with Gravel Cover are different. Gravel does not pose an entrapment potential to wildlife or act as a physical barrier to wildlife movement, and it does not block or restrict the viewshed as

does Moat and Row. However, gravel application as a DCM has never been fully evaluated, with respect to biological impacts, as large-scale gravel application has not been considered consistent with the Public Trust. Gravel will likely increase off-road activity by recreational users, it will not offer a significant habitat value, over time it may require significant maintenance activities as windblown sand accumulates, and it would preclude future vegetative development via natural recruitment or other vegetative development.

Benefits of Gravel Cover:

- Does not require the application of water
- Limited maintenance would be required to preserve the gravel blanket.
- Operation of the Gravel Cover would require an average ongoing maintenance amount of gravel of 7,000 cubic yards per square mile per year (this allows for complete gravel replacement once every 50 years).
- Visually it would be approximately the same color as the existing lake bed (depending on gravel source)
- Would not result in significant impacts to utilities and service systems
- Would potentially enhance the rate of rainfall recharge by reducing soil evaporation rates
- Will meet District requirements for dust control efficiencies

Significant Impacts from Gravel Cover as Previously Evaluated:

- GHG emissions were found to be significant and unavoidable
- Would not be consistent with adopted plans and policies in the proposed project area (Public Trust)
- Archaeological and historical resources, due to construction equipment crushing and displacement of artifacts

Less than Significant Impacts (Would be reduced to less than significant with mitigation):

- Air quality from fugitive dust during construction
- May result in the release of hazardous materials from construction equipment related to gravel hauling and dumping (oil, gas, and/or hydraulic fluid)
- Potential increase in recharge to shallow groundwater from precipitation
- Potential for greater impacts related to transportation and traffic, including increased road damage to related roadways during transport of the higher volumes of gravel.
- Would eliminate habitat but not pose entrapment potential; would require additional habitat set-asides.

Additional:
- Gravel areas would be protected from flood deposits with flood control berms, drainage channels, and desiltation/retention basins.

Moat and Row:
- Does not use water
- May control dust; Moat and Row DCM is still considered experimental

Significant Impacts from Moat & Row:
- GHG emissions from construction equipment and associated activities. Impact would be similar to gravel and greater than shallow flooding and managed vegetation.

Less than Significant Impacts with Mitigation:
- Biological impacts are uncertain and are contingent on an adaptive management plan to reduce them to a level of "less than significant" and are likely greater than all the other DCMs due to obstacles to biological movement and habitat loss.
- Archaeological and historical resources. Similar to gravel cover and shallow flooding and more than managed vegetation.
- Hazards and hazardous materials. The impact would be less than gravel and similar to shallow flooding and managed vegetation.
- Utilities and services. This option requires installation of less infrastructure than shallow flooding and managed vegetation and more than gravel.
- Visual impacts are greater than shallow flooding, managed vegetation, and gravel, due to visual obstruction from the height of the feature (as viewed from the lake bed).

Additional:
- Moat and row provides no habitat value
- Has entrapment potential

SUMMARY OF ENVIRONMENTAL CONCERNS:

The CEQA Process:
Commission staff has commented extensively on the SEIR in its capacity as a responsible and trustee agency under CEQA. Commission staff believes that the SEIR exceeded the scope allowed under CEQA for a Supplemental EIR due to the introduction of new, narrowly-defined Project Objectives, the addition of significant new information that was not previously known (insufficient water or no water for new DCMs), a new Alternatives Analysis based on the new narrowly defined Project Objectives, and changed conclusions from those reached in the 2008 Subsequent EIR certified by the District.

As a result of these procedural issues and the incomplete analysis in the City's SEIR, two of the three DCMs approved as BACM by the District have been determined infeasible by the City. These include Shallow Flooding and Managed Vegetation. Staff believes these conclusions overreach what is allowed in a Supplemental EIR and are not supported by the inadequate water supply analysis provided in the SEIR. For example, the City is investigating the possibility of using groundwater for DCMs.

Also, the City has recently signed a Memorandum of Understanding (MOU) with NASA's Jet Propulsion Laboratory and the California Institute of Technology to develop instruments that would measure the lakebed's surface moisture and increase efficiency of water application. Furthermore, since the third DCM approved by the District as BACM is gravel, and gravel was found infeasible for large-scale application by the District in its 2008 Subsequent EIR, it is unknown what DCM would or could be used to replace the Moat and Row DCM if it proves unsuccessful.

If Moat and Row did prove successful as a DCM, it could be argued to have set a precedent for other areas at Owens Lake. The LADWP 2009 budget document (page 88), the 2008 FSEIR (page 2-15) and City staff comments made after the June 25, 2009, public meeting in Lone Pine, indicate that Moat and Row has the potential to be used to replace existing DCMs that use water such as shallow flooding and managed vegetation.

Should the Commission decide to approve the lease amendment to the City, it will be required to use the SEIR prepared by the City for the proposed Project. Although the Commission is not required to state that the SEIR complies with CEQA, it will be deemed to have waived its objections to the adequacy of the SEIR for CEQA compliance purposes of this project.

Substantive Unresolved Environmental Issues:

Commission staff continues to believe that there are significant impacts to public trust values including wildlife and visual resources that are not acknowledged by the City. Additionally, impacts to GHG emissions from equipment (air quality) used to construct and maintain the project, while recognized as significant by the City, are underestimated or unknown because ongoing maintenance needs of the Moat and Row DCMs are not included in the GHG emissions calculation.

Further detail is provided below or, for an extensive discussion of staff's substantive environmental concerns as well as CEQA procedural concerns, please refer to the Informational Calendar Item prepared for the August 11, 2009, Commission meeting, available online

http://archives.slc.ca.gov/Meeting_Summaries/2009_Documents/08-11-09/ITEMS_AND_EXHIBITS/52.pdf).

FACTORS IN FAVOR OF APPROVING A LEASE AMENDMENT FOR THE REVISED MOAT AND ROW PROJECT:

California is in the third year of a severe drought. The Governor issued a "Proclamation of a State of Emergency – Water Shortage" on February 27, 2009, for the State of California directing that numerous and immediate measures be implemented to decrease water use. The City has stated that it is especially affected by the reduced water supply and has instituted rationing to its customers. As a result of the reduced water supply, the SEIR states that there is no water available for additional DCMs at Owens Lake.

The proposed Moat and Row DCM, as it would initially be constructed, uses no water to control dust. The City has determined that there would be significant cost savings to its rate payers with the Moat and Row project. To implement Shallow Flooding instead could require the purchase of an estimated 8,000 acre-feet of replacement water per year, (if available) and the additional infrastructure to deliver the water would be required including a new main water supply line. Although the total cost of implementing either Shallow Flooding or Managed Vegetation in the proposed Moat and Row DCM area is unknown, it likely would be several times the $24 million estimated cost of the Moat and Row Project. The City has already spent over $500 million on dust control at Owens Lake.

The City constructed a demonstration Moat and Row DCM project on a one-half square mile area of the lake bed in 2007. According to the City's consultant, Air Sciences, Inc., the demonstration project achieved 99 percent control efficiency. The evaluation was based on one high wind event on February 13-14, 2008, which was experienced during the test period. The City contends that the demonstration project shows that the Moat and Row concept does work.

The District has agreed to allow the City to implement up to 3.5 square miles of Moat and Row DCMs as an experiment. If the Moat and Row DCMs work, there is a process that could allow it to be certified as BACM. If it does not work initially, then enhancements could be added to try to achieve the required control efficiency. These enhancements as originally contemplated could include gravel, managed vegetation, or shallow flooding; however, the City has indicated that water may not be available for enhancements. (If the Moat and Row DCM does not work after enhancements are applied, the District will require that another DCM be used; as indicated earlier, it is unclear what that DCM would be.)

Overall, the Moat and Row DCM area of 3.5 square miles is a relatively small area of the approximately 110 square mile lake bed. It would represent less than ten percent of the area with DCMs. Under current District requirements, it is the final emissive area to be controlled on the lake bed, except for study areas which may require additional DCMs.

If the Moat and Row DCMs are successful, PM_{10} emissions will be reduced, air quality will improve, and there will be fewer human health impacts. The Moat and Row DCMs can be implemented in a much shorter time frame than Shallow Flooding or Managed Vegetation. The District requires that the City begin implementation of DCMs on the 3.5 square miles of emissive areas by January 1, 2010.

APPROVALS OBTAINED:

Great Basin Unified Air Pollution Control District
City of Los Angeles, Department of Water and Power

FURTHER APPROVALS REQUIRED:

California Department of Fish and Game
California Regional Water Quality Control Board

EXHIBITS:

A. Site/Location Map
B. Land Description
C. Proposed Lease Amendment Submitted by City
D. Proposed Lease Amendment Prepared by Commission Staff
E. Alternate Findings and Recommendations for Approving a Lease Amendment to the City
F. CEQA Findings for Approving a Lease Amendment to the City
G. Statement of Overriding Considerations for Approving a Lease Amendment to the City
H. Mitigation Monitoring Program for Approving Lease Amendment to City

PERMIT STREAMLINING ACT DEADLINE:

April 10, 2010 – Commission acting as a Responsible Agency

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

FIND AND DETERMINE THAT THE PROPOSAL TO LEASE STATE-OWNED LANDS IN OWENS LAKE FOR THE PURPOSE OF CONSTRUCTING THE REVISED MOAT AND ROW DUST CONTROL MEASURES IS INCONSISTENT

WITH PUBLIC TRUST NEEDS AND IS NOT IN THE STATE'S BEST INTERESTS; DENY THE APPLICATION BY THE CITY, FOR THE LEASING OF STATE-OWNED LANDS IN OWENS LAKE FOR THE PURPOSES OF CONSTRUCTION OF 3.5 SQUARE MILES OF MOAT AND ROW DUST CONTROL MEASURES; AND, DISAPPROVE THE PROPOSED LEASE AMENDMENT TO THE CITY OF LOS ANGELES, DEPARTMENT OF WATER AND POWER.

NO SCALE

SITE

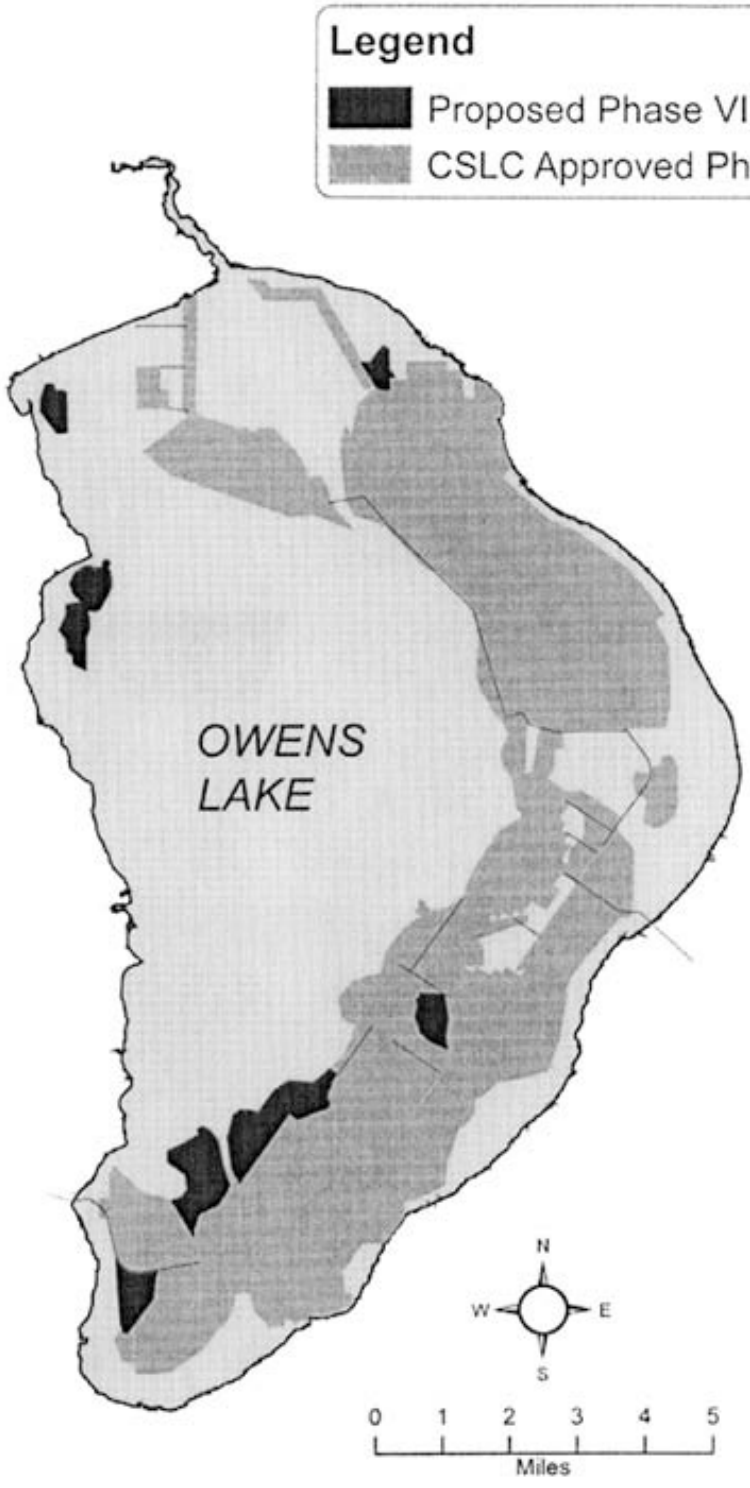

Exhibit A

WP 8079.9

LADWP
Owens Lake Dust Control Project
Phase VII

OWENS LAKE, INYO COUNTY

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property

EXHIBIT C
PROPOSED LEASE AMENDMENT SUBMITTED BY CITY

RECORDED AT THE REQUEST OF
AND WHEN RECORDED MAIL TO:
STATE OF CALIFORNIA
State Lands Commission
Attn: Title Unit
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

STATE OF CALIFORNIA
OFFICIAL BUSINESS
Document entitled to free recordation
pursuant to Government Code Section 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

A.P.N.
County:

STATE OF CALIFORNIA
STATE LANDS COMMISSION

EIGHTH AMENDMENT OF LEASE PRC 8079.9

WHEREAS, the State of California, acting through the State Lands Commission, hereinafter called Lessor, and, the City of Los Angeles Department of Water and Power, hereinafter called the Lessee, have heretofore entered into an agreement designated as Lease PRC 8079.9 (Lease), authorized by the State Lands Commission on June 14, 1999 and executed July 21, 1999, whereby the Lessor granted to said Lessee a General Lease – Public Agency Use covering certain State Land situated in the dry lakebed of Owens Lake, Inyo County; and

WHEREAS, on June 27, 2000, the Lessor amended the Lease in order for the Lessee to construct and operate a shallow flooding project located on 13.5 square miles on the North Sand Sheet area of the dry lakebed of Owens Lake; and

WHEREAS, on November 26, 2001, the Lessor amended the Lease in order for the Lessee to construct and operate the South Zone Dust Control Project; and

WHEREAS, on May 2, 2002, the Lessee adopted an Addendum for the Mitigated Negative Declaration previously adopted by the Lessee and the Lessee is required to implement the Mitigation Measures outlined in the Mitigated Negative Declaration and Mitigation Monitoring Program; and

WHEREAS, on June 18, 2002, the Lessor amended the Lease in order for the Lessee to construct and operate an additional 154 acres of shallow flooding at the South Zone Dust Control Project on the south end of Owens Lake; and

WHEREAS, on November 13, 2003, the Great Basin Air Pollution Control District certified

EIR SCH No. 2002111020, and the Lessee is required to implement the Mitigation Measures outlined in the EIR and Mitigation Monitoring Program; and,

WHEREAS, on September 23, 2005, Lessee adopted Mitigated Negative Declaration SCH No. 2005061068 and Mitigation Monitoring Program and the Lessee is required to implement the Mitigation Measures outlined in the Mitigated Negative Declaration and Mitigation Monitoring Program; and,

WHEREAS, on April 17, 2006, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor additional acreage of shallow flooding, including construction of drain pipeline, conveyance pipelines, control valve facilities, pump stations, and high voltage power cables, and water monitoring wells for Phases IV and V of the Owens Lake Dust Control Project; and,

WHEREAS, on February 1, 2008, the Great Basin Air Pollution Control District approved the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (2008 SIP) and certified EIR SCH No. 2007021127 (EIR) and its associated Mitigation Monitoring Program and the Lessee is required to implement the requirements of the 2008 SIP, as well as the Mitigation Measures outlined in the EIR and Mitigation Monitoring Program; and,

WHEREAS, the 2008 SIP contains Board Order #080128-01 Requiring the City of Los Angeles to Undertake Measures to Control PM_{10} Emissions From the Dried Bed of Owens Lake; and,

WHEREAS, on August 22, 2008, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor additional acreage of shallow flooding improvements, on the dry bed of Owens Lake known as Phase VII of the Owens Lake Dust Control Project; and,

WHEREAS, on June 1, 2009, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor Channel improvements; and,

WHEREAS, on September 15, 2009, Lessee certified the Supplemental Environmental Impact Report (SEIR) SCH No. 2008121074 for the Owens Lake Revised Moat and Row Dust Control Measures and adopted the Findings of Fact and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Plan (MMRP) for the Owens Lake Revised Moat and Row Dust Control Measures; and,

WHEREAS, Lessee is required to implement the mitigation measures contained in the SEIR and MMRP.

WHEREAS, Section 4, Paragraph 15(e) provides that the Lease may be terminated and its terms, covenants and conditions amended, revised or supplemented only by mutual written agreement of the parties; and

WHEREAS, the Lessee now desires to **amend** the **Land Use or Purpose, Authorized Improvements, Special Provisions,** and **Description of the Lease Premises (Section 3)** of the Lease, as amended, in order to construct, operate, maintain and monitor 3.5 square miles of Moat and Row dust control improvements on seven sites.

NOW THEREFORE, the parties hereto agree as follows:

1) **Section 1** of the Lease is amended as follows:

a) The "**Land Use or Purpose**" provision is hereby amended to include authorization of the following activities: Construct, install, operate and monitor 3.5 square miles of new Moat and Row dust control measures on seven sites on the land depicted on the attached Exhibit "A", and described on the attached Exhibit "B".

b) The **"Authorized Improvements"** provision of Section 1 of the Lease is hereby amended to include authorization of the following:

i. Moat & Row with Sand Fences: 20.8 miles of earthen berms (rows) five feet high with 1.5:1 side slopes. Three inches of base course will be applied to the tops of the berms to prevent erosion. A moat measuring 17 feet wide across the top with 1.5:1 side slopes will be constructed on each side of the berm. Sand fence five feet high will be mounted on wooden fence posts measuring 8-inches or 10-inches square.
ii. Moat & Row without Sand Fences: 42.3 miles of earthen berms five feet high with 1.5:1 side slopes. Six inches of base course will be applied to the tops of the berms to prevent erosion. A moat measuring 16 feet across the top with 1.5:1 side slopes will be constructed on each side of the berm.
iii. Sand Fence Only: 3.8 miles of sand fence five feet high will be installed in area T1A-1 using wooden fence posts measuring 8-inches or 10-inches square.
iv. Maintenance Access: up to 190,673 cubic yards of crushed rock will be applied between the moats and rows for maintenance vehicle access to the moats, rows, and fences.
v. Culvert Crossing: One culvert crossing will be constructed in T37-2 using 14 high density polyethylene (HDPE) culvert pipes measuring 24-inches in diameter and approximately 60 feet long.
vi. Barrier Gate: One galvanized steel Barrier Gate (cattle guard) measuring 40 feet will be installed in T32-1.
vii. Outlets: Three outlets will be installed in T1A-1. Each outlet will consist of a HDPE riser, with diameters ranging from 8 to 12 inches, surrounded by a 40 foot square area of riprap.
viii. Riprap Berms: Two berms made of riprap, each measuring approximately 1,000 feet long, 1.5 feet high, and 6.5 feet wide will be installed adjacent to T1A-1 and T1A-3.
ix. T1A-1 Submains: 2,015 feet of 16-inch, 415 feet of 12-inch, 2,540 feet of 10-inch, and 1,410 feet of 8-inch HDPE submain pipe will be installed along with various valves for control of irrigation water.
x. T1A-1 Turnout Facility: A concrete equipment pad measuring 30 feet x 6 feet x 2 feet thick will be poured to support various valves (flow control, pressure control, and air release valves), a flow meter, stainless steel piping, and various appurtenances.
xi. Irrigation Extensions: Two irrigation extensions, each 12-inch diameter HDPE pipe and approximately 700 feet in length will connect to 12-inch butterfly valves each surrounded by 2 cubic yards of riprap.

xii. Temporary construction fencing: Approximately 2,550 feet of temporary construction sand fencing will be installed at T32-1 and T37-1 prior to start of other construction activities.

2) **Section 2 (Special Provisions)** of the Lease is hereby amended to include the following:

a) Prior to construction of the Moat and Row dust control design within the Lease premises, Lessee shall provide:

i. Documentation showing that the Moat and Row areas are designed to meet the Minimum Dust Control Efficiencies (MDCE) as stated in the 2008 SIP, Section 7.3.2.;

ii. a detailed written program for the maintenance of the Moat and Row design that will minimize impacts to public trust lands and wildlife resources

b) Should Great Basin Unified Air Pollution Control District determine that any Moat and Row areas or portions thereof contribute to shoreline PM10 exceedances as specified in the 2008 SIP, the Lessee will remediate the areas causing exceedances as described in Section 7.3.2 of the 2008 SIP. The Lessee shall develop a Remedial Action Plan for conversion of Moat and Row as described in Section 21 of the 2006 Settlement Agreement.

c) Submittal of as-builts of, and compliance and monitoring reports for, all of the improvements for Moat and Row portion of Phase VII of the Owens Lake Dust Control Project as described in Section 1 of this Lease Amendment, not less than 180 days upon completion of Phase VII.

d) Lessee shall not construct or implement any other improvements within the Lease premises except as described in Section 1 of the Lease.

e) Lessee acknowledges that future implementation of additional dust control measures may be necessary, as determined by the Great Basin Unified Air Pollution Control District, that may require amendment to this Lease.

3) Section 3 (**Description of the Lease Premises**) of the Lease is hereby modified to include the lands described in the attached Exhibit "B" and as depicted on the attached Exhibit "A", which by reference are made a part hereof.

The effective date of this Amendment to the Lease shall be December __, 2009.

This Amendment, containing a total of __ pages, is a portion of document number PRC 8079.9, with a beginning date of May 1, 1999, consisting of four (4) sections with a total of (92) pages.

All other terms and conditions of the Lease shall remain in full force and effect.

This Amendment will become binding on the Lessor only when duly executed on behalf of the State Lands Commission of the State of California.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the dates indicated.

LESSEE:	**LESSOR**:
CITY OF LOS ANGELES	STATE OF CALIFORNIA
DEPARTMENT OF WATER AND POWER	STATE LANDS COMMISSION
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

(Please attach Notary Acknowledgement)

Execution of this document was authorized
By the State Lands Commission on _____.

EXHIBIT D
PROPOSED LEASE AMENDMENT PREPARED BY COMMISSION STAFF

RECORDED AT THE REQUEST OF
AND WHEN RECORDED MAIL TO:
STATE OF CALIFORNIA
State Lands Commission
Attn: Title Unit
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

STATE OF CALIFORNIA
OFFICIAL BUSINESS
Document entitled to free recordation
pursuant to Government Code Section 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

A.P.N.
County: Inyo

STATE OF CALIFORNIA
STATE LANDS COMMISSION

DRAFT EIGHTH AMENDMENTOF LEASE PRC 8079.9

WHEREAS, the State of California, acting through the State Lands Commission, hereinafter called Lessor, and, the City of Los Angeles Department of Water and Power, hereinafter called the Lessee, have heretofore entered into an agreement designated as Lease PRC 8079.9 (Lease), authorized by the State Lands Commission on June 14, 1999, and executed July 21, 1999, whereby the Lessor granted to said Lessee a General Lease – Public Agency Use covering certain State Land situated in the dry lakebed of Owens Lake, Inyo County; and

WHEREAS, on June 27, 2000, the Lessor amended the Lease in order for the Lessee to construct and operate a shallow flooding project located on 13.5 square miles on the North Sand Sheet area of the dry lakebed of Owens Lake; and

WHEREAS, on November 26, 2001, the Lessor amended the Lease in order for the Lessee to construct and operate the South Zone Dust Control Project; and

WHEREAS, on May 2, 2002, the Lessee adopted an Addendum for the Mitigated Negative Declaration previously adopted by the Lessee and the Lessee is required to implement the Mitigation Measures outlined in the Mitigated Negative Declaration and Mitigation Monitoring Program; and

WHEREAS, on June 18, 2002, the Lessor amended the Lease in order for the Lessee to construct and operate an additional 154 acres of shallow flooding at the South Zone Dust Control Project on the south end of Owens Lake; and

WHEREAS, on November 13, 2003, the Great Basin Air Pollution Control District certified EIR SCH No. 2002111020, and the Lessee is required to implement the Mitigation Measures outlined in the EIR and Mitigation Monitoring Program; and,

WHEREAS, on September 23, 2005, Lessee adopted Mitigated Negative Declaration SCH No. 2005061068 and Mitigation Monitoring Program and the Lessee is required to implement the Mitigation Measures outlined in the Mitigated Negative Declaration and Mitigation Monitoring Program; and,

WHEREAS, on April 17, 2006, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor additional acreage of shallow flooding, including construction of drain pipeline, conveyance pipelines, control valve facilities, pump stations, and high voltage power cables, and water monitoring wells for Phases IV and V of the Owens Lake Dust Control Project; and,

WHEREAS, on February 1, 2008, the Great Basin Air Pollution Control District approved the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (2008 SIP) and certified EIR SCH No. 2007021127 (EIR) and its associated Mitigation Monitoring Program and the Lessee is required to implement the requirements of the 2008 SIP, as well as the Mitigation Measures outlined in the EIR and Mitigation Monitoring Program; and,

WHEREAS, the 2008 SIP contains Board Order #080128-01 Requiring the City of Los Angeles to Undertake Measures to Control PM_{10} Emissions From the Dried Bed of Owens Lake; and,

WHEREAS, on August 22, 2008, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor additional acreage of shallow flooding improvements, on the dry bed of Owens Lake known as Phase VII of the Owens Lake Dust Control Project; and,

WHEREAS, on June 1, 2009, Lessor amended the Lease in order for the Lessee to construct, operate, maintain and monitor two earthen berms identified as the Channel Improvements, on the drybed of Owens Lake, as a component of the Phase VII Owens Lake Dust Control Project; and,

WHEREAS, on October 22, 2009, Lessor amended the Lease in order for the Lessee to construct, operate, and maintain the T-5 Drip Irrigation components of the Phase VII Owens Lake Dust Control Project; and,

WHEREAS, Section 4, Paragraph 15(e) of the Lease provides that the Lease may be terminated and its terms, covenants and conditions amended, revised or supplemented only by mutual written agreement of the parties; and,

WHEREAS, the Lessee now desires to **amend** the **Land Use or Purpose, Authorized Improvements, Special Provisions and description of Lease Premises,** of the Lease in order to construct, operate, maintain and monitor the Moat and Row components of the Phase VII Owens Lake Dust Control Project.

NOW THEREFORE, the parties hereto agree as follows:

1) **Section 1** of the Lease is amended as follows:
   a) The "**Land Use or Purpose**" provision is hereby amended to include authorization of the following activities: Construct, install, operate and maintain, and monitor 3.5 square miles of Moat and Row dust control measures associated with Phase VII of the Owens Lake Dust Control project on the land as depicted on the attached Exhibit "A".

   b) The **"Authorized Improvements"** provision of Section 1 of the Lease is hereby amended to include the following:

   In addition to previously authorized improvements, the following components of Phase VII Moat and Row Dust Control as described in the *2008 Owens Valley* PM_{10} *Planning Area Demonstration Of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (EIR) and FSEIR Owens Lake Revised Moat And Row Dust Control Measures, September 2009, may include: moat & row with sand fences: 20.8 miles of earthen berms (rows) five feet high with 1.5:1 side slopes. Three inches of base course will be applied to the tops of the berms to prevent erosion. A moat measuring 17 feet wide across the top with 1.5:1 side slopes will be constructed on each side of the berm. Sand fence five feet high will be mounted on wooden fence posts measuring 8 inches or 10 inches square; moat and row without sand fences: 42.3 miles of earthen berms five feet high with 1.5:1 side slopes. Six inches of base course will be applied to the tops of the berms to prevent erosion. A moat measuring 16 feet across the top with 1.5:1 side slopes will be constructed on each side of the berm; sand fence only: 3.8 miles of sand fence five feet high will be installed in area T1A-1 using wooden fence posts measuring eight inches or ten inches square; maintenance access: up to 190,673 cubic yards of crushed rock will be applied between the moats and rows for maintenance vehicle access to the moats, rows, and fences; culvert crossing: one culvert crossing will be constructed in T37-2 using 14 high density polyethylene (HDPE) culvert pipes measuring 24 inches in diameter and approximately 60 feet long; barrier gate: one galvanized steel barrier gate (cattle guard) measuring 40 feet will be installed in T32-1; outlets: three irrigation outlets will be installed in T1A-1. Each outlet will consist of a HDPE riser, with diameters ranging from eight to 12 inches, surrounded by a 40-foot square area of riprap; riprap berms: two berms made of riprap, each measuring approximately 1,000 feet long, 1.5 feet high, and 6.5 feet wide will be installed adjacent to T1A-1 and T1A-3 cell areas; T1A-1 submains: 2,015 feet of 16-inch, 415 feet of 12-inch, 2,540 feet of 10-inch, and 1,410 feet of eight-inch HDPE submain pipe will be installed along with various valves for control of irrigation water; T1A-1 turnout facility: a concrete equipment pad measuring 30 feet by six feet by two feet thick will be poured to support various valves (flow control, pressure control, and air release valves), a flow meter, stainless steel piping, and various appurtenances; irrigation extensions: two irrigation extensions, each 12-inch diameter HDPE pipe and approximately 700 feet in length will connect to 12-inch butterfly valves each surrounded by two cubic yards of riprap; temporary construction fencing: approximately 2,550 feet of temporary construction sand fencing will be installed at T32-1 and T37-1 prior to start of other construction activities;

2) **Section 2 "Special Provisions"** of the Lease is hereby amended to include the following:

a) Prior to construction of the Moat and Row dust control design within the Lease Premises, Lessee shall provide to Lessor for Lessor's staff approval:

i. a detailed written program for the maintenance of the Moat and Row design that will minimize impacts to public trust lands and wildlife resources;

ii. 1:1 mitigation within Owens Lake for impacts to biological resources resulting from Moat and Row, and agreement to participate in a long-term conservation plan with legally binding requirements to designate an appropriate acreage of shallow flood in perpetuity;

iii. a survey of the existing dry lake bed conditions that includes, but is not limited to, ground and aerial photography, and topographical survey data sufficient to restore the site to pre-existing elevations.

b) During the period that Lessee occupies lands presently a part of Lease PRC 5464.1 (issued by Lessor to US Borax), Lessee agrees to insure, indemnify and hold US Borax harmless to the same extent that it insures, indemnifies and holds Lessor harmless as stated in Paragraphs 7 and 8 of Section 4 of Lease PRC 8079.9. This provision is for the benefit of U S Borax as third party beneficiary.

c) Should the Moat and Row dust control measure design be determined to be ineffective by the Great Basin Unified Air Pollution Control District, and should the remedy involve more than 33% of the disturbed area for all Moat and Row areas, Lessee shall submit an application to Lessor to amend Lease No. PRC 8079.9 to consider implementation of an alternative dust control measure that is compatible with the Public Trust values of Owens Lake (e.g., Shallow Flooding or Managed Vegetation) as will be determined by the Lessor. Depending on the proposed alternative dust control measure, restoration of the lease area to pre-moat and row topography may be required at the sole discretion of Lessor.

d) Lessee shall submit as-builts of, and compliance and monitoring reports for all of the improvements for Phase VII of the Owens Lake Dust Control Project as described in Section 1 of this Lease Amendment, within 180 days upon completion of Phase VII.

e) Lessee shall execute with the California Department of Fish and Game an Agreement Regarding Proposed Stream or Lake Alteration, Notification Number 1600-2009-0039-R6, and provide to Lessor copies of all monitoring reports resulting therefrom.

f) Lessee shall comply with the Mitigation Monitoring and Reporting Program for the Owens Lake Revised Moat and Row Dust Control Measures adopted by Lessor except as modified by specific provision of this Lease Amendment. In the event of any conflict between the provisions of the Mitigation Monitoring and Reporting Program and this Lease Amendment, the provisions of the Lease Amendment shall prevail.

g) All structures that are constructed on the Lease Premises that can be used as a perch by predators shall require the installation of Nixalite or equivalent perch prevention measures.

h) Lessee shall provide a written and electronic copy of all Mitigation Monitoring and Reporting documents for this component of the Phase VII Owens Lake Dust Control Project.

i) Lessee shall not construct or implement any other improvements or modifications to the design or location of the Moat and Row components within the Lease Premises except as described in Section 1 and 2(c) of the Lease Amendment.

j) Lessee acknowledges that future implementation of additional dust control measures may be necessary, as determined by the Great Basin Unified Air Pollution Control District, which may require amendment to this Lease.

k) Lessee is responsible for ensuring that any abandoned structure(s) within the Lease Premises are properly and completely removed, transported and disposed of in accordance with all applicable federal, state and local rules and regulations. In removing any abandoned structure(s), the Lessee is required to obtain any permits or other governmental approvals as may then be required. Lessee shall be responsible for all past and any future costs associated with the study, analysis, environmental review for compliance with the California Environmental Quality Act (as required), removal, transportation and disposal of any abandoned structure(s) within the Lease Premises.

l) Lessee acknowledges that Lessor's approval and issuance of this lease amendment for the Moat and Row project is no assurance that the future use of Moat and Row as a dust control measure will be allowed on sovereign lands at Owens Lake.

m) Lessee shall ensure that public access and public safety are maintained at all times within the Lease Premises.

n) Lessee agrees to reimburse Lessor's staff costs for all monitoring and compliance of this Lease and its Amendments, and shall submit a deposit of $25,000 for such expenses.

o) Lessee shall reimburse Lessor in full for all reasonable costs and attorneys fees, including, but not limited to, those charged it by the Department of Justice, that Lessor incurs in connection with the defense of any action brought against Lessor challenging the issuance of this Lease, any provision of this Lease, the environmental review upon which the issuance of this Lease or any other matter related to this Lease or its issuance. In addition, Lessee shall reimburse Lessor for any court costs and reasonable attorney fees that Lessor may be required by a court to pay as the result of such action.

3) **Section 3 – "Description of Lease Premises"** is hereby amended to include 3.5 square miles of moat and row dust control measures on the lands described in the attached Exhibit B; all other terms and conditions of the Lease, as amended, shall remain in full force and effect.

The effective date of this Amendment to the Lease shall be December 17, 2009.

This Amendment is a portion of a lease document number PRC 8079.9, with a beginning date of May 1, 1999.

All other terms and conditions of the Lease shall remain in full force and effect.

This Amendment will become binding on the Lessor only when duly executed on behalf of the State Lands Commission of the State of California.

IN WITNESS WHEREOF, the parties hereto have executed this Lease Amendment as of the dates indicated.

LESSEE:	**LESSOR**:
CITY OF LOS ANGELES	STATE OF CALIFORNIA
DEPARTMENT OF WATER AND POWER	STATE LANDS COMMISSION
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

(Please attach Notary Acknowledgement)

Execution of this document was authorized
By the State Lands Commission on _____.

EXHIBIT E
Alternate CEQA Findings and Authorization for Approval of Lease Amendment
Prepared by Commission Staff

CEQA FINDING:

FIND THAT A SUBSEQUENT EIR 2008 OWENS VALLEY PM_{10} PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN (SCH NO. 2007021127) WAS PREPARED AND CERTIFIED FOR PHASE VII THAT INCLUDED MOAT AND ROW DUST CONTROL MEASURES BY THE GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT ON OR ABOUT JANUARY 28, 2008, AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

FIND THAT A SUPPLEMENTAL EIR OWENS LAKE MOAT AND ROW REVISED DUST CONTROL MEASURES (SCH NO. 2008121074) WAS PREPARED AND CERTIFIED FOR THIS PROJECT BY THE CITY OF LOS ANGELES, DEPARTMENT OF WATER AND POWER ON SEPTEMBER 15, 2009, AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTIONS 15091 AND 15096(h), AS CONTAINED IN EXHIBIT F, ATTACHED HERETO.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT H, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, AND 15096 (h) AS CONTAINED IN EXHIBIT G, ATTACHED HERETO.

AUTHORIZATION:

AUTHORIZE THE AMENDMENT OF LEASE NO. PRC 8079.9, A GENERAL LEASE – PUBLIC AGENCY USE, OF LANDS LOCATED ON OWENS LAKE AS SHOWN ON EXHIBIT A (FOR REFERENCE PURPOSES ONLY) AND DESCRIBED ON EXHIBIT B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF, EFFECTIVE DECEMBER 17, 2009, TO CONSTRUCT, INSTALL, OPERATE, MONITOR AND MAINTAIN 3.5 SQUARE MILES OF MOAT AND ROW DUST CONTROL MEASURES; AMEND THE LEASE AS SHOWN IN EXHIBIT D; ALL OTHER TERMS AND CONDITIONS OF THE LEASE WILL REMAIN IN EFFECT WITHOUT AMENDMENT.

EXHIBIT F

Owens Lake Revised Moat and Row Dust Control Measures

STATEMENT OF FINDINGS

December 17, 2009

CEQA FINDINGS

These Findings on the Owens Lake Revised Moat and Row Dust Control Measures Project (Project) proposed by the City of Los Angeles, Department of Water and Power (City or LADWP), are made by the California State Lands Commission (Commission or CSLC), acting as a responsible agency pursuant to Public Resources Code section 21081 and the Guidelines for the California Environmental Quality Act (CEQA) (Title 14, California Code of Regulations, sections 15091, 15096(h), and 15163(e)).

The City prepared a Final Supplemental Environmental Impact Report (2009 City Supplemental EIR or 2009 FSEIR, SCH No. 2008121074) for the *Owens Lake Revised Moat and Row Dust Control Measures* to evaluate potential significant impacts from design changes to the proposed Moat and Row dust control measures (DCMs) that were evaluated in the Great Basin Unified Air Pollution Control District's (District or GBUAPCD) Final Subsequent EIR for the *2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan* (2008 District Final Subsequent EIR or 2008 FSEIR, SCH No. 2007021127).

When a supplemental EIR has been prepared for a project, the decision-making body "shall consider the previous EIR as revised by the supplemental EIR" (CEQA Guidelines section 15163(e)). Therefore, the California State Lands Commission (Commission) as a responsible agency under CEQA must consider the 2008 District Subsequent EIR and the 2009 City Supplemental EIR and make its own findings as required by CEQA Guidelines sections 15096(h) and 15091.

The Commission has reviewed and considered the information contained in both the 2008 District Final Subsequent EIR and the 2009 City Final Supplemental EIR and the *Findings of Fact and Statement of Overriding Considerations* accompanying each document.

The Commission adopts the Findings made by the City contained in its Statement of Findings that relate specifically to the Revised Moat and Row Project as re-stated or modified in this Statement of Findings. These Findings relate to the potential significant impacts resulting from the revised Project design. As explained in the section "Findings Regarding Alternatives," the Commission declines to adopt the City's findings regarding alternatives. Instead, the Commission adopts the District's findings regarding the alternatives.

All significant adverse impacts of the Project identified in the 2008 District Final Subsequent EIR and the 2009 City Final Supplemental EIR are included herein and organized according to the resource affected. For each significant impact, a finding has been made as to one or more of the following, as appropriate:

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

A discussion of the facts supporting them follows the findings.

Whenever Finding (b) occurs, the agencies with jurisdiction have been specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed within each type of impact that could result from project implementation. However, under CEQA (Public Resources Code section 21081.6), the City, as the CEQA Lead Agency for the 2009 City Final Supplemental EIR or the District, as the Lead Agency for the 2008 District Final Subsequent EIR, have the responsibility to ensure that the mitigation measures are effectively implemented.

Whenever Finding (c) is made, the Commission has determined that sufficient mitigation is not practicable to reduce the impact to a less than significant level and, even after implementation of all feasible mitigation measures, there will or could be an unavoidable significant adverse impact due to the Project. Significant impacts requiring Finding (c) were identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR. The Statement of Overriding Considerations applies to all such unavoidable impacts as required by the CEQA *Guidelines* sections 15092 and 15093.

These Findings are based on the information contained in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR, as well as information provided by the City and gathered through an Informational Hearing (Calendar Item 52, August 11, 2009) all of which is contained in the record of proceedings as noted below.

The custodian of the record of proceedings upon which the Commission's decision is based is the Sacramento office of the California State Lands Commission, located at 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825.

FINDINGS OF FACT

Effects Found Not To Be Significant

The Initial Study (IS) prepared for the Revised Moat and Row Project (December 16, 2008, see Appendix A of the 2009 City Final Supplemental EIR) identified those effects that were already addressed in the 2008 District Final Subsequent EIR, or otherwise were found not to be significant. The IS documented that the proposed Project would have no impact on agricultural resources or recreation. In addition, the IS found that the following impacts were sufficiently analyzed in the 2008 District Final Subsequent EIR and were found to be less than significant: geology and soils, noise, population and housing and public services. These impacts would not change with implementation of the Revised Moat and Row Project.

As documented in the IS, the 2008 District Final Subsequent EIR determined that construction, maintenance, and operation of DCMs (including moat and row) would result in significant impacts to cultural resources, hazards, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities. However, as the lead agency for the 2008 District Final Subsequent EIR, the District, determined that these significant impacts would be avoided or reduced to a less-than-significant level with implementation of mitigation measures adopted in the 2008 District Final Subsequent EIR. The District adopted a Mitigation and Monitoring Plan and *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The District's Findings are hereby incorporated by reference and the findings of fact related to significant impacts to cultural resources, hazards, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities are summarized as follows.

Cultural Resources

The District found that implementation of the 2008 State Implementation Plan (SIP) has the potential to result in significant impacts to cultural resources related to the destruction of a unique paleontological resource, a substantial adverse change to the significance of archaeological and historical resources, and unknown burial sites. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to cultural resources. Implementation of Measure Cultural-1 (Paleontological Resources Construction Monitoring), Measure Cultural-2 (Cultural Resources Investigations), and Measure Cultural-3 (Cultural Resources Monitoring Program) from the 2008 District Subsequent EIR would eliminate or substantially reduce these significant cultural resource impacts to a less-than-significant level. These findings are documented on pages III-13 through III-20 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead

agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency, concurs with the District's findings of fact and hereby incorporates by reference those findings into this document.

Hazards and Hazardous Materials

The District found that implementation of the 2008 SIP has the potential to result in significant impacts related to the accidental release of hazardous materials into the environment resulting from routine transport, use or disposal of hazardous materials and the increased occurrence of wildland fires. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid significant effects on the environment related to hazards and hazardous materials. Implementation of Measure Hazards-1 (Hazardous Materials Transport), Measure Hazards-2 (Spill Prevention Control and Countermeasure Program), Measure Hazards-3 (Emergency Response Business Plan), and Measure Hazards-4 (Fire Protection Services) from the 2008 District Subsequent EIR would eliminate or substantially reduce these significant impacts to a less-than-significant level. These findings are documented on pages III-20 through III-22 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency, concurs with the District's findings of fact and hereby incorporates by reference those findings into this document.

Hydrology and Water Quality

The District found that implementation of the 2008 SIP has the potential to result in significant impacts to surface water quality, groundwater, drainage, and increased flood potential. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to hydrology and water quality. Implementation of Measure Hydrology-1 (Acquire and Adhere to National Pollution Discharge Elimination System General Permit), Measure Hydrology-2 (Water Quality Monitoring and Reporting Program), Measure Hydrology-3 (Shallow Flood Water Retention Berms), Measure Hydrology-4 (Reduction of Flash Flood and Alluvial Sediment Damage Potential), and Measure Hydrology-5 (Berm Failure Emergency Management Plan) from the 2008 District Subsequent EIR would eliminate or substantially reduce these significant hydrology and water quality impacts to a less-than-significant level. These findings are documented on pages III-22 through III-25 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with these findings of fact. The Commission, acting as a responsible agency, concurs with the District's findings of fact and hereby incorporates by reference those findings into this document.

Land Use and Planning

The District found that implementation of the 2008 SIP has the potential to result in a significant impact related to a potential increase in mosquitoes and other biting insects. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effect on the environment related to this land use issue. Implementation of Measure Land Use and Planning-1 (Resident Insect Control Program) from the 2008 FSEIR would eliminate or substantially reduce this significant land use impact to a less-than-significant level. These findings are documented on pages III-25 through III-26 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency concurs with the District's findings and hereby incorporates by reference those findings into this document.

Mineral Resources

The District found that implementation of the 2008 SIP has the potential to result in significant impacts to mineral resources due to increased flash flood potential for portions of the areas leased by U.S. Borax. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to mineral resources. Implementation of Measure Minerals-1 (U.S. Borax Lease Area Approval and Compensation), Measure Hydrology-3 (Shallow Flood Water Retention Berms), and Measure Hydrology-4 (Reduction of Flash Flood and Alluvial Sediment Damage Potential) from the 2008 District Subsequent EIR would eliminate or substantially reduce the significant mineral resource impact to a less-than-significant level. These findings are documented on pages III-26 through III-27 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14. 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency concurs with the District's findings and hereby incorporates by reference those findings into this document.

Transportation and Traffic

The District found that implementation of the 2008 SIP has the potential to result in significant impacts to transportation and traffic related to substantial increases in hazards during construction due to turning vehicles and heavy trucks transporting materials and equipment to the site. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to transportation and traffic. Implementation of Measure Traffic-1 (Traffic Work Safety Plan), Measure Traffic-2 (Traffic Work Safety Plan Conformance), and Measure Traffic-3 (Regional Transportation Network Damage Repair) from the 2008 District Subsequent EIR would eliminate or substantially reduce these significant traffic impacts to a less-than-significant level. These findings are

documented on pages III-27 through III-29 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency concurs with the District's findings and hereby incorporates by reference those findings into this document.

Utilities

The District found that implementation of the 2008 SIP has the potential to result in significant storm drain system impacts due to channeling storm water flows that could result in an increase of flash flood potential by directing water and sediment loads toward the U.S. Borax mineral lease, causing either erosion, deposition of sediment, or loss of ore material to the brine pool. The District found that changes or alterations have been required in, or incorporated into, the project that mitigate or avoid this significant effect on the environment related to the storm drain system. Implementation of Measure Hydrology-3 (Shallow Flood Water Retention Berms) and Measure Hydrology-4 (Reduction of Flash Flood and Alluvial Sediment Damage Potential) from the 2008 District Subsequent EIR would eliminate or substantially reduce this significant utilities impact to a less-than-significant level. These findings are documented on pages III-29 through III-30 of the District's *Findings of Fact and Statement of Overriding Considerations* dated January 14, 2008. The City, as the lead agency for the 2009 Revised Moat and Row Dust Control Measures Project, concurred with the District's findings of fact. The Commission, acting as a responsible agency, concurs with the District's findings and hereby incorporates by reference those findings into this document.

Visual Resources

The City evaluated potentially significant impacts to visual resources in the 2009 City Final Supplemental EIR and concluded that the impact would be less than significant (pp. ES-21 and 3.3-17 through 3.3-25). No mitigation or findings are required for impacts that are less than significant.

Effects Found To Be Significant

The City evaluated three new potentially significant effects in the 2009 City Final Supplemental EIR: biological resources, construction-related air quality, and visual resources. The City, as Lead Agency for the 2009 City Final Supplemental EIR, made specific findings for biological resources and construction-related air quality in Section 1.6.2, "Effects Found to Be Significant," in its *Findings of Fact and Statement of Overriding Considerations* dated September 2009. Except as specifically noted, the Commission, acting as a responsible agency, concurs with the District's Findings as re-stated or modified below.

The City's evaluation of visual resources in the 2009 City Final Supplemental EIR found that the impact would be less than significant and thus no mitigation is required

(pp. ES-21 and 3.3-17 through 3.3-25). The Commission, acting as a responsible agency, concurs with the District's determination. Therefore, no finding is required for visual resources.

Biological Resources

SIGNIFICANT EFFECT: EFFECTS ON WESTERN SNOWY PLOVER (IMPACT 3.1-1)

Implementation of the proposed project would result in the loss of up to 1,503.8 acres of suitable habitat for western snowy plover within moat and row cells. Other potential direct and indirect impacts of the project include potential loss of snowy plover individuals as a result of construction and operations and maintenance activities; isolation and loss of plover broods within fence grids; entrapment within moats: and increased predation by corvid species as a result of fence construction and additional corvid perch opportunities near plover nesting habitat. These potential impacts to habitat, individuals, and brood movements would result in potentially significant adverse effects on western snowy plover.

Finding

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the 2008 District Subsequent EIR as revised by the 2009 City Supplemental EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts in Support of Finding

LADWP adopted the following mitigation measures to reduce or compensate for project impacts to western snowy plover. The following mitigation measures would reduce impacts to western snowy plover to a less-than-significant level.

Mitigation Measure 3.1-1 (Measure Biology-1 in 2008 FSEIR, 2008 SIP MMP Table III-1): Lake Bed Worker Education Program

To minimize potential direct impacts to western snowy plover from construction activities to below the level of significance, LADWP shall continue the lake bed worker education program consistent with the previous approach and per Department of Fish and Game (DFG) 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 LADWP and construction personnel. The program shall be conducted by a biologist familiar with the biology of the western snowy plover at Owens Lake and familiar with special status plant and wildlife species of the Owens Lake basin. The biologist shall be approved by GBUAPCD prior to implementation of the education program. The qualifications of the biologist shall be submitted to DFG 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 GBUAPCD 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 GBUAPCD. A copy of the worker education program shall be provided to DFG and CSLC.

Mitigation Measure 3.1-2 (Measure Biology-2 in 2008 FSEIR, 2008 SIP MMP Table III-1): Preconstruction Surveys for Western Snowy Plover

To minimize potential direct impacts to western snowy plover within the project area due to construction activities, LADWP 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. LADWP 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 GBUAPCD. Maps of snowy plover nest locations shall be posted at the construction office and made available to all site personnel and GBUAPCD staff. The activity of the nest shall be monitored by a biological monitor approved by GBUAPCD, 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 DFG. Active snowy plover nests shall be monitored at least weekly. The qualifications of the biological monitor shall be submitted to DFG 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 GBUAPCD through issuance of a weekly written report by LADWP to GBUAPCD.

Mitigation Measure 3.1-3 (Measure Biology-3 in 2008 FSEIR, 2008 SIP MMP Table III-1): 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, LADWP shall implement a speed limit of 30 miles per hour within all active construction areas on Owens Lake during construction of DCMs. 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 GBUAPCD 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 GBUAPCD through issuance of a summary written report by LADWP to GBUAPCD after posting of speed limits. A copy of the summary report shall be provided to the DFG.

Mitigation Measure 3.1-4 (Measure Biology-4 in 2008 FSEIR, 2008 SIP MMP Table III-1): Lighting Best Management Practices

To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, LADWP shall institute all best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and DFG 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 GBUAPCD, and a copy of the compliance record shall be provided to DFG.

Mitigation Measure 3.1-5 (Measure Biology-7 in 2008 FSEIR, 2008 SIP MMP Table III-1): 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, LADWP 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 CSLC and GBUAPCD for review and comment at least 60 days prior to the start of operation of new water-based DCMs. 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 GBUAPCD 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 GBUAPCD and DFG 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 GBUAPCD, DFG, Lahontan Water Quality Control Board, and CSLC by the approved biological monitor

within four months following the end of the monitoring year. Any changes in the existing monitoring requirements by the RWQCB shall be included into this mitigation measure.

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

Mitigation Measure 3.1-6 (Measure Biology-9 in 2008 FSEIR, 2008 SIP MMP Table III-1): 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 DFG 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 GBUAPCD and DFG 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 GBUAPCD, the CSLC, and DFG.

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 DCM 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. GBUAPCD and DFG 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 GBUAPCD and DFG 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 LADWP and DFG based on the report provided by the biological monitor. A copy of the resultant mitigation that is negotiated between LADWP and DFG shall be provided to GBUAPCD and CSLC.

Mitigation Measure 3.1-7 (Measure Biology-10 in 2008 FSEIR, 2008 SIP MMP Table III-1): Long-Term Monitoring Program for Western Snowy Plover

To minimize potential direct, indirect, and cumulative impacts resulting, from operation and maintenance of DCMs to western snowy plover, LADWP 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 DCMs on Owens Lake bed shall be coordinated so that long-term monitoring for all DCMs 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 DFG 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 GBUAPCD, CSLC, and DFG by December 31 of each monitoring year. GBUAPCD shall require adaptive management changes to operation and maintenance of DCMs 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. GBUAPCD shall consult with LADWP, CSLC, and DFG 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 GBUAPCD by December 31 of each monitoring year. The report shall document survey locations and dates, the number of plovers observed, and an estimate of the total plover population. A copy of the yearly summary reports shall be provided to DFG and CSLC.

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

Mitigation Measure 3.1-8 (Measure Biology-12 in 2008 FSEIR, 2008 SIP MMP Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008): 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 LADWP 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. LADWP 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 LADWP 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 shutdown. The qualifications of the biologist who conducts the snowy plover surveys shall be submitted to DFG for review. A final operations plan detailing the drying operations shall be submitted to GBUAPCD for approval, and a copy shall be provided to DFG 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 GBUAPCD for approval one week prior to implementation, and a copy of the changes shall be provided to DFG.

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

Mitigation Measure 3.1-9 (Measure Biology-14 in 2008 FSEIR Clarification Sheet, dated January 23, 2008): 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 DFG 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 DFG for review. The Long-term Habitat Management Plan shall be submitted to both the DFG and the CSLC for comment, with final approval by the DFG. The Long-term Habitat Management Plan shall have final approval and 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 by the CSLC and lands owned by the LADWP. In recognition of the public trust values related to resident and migratory wildlife resources at Owens dry lake, DFG and CSLC 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:

- Within the Environmental Impact Report analysis areas for 2008 State Implementation Plan dust controls (Figure 2.1-3), achieve no net loss of riparian or aquatic baseline habitat functions and values or total acres of these habitats (refer to Table 3.2.2-1 for type and amount plant communities).

- Manage 1,000 acres in perpetuity for shorebirds and snowy plovers in Zone II, in consultation with DFG.

- Pursuant to Condition No. 16 of the 2001 Streambed Alteration Agreement (Agreement No. R6-2001-060, Page 5), the project was expected to adversely impact 63 acres of shorebird foraging habitat at Dirty Socks Spring. Therefore, LADWP was required to create 145 acres of Habitat Shallow Flood suitable for shorebird foraging. LADWP has currently created 152 acres. If LADWP proposes to discontinue using the 145 acres or any portion thereof the Habitat Shallow Flood for shorebird foraging habitat, the LADWP shall provide shorebird foraging habitat of equivalent quality at a ratio of 1:1 to 2:1 as determined through coordination between the DFG and LADWP.

- In consultation with DFG, develop a specification for an appropriate amount of deep-water habitat and then develop and manage that deepwater habitat in perpetuity in order to support focal migratory water birds determined to be present during 1995-1997 baseline surveys in support of the 1998 State Implementation Plan. This shall include a variety of water birds that use Owens Lake as a temporary stopover habitat during spring and autumn migration; water birds that are adapted to saline conditions such as eared grebe (*Podiceps nigricollis*), Wilson's phalarope (*Phalaropus tricolor*), and California gull (*Larus californicus*); and other water birds including waterfowl that can tolerate saline or brackish conditions such as gadwall (*Anas strepera*) and lesser scaup (*Aythya affinis*), among other species.

- Maintain a baseline population of 272 snowy plovers.

- In addition to the 1,000 acres of shorebird and snowy plover habitat in Zone II, LADWP shall maintain a minimum of 523 acres of habitat specifically for snowy plovers in perpetuity at Owens Lake in consultation with the DFG. 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 approximately 17.5 acres of proposed dust control measures that are within DFG Cartago Springs Wildlife Area is compatible with the designated land use. DFG has determined that Habitat Shallow Flood or habitat restoration would be compatible with the Cartago Springs Wildlife Area's designated use (Figure 3.2.5-3, Cartago Springs Wildlife Area).

Mitigation Measure 3.1-10 (Replaced Measure Biology-13 in 2008 FSEIR, 2008 SIP MMP Table III-1): Wildlife Movement Gaps

To minimize or avoid effects of proposed fencing on movements of snowy plover broods at Cell T1A-1, LADWP shall install and maintain additional fence gaps within the three fence blocks located in the northeast corner of the cell. Based on the movement behaviors of snowy plover, fence gaps designed to facilitate brood movements shall be regularly distributed over relatively short distances, and easily encountered by fast-moving plovers. Plover broods must be able to physically fit through fence gaps, and must be able to visually locate the gaps efficiently during movements. The following describes the design considerations and specifications for installing fence gaps to facilitate plover movements. The final design shall be developed and implemented in consultation with DFG, CSLC, and GBUAPCD, and will be subject to the approval of DFG.

Fence gaps shall be installed using one of two basic design options: (1) vertical gaps beneath fences, or (2) horizontal gaps along fences (i.e., fence breaks).

Option 1

If vertical gaps are implemented, a minimum 2-inch gap shall be installed beneath the entire length of fencing. This gap size is considered sufficient for plover broods (including chicks and adults) to fit beneath fences (Page, pers. comm., 2008). Within 30 days prior to the core brooding season (March 15—August 15) each year, the sand fence shall be inspected, and maintained at that time if necessary, to ensure a minimum 2-inch gap beneath the fence. Following this initial inspection before the core brooding season each year, the fence gaps shall additionally be inspected by a biologist once per month, and maintained as needed, until August 15. Biologists shall attempt to avoid or minimize disturbances to nesting plovers while conducting the monthly inspections.

A 2-inch gap beneath a fence could be difficult for plovers to detect from a distance, due to its low visual profile relative to the surrounding landscape. For example, the average range of surface relief recorded at nest sites on Owens Lake was 1.5-8.2 inches (PRBO 2000, 2001, 2002); in some locations, this natural microtopography could obstruct a plover's visual detection of a 2-inch movement gap. To minimize or offset this potential detection problem, vertical gaps designed to facilitate brood movements shall extend along the entire fence length.

Option 2

If horizontal gaps along fences are installed, they shall be spaced no greater than 100 feet apart (i.e., no more than 100 feet of fence between two gaps); and the combined width of all fence gaps shall total a minimum of 10% of the total fence perimeter length. Gaps shall be maintained throughout the snowy plover brooding season (March 15—August 15). The same fence-gap inspection and maintenance procedures (conducted before and during the core brooding season [March 15—August 15]) described for Option 1 shall be implemented under Option 2. Although the minimum size and spacing of fence gaps to facilitate movement by snowy plovers is not known, Page (pers. comm., 2008) estimated that approximately 1-foot-wide gaps placed every 10 feet along fence rows could potentially allow for unimpeded movements. For developing a range of feasible options to meet this mitigation measure, it is assumed that these guidelines for gap size and frequency can generally be extrapolated as follows: based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence perimeter), all fence gaps shall total a minimum of 10% of the total fence perimeter (e.g., over a 500-foot fence perimeter, a minimum total of 50 feet within a gap condition would be required). Therefore, based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence length), all fence gaps shall total a minimum of 10% of the total fence perimeter length (e.g., over a 500-foot fence perimeter, a total of 50 feet within a gap condition shall be required).

The ability of broods to visually locate horizontal gaps is probably affected by the relationship between gap frequency and size; as the spacing between gaps increases (and distance from a plover at a given location to a gap increases), the size of individual gaps required for visual detection from a given location increases. Therefore, in addition to maintaining a minimum of 10% of total fence perimeter within a gap condition, gaps shall be spaced regularly and no more than 100 feet apart. It is assumed that this maximum spacing of gaps would allow for sufficient opportunity for broods to meet their daily movement requirements.

Mitigation Measure 3.1-11 (Revised Measure Biology-11 in 2008 FSEIR, 2008 SIP MMP Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008): 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 DCMs, LADWP shall continue to implement the corvid management plan resulting from the 2003 SIP with an extension of one year within the project area, or comparable corvid control measures, to the satisfaction of DFG, 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 DCMs, 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 dust control measure, the corvid management techniques shall be expanded to specify that the sand fence fabric and fence posts shall be designed to prevent perching by corvids, within 0.25 mile of occupied nesting shorebird habitat. Occupied nesting shorebird habitat will be evaluated on an annual basis, in collaboration with DFG, to identify areas requiring perch deterrents. The annual habitat evaluation will attempt to identify potential shifts in occupied nesting habitat over time. The use of sand fencing on top of rows within the Moat & Row areas will be considered under this mitigation measure as exceeding the height of 72 inches. Sand fence design to deter perching by corvids shall include the installation of: (1) Nixalite or the functional equivalent on the tops of fence posts; and (2) monofilament line or the functional equivalent along and above the sand fence fabric. To avoid a potential avian collision hazard, monofilament or other line shall be installed no greater than two inches above the top of sand fence fabric. Within 30 days prior to the brooding season (March 15—August 15) each year, the perch deterrent structures shall be inspected. If a structure has been damaged or otherwise needs maintenance, it shall be repaired at that time.

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 DFG 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 GBUAPCD and DFG 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 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 GBUAPCD and DFG no later than December 31 of each corvid management year. If after the sixth year of reporting in 2011, GBUAPCD determines that the corvid management program is effective and that 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 (of the 2008 FSEIR). However, the corvid management practices shall be continuously implemented.

Mitigation Measure 3.1-12: Monitoring and Adaptive Management for Moat Entrapment of Snowy Plover

To minimize or avoid potential moat entrapment of western snowy plovers, LADWP shall develop and implement a moat monitoring and adaptive management strategy. Although entrapment of snowy plovers within moats is assumed to be infrequent, in the absence of empirical data or other observations, there is reasonable uncertainty about this assumption. Therefore, this monitoring and adaptive monitoring approach is recommended to address this uncertainty, identify specific incidences of plover entrapment or mortality, and mitigate for significant effects.

Monitoring and Adaptive Management Purpose and Guidelines

The purpose of the monitoring and adaptive management strategy is to: (1) determine whether moat entrapment or loss of plovers occurs due to moat design or other elements (e.g., side slope angle presence of water); (2) identify and implement site-specific corrective actions that would minimize or avoid any additional impact; and (3) identify whether compensatory measures for significant losses or entrapment are required. This analysis assumes that repeated and regular observations of plover entrapment or mortality would indicate a potentially significant adverse effect. Specific adaptive management response thresholds are discussed below under "4. Response Triggers."

The moat monitoring and adaptive management strategy shall:

- be developed in consultation with DFG, CSLC, and GBUAPCD, and will be subject to the approval of DFG;
- be completed prior to initiating moat construction; and
- where appropriate, maintain consistency with and tier from existing monitoring programs, such as the Toxicity Monitoring Program (2008 FSEIR Measure Biology-7), and the Long-Term Monitoring Program for Western Snowy Plover (2008 FSEIR Measure Biology-10).

Monitoring and Adaptive Management Components

The moat monitoring and adaptive management strategy shall include the following components:

- a monitoring schedule, including the timing and frequency of monitoring;
- a description of monitoring locations and procedures;
- selection of indicators for identifying the type and extent of impacts to snowy plover due to moat entrapment;
- specific quantitative response triggers to indicate thresholds requiring management action;
- a list of corrective management actions appropriate for each type and extent of impact; and
- documentation and reporting requirements.

Guidelines for developing these six elements are summarized below.

1. Implementation Schedule, Timing, and Frequency

Moat monitoring shall be conducted during the snowy plover brooding season (March 15-August 15) for a minimum of two full brooding seasons after completion of project construction. Until the end of the first full brooding season after project construction, monitoring shall be conducted twice per week. If no entrapments (defined in "3. Entrapment Indicator," below) are observed during this initial period, the frequency of monitoring may be reduced to once per week for the second complete brooding season.

Monitoring shall commence immediately after construction of any perimeter moat is complete, if during the snowy plover brooding season. Otherwise, monitoring shall commence at the start of the following brooding season. If after two full brooding seasons of monitoring, it is determined that there is no evidence of significant moat entrapment or mortality, this monitoring requirement may be discontinued. However, if at any point within the monitoring period corrective management actions are required (i.e., response triggers or thresholds are met), monitoring shall be continued for an additional two full brooding seasons after corrective actions are implemented to ensure effectiveness of the action. This monitoring cycle shall be repeated until significant mortality or entrapment ceases to occur during a two-year cycle.

2. Monitoring Locations and Procedures

Monitoring surveys shall be conducted at all moats forming the perimeter of moat and row cells identified as high or moderate risk of interacting with snowy plover individuals or broods (T37-1, T37-2, and T1A-3). In the event that any entrapment of snowy plover is observed in moats, moats forming the perimeter of moat and row cells identified as low risk of interacting with snowy plover (T32-1, T12-1, and T1A-4) shall be added to this monitoring and adaptive management program. All monitoring shall be conducted by wildlife biologists familiar with snowy plover identification, movement patterns, and life history requirements. Monitoring protocols shall be developed to determine the presence and condition of plovers in moats, and to document existing moat conditions where entrapment is observed. Key information collected during monitoring shall include, but is not limited to:

- specific locations of all areas surveyed;
- locations of all snowy plovers detected inside or within 100 feet of moats (using global positioning system [GPS]);
- age or life stage (juvenile, adult), behavior, and condition of individuals of snowy plover and all other wildlife species found within moats (including injury, death, and the identified cause of adverse condition, if possible);
- moat side-slope measurements where plovers are found, and within 200 feet of these locations;
- presence, depth, and quality (including salinity) of water in moats, where plovers are found (water quality data collection will follow that described for surface water monitoring of moat and row cells in the 2008 FSEIR Mitigation Measure Hydrology-2); and
- incidental observations of snowy plovers and other wildlife species made during monitoring surveys.

Any live shorebird found within a moat shall be observed at a distance for a minimum of 15 minutes, or until it exits the moat.

3. Entrapment Indicator

Moat entrapment shall be indicated and quantified by the number of plover mortalities or other observed entrapments within a moat per breeding season. In addition to mortality, “entrapment” shall include an incidence of a live bird that: (1) visibly attempts but is unable to exit the moat for 15 minutes or more, (2) is caught within the moat's substrate (e.g., mud), or (3) does not attempt to exit the moat and appears injured or in otherwise poor condition to do so. Any observed mortality or entrapment will be reported to DFG within 48 hours of documenting the incident. (This timeframe is consistent with reporting standards for observed avian mortalities established in Mitigation Measure Biology-9 of the 2008 FSEIR [GBUAPCD 2008]).

4. Response Triggers

The threshold for requiring corrective actions is three or more snowy plover moat entrapments per DCA per calendar year. (The maximum number of observed entrapments per year that could occur without requiring corrective actions under this measure would range from two birds at any one DCA to six birds across the three monitored DCAs [T37-1, T37-2, and T1A-3].) If three or more entrapments at any DCA are observed, corrective adaptive management actions shall be required within the moat(s) where entrapments were detected.

It is assumed that a loss of plovers up to this threshold would not significantly increase juvenile or adult mortality rates above existing levels or substantially affect the overall snowy plover population size, due to the following factors:

- The threshold number is small relative to the overall snowy plover population size and productivity. In 2008, 478 adults and 39 broods were counted over a portion of Owens Lake; during the period of 2003-2008, the number of broods counted annually ranged from 18 to 52 (PRBO 2008). These counts include only the broods and adults observed during one-week lake-wide surveys conducted in late May to early June. Because adults often initiate multiple nesting attempts (sometimes up to three) and produce multiple broods during a breeding season, these numbers represent only a proportion of the broods produced at Owens Lake during a breeding season. Also, not all areas of suitable habitat were included in all years of the lake-wide surveys.

- The Owens Lake population appears viable, based on reproductive success metrics and an increasing population trend. Although juvenile or adult survival rates for the Owens Lake population have not been estimated, the number of nests and nest success rates have been relatively high. The most complete lake-wide nesting data are from 2002 and 2003. In 2002, when 272 adults were counted, 128 nests were located; and the average nest hatching rate was 82.5%. In 2003, when 401 adults were counted, 199 nests were located; and the average hatching rate was 80%.

- Multiple nesting attempts, particularly those initiated by a pair after a nest or brood has failed, would compensate for some loss during the breeding season.

5. Corrective Adaptive Management Actions

If the response threshold is met, LADWP shall notify DFG as soon as possible and within 48 hours of the incident. Notification shall be sent to the designated personnel at DFG. In coordination with DFG, CSLC, and GBUAPCD, LADWP shall implement corrective management actions as appropriate depending on the cause of moat entrapment (e.g., slope, presence of water, or other).

Appropriate corrective actions for entrapment due to moat side-slopes could include one or more of the following:

- add escape ramps every 100 feet within the identified problem moat;

- add rip-rap to side-slopes; and

- reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness.

Appropriate corrective actions for entrapment due to the presence of water in moats could include one or more of the following:

- add rip-rap to bottoms of moats, so that the top of rip-rap exceeds the maximum water and mud level observed in moats during the breeding season; and

- reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness.

If the monitoring and adaptive management process indicates that corrective actions are not effective, or if actions are determined to not be feasible, then LADWP shall work collaboratively with DFG, CSLC, and GBUAPCD to develop a revised action or provide on- or off-site habitat enhancement and protection as compensation. Revised corrective actions or habitat enhancement shall require approval by DFG.

6. Reporting Requirements

LADWP shall provide summaries of monitoring methods and results to DFG, CSLC, and GBUAPCD within 60 days of completing each monitoring season. Reports shall include summaries of all detections of snowy plover or other shorebirds in and around moats; their behavior, state or condition when detected; side-

slopes and water depths measured in association with each detection; and whether any mortalities or other entrapments were observed. After completing the second year of monitoring, annual reports that summarize the cumulative results of monitoring efforts shall also be submitted to DFG, CSLC, and GBUAPCD.

Integration with Existing Snowy Plover Monitoring and Management

The specific monitoring and adaptive management program for moat entrapment could be incorporated directly into existing plover monitoring and management commitments as appropriate, including as an element of the Long-term Monitoring Program for Western Snowy Plover (Mitigation Measure 3.1-8; Measure Biology-10 in the 2008 FSEIR) or the Long-term Habitat Management Plan (Mitigation Measure 3.1-9; Measure Biology-14 in the 2008 FSEIR).

Level of Significance after Mitigation

Implementation of Mitigation Measures 3.1-10, 3.1-11, and 3.1-12 , and the applicable measures from the 2008 FSEIR (Mitigation Measures 3.1-1 through 3.1-9), would reduce potential effects of project implementation on western snowy plover to a less-than-significant level. Collectively, these measures would avoid substantial mortality and population reductions as a result of project implementation; also habitat for snowy plover would be protected in perpetuity.

Air Quality

SIGNIFICANT EFFECT: PROJECT-GENERATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS (IMPACT 3.2-1)

Implementing the proposed project would not result in the generation of short-term construction emissions beyond the level analyzed in the 2008 FSEIR, because the proposed modifications would not require additional daily land disturbance, heavy-duty equipment use, or construction personnel beyond the levels previously evaluated. However, construction of the proposed project (moat and row elements) would cause the delay of implementation of moat and row DCMs, a relatively small part of the overall DCM program, beyond the time frame specified in the 2008 SIP (i.e., delay in implementation of 3.5 square miles of DCMs by 6 months or more). Thus, implementation of the project as proposed would conflict with the applicable air quality plan, resulting in a potential for an increase in the number of days when violations of the NAAQS and exposure of sensitive receptors would occur. This impact would be considered significant.

Finding

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

Facts in Support of Finding

LADWP adopted the following 2008 FSEIR mitigation measures as a requirement of Mitigation Measure 3.2-1 for the project's air quality impacts related to increases in regional criteria pollutants during construction. These mitigation measures would reduce this impact to the greatest extent feasible, but not to a less-than-significant level.

Mitigation Measure 3.2-1: 2008 FSEIR Mitigation Measures Air-1 through Air-6 (2008 SIP MMP, Table III-1)

LADWP is committed to implement all required DCMs as quickly as feasible. LADWP will continue to investigate the implementation of additional and/or accelerated air pollution control measures to reduce or eliminate these impacts.

As discussed in the 2008 FSEIR, GBUAPCD requires that all feasible control measures, dependent on the size of the construction area and the nature of the activities involved, shall be incorporated into project design and implemented during project construction. As a result, LADWP adopted and incorporated the following 2008 FSEIR mitigation measures, Mitigation Measures Air-1 through Air-6, into the proposed project.

Measure Air-1, Construction Activities Fugitive Dust Emissions Control and Minimization

Fugitive dust emissions during construction shall be controlled and minimized, to comply with GBUAPCD Rules 400 and 401 (EPA 1992), through LADWP'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. LADWP shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by LADWP and approved by GBUAPCD prior to the start of construction and the submission of weekly monitoring reports to GBUAPCD and CSLC. GBUAPCD 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.

Measure Air-2, Construction Equipment Low-emissions Tune-ups Schedule

To mitigate the air quality impact related to greenhouse gas emissions, LADWP 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 GBUAPCD during the project’s construction phase. Prior to implementation of the schedule, LADWP shall submit the schedule to GBUAPCD and CSLC. GBUAPCD shall ensure conformance of the equipment operation with the approved schedule.

Measure Air-3, Low-emission Construction Equipment Utilization

To mitigate the air quality impact related to greenhouse gas emissions, LADWP shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. GBUAPCD 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.

Measure Air-4, Low-sulfur Fuel Utilization during Construction

To mitigate the air quality impact related to greenhouse gas emissions, LADWP 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 LADWP submits documentation and consults with GBUAPCD and CSLC that the use of such equipment is not practical, feasible, or available. GBUAPCD 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.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by LADWP to reduce vehicular emissions.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. LADWP shall provide GBUAPCD 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 LADWP to reduce vehicular greenhouse gas emissions.

Significance after Mitigation

Changes or alterations, which reduce but do not completely avoid the significant effects of short-term construction emissions, have been incorporated into the project, as explained below. While these mitigation measures would substantially reduce the significant air quality effects of the project, the residual impact would continue to be significant. Therefore, this impact would be significant and unavoidable.

Approval of the Project would be subject to a Statement of Overriding Considerations (see Exhibit G).

All requirements from GBUAPCD for the permit to construct would be met, and project emissions would be reduced to levels acceptable by GBUAPCD with implementation of Mitigation Measures Air-1 through Air-6 of the 2008 FSEIR. Mitigation Measures Air-1 through Air-6 include construction-related fugitive reduction techniques, such as watering loose soils and using windbreaks; requiring tune-ups to ensure that the equipment is operating at the highest efficiency possible; using low-emission equipment to ensure that the lowest emitting pieces of equipment are used at all feasible times; using low-sulfur fuel in all capable engines; and using low-emission mobile vehicles to ensure that the lower emission vehicles are used by LADWP during project construction and operation. With implementation of these adopted mitigation measures from the 2008 FSEIR, all feasible emission-reduction methods would be implemented by LADWP, and the lowest possible amount of emissions related to the project would be generated. However, at this time, there is no feasible way to complete implementation of the moat and row features by October 1, 2009. LADWP has shortened the time to implement moat and row DCMs and other DCMs evaluated in the 2008 FSEIR to the greatest extent feasible (i.e., 1 year or less). There are no other measures or actions LADWP can take to implement the moat and row DCMs on a faster timetable. Therefore, implementation of the proposed project would continue to conflict with the applicable air quality plan, resulting in an increased number of days when violations of the NAAQS and the subsequent exposure of sensitive receptors would occur. This impact would be significant and unavoidable.

Cumulative Air Quality Impacts

SIGNIFICANT CUMULATIVE EFFECT: AIR QUALITY - PROJECT-GENERATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The overall size and location of ground disturbance, construction duration and phasing, heavy-duty construction equipment, and number of construction personnel required for construction of the proposed project would remain the same as specified in the 2008 FSEIR, for which emissions were calculated and mitigation recommended. However, because DCM operations would be delayed by the new construction schedule beyond the date specified in the 2008 SIP, implementation of the proposed project would result in a significant project-level impact related to the conflict that would be created with the applicable air quality plan. Thus, the project could contribute to the continued potential violation of the NAAQS and the subsequent exposure of sensitive receptors to substantial pollutant concentrations. Emissions attributable to project implementation along with emissions from other reasonably foreseeable future projects in the OVPA, would continue to contribute to increases in emissions, which would exacerbate existing and projected nonattainment conditions. As a consequence, project-generated emissions would result in a cumulatively considerable net increase to this significant cumulative impact (e.g., region is a nonattainment area under the applicable ambient air quality standards).

Finding

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the

2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

Facts in Support of the Finding

As discussed in the 2008 FSEIR, GBUAPCD requires that all feasible control measures, dependent on the size of the construction area and the nature of the activities involved, shall be incorporated into project design and implemented during project construction. As a result, LADWP adopted and incorporated the 2008 FSEIR Mitigation Measures Air-1 through Air-6 into the proposed project per Mitigation Measure 3.2-1.

Mitigation Measure 3.2-1: 2008 FSEIR Mitigation Measures Air-1 through Air-6 (2008 SIP MMP, Table III-1) Measure Air-1, Construction Activities Fugitive Dust Emissions Control and Minimization

Fugitive dust emissions during construction shall be controlled and minimized, to comply with GBUAPCD Rules 400 and 401 (EPA 1992), through LADWP'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. LADWP shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by LADWP and approved by GBUAPCD prior to the start of construction and the submission of weekly monitoring reports to GBUAPCD and CSLC. GBUAPCD 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.

Measure Air-2, Construction Equipment Low-emissions Tune-ups Schedule

To mitigate the air quality impact related to greenhouse gas emissions, LADWP 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 GBUAPCD during the project's construction phase. Prior to implementation of the schedule, LADWP shall submit the schedule to GBUAPCD and CSLC. GBUAPCD shall ensure conformance of the equipment operation with the approved schedule.

Measure Air-3, Low-emission Construction Equipment Utilization

To mitigate the air quality impact related to greenhouse gas emissions, LADWP shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. GBUAPCD 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.

Measure Air-4, Low-sulfur Fuel Utilization during Construction

To mitigate the air quality impact related to greenhouse gas emissions, LADWP 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 LADWP submits documentation and consults with GBUAPCD and CSLC that the use of such equipment is not practical, feasible, or available. GBUAPCD 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.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by LADWP to reduce vehicular emissions.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. LADWP shall provide GBUAPCD 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 LADWP to reduce vehicular greenhouse gas emissions.

Significance after Mitigation

Although implementation of project mitigation measures would reduce the project's contribution to regional pollutant loads, the project would contribute to the continued exceedance of state and federal ambient air quality standards for ROG, NO_x, PM_{10}, and TACs. No other feasible mitigation is available. This would be a cumulatively significant and unavoidable impact.

Approval of the Project would be subject to a Statement of Overriding Considerations (see Exhibit G).

Significant Cumulative Effect: Air Quality - Project-Generated Greenhouse Gas Emissions

As stated in the 2008 FSEIR, construction activities associated with construction of the proposed project would occur over a 12-month period. During that time, a net increase in GHG emissions would result from various construction activities. As stated in 2009 FSEIR

Impact 3.2-1, construction activities would not change as a result of schedule variability; because there would be no net change, emissions from the redesign of moat and row DCMs were addressed in the 2008 FSEIR CO2 emissions modeling.

Although the GHG emissions contributed by the project would be reduced by 2008 FSEIR Mitigation Measures Air-3 through Air-6, the emission reduction attributable to the mitigation measures is not known at this time, nor is the amount of CO2 that would be a significant contributor to the cumulative condition. Thus, the 2008 FSEIR concluded that the project's contribution to GHG levels would be a significant unavoidable contribution to the cumulative condition.

Finding

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the 2008 District Final Subsequent EIR as revised by the 2009 City Final Supplemental EIR.

Facts in Support of the Finding

GBUAPCD adopted the following mitigation measures, Measures Air-3 through Air- 6, as part of the 2008 FSEIR, which would reduce greenhouse gas emissions to the maximum extent practicable. Consistent with the 2008 FSEIR, LADWP has adopted and incorporated these mitigation measures into the proposed project.

Measure Air-3, Low-emission Construction Equipment Utilization

To mitigate the air quality impact related to greenhouse gas emissions, LADWP shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. GBUAPCD 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.

Measure Air-4, Low-sulfur Fuel Utilization during Construction

To mitigate the air quality impact related to greenhouse gas emissions, LADWP 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 LADWP submits documentation and consults with GBUAPCD and CSLC that the use of such equipment is not practical, feasible, or available. GBUAPCD 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 long on file during this phase.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by LADWP to reduce vehicular emissions.

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 LADWP submits documentation and consults with GBUAPCD and CSLC that use of such equipment is not practical, feasible, or available. LADWP shall provide GBUAPCD 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 LADWP to reduce vehicular greenhouse gas emissions.

Significance after Mitigation

The GHG emissions quantified in the 2008 FSEIR were found to be cumulatively significant and unavoidable. The emissions generated by the proposed revised project would be the same as the amount generated by the project evaluated in the 2008 FSEIR. Therefore, although there would be no net change in GHG emissions (from the 2008 FSEIR analysis) as a result of the proposed moat and row design changes, this impact would remain the same as described in the 2008 FSEIR: cumulatively significant and unavoidable.

Approval of the Project would be subject to a Statement of Overriding Considerations (see Exhibit G).

FINDINGS REGARDING ALTERNATIVES

The Commission's action consists of approval of a lease amendment for 3.5 square miles of State-owned sovereign lands for the construction and maintenance of Moat and Row DCMs, a DCM that uses no water. As explained below, the Commission declines to adopt the City's findings regarding alternatives. Instead, the Commission adopts the District's findings regarding the alternatives.

The District made "Findings Regarding Alternatives" when it certified the 2008 District Final Subsequent EIR (Section V of its findings; all subsequent page references are to the District's findings). These "Findings Regarding Alternatives" covered a larger project of 15.1 square miles, including 12.7 square miles of new dust control areas. The four

alternatives evaluated in the 2008 District Final Subsequent EIR included the No Project Alternative, All Shallow Flooding, All Managed Vegetation, and All Gravel Cover. The alternatives analysis looked at each of these DCMs for use on the entire 12.7 square mile dust control area. In contrast, the proposed project that was approved by the District was a mixed project that included 9.2 square miles of shallow flooding and 3.5 square miles of Moat and Row DCMs.

The Commission approved the 9.2 square miles of shallow flooding, which the City is now in the process of constructing, at its August 22, 2008, public meeting. The purpose of the 2009 City Final Supplemental EIR was to evaluate the potentially significant impacts from the revised design of the Moat and Row DCMs compared with the design that was analyzed in the 2008 District Subsequent EIR. As a result, the City's reevaluation of alternatives was unnecessary because only the 3.5 square miles of Moat and Row DCMs remained of the larger project.

As additional background, the District made the following "Findings Regarding Alternatives." It rejected the No Project Alternative because it would not control dust. All three of the DCMs (shallow flooding, managed vegetation, and gravel cover) evaluated in the alternatives analysis are approved by the District as Best Available Control Measures (BACM) for controlling PM_{10} dust emissions. The District determined that the All Shallow Flooding and All Managed Vegetation alternatives were feasible alternatives (pp. V-11 and V-13 respectively). Additionally, the All Shallow Flooding alternative was identified as "the environmentally superior alternative due to its proven capability to control PM_{10} emissions" and because it has "the ability to minimize impacts to biological resources (especially western snowy plover) because it provides additional wildlife habitat resources" (p. V-7).

The District specifically rejected the Moat and Row DCM from consideration as the environmentally superior alternative because "[t]he City has not provided enough evidence in the record to demonstrate the efficacy of the Moat & Row DCM" (p. V-7). The Moat and Row DCM has not been approved as BACM because it is experimental.

The District determined that the All Gravel Cover alternative was infeasible because: it would not minimize the long-term significant, adverse changes to sensitive resources; it would not provide a high likelihood of success because of the difficulty in obtaining the large amounts of gravel required; it would not conform to adopted plans and policies; it would not minimize the cost per ton of particulate pollution controlled because of high costs to mine, process, and haul the aggregate; and because it would be incompatible with the State of California's public trust values (p. V-14).

To summarize the District's Findings, the All Shallow Flooding and All Managed Vegetation alternatives were determined to be feasible alternatives to the proposed mixed project composed of 9.2 square miles of shallow flooding areas and 3.5 square miles of Moat and Row DCMs. The All Gravel Cover was determined to be infeasible.

As noted above, the City prepared a Final Supplemental EIR to the 2008 District Final Subsequent EIR to evaluate potential significant impacts resulting from design changes in

the Moat and Row component of the larger project that occurred after the analysis in the 2008 District Final Subsequent EIR was completed and certified. As explained by the City, "[t]he proposed changes affect only the moat and row dust control areas, not the larger dust control program evaluated in the 2008 FSEIR and approved by the GBUAPCD [District]. . . . Further, CEQA Section 15163(b) states that the supplemental EIR need contain only the information necessary to make the previous EIR adequate" (p. 1-3, City's Findings of Fact).

Because the 2009 City Final Supplemental EIR needed to address only the potential significant impacts resulting from design changes to the proposed Moat and Row DCMs, there was no reason to reevaluate the comprehensive alternatives analysis contained in the 2008 District Final Subsequent EIR. The City, however, did look at the alternatives and it reached new conclusions about the feasibility of Shallow Flooding and Managed Vegetation. Based on its assertion that "[n]o additional water supplies are available to expand shallow flooding (i.e., more water used) beyond what is previously approved for the lake bed" the City concluded that the Shallow Flooding Alternative was infeasible (p. 1-27, City's Findings of Fact). The City also cited its objective to eliminate the use of water as a reason to reject the Managed Vegetation Alternative (pp. 1-29 and 1-31, City's Findings of Fact).

The City had no substantial evidence to support its conclusion that the Shallow flooding and Managed Vegetation alternatives were infeasible because no water is available. Several sources of water are available. The section of the 2009 City Draft Supplemental EIR on the City's water supplies concluded, incorrectly, that "[w]ith regard to dust control activities on Owens Lake, all water supplies uses for dust control or other environmental restoration benefits must be supplemented through additional purchases from MWD" (p. 2-9, 2009 City Draft Supplemental EIR).

The District wrote the City that this assumption is not correct: "Current water control efficiency improvement efforts on the existing and proposed water-based dust control areas should result in significant water savings. In addition, the City is currently conducting a large groundwater resource investigation in the Owens Lake area to determine if local water supplies could supplement aqueduct deliveries" (Draft EIR Comment Letter from District, dated June 23, 2009, p. 2). Increased efficiency in the use of water in existing shallow flood areas is one option that would allow for expanded shallow flooding or irrigation for expanded managed vegetation. The City has already submitted an application to the Commission for monitoring wells to determine if groundwater might be available for DCMs.

The City also recently signed a Memorandum of Understanding with NASA's Jet Propulsion Laboratory and the California Institute of Technology to develop instruments that will measure the lakebed's surface moisture to increase the efficient use of water. Because it failed to adequately consider other sources of water, the City lacked substantial evidence to conclude that shallow flooding and managed vegetation were infeasible.

For future dust control phases, it may be necessary to reevaluate the alternatives based on available water supplies or other information, but to do so now is premature. First, as described above, the purpose of the 2009 City Final Supplemental EIR was to evaluate the design changes to the Moat and Row DCMs. Second, water supply is not an issue for the waterless Moat and Row DCM so there was no compelling reason to look at water-related alternatives in the supplemental EIR. Third, there are currently several ongoing and planned studies to determine if new supplies of water might be available for future DCMs.

Because the City incorrectly found the Shallow Flooding alternative infeasible, the City had no substantial evidence to conclude that the Revised Moat and Row DCMs Project is the environmentally superior alternative. The designation of the environmentally superior alternative is a designation among feasible alternatives. Since the Shallow Flooding alternative is feasible, it is also the environmentally superior alternative for the same reasons cited in the 2008 District Final Subsequent EIR: it is a proven measure for controlling dust (BACM) and it provides wildlife habitat.

Furthermore, the conclusion that the Revised Moat and Row DCMs Project is the environmentally superior alternative directly contradicted the determination made by the District in its *Findings of Fact and Statement of Overriding Considerations* quoted above—there is insufficient evidence that Moat and Row is effective. The Moat and Row DCM is still experimental. Since no additional test data from the Moat and Row Demonstration Project were presented in the 2009 City Final Supplemental EIR that would change the determination reached previously by the District, the City lacked substantial evidence to find that the Moat and Row Project was the environmentally superior alternative.

Additionally, the City has recently disclosed that it has high expectations that solar panels can be used to control dust. On December 1, 2009, the City approved plans to build a 50 megawatt solar demonstration project at Owens Lake. City staff advised its Board of Water and Power Commissioners "that properly aligned solar arrays combined with gravel roadways and fencing is potentially the most effective dust control measure implemented on Owens Dry Lake." The $300 million dollar solar demonstration project was approved by the Board of Water and Power Commissioners to gather information to develop a large-scale Owens Valley Solar Park. The City has indicated to Commission staff that it intends to submit an application to lease land for the solar demonstration project in the immediate future.

Because the City's alternatives analysis in the 2009 City Final Supplemental EIR and the alternatives findings in the City's *Findings of Fact and Statement of Overriding Considerations* overreach what is needed for the Commission to approve the Revised Moat and Row DCMs Project and are not based on substantial evidence, the Commission rejects the City's findings concerning alternatives. The Commission finds that shallow flooding and managed vegetation are feasible alternatives as described in the 2008 District Final Subsequent EIR, and that shallow flooding remains the environmentally superior alternative. The Commission, therefore, adopts the "Findings Regarding

Alternatives" made by the District in its 2008 *Findings of Fact and Statement of Overriding Considerations* attached and incorporated herein by reference (see Attachment A).

Attachment A

to

EXHIBIT F

SECTION V
FINDINGS REGARDING ALTERNATIVES

Alternatives were analyzed in the Environmental Impact Report (EIR) for the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (project), consistent with the recommendations of Section 15126.6 of the State of California Environmental Quality Act (CEQA) Guidelines, which require evaluation of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant project effects, and evaluate the comparative merits of the alternatives. An environmentally superior alternative must be identified in addition to the No Project Alternative. The analysis of alternatives is limited to those that the Great Basin Unified Air Pollution Control District (District) determines could feasibly attain most of the basic objectives of the project. Section 15126.6(f) of the State CEQA Guidelines describes feasibility as being dependent on site suitability, economic viability, availability of infrastructure, general plan consistency, consistency with other plans or regulatory limitations, jurisdictional boundaries, and the ability of the project proponent to gain access to or acquire an alternative site.

Alternatives addressed in the EIR were derived from work undertaken by the District, from comments that were received in response to the Notice of Availability, and from comments provided by interested parties that attended the public scoping meeting. The resulting range of alternatives considered in this EIR consists of the following:

No Project Alternative
Alternative 1: All Shallow Flooding (the environmentally superior alternative)
Alternative 2: All Managed Vegetation
Alternative 3: All Gravel Cover

The ability of the project and four alternatives under consideration to meet the objectives of the project is summarized in these Findings as Table V-1, *Summary of Adequacy of Project and Alternatives to Attain Project Objectives*; Table V-2, *Project Alternative Elements*; and Table V-3, *Comparative Analysis of Impacts for Project and Alternatives*. As required by CEQA, evaluation of the No Project Alternative considered what would reasonably be expected to occur in the foreseeable future if the project were not approved; however, the No Project Alternative is not capable of meeting most of the project objectives. Three of the proposed alternatives were consistent with some of the basic project objectives and, for this reason, were carried forward for comparative analysis with respect to the determined environmental issues of the project.

TABLE V-1
SUMMARY OF ADEQUACY OF PROJECT AND ALTERNATIVES TO ATTAIN PROJECT OBJECTIVES

Objectives	Alternatives				
	Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
1. Implement all Owens Lake bed PM_{10} control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS	Yes	Yes	Yes	Yes	No
2. Revise the approved 2003 SIP by July 1, 2008	Yes	Yes	Yes	Yes	No
3. Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment	Yes	Yes	Yes	No	No
4. Provide a high technical likelihood of success without substantial delay	Yes	Yes	No	No	No
5. Conform substantially to adopted plans and policies and existing legal requirements	Yes	Yes	Yes	No	No
6. Minimize the long-term consumption of natural resources	Yes	No	Yes	Yes	No
7. Minimize the cost per ton of particulate pollution controlled	Yes	Yes	No	No	No
8. Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake	Yes	Yes	Yes	No	No

KEY:
SIP = State Implementation Plan
NAAQS = National Ambient Air Quality Standards

TABLE V-2
PROJECT ALTERNATIVE ELEMENTS

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Dust Control Measures (DCMs)				
Shallow Flooding: 9.2 square miles (approximately 5,888 acres) of the project area would be subject to shallow flooding. Moat & Row: 3.5 square miles (approximately 2,240 acres) of the project area would be subject to Moat & Row. Gravel Cover: There are no Gravel Cover DCMs. Note: There are a mandatory 12.7 square miles of new DCMs with 0.5 square mile of Channel Area and 1.9 square mile of potential study area Moat & Row.	Shallow Flooding: 12.7 square miles of the project area would be subject to DCMs. Managed Vegetation: There are no managed vegetation DCMs. Moat & Row: There are no Moat & Row DCMs. Gravel Cover: There are no Gravel Cover DCMs. Note: There are a mandatory 12.7 square miles of new DCMs with up to a 15.1 square miles of DCMs overall.	Shallow Flooding: There are no shallow flooding DCMs. Managed Vegetation: 12.7 square miles of the project area would be subject to DCMs. Gravel Cover: There are no Gravel Cover DCMs. Note: There are a mandatory 12.7 square miles of new DCMs with up to a 15.1 square miles of DCMs overall.	Shallow Flooding: There are no shallow flooding DCMs. Managed Vegetation: There are no managed vegetation DCMs. Gravel Cover: 12.7 square miles of the project area would be subject to DCMs. Note: There are a mandatory 12.7 square miles of new DCMs with up to a 15.1 square miles of DCMs overall.	Same as existing conditions. No additional DCMs would be constructed in areas required to reduce PM_{10} emissions to meet NAAQS by April 2010.
Power Supply and Control				
Up to 2,000 kilovolts of electrical power may be required to operate project facilities, including the Shallow Flooding facilities. This power will be supplied from existing power facilities to the site. Underground power lines will be buried 18 to 30 inches below ground surface and will 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 will provide some temporary construction and emergency power.	Similar to the project; however, more power would be needed for the greater number of Shallow Flooding areas required by this alternative.	Similar to the project; however, less power would be needed for the greater number of Managed Vegetation areas required by this alternative.	Less power would be needed for the greater number of Gravel Cover areas required by this alternative.	Same as existing conditions. Existing power supplies would generate the energy necessary for the completed 29.8 square miles of DCMs pursuant to the 2003 SIP. No additional DCMs would be constructed in areas required to reduce PM_{10} emissions to meet NAAQS by April 2010.

TABLE V-3
COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Air Quality				
The project would allow PM_{10} emissions to be brought into compliance with the NAAQS for PM_{10} with maximum efficiency, substantially benefiting air quality. The project would install a total of 15.1 square miles (9,664,acres) of DCMs. These would pose potentially significant impacts to air quality, which would be reduced to below the level of significance through the implementation of mitigation measure Air-1. Unavoidable impacts would occur related to greenhouse gas emissions. Implementation of mitigation measures Air-2 through Air-6 would reduce the impacts related to greenhouse gas emissions.	Same as the project. *Comparative Impact:* Neutral	Same as project. *Comparative Impact:* Neutral	Same as project *Comparative Impact:* Neutral	The No Project Alternative would not allow PM_{10} emissions to be brought into compliance with the NAAQS for PM_{10} with maximum efficiency, resulting in greater operational air quality impacts from PM_{10} emissions. There would be no construction-related air quality impacts from this alternative, and the impacts related to greenhouse gases would not occur. However, the No Project Alternative would not allow for the improvement of overall air quality in the area by attaining NAAQS for PM_{10} by 2010 and does not revise the 2003 SIP. *Comparative Impact:* Negative
Biological Resources				
The project would install a total of up to 15.1 square miles (9,664,acres) of DCMs. These would pose potentially significant impacts to biological resources, which would be reduced to below the level of significance through the implementation of mitigation measures Biology-1 through -14.	This alternative has the potential to provide more habitat for western snowy plover (*Charadrius alexandrinus nivosus*) than the project as it would provide a greater acreage of Shallow Flooding. *Comparative Impact:* Positive	This alternative would remove habitat suitable for nesting western snowy plovers and special status plant and invertebrate species. This alternative would require the incorporation of mitigation measures to reduce impacts to below the level of significance. Potentially significant impacts related to biological resources resulting from this alternative would be reduced to below the level of significance through the incorporation of mitigation measures Biology-1 through -14. *Comparative Impact:* Negative	This alternative would have greater impacts to biological resources than the project, requiring a higher level of implementation of mitigation measures for loss of habitat and impacts to sensitive resources. As with the project, potentially significant impacts related to biological resources resulting from this alternative would be reduced to below the level of significance with the incorporation of mitigation measures. *Comparative Impact:* Negative	The No Project Alternative would only result in the 29.8 square miles (19,072acres) of DCMs installed pursuant to the 2003 SIP. DCMs would be placed primarily in salt pan areas of similar habitat. *Comparative Impact:* Neutral
Cultural Resources				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to cultural resources, which would be reduced to below the level of significance through the implementation of mitigation measures Cultural-1 through -4.	This alternative would result in significant impacts related to archaeological and historical resources. As with the project, potentially significant impacts related to cultural resources resulting from this alternative would be reduced to below the level of significance through the incorporation of mitigation measures *Comparative Impact:* Neutral	Same as the project. *Comparative Impact:* Neutral	The alternative would entail heavy equipment and the placement of gravel on the lake surface, resulting in significant adverse impacts to cultural resources. *Comparative Impact:* Neutral	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. Therefore, the No Project Alternative would not require implementation of mitigation measures for cultural resources. *Comparative Impact:* Positive

TABLE V-3
COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES, Continued

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Hazards and Hazardous Materials				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to hazards and hazardous materials, which would be reduced to below the level of significance through the implementation of the mitigation measure.	This alternative would reduce the use and generation of chemicals that would potentially occur with the project. This alternative would not result in short- or long-term impacts from hazards and hazardous materials; therefore, mitigation measures would not be required. *Comparative Impact:* Positive	Same as the project. *Comparative Impact:* Neutral	This alternative would entail reduced use of chemicals but may still result in release of hazardous materials from construction equipment related to gravel hauling and dumping, therefore requiring implementation of mitigation measures. *Comparative Impact:* Neutral	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. The 2003 SIP includes DCMs that would continue the use of potentially hazardous materials associated with the operation of Managed Vegetation. *Comparative Impact:* Negative
Hydrology and Water Quality				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to hydrology and water quality, which would be reduced to below the level of significance through the implementation of the mitigation measures Hydrology-1 through -5.	Same as the project. *Comparative Impact:* Neutral	Unlike the project, this alternative would require the use of additional chemicals for vegetation growth. *Comparative Impact:* Neutral	This alternative would reduce some of the potential impacts associated with the project due to the reduced application of water or use of chemicals associated with the application of gravel. However, this alternative may result in construction-related release of hazardous materials from equipment related to gravel hauling and dumping, requiring construction-related mitigation measures. *Comparative Impact:* Neutral	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of the playa to DCMs via grading and installation of infrastructure for dust control, and implementation of mitigation measures would not be required for hydrology. However, the No Project Alternative would not provide control of emissive dust. *Comparative Impact:* Negative
Land Use				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would not pose potentially significant impacts to land use and planning, but implementation of mitigation measure Land Use-1 would reduce the potential impacts related to land use and planning to below the level of significance.	This alternative would require installation of more infrastructure associated with Shallow Flooding than the multiple DCMs of the project. This alternative would require implementation of one mitigation measure to reduce impacts to below the level of significance. *Comparative Impact:* Neutral	Same as the project. *Comparative Impact:* Neutral	This alternative would not be consistent with adopted plans and policies in the project area and may therefore result in a greater impact than the project in terms of land use and planning. Therefore, this alternative may require additional mitigation measures to reduce these potential impacts. *Comparative Impact:* Negative	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not be consistent with adopted plans and policies in the project area and may therefore result in a greater impact than the project in terms of land use and planning. Therefore, the No Project Alternative may require additional mitigation measures to reduce these potential impacts. *Comparative Impact:* Negative
Mineral Resources				
The project would install a total of 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to mineral resources, which would be reduced to below the level of significance through the implementation of mitigation measures Land Use–1 through –3.	Same as the project. *Comparative Impact:* Neutral	Same as the project. *Comparative Impact:* Neutral	This alternative would have the potential for lesser impacts related to mineral resources because it does not include a provision for the use of high amounts of freshwater resources or the possible channeling of those resources. However, the potential increase in recharge to shallow groundwater from precipitation may affect mineral resources and would require mitigation measures. *Comparative Impact:* Negative	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail the construction of new structures to support the DCMs. Implementation of mitigation measures would not be required. *Comparative Impact:* Positive

TABLE V-3
COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES, Continued

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Transportation and Traffic				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to transportation and traffic, which would be reduced to below the level of significance through the implementation of mitigation measures Traffic-1 through -3.	Same as the project. *Comparative Impact:* Neutral	Same as the project. *Comparative Impact:* Neutral	Same as the project. *Comparative Impact:* Neutral	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would create no additional transportation components that could cause greater damage to existing roadways. Implementation of mitigation measures would not be required. *Comparative Impact:* Positive
Utilities and Service Systems				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to utilities and service systems, which would be reduced to below the level of significance through the implementation of mitigation measures Utilities-1 though -2.	This alternative would require installation of more infrastructure associated with Shallow Flooding. This alternative has the potential of using more water resources than the project. The All Shallow Flooding Alternative would incur additional impacts to utilities by increasing the time that Shallow Flood systems must remain operational. This would incur additional expenditures of electricity and water resources to meet the requirements of this alternative. *Comparative Impact:* Negative	This alternative would entail the use of one DCM, which would require the installation of more infrastructure related to Managed Vegetation (mainline, submain, lateral and riser pipes, irrigation lines, fertilizer injection, water treatment systems, perimeter berms, and tailwater recycling facilities) than the multiple DCMs of the project. The Managed Vegetation DCM uses approximately 1.2 acre-feet/acre, which is greater than that of the project with the inclusion of Moat & Row. Thus, implementation of this alternative has the potential to use more water resources than the project. *Comparative Impact:* Negative	This alternative would not result in potential impacts to utilities and service systems. Unlike the project, this alternative would not require the application of water. Therefore, this alternative may utilize less water than the project and reduce those anticipated impacts from the project. Any impacts to utilities and service systems would be mitigated to below the level of significance. *Comparative Impact:* Positive	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail the construction of new water control infrastructure. Implementation of mitigation measures would not be required. *Comparative Impact:* Positive

Based on the alternatives analysis provided in Section 4.0 of the EIR, the District determined that the No Project Alternative does not accomplish most of the basic objectives of the project and that it does not qualify as the environmentally superior alternative. The No Project Alternative includes continuing the implementation of the 2003 SIP, which involved the construction of 29.8 square miles of DCMs per year until the NAAQS for PM_{10} are met. Under the No Project Alternative, the NAAQS would not be achieved by December 31, 2010, and DCMs would not be installed in locations that the District now knows cause or contribute to NAAQS exceedances. In addition, the No Project Alternative would not benefit from air quality improvement measures that are part of the project.

The project meets all project objectives without resulting in impacts that cannot be mitigated to below the level of significance. The All Shallow Flooding and All Managed Vegetation Alternatives analyzed in Section 4.0 of the Draft EIR are also feasible because they meet most of the project objectives, including the primary objective of attaining the NAAQS for PM_{10} by April 1, 2010, pursuant to the revised 2008 SIP, but do not meet the secondary objective of minimizing the long-term consumption of natural resources, as described below. The No Project Alternative is not feasible since it does not meet the objective of attaining the NAAQS for PM_{10} by April 1, 2010, although it may minimize consumption of natural resources.

The City of Los Angeles Department of Water and Power (City) is concerned about the diversion of water and the potential loss of other beneficial uses of that water. Therefore, under requirements of the SIP agreements, they have negotiated the use of Moat & Row as a possible allowable DCM more effectively utilizing the water resources at Owens Lake. The City has not provided enough evidence in the record to demonstrate the efficacy of the Moat & Row DCM. The City is the party responsible for the implementation and construction of the DCMs within the proposed area and believes it to be an effective means for dust control. The EIR analyzed the potential for effects on the sixteen (16) CEQA regulated environmental issue areas. Based on the data collected during the analysis and resulting from coordination with the City, the EIR does not make the determination that the Moat & Row DCM is the environmentally superior alternative for dust control on Owens Lake.

The All Shallow Flooding Alternative (Alternative 1) was identified as the environmentally superior alternative due to its proven capability to control PM_{10} emissions needed to meet NAAQS by April 2010. Alternative 1 also has the ability to minimize impacts to biological resources (especially western snowy plover) because it provides additional wildlife habitat resources. However, it failed to minimize the long-term consumption of natural resources due to its need for more water, and it failed to provide an adequate time interval to perform the site maintenance necessary to ensure reliable operation of the dust control facilities.

The alternatives to the project evaluated in Section 4 are as follows:

No Project Alternative
Alternative 1: All Shallow Flooding (the environmentally superior alternative)
Alternative 2: All Managed Vegetation
Alternative 3: All Gravel Cover

V.A No Project

Description of Alternative: The project components of the No Project Alternative are identical to the project components of the 2003 SIP. They include Shallow Flooding, Gravel Cover, and

Managed Vegetation DCMs (and associated infrastructure) installed over 29.8 square miles of the Owens Lake bed.

Effectiveness in Meeting Project Objectives: The No Project Alternative would not allow the District to meet its primary project objective of attaining the NAAQS for PM_{10} by April 1, 2010 (Objective 1), since only 29.8 square miles of DCMs would be implemented by that time. The No Project Alternative would not meet the District's secondary objective of revising the approved 2003 SIP by July 1, 2008 (Objective 2). The No Project Alternative may minimize adverse changes to sensitive resources (Objective 3). The No Project Alternative would not have the capability of being implemented with a high technical likelihood of success without delay, since it would not allow for the needed 43 square miles of DCMs to meet attainment of the NAAQS (Objective 4). In addition, the No Project Alternative would not conform to adopted plans, policies, and legal requirements, as required by Objective 5. The No Project Alternative would not allow for flexibility in use of water, thus potentially increasing long-term consumption of natural resources such as water (Objective 6). The No Project Alternative would not minimize the cost per ton of particulate matter controlled (Objective 7) because it may not allow the most efficient DCM construction to take place through installation on the most emissive areas of the lake bed. Finally, the No Project Alternative would not be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake. The summary of this alternative's ability to meet the objectives is described in Table V-1.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in the area affected by DCMs and the efficiency with which they would be installed. This alternative differs from the project in the assessment of air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities and service systems.

- **Air Quality**: As documented in Table V-3, the No Project Alternative would not allow PM_{10} emissions to be brought into compliance with the NAAQS for PM_{10} with maximum efficiency, resulting in greater air quality impacts from PM_{10} emissions.

- **Biological Resources**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. DCMs would be placed primarily in salt pan areas of similar habitat. Any impacts to biological resources would be mitigated to below the level of significance.

- **Cultural Resources**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. Therefore, the No Project Alternative would not require implementation of mitigation measures for cultural resources.

- **Hazards and Hazardous Materials**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. The 2003 SIP includes DCMs that would continue the use of potentially hazardous materials associated with the operation of

Managed Vegetation. Any impacts from hazards and hazardous materials would be mitigated to below the level of significance.

- **Hydrology and Water Quality**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of the playa to DCMs via grading and installation of infrastructure for dust control, and implementation of mitigation measures would not be required for hydrology. However, the No Project Alternative would not provide control of emissive dust.

- **Land Use and Planning**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not be consistent with adopted plans and policies in the proposed project area and may therefore result in a greater impact than the proposed project in terms of land use and planning. Therefore, the No Project Alternative may require additional mitigation measures to reduce these potential impacts. Any impacts to land use and planning would be mitigated to below the level of significance.

- **Mineral Resources**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. No water resources would be necessary for this DCM, thus the mineral lease would be protected against leakage. Therefore, the No Project Alternative would not require implementation of mitigation measures for mineral resources.

- **Transportation and Traffic**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would create no additional transportation components that could cause greater damage to existing roadways. Implementation of mitigation measures would not be required.

- **Utilities and Service Systems**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail the construction of new water control infrastructure. Implementation of mitigation measures would not be required.

Feasibility: This alternative is not feasible.

Facts: The above feasibility finding is based on the following:

- None of the eight objectives are met in the No Project Alternative (Table V-1).

- The primary goal of the project, to achieve NAAQS for PM_{10} by April 1, 2010, is not likely to be met by this alternative.

V.B Alternative 1: All Shallow Flooding

Description of Alternative: Alternative 1, All Shallow Flooding, would involve the use of the known and effective Shallow Flooding DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas. In this alternative, the project elements would be constructed or carried forward with the exception of the Managed Vegetation, Gravel Cover, and Moat & Row DCMs on the project area. Alternative 1 does not include additional components to those described for the project. However, this alternative would require the installation of more infrastructure associated with Shallow Flooding (mainline, submain, lateral, and riser pipes, perimeter berms, and tailwater recycling facilities) than the project. It would also require the use of a greater amount of water.

Effectiveness in Meeting Project Objectives: Alternative 1 would be capable of meeting seven of the eight project objectives identified by the District:

- Implement all Owens Lake bed PM_{10} control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS
- Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment
- Provide a high technical likelihood of success without substantial delay
- Conform substantially to adopted plans and policies and existing legal requirements
- Minimize the cost per ton of particulate pollution controlled
- Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake

Alternative 1 would only entail the use of one DCM, Shallow Flooding. Implementation of this alternative would result in more consumption of freshwater resources than the project. Thus, Alternative 1 would not be able to meet the objective of minimizing the long-term use of natural resources.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in terms of use of water. This alternative differs from the project in the assessment of impacts to biological resources, hazards and hazardous materials, hydrology and water quality, land use and planning, and utilities and service systems. Impacts related to air quality, cultural resources, mineral resources, and transportation and traffic would be similar to the project.

- **Air Quality**: As documented in Table V-3, Alternative 1 would have the same impacts to air quality as the project. As with the project, the impacts resulting from implementation of Alternative 1 on global climate change related to greenhouse gas emissions may be considered significant and unavoidable.

- **Biological Resources**: As documented in Table V-3, Alternative 1 has the potential to provide more habitat for western snowy plover than the project as it would provide a greater acreage of Shallow Flooding. Any impacts to biological resources would be mitigated to below the level of significance.

- **Cultural Resources**: As documented in Table V-3, Alternative 1 would have the same impacts to cultural resources as the project. Any impacts to cultural resources would be mitigated to below the level of significance.

- **Hazards and Hazardous Materials**: As documented in Table V-3, Alternative 1 would reduce the use and generation of chemicals that would potentially occur with the project. Therefore, Alternative 1 would not require the use of mitigation measures. Alternative 1 would not result in short- or long-term impacts from hazards and hazardous materials. Any impacts from hazards and hazardous materials would be mitigated to below the level of significance.

- **Hydrology and Water Quality**: As documented in Table V-3, Alternative 1 would not require the use of additional chemicals for vegetation growth but would still require implementation of mitigation measures to reduce impacts to below the level of significance. As with the project, any impacts to hydrology and water quality would be mitigated to below the level of significance.

- **Land Use and Planning**: As documented in Table V-3, Alternative 1 would require installation of more infrastructure associated with Shallow Flooding than the multiple DCMs of the project. Alternative 1 would require implementation of one mitigation measure to reduce impacts to below the level of significance. Any impacts to land use and planning would be mitigated to a below the level of significance.

- **Mineral Resources**: As documented in Table V-3, Alternative 1 would have the same impacts to mineral resources as the project. Any impacts from mineral resources would be mitigated to a below the level of significance.

- **Transportation and Traffic**: As documented in Table V-3, Alternative 1 would have the same impacts to transportation and traffic as the project. Any impacts to transportation and traffic would be mitigated to below the level of significance.

- **Utilities and Service Systems**: As documented in Table V-3, Alternative 1 would require installation of more infrastructure associated with Shallow Flooding. Alternative 1 has the potential of using more water resources than the project. Any impacts to utilities and service systems would be mitigated to below the level of significance.

Feasibility: This alternative is feasible.

Facts: The above feasibility finding is based on the following:

- Seven of the eight objectives are met; however, the objective of minimizing the long-term consumption of natural resources is not met with Alternative 1 (Table V-1).

V.C Alternative 2: All Managed Vegetation

Description of Alternative: Alternative 2, All Managed Vegetation, would involve the use of the known and effective Managed Vegetation DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas (EIR, Figure 4.3-1, *Alternative 2: All Managed Vegetation*). In this alternative, the project elements would be constructed or carried forward with the exception of the Shallow Flooding, Gravel Cover, and Moat & Row DCMs on the project area.

Effectiveness in Meeting Project Objectives: Alternative 2 would allow the District to meet its objective of implementing and attaining the NAAQS for PM_{10} by April 1, 2010 (Objective 1). The District could also attain its second objective to revise the approved 2003 SIP by July 1, 2008 (Objective 2) through this alternative. This alternative would minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment (Objective 3), and conform substantially to adopted plans and policies and existing legal requirements (Objective 5). In addition, this alternative would minimize the long-term consumption of natural resources (Objective 6) and allow the District to meet it final objective of consistency with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake (Objective 8).

This alternative would not enable the District to meet it objective to provide a high technical likelihood of success without substantial delay (Objective 4) because the amount of time needed for plants to reach the level of growth required for dust control may be difficult to achieve by the determined date of April 2010. This alternative would not allow the District to meet is objective to minimize the cost per ton of particulate pollution controlled (Objective 7) due to the fact that implementation of Managed Vegetation would result in a higher cost per acre. The summary of this alternative's ability to meet the objectives is described in Table V-1.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in its impacts to biological resources, hydrology and water quality, and utilities and service systems. Impacts related to air quality, cultural resources, hazards and hazardous materials, land use and planning, mineral resources, and transportation and traffic would be similar to the project.

- **Air Quality**: As shown in Table V-3, Alternative 2, like the project, would result in potentially significant impacts to air quality due to construction-related activities. As with the project, the impacts of Alternative 2 on global climate change may be considered significant and unavoidable.

- **Biological Resources**: As documented in Table V-3, Alternative 2 would have greater impacts on biological resources than the project and would require the incorporation of mitigation measures to reduce impacts to below the level of significance.

- **Cultural Resources:** As documented in Table V-3, Alternative 2 would result in a substantial adverse change in the significance of a paleontological resource or site or unique geological feature. As with the project, potentially significant impacts related to cultural resources resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.

- **Hazards and Hazardous Materials:** As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to hazards and hazardous materials. As with the project, potentially significant impacts related to hazards and hazardous materials resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.

- **Hydrology and Water Quality**: As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to hydrology and water quality. This alternative would reduce potential impacts from Moat & Row and Shallow Flooding DCMs in terms of flood risk, but would have the potential to affect water quality.

- **Land Use and Planning:** As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to land use and planning. As with the project, potentially significant impacts related to land use and planning resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of a mitigation measure.

- **Mineral Resources:** As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to mineral resources. As with the proposed project, potentially significant impacts related to mineral resources resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.

- **Transportation and Traffic:** As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to transportation and traffic. As with the proposed project, potentially significant impacts related to transportation and traffic resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.

- **Utilities and Service Systems:** As documented in Table V-3, Alternative 2 may result in potential impacts to utilities and service systems. This alternative would entail the use of one DCM, which would require the installation of more infrastructure related to Managed Vegetation (mainline, submain, lateral and riser pipes, irrigation lines, fertilizer injection, water treatment systems, perimeter berms, and tailwater recycling facilities) than the multiple DCMs of the project. The Managed Vegetation DCM uses approximately 1.2 acre-feet/acre, which is greater than that of the project with the inclusion of Moat & Row. Thus, implementation of this alternative has the potential to use more water resources than the project.

Feasibility: This alternative is feasible.

Facts: The above feasibility finding is based on the following:

- Six of the eight objectives are met in the All Managed Vegetation Alternative (Table V-1).

- The All Managed Vegetation Alternative would have grater significant impacts related to biological resources and utilities and service systems than the project.

V.D Alternative 3: All Gravel Cover

Description of Alternative: Alternative 3, All Gravel Cover, would involve the use of the known and effective Gravel Cover DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas.

Effectiveness in Meeting Project Objectives: This alternative would meet the objective of implementing all Owens Lake bed PM_{10} control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS. Alternative 3 would meet the objective to revise the approved 2003 SIP by July 1, 2008. Gravel Cover would meet the objective of minimizing the log-term consumption of natural resources. This alternative would not minimize the long-term significant, adverse changes to sensitive resources as it would essentially cover all potential resources. It would not provide a high likelihood of success as it would require large amounts of gravel. Available sources of aggregate are difficult to obtain. Gravel Cover would not conform to adopted plans and policies. This alternative would not minimize the cost per ton of particulate pollution controlled since there are high costs associated with mining, processing, and hauling the aggregate. In addition, this alternative is incompatible with the State of California's public trust values.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to the effects of the project is presented in Table V-3. This alternative differs from the project in the assessment of biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, and utilities and service systems. Impacts related to air quality and transportation and traffic would remain similar to the project.

- **Air Quality**: As documented in Table V-3, Alternative 3, as with the project, would result in potentially significant impacts related to air quality. It cannot be determined to a reasonable degree of certainty that Alternative 3 would not result in a cumulatively considerable, incremental contribution to the significant cumulative impact of global climate change. The impacts of Alternative 3 on global climate change may be considered significant and unavoidable.

- **Biological Resources**: As documented in Table V-3, Alternative 3 would have the greatest impacts to biological resources when compared with all other alternatives, including the project. This alternative would have greater impacts to biological resources than the project, requiring a higher level of implementation of mitigation measures for loss of habitat and impacts to sensitive resources. As with the project, potentially significant impacts would be mitigated to below the level of significance.

- **Cultural Resources**: As documented in Table V-3, Alternative 3 would cause a substantial adverse change in the significance of a paleontological resource or site or unique geological feature. As a result, implementation of Alternative 3 would result in significant impacts related to archaeological and historical resources. This alternative would entail heavy equipment and the placement of gravel on the lake surface, resulting in significant adverse impacts to cultural resources.

- **Hazards and Hazardous Materials**: As documented in Table V-3, Alternative 3 would reduce the potential impacts from release of hazards and hazardous materials resulting from the project. This alternative would entail reduced use of

chemicals but may still result in release of hazardous materials from construction equipment related to gravel hauling and dumping. However, potentially significant impacts related to hazards and hazardous materials resulting from Alternative 3 would be mitigated to below the level of significance.

- **Hydrology and Water Quality**: As documented in Table V-3, Alternative 3 would reduce some of the potential impacts associated with the project. However, this alternative may result in construction release of hazardous materials requiring construction-related mitigation measures. This alternative would reduce some of the potential impacts associated with the project due to the reduced application of water or use of chemicals. However, this alternative may result in construction-related release of hazardous materials from equipment related to gravel hauling and dumping, requiring construction-related mitigation measures.

- **Land Use and Planning**: As documented in Table V-3, Alternative 3 may result in significant impacts related to land use and planning. Implementation of this alternative would not be consistent with adopted plans and policies in the project area and may therefore result in a greater impact than the project in terms of land use and planning. Therefore, Alternative 3 may require additional mitigation measures to reduce these potential impacts.

- **Mineral Resources**: As documented in Table V-3, Gravel Cover would not result in significant impacts related to hydrologic issues of mineral resources. No water resources would be necessary for this DCM, thus the mineral lease would be protected against leakage. Therefore, this alternative would not require implementation of mitigation measures for mineral resources related to protection of the mineral lease from leakage.

- **Transportation and Traffic**: As documented in Table V-3, Alternative 3 would have the potential for greater impacts related to transportation and traffic than the project. Alternative 3 would be expected to increase road damage to related roadways during transport of the higher volumes of gravel to the project site. As with the project, potentially significant impacts related to transportation and traffic would be mitigated to below the level of significance.

- **Utilities and Service Systems**: As documented in Table V-3, Gravel Cover would not result in potential impacts to utilities and service systems. Unlike the project, this alternative would not require the application of water. Therefore, this alternative may utilize less water than the project and reduce those anticipated impacts from the project. Any impacts to utilities and service systems would be mitigated to below the level of significance.

Feasibility: This alternative is not feasible.

Facts: The above feasibility finding is based on the following:

The Gravel Cover Alternative would be capable of accomplishing only three of the eight objectives identified by the District:

- Implement all Owens Lake bed PM_{10} control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS
- Revise the approved 2003 SIP by July 1, 2008
- Minimize the long-term consumption of natural resources

EXHIBIT G

Owens Lake Revised Moat and Row Dust Control Measures

STATEMENT OF OVERRIDING CONSIDERATIONS

December 17, 2009

The California State Lands Commission (Commission), acting as a responsible agency, adopts the Statement of Overriding Considerations made by the City of Los Angeles, Department of Water and Power (the lead agency), as re-stated or modified herein.

The California Environmental Quality Act (CEQA) requires a public agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project (Public Resources Code section 21081 and CEQA Guidelines section 15093). The *2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (2008 FSEIR) and 2009 *Final Supplemental Environmental Impact Report, Owens Lake Revised Moat and Row Dust Control Measures* (FSEIR) identify and discuss unavoidable significant effects that would occur as a result of the proposed Project. With the implementation of the Mitigation Monitoring and Reporting Program (MMRP) adopted by the Commission, which includes changes to the Project to mitigate or avoid significant effects on the environment, most of the significant environmental impacts can be mitigated to less-than-significant levels. The 2009 FSEIR determined that the Project is expected to result in significant unavoidable impacts related to construction-generated emissions of criteria air pollutants and precursors and Project-generated greenhouse gases (GHG). The Commission proposes to approve the Owens Lake Revised Moat and Row Dust Control Measures despite these significant unavoidable adverse impacts.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Air Quality

Project-Generated Emissions of Criteria Air Pollutants and Precursors (Impact 3.2-1) (Project and Cumulative)

The 2009 FSEIR identified and discussed significant effects that would occur as a result of the proposed Project. The proposed Project involves the construction of landform features called moats and rows to reduce dust emissions from the dry Owens Lake bed without the addition of supplemental water and eliminate exceedances of the federal particulate matter (PM_{10}) standard. The 6-month or more delay in implementation of 3.5 square miles of DCMs, due to the revised moat and row design and additional CEQA analysis (the 2009 FSEIR) would conflict with implementation of the applicable air quality plan. The Project could contribute to the potential for additional violations of the National Ambient Air Quality Standard (NAAQS) and exposure of sensitive receptors to substantial pollutant concentrations. With the implementation of the mitigation

measures described in the 2008 FSEIR and 2009 FSEIR, most significant effects can be mitigated to less-than-significant levels. However, there are no measures reasonably available to reduce the potential impacts resulting from this conflict and it would be a significant and unavoidable impact.

Project-Generated Greenhouse Gas Emissions (Cumulative)

The 2008 FSEIR determined that the Project is expected to result in significant and unavoidable impacts to air quality. Implementation of the adopted 2008 FSEIR mitigation measures would reduce impacts on air quality to below the level of significance, with the exception of GHG emissions, which would have the potential to add to the overall global GHG emissions during construction, thus causing potential impacts on global climate change.

The GHG emissions quantified in the 2008 FSEIR were found to be cumulatively significant and unavoidable. The emissions generated by the proposed revised Project would be the same as the amount generated by the Project evaluated in the 2008 FSEIR. Therefore, although there would be no net change in GHG emissions (from the 2008 FSEIR analysis) as a result of the proposed moat and row design changes, this impact would remain the same as described in the 2008 FSEIR: cumulatively significant and unavoidable.

OVERRIDING CONSIDERATIONS

Having reduced the effects of the proposed Project by adopting mitigation measures in the MMRP, and balanced the benefits of the proposed Project against the Project's potential unavoidable adverse impacts, the Commission hereby determines that the specific overriding economic, legal, social, technological, or other benefits of the proposed Project outweigh the potential unavoidable adverse effects on the environment, and that the unavoidable adverse effects are therefore acceptable, based on the following overriding considerations, which are sufficient to outweigh the Project's unavoidable adverse effects:

- Achievement of the Project objectives requires construction of previously approved dust control measures (DCMs) to meet the NAAQS by 2010 of the largest single source of particulate matter (PM_{10}) in the United States. Such improvements require the use of heavy construction equipment that generates emissions of criteria air pollutants and precursors and GHG emissions. Incorporation of the adopted mitigation measures substantially reduces emissions during construction. The benefit of the control of PM_{10} from the Owens Lake bed outweighs the effects from short-term emissions of criteria air pollutants and precursors and GHG emissions resulting from implementation of the Project.
- The improvements achieved through the construction of the Project DCMs will provide reduced fugitive dust emissions to over 17,000 Inyo County residents, which overrides the short-term construction impacts on air quality.
- Achievement of PM_{10} reduction to meet NAAQS by 2010 would have a widespread benefit to property and open space recreational areas and parks in

close proximity to Owens Lake. Sites such as the Golden Trout Wilderness within the Inyo National Forest, Sequoia National Park, and Death Valley National Park would have better overall air quality for their recreational users, thereby enhancing the recreational availability and experience of these areas for visitors and nearby residents.

- The revised moat and row DCMs would allow for the sparing use of water needed for existing municipal and industrial use.
- The revised moat and row DCMs would substantially reduce the long-term use of water in implementing the required DCMs to meet NAAQS on the Owens Lake bed.
- In the absence of these additional areas of DCMs, there is no feasible way to accomplish the reduction of PM_{10} through implementation of all Owens Lake bed PM_{10} control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS without the addition of GHG emissions.
- In conjunction with approval of this Project, LADWP has committed to the long-term reduction of PM_{10} emissions for the entire Owens Valley and will continue to coordinate efforts to ensure that the overall air quality of the area is greatly improved.

Mitigation Monitoring and Reporting Program for the

Owens Lake Revised Moat and Row Dust Control Measures

Lead Agency:

Department of Water and Power
City of Los Angeles
111 North Hope Street, Room 1044
Los Angeles, CA 90012

August 2009

Mitigation Monitoring and Reporting Program for the

Owens Lake Revised Moat and Row Dust Control Measures

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ACRONYMS AND ABBREVIATIONS

ATV	all-terrain vehicle
CEQA	California Environmental Quality Act
CSLC	California State Lands Commission
DCM	dust control measure
DFG	California Department of Fish and Game
DO	dissolved oxygen
EC	electrical conductivity
Final SEIR	*Final Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, August 2009
GBUAPCD	Great Basin Unified Air Pollution Control District
GPS	global positioning system
LADWP	City of Los Angeles Department of Water and Power
MMRP	Mitigation Monitoring and Reporting Program
PRBO	Point Reyes Bird Observatory
proposed project	Revised Moat and Row Project
RWQCB	Lahontan Regional Water Quality Control Board
SIP	State Implementation Plan
TDS	total dissolved solids
TOC	total organic carbon

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

This Environmental Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to provide for the monitoring of mitigation measures required of the Revised Moat and Row Project (proposed project), a dust control measure (DCM) proposed by the City of Los Angeles Department of Water and Power (LADWP) to be implemented on the dry Owens Lake bed, as set forth in the *Final Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, August 2009 (Final SEIR) (State Clearinghouse Number 2008121074) prepared for the project.

Section 21081.6 of the California Public Resources Code and Section 15091(d) and 15097 of the State CEQA Guidelines require public agencies "to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." A MMRP is required for the proposed project because the Final SEIR for the project identified potentially significant adverse impacts related to construction and operation of the project, and mitigation measures have been identified to reduce most of those impacts to a less-than-significant level.

This MMRP will be adopted by the Board of Water and Power Commissioners when it approves the Revised Moat and Row Project.

This MMRP will be kept on file at the LADWP, 111 North Hope Street, Room 1044, Los Angeles, CA 90012.

PURPOSE OF THE MMRP

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during project construction and implementation, as required. The MMRP may be modified by the LADWP during project implementation, as necessary, in response to changing conditions or other refinements. A summary table (attached) has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, the party responsible for implementing the mitigation, the monitoring/mitigation timing, the enforcement agency(s), the monitoring agency(s), and a record of implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the June 2009 Draft SEIR.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the LADWP is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. LADWP at its discretion may delegate implementation responsibility or portions thereof to a licensed contractor. LADWP will be responsible for overall administration of the MMRP, including:

- Ensuring that routine inspections of the construction site are conducted by appropriate LADWP staff; and check plans, reports, and other documents required by the MMRP.
- Serving as a liaison between the LADWP and the construction contractor regarding mitigation monitoring issues.
- Completing forms and maintaining records and documents required by the MMRP.

- Coordinating and ensuring that corrective actions or enforcement measures are taken, if necessary.

Enforcement and monitoring, as identified in the summary table, will be the responsibility of the Great Basin Unified Air Pollution Control District (GBUAPCD), California Department of Fish and Game (DFG), California State Lands Commission (CSLC), and/or Lahontan Regional Water Quality Control Board (RWQCB). As the mitigation measures are completed, the monitoring agency will sign and date the MMRP 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.

CHANGES TO MITIGATION MEASURES

Any substantive change in the MMRP made by LADWP staff shall be reported in writing. Reference to such changes shall be made in the monthly or annual Environmental Mitigation Monitoring Report prepared by LADWP staff. Modifications to the mitigation measures may be made by LADWP staff subject to one of the following findings and documented by evidence included in the record:

1. The mitigation measure included in the Final SEIR and the MMRP is no longer required because the significant environmental impact identified in the Final SEIR has been found not to exist or to occur at a level which makes the impact less than significant as a result of changes in the project, changes in conditions of the environment, or other factors.

OR

2. The modified or substitute mitigation measure to be included in the MMRP provides a level of environmental protection equal to or greater than that afforded by the mitigation measure included in the Final SEIR and the MMRP.

AND

3. The modified or substitute mitigation measures do not have significant adverse effects on the environment in addition to or greater than those which were considered by the responsible hearing bodies in their decisions on the Final SEIR and the proposed project.

AND

4. The modified or substitute mitigation measures are feasible, and LADWP, through measures included in the MMRP or other City procedures, can assure their implementation.

Findings and related documentation supporting the findings involving modifications to mitigation measures shall be maintained in the project file with the MMRP and shall be made available to the public upon request.

MMRP SUMMARY TABLE

The MMRP Summary Table that follows should guide LADWP and the enforcement and monitoring agencies (GBUAPCD, DFG, CSLC, and RWQCB) in their evaluation and records of the implementation of mitigation measures.

The MMRP Summary Table provides the following information for each mitigation measure:

Mitigation Number – lists the mitigation measures by number, corresponding to the impacts and mitigation measure numbers found in the 2009 Draft SEIR

Mitigation Measure – provides the complete text of the mitigation measures identified in the 2009 Draft SEIR, including mitigation measures incorporated into the Revised Moat and Row Project from the *2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (State Clearinghouse Number 2007021127), adopted by the GBUAPCD in February 2008

Responsible Implementation Party – identifies the entity responsible for complying with the requirements of the mitigation measure

Monitoring Period – lists the period of the project during which implementation of the mitigation will take place

Enforcement Agency – identifies the agency with the power to enforce the mitigation measure

Monitoring Agency – identifies the agency to whom the reports are made

Documentation of Compliance – verifies compliance. The "Source" column describes the type of action taken to verify implementation. The "Signature/Date" column is to be signed and dated by the monitoring agency, or their designee, based on the documentation provided by qualified contractors or through personal verification by LADWP representatives

REFERENCES

GBUAPCD. *See* Great Basin Unified Air Pollution Control District.

Great Basin Unified Air Pollution Control District. 2008. *2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan: Integrated Subsequent Environmental Impact Report*. State Clearinghouse No. 2007021127. Bishop, CA. Prepared by Sapphos Environmental, Inc., Pasadena, CA.

Point Reyes Bird Observatory. 2000. *Summary of Surveys for Snowy Plovers at Owens Lake, April through August, 2000*. Stinson Beach, CA. Prepared by S. E. Hudson and G. W. Page. Prepared for CH2M HILL, Santa Ana, CA.

———. 2001. *Summary of Surveys for Snowy Plovers at Owens Lake in 2001*. Stinson Beach, CA. Prepared by T. D. Ruhlen and G. W. Page. Prepared for CH2M HILL, Santa Ana, CA.

———. 2002. *Summary of Surveys for Breeding Snowy Plovers and American Avocets at Owens Lake in 2002*. Stinson Beach, CA. Prepared by T. D. Ruhlen and G. W. Page. Prepared for CH2M HILL, Santa Ana, CA.

PRBO. *See* Point Reyes Bird Observatory.

Owens Lake Revised Moat and Row Dust Control Measures

Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
3.1 Biological Resources							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
The 2008 FSEIR includes 14 mitigation measures intended to reduce or compensate for project impacts to biological resources; 11 of these address potential impacts to western snowy plover. Consistent with the requirements of CEQA, LADWP is required to implement these measures as a condition of approval of the 2008 SIP. The GBUAPCD has approved a Mitigation Monitoring and Reporting Program that will monitor and document the implementation of these mitigation measures. Because many of the previously adopted mitigation measures would apply to the project, they are incorporated by reference into the 2009 Final Supplemental EIR (2009 FSEIR) and into this MMRP. The previously adopted mitigation measures are presented below in their entirety with no revisions.							
3.1-1	**Measure Biology-1 in 2008 FSEIR: Lake Bed Worker Education Program (2008 SIP MMP, Table III-1)** To minimize potential direct impacts to western snowy plover from construction activities to below the level of significance, the LADWP shall continue the lake bed worker education program consistent with the previous approach and per DFG 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 LADWP and construction personnel. The program shall be conducted by a biologist familiar with the biology of the western snowy plover at Owens Lake and familiar with special status plant and wildlife species of the Owens Lake basin. The biologist shall be approved by the GBUAPCD prior to implementation of the education program. The qualifications of the biologist shall be submitted to the DFG 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 GBUAPCD 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 GBUAPCD. A copy of the worker education program shall be provided to the DFG and CSLC.	LADWP	Construction	GBUAPCD	GBUAPCD DFG	Worker Education Program Summary Report and Monthly Worker Education Program Reports for newly trained personnel	_____ (Signature/Date of Monitoring Agency)
3.1-2	**Measure Biology-2 in 2008 FSEIR: Preconstruction Surveys for Western Snowy Plover (2008 SIP MMP, Table III-1)** To minimize potential direct impacts to western snowy plover within the project area due to construction activities, the LADWP 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 LADWP 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 GBUAPCD. Maps of snowy plover nest locations shall be posted at the construction office and made available to all site personnel and GBUAPCD staff. The activity of the nest shall be monitored by a biological monitor approved by the GBUAPCD, 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 DFG. Active snowy plover nests shall be monitored at least weekly. The qualifications of the biological monitor shall be submitted to the DFG 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 GBUAPCD through issuance of a weekly written report by the LADWP to the GBUAPCD.	LADWP	Construction	GBUAPCD	GBUAPCD DFG	Weekly Monitoring Reports (provided until construction is complete)	_____ (Signature/Date of Monitoring Agency

Owens Lake Revised Moat and Row Dust Control Measures

Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
3.1-3	**Measure Biology-3 in 2008 FSEIR: Snowy Plover Nest Speed Limit (2008 SIP MMP, Table III-1)** To minimize potential direct and cumulative impacts to western snowy plover and other sensitive biological resources from vehicles construction activities, the LADWP shall implement a speed limit of 30 miles per hour within all active construction areas on Owens Lake during construction of DCMs. 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 GBUAPCD 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 GBUAPCD through issuance of a summary written report by the LADWP to the GBUAPCD after posting of speed limits. A copy of the summary report shall be provided to the DFG.	LADWP	Construction	GBUAPCD	GBUAPCD DFG	Compliance Summary Report (provided within 30 days of completion of education seminar and installation of speed-limit signs)	_____ (Signature/Date of Monitoring Agency
3.1-4	**Measure Biology-4 in 2008 FSEIR: Lighting Best Management Practices (2008 SIP MMP, Table III-1)** To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, the LADWP shall institute all best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and DFG recommendations. Best management practices include those listed below, and are included in the Project Description of the 2008 State Implementation Plan (SIP) 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 GBUAPCD, and a copy of the compliance record shall be provided to the DFG.	LADWP	Construction	GBUAPCD	GBUAPCD DFG	Compliance Summary Report (provided until construction is complete)	_____ (Signature/Date of Monitoring Agency
3.1-5	**Measure Biology-7 in 2008 FSEIR: Toxicity Monitoring Program (2008 SIP MMP, Table III-1)** 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 LADWP 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 CSLC and GBUAPCD for review and comment at least 60 days prior to the start of operation of new water-based DCMs. 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 GBUAPCD 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	LADWP	Operation	GBUAPCD DFG	GBUAPCD DFG CSLC RWQCB	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>
<tr><th rowspan="2">Mitigation Number</th><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>
<tr><th>Source</th><th>Signature/Date</th></tr>
<tr><td></td><td>control areas, or any other appropriate measures. Any adaptive management measures that would potentially be implemented shall be approved by the GBUAPCD and the DFG 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 SIP and 2008 SIP monitoring schedules coincide, the final year for monitoring in 2003 SIP 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 GBUAPCD, the DFG, Lahontan Water Quality Control Board, and the CSLC 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.

Table 3.2.5-1
Biology-7, Postconstruction Bioaccumulation Monitoring Schedule
<table><tr><th>2003 SIP Areas Only</th><th>2003 SIP Areas Only</th><th>Year 1 Monitoring Event*</th><th>Year 2 Monitoring Event*</th><th>Year 3 Monitoring Event**</th></tr><tr><td>2008</td><td>2009</td><td>2010</td><td>2011</td><td>2012</td></tr><tr><th>Year 4 Monitoring Event*</th><th>Year 5 Monitoring Event**</th><th>Year 6 Monitoring Event*</th><th>Year 9 Monitoring Event**</th><th>Year 14 Monitoring Event*</th></tr><tr><td>2013</td><td>2014</td><td>2015</td><td>2018</td><td>2023</td></tr><tr><td colspan="5">NOTE:
*2003 and 2008 SIP areas monitored
** 2008 SIP areas only</td></tr></table></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>3.1-6</td><td>Measure Biology-9 in 2008 FSEIR: Plover Identification Training (2008 SIP MMP, Table III-1)

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 DFG 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 GBUAPCD and the DFG 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 GBUAPCD, the CSLC, and the DFG.</td><td>LADWP</td><td>Operation</td><td>GBUAPCD
DFG
CSLC</td><td>GBUAPCD
DFG
CSLC</td><td>Subsequent Incident Reports and Emergency Repair Activities Report</td><td>_____
(Signature/Date of Monitoring Agency</td></tr>
</table>

Owens Lake Revised Moat and Row Dust Control Measures

Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	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 SIP revision and the 1998 SIP 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 DCM 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 GBUAPCD and the DFG 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 GBUAPCD and the DFG 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 LADWP and the DFG based on the report provided by the biological monitor. A copy of the resultant mitigation that is negotiated between LADWP and the DFG shall be provided to the GBUAPCD and CSLC.						
3.1-7	**Measure Biology-10 in 2008 FSEIR: Long-Term Monitoring Program for Western Snowy Plover (2008 SIP MMP, Table III-1)** To minimize potential direct, indirect, and cumulative impacts resulting from operation and maintenance of DCMs to western snowy plover, the LADWP 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 SIP shall be continued under the 2008 SIP 1, 2, 3, 4, 5, 7, 9, and 14 years after project implementation. The final western snowy plover monitoring schedule for all DCMs on Owens Lake bed shall be coordinated so that long-term monitoring for all DCMs 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 SIP relative to baseline plover population numbers prior to implementation of the 2003 SIP 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 DFG 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 GBUAPCD, the CSLC, and the DFG by December 31 of each monitoring year. The GBUAPCD shall require adaptive management changes to operation and maintenance of DCMs 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 GBUAPCD shall consult with the LADWP, CSLC, and the DFG 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 SIP. Beginning in 2010, lake-wide surveys shall conform to the 2008 SIP 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 GBUAPCD by December 31 of each monitoring year. The report shall document survey locations and dates, the number of plovers observed, and an	LADWP	Operation and Maintenance	GBUAPCD	GBUAPCD DFG CSLC	Annual Monitoring Summary Reports (for years 1 to 5, 7, 9, 14, and thereafter until determined to be unnecessary by the GBUAPCD)	_____ (Signature/Date of Monitoring Agency

Owens Lake Revised Moat and Row Dust Control Measures
Mitigation Monitoring and Reporting Program
Summary Table

<table>
<tr><th rowspan="2">Mitigation Number</th><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>
<tr><th>Source</th><th>Signature/Date</th></tr>
<tr><td></td><td>estimate of the total plover population. A copy of the yearly summary reports shall be provided to the DFG and the CSLC.
Table 3.2.5-2
Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule<table><tr><th>Year 1 Monitoring Event</th><th>Year 2 Monitoring Event</th><th>Year 3 Monitoring Event</th><th>Year 4 Monitoring Event</th></tr><tr><td>2010</td><td>2011</td><td>2012</td><td>2013</td></tr><tr><th>Year 5 Monitoring Event</th><th>Year 7 Monitoring Event</th><th>Year 9 Monitoring Event</th><th>Year 14 Monitoring Event</th></tr><tr><td>2014</td><td>2016</td><td>2018</td><td>2023</td></tr></table></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>3.1-8</td><td>Measure Biology-12 in 2008 FSEIR: Habitat Management Program for Nesting Snowy Plovers
(2008 SIP MMP, Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008)
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 LADWP 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 LADWP 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 LADWP 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 DFG for review. A final operations plan detailing the drying operations shall be submitted to the GBUAPCD for approval, and a copy shall be provided to the DFG 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 GBUAPCD for approval one week prior to implementation, and a copy of the changes shall be provided to the DFG.
Table 3.2.5-3
Biology-12, Schedule of Percent Surface Area Wetted Required to Achieve Level of Control Efficiency After June 30<table><tr><th>July 1–7</th><th>July 8–14</th><th>July 15–21</th><th>July 22</th></tr><tr><td>~ 50% wetted area</td><td>~ 20% wetted area</td><td>~ 15% wetted area</td><td>Off</td></tr></table></td><td>LADWP</td><td>Operation</td><td>GBUAPCD</td><td>GBUAPCD
DFG</td><td>Final Operations Plan / Habitat Management Program</td><td>_____
(Signature/Date of Monitoring Agency</td></tr>
</table>

Owens Lake Revised Moat and Row Dust Control Measures

Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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3.1-9	**Measure Biology-14 in 2008 FSEIR: Long-Term Habitat Management Plan (2008 FSEIR Clarification Sheet, dated January 23, 2008)** 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 DFG 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 DFG for review. The Long-term Habitat Management Plan shall be submitted to both the DFG and the CSLC for comment, with final approval by the DFG. The Long-term Habitat Management Plan shall have final approval and 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 by the CSLC and lands owned by the LADWP. In recognition of the public trust values related to resident and migratory wildlife resources at Owens dry lake, DFG and CSLC 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: ► Within the Environmental Impact Report analysis areas for 2008 State Implementation Plan dust controls (Figure 2.1-3), achieve no net loss of riparian or aquatic baseline habitat functions and values or total acres of these habitats (refer to Table 3.2.2-1 for type and amount plant communities). ► Manage 1,000 acres in perpetuity for shorebirds and snowy plovers in Zone II, in consultation with DFG. ► Pursuant to Condition No. 16 of the 2001 Streambed Alteration Agreement (Agreement No. R6-2001-060, Page 5), the project was expected to adversely impact 63 acres of shorebird foraging habitat at Dirty Socks Spring. Therefore, LADWP was required to create 145 acres of Habitat Shallow Flood suitable for shorebird foraging. LADWP has currently created 152 acres. If LADWP proposes to discontinue using the 145 acres or any portion thereof the Habitat Shallow Flood for shorebird foraging habitat, the LADWP shall provide shorebird foraging habitat of equivalent quality at a ratio of 1:1 to 2:1 as determined through coordination between the DFG and LADWP. ► In consultation with DFG, develop a specification for an appropriate amount of deep-water habitat and then develop and manage that deepwater habitat in perpetuity in order to support focal migratory water birds determined to be present during 1995–1997 baseline surveys in support of the 1998 State Implementation Plan. This shall include a variety of water birds that use Owens Lake as a temporary stopover habitat during spring and autumn migration; water birds that are adapted to saline conditions such as eared grebe (*Podiceps nigricollis*), Wilson's phalarope (*Phalaropus tricolor*), and California gull (*Larus californicus*); and other water birds including waterfowl that can tolerate saline or brackish conditions such as gadwall (*Anas strepera*) and lesser scaup (*Aythya affinis*), among other species. ► Maintain a baseline population of 272 snowy plovers. ► In addition to the 1,000 acres of shorebird and snowy plover habitat in Zone II, LADWP shall maintain a minimum of 523 acres of habitat specifically for snowy plovers in perpetuity at Owens Lake in consultation with the DFG. 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 approximately 17.5 acres of proposed dust control measures that are within DFG Cartago Springs Wildlife Area is compatible with the designated land use. DFG has determined that Habitat Shallow Flood or habitat restoration would be compatible with the Cartago Springs Wildlife Area's designated use (Figure 3.2.5-3, Cartago Springs Wildlife Area).	LADWP	Operation and Maintenance	DFG	GBUAPCD DFG California State Lands	Habitat Management Plan and Annual Monitoring Summary Reports	_____ (Signature/Date of Monitoring Agency

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New Mitigation Measures Recommended in the 2009 SEIR. These mitigation measures would replace mitigation measures previously adopted as part of the 2008 SEIR. For each mitigation measure that has been replaced, LADWP has made findings consistent with CEQA Section 15091.							
3.1-10	**Replaces Measure Biology-13 in 2008 FSEIR: Wildlife Movement Gaps (2008 SIP MMP, Table III-1)** In the 2008 FSEIR, the discussion of wildlife movements concluded that "sand fencing constructed on tops of moat and row elements would potentially obstruct the movement of wildlife through the area. Therefore, further analysis of potential impacts to terrestrial wildlife is warranted." Measure Biology-13, which prescribes gaps in sand fencing or alternative passage features (e.g., culverts, etc.) within moat and row grids, was included to mitigate for this potential effect. Consistent with the 2008 FSEIR recommendation, further analysis of moat and row elements and effects on wildlife movements was conducted as part of this SEIR (see Effects on Brood Movements and Habitat Connectivity for snowy plover, above; and Impact 3.1-2, Effects on Wildlife Movements, Corridors, and Access to Nursery Sites for other species, below). Based on the results of this focused analysis, the type of mitigation specified in Measure Biology-13 from the FSEIR is not considered necessary to mitigate for significant effects on wildlife movement identified in this SEIR. However, fence gaps to facilitate movement are recommended to mitigate for potentially significant effects on snowy plover broods at site T1A-1 (sand fence only). Therefore, Measure Biology-13 is replaced here by Mitigation Measure 3.1-10 to mitigate specifically for potential effects on plover brood movements at site T1A-1. To minimize or avoid effects of proposed fencing on movements of snowy plover broods at Cell T1A-1, LADWP shall install and maintain additional fence gaps within the three fence blocks located in the northeast corner of the cell. Based on the movement behaviors of snowy plover, fence gaps designed to facilitate brood movements shall be regularly distributed over relatively short distances, and easily encountered by fast-moving plovers. Plover broods must be able to physically fit through fence gaps, and must be able to visually locate the gaps efficiently during movements. The following describes the design considerations and specifications for installing fence gaps to facilitate plover movements. The final design shall be developed and implemented in consultation with DFG, CSLC, and GBUAPCD, and will be subject to the approval of DFG. Fence gaps shall be installed using one of two basic design options: (1) vertical gaps beneath fences, or (2) horizontal gaps along fences (i.e., fence breaks). *Option 1* If vertical gaps are implemented, a minimum 2-inch gap shall be installed beneath the entire length of fencing. This gap size is considered sufficient for plover broods (including chicks and adults) to fit beneath fences (Page, pers. comm., 2008). Within 30 days prior to the core brooding season (March 15–August 15) each year, the sand fence shall be inspected, and maintained at that time if necessary, to ensure a minimum 2-inch gap beneath the fence. Following this initial inspection before the core brooding season each year, the fence gaps shall additionally be inspected by a biologist once per month, and maintained as needed, until August 15. Biologists shall attempt to avoid or minimize disturbances to nesting plovers while conducting the monthly inspections. A 2-inch gap beneath a fence could be difficult for plovers to detect from a distance, due to its low visual profile relative to the surrounding landscape. For example, the average range of surface relief recorded at nest sites on Owens Lake was 1.5–8.2 inches (PRBO 2000, 2001, 2002); in some locations, this natural microtopography could obstruct a plover's visual detection of a 2-inch movement gap. To minimize or offset this potential detection problem, vertical gaps designed to facilitate brood movements shall extend along the entire fence length.	LADWP	Operation and Maintenance	DFG	GBUAPCD DFG California State Lands	Final fence gap design and Annual Monitoring Summary Reports	_____ (Signature/Date of Monitoring Agency

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	Option 2 If horizontal gaps along fences are installed, they shall be spaced no greater than 100 feet apart (i.e., no more than 100 feet of fence between two gaps); and the combined width of all fence gaps shall total a minimum of 10% of the total fence perimeter length. Gaps shall be maintained throughout the snowy plover brooding season (March 15–August 15). The same fence-gap inspection and maintenance procedures (conducted before and during the core brooding season [March 15-August 15]) described for Option 1 shall be implemented under Option 2. Although the minimum size and spacing of fence gaps to facilitate movement by snowy plovers is not known, Page (pers. comm., 2008) estimated that approximately 1-foot-wide gaps placed every 10 feet along fence rows could potentially allow for unimpeded movements. For developing a range of feasible options to meet this mitigation measure, it is assumed that these guidelines for gap size and frequency can generally be extrapolated as follows: based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence perimeter), all fence gaps shall total a minimum of 10% of the total fence perimeter (e.g., over a 500-foot fence perimeter, a minimum total of 50 feet within a gap condition would be required). Therefore, based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence length), all fence gaps shall total a minimum of 10% of the total fence perimeter length (e.g., over a 500-foot fence perimeter, a total of 50 feet within a gap condition shall be required). The ability of broods to visually locate horizontal gaps is probably affected by the relationship between gap frequency and size; as the spacing between gaps increases (and distance from a plover at a given location to a gap increases), the size of individual gaps required for visual detection from a given location increases. Therefore, in addition to maintaining a minimum of 10% of total fence perimeter within a gap condition, gaps shall be spaced regularly and no more than 100 feet apart. It is assumed that this maximum spacing of gaps would allow for sufficient opportunity for broods to meet their daily movement requirements.						
3.1-11	**Revised Measure Biology-11 in 2008 FSEIR: Corvid Management Plan (2008 SIP MMP, Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008)** 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 DCMs, the LADWP shall continue to implement the corvid management plan resulting from the 2003 SIP with an extension of one year within the project area, or comparable corvid control measures, to the satisfaction of the DFG, 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 DCMs, 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 dust control measure, the corvid management techniques shall be expanded to specify that the sand fence fabric and fence posts shall be designed to prevent perching by corvids, within 0.25 mile of occupied nesting shorebird habitat. Occupied nesting shorebird habitat will be evaluated on an annual basis, in collaboration with DFG, to identify areas requiring perch deterrents. The annual habitat evaluation will attempt to identify potential shifts in occupied nesting habitat over time. The use of sand fencing on top of rows within the Moat & Row areas will be considered under this mitigation measure as exceeding the height of 72 inches. Sand fence design to deter perching by corvids shall include the installation of: (1) Nixalite or the functional equivalent on the tops of fence posts; and (2) monofilament line or the functional equivalent along and above the sand fence fabric. To avoid a potential avian collision hazard, monofilament or other line shall be installed no greater than two inches	LADWP	Operation	GBUAPCD DFG	GBUAPCD DFG	Corvid Management Plan and Annual Monitoring Summary Reports (for five years and thereafter until deemed unnecessary by the GBUAPCD)	_____ (Signature/Date of Monitoring Agency

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	above the top of sand fence fabric. Within 30 days prior to the brooding season (March 15–August 15) each year, the perch deterrent structures shall be inspected. If a structure has been damaged or otherwise needs maintenance, it shall be repaired-at that time. 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 DFG 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 GBUAPCD and the DFG 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 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 GBUAPCD and the DFG no later than December 31 of each corvid management year. If after the sixth year of reporting in 2011, the GBUAPCD determines that the corvid management program is effective and that 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 (of the 2008 FSEIR). However, the corvid management practices shall be continuously implemented.						
3.1-12	**Mitigation Measure 3.1-12: Monitoring and Adaptive Management for Moat Entrapment of Snowy Plover** To minimize or avoid potential moat entrapment of western snowy plovers, LADWP shall develop and implement a moat monitoring and adaptive management strategy. Although entrapment of snowy plovers within moats is assumed to be infrequent, in the absence of empirical data or other observations, there is reasonable uncertainty about this assumption. Therefore, this monitoring and adaptive monitoring approach is recommended to address this uncertainty, identify specific incidences of plover entrapment or mortality, and mitigate for significant effects. **Monitoring and Adaptive Management Purpose and Guidelines** The purpose of the monitoring and adaptive management strategy is to: (1) determine whether moat entrapment or loss of plovers occurs due to moat design or other elements (e.g., side slope angle, presence of water); (2) identify and implement site-specific corrective actions that would minimize or avoid any additional impact; and (3) identify whether compensatory measures for significant losses or entrapment are required. This analysis assumes that repeated and regular observations of plover entrapment or mortality would indicate a potentially significant adverse effect. Specific adaptive management response thresholds are discussed below under “4. Response Triggers.” The moat monitoring and adaptive management strategy shall: ► be developed in consultation with DFG, CSLC, and GBUAPCD, and will be subject to the approval of DFG; ► be completed prior to initiating moat construction; and ► where appropriate, maintain consistency with and tier from existing monitoring programs, such as the Toxicity Monitoring Program (2008 FSEIR Measure Biology-7), and the Long-Term Monitoring Program for Western Snowy Plover (2008 FSEIR Measure Biology-10). **Monitoring and Adaptive Management Components** The moat monitoring and adaptive management strategy shall include the following components: ► a monitoring schedule, including the timing and frequency of monitoring; ► a description of monitoring locations and procedures;	LADWP	Operation and Maintenance	DFG	GBUAPCD DFG CSLC	Final Monitoring and Adaptive Management Strategy. Summary monitoring reports within 60 days of completing each monitoring season. After completing the second year of monitoring, annual reports summarizing the cumulative results of monitoring efforts.	_____ (Signature/Date of Monitoring Agency

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	► selection of indicators for identifying the type and extent of impacts to snowy plover due to moat entrapment; ► specific quantitative response triggers to indicate thresholds requiring management action; ► a list of corrective management actions appropriate for each type and extent of impact; and ► documentation and reporting requirements. Guidelines for developing these six elements are summarized below. *1. Implementation Schedule, Timing, and Frequency* Moat monitoring shall be conducted during the snowy plover brooding season (March 15–August 15) for a minimum of two full brooding seasons after completion of project construction. Until the end of the first full brooding season after project construction, monitoring shall be conducted twice per week. If no entrapments (defined in "3. Entrapment Indicator," below) are observed during this initial period, the frequency of monitoring may be reduced to once per week for the second complete brooding season. Monitoring shall commence immediately after construction of any perimeter moat is complete, if during the snowy plover brooding season. Otherwise, monitoring shall commence at the start of the following brooding season. If after two full brooding seasons of monitoring, it is determined that there is no evidence of significant moat entrapment or mortality, this monitoring requirement may be discontinued. However, if at any point within the monitoring period corrective management actions are required (i.e., response triggers or thresholds are met), monitoring shall be continued for an additional two full brooding seasons after corrective actions are implemented to ensure effectiveness of the action. This monitoring cycle shall be repeated until significant mortality or entrapment ceases to occur during a two-year cycle. *2. Monitoring Locations and Procedures* Monitoring surveys shall be conducted at all moats forming the perimeter of moat and row cells identified as high or moderate risk of interacting with snowy plover individuals or broods (T37-1, T37-2, and T1A-3). In the event that any entrapment of snowy plover is observed in moats, moats forming the perimeter of moat and row cells identified as low risk of interacting with snowy plover (T32-1, T12-1, and T1A-4) shall be added to this monitoring and adaptive management program. All monitoring shall be conducted by wildlife biologists familiar with snowy plover identification, movement patterns, and life history requirements. Monitoring protocols shall be developed to determine the presence and condition of plovers in moats, and to document existing moat conditions where entrapment is observed. Key information collected during monitoring shall include, but is not limited to: ► specific locations of all areas surveyed; ► locations of all snowy plovers detected inside or within 100 feet of moats (using global positioning system [GPS]); ► age or life stage (juvenile, adult), behavior, and condition of individuals of snowy plover and all other wildlife species found within moats (including injury, death, and the identified cause of adverse condition, if possible); ► moat side-slope measurements where plovers are found, and within 200 feet of these locations; ► presence, depth, and quality (including salinity) of water in moats, where plovers are found (water quality data collection will follow that described for surface water monitoring of moat and row cells in the 2008 FSEIR Mitigation Measure Hydrology-2); and ► incidental observations of snowy plovers and other wildlife species made during monitoring surveys. Any live shorebird found within a moat shall be observed at a distance for a minimum of 15 minutes, or until it exits the moat. *3. Entrapment Indicator* Moat entrapment shall be indicated and quantified by the number of plover mortalities or other observed entrapments within a moat per breeding season. In addition to mortality, "entrapment" shall include an incidence of a live bird that: (1) visibly attempts but is unable to exit the moat for 15 minutes or more, (2) is caught within the moat's substrate						

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	(e.g., mud), or (3) does not attempt to exit the moat and appears injured or in otherwise poor condition to do so. Any observed mortality or entrapment will be reported to DFG within 48 hours of documenting the incident. (This timeframe is consistent with reporting standards for observed avian mortalities established in Mitigation Measure Biology-9 of the 2008 FSEIR [GBUAPCD 2008]). *4. Response Triggers* The threshold for requiring corrective actions is three or more snowy plover moat entrapments per DCA per calendar year. (The maximum number of observed entrapments per year that could occur without requiring corrective actions under this measure would range from two birds at any one DCA to six birds across the three monitored DCAs [T37-1, T37-2, and T1A-3].) If three or more entrapments at any DCA are observed, corrective adaptive management actions shall be required within the moat(s) where entrapments were detected. It is assumed that a loss of plovers up to this threshold would not significantly increase juvenile or adult mortality rates above existing levels or substantially affect the overall snowy plover population size, due to the following factors: ► The threshold number is small relative to the overall snowy plover population size and productivity. In 2008, 478 adults and 39 broods were counted over a portion of Owens Lake; during the period of 2003–2008, the number of broods counted annually ranged from 18 to 52 (PRBO 2008). These counts include only the broods and adults observed during one-week lake-wide surveys conducted in late May to early June. Because adults often initiate multiple nesting attempts (sometimes up to three) and produce multiple broods during a breeding season, these numbers represent only a proportion of the broods produced at Owens Lake during a breeding season. Also, not all areas of suitable habitat were included in all years of the lake-wide surveys. ► The Owens Lake population appears viable, based on reproductive success metrics and an increasing population trend. Although juvenile or adult survival rates for the Owens Lake population have not been estimated, the number of nests and nest success rates have been relatively high. The most complete lake-wide nesting data are from 2002 and 2003. In 2002, when 272 adults were counted, 128 nests were located; and the average nest hatching rate was 82.5%. In 2003, when 401 adults were counted, 199 nests were located; and the average hatching rate was 80%. ► Multiple nesting attempts, particularly those initiated by a pair after a nest or brood has failed, would compensate for some loss during the breeding season. *5. Corrective Adaptive Management Actions* If the response threshold is met, LADWP shall notify DFG as soon as possible and within 48 hours of the incident. Notification shall be sent to the designated personnel at DFG. In coordination with DFG, CSLC, and GBUAPCD, LADWP shall implement corrective management actions as appropriate depending on the cause of moat entrapment (e.g., slope, presence of water, or other). Appropriate corrective actions for entrapment due to moat side-slopes could include one or more of the following: ► add escape ramps every 100 feet within the identified problem moat; ► add rip-rap to side-slopes; and ► reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness. Appropriate corrective actions for entrapment due to the presence of water in moats could include one or more of the following: ► add rip-rap to bottoms of moats, so that the top of rip-rap exceeds the maximum water and mud level observed in moats during the breeding season; and ► reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness.						

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	If the monitoring and adaptive management process indicates that corrective actions are not effective, or if actions are determined to not be feasible, then LADWP shall work collaboratively with DFG, CSLC, and GBUAPCD to develop a revised action or provide on- or off-site habitat enhancement and protection as compensation. Revised corrective actions or habitat enhancement shall require approval by DFG. *6. Reporting Requirements* LADWP shall provide summaries of monitoring methods and results to DFG, CSLC, and GBUACD within 60 days of completing each monitoring season. Reports shall include summaries of all detections of snowy plover or other shorebirds in and around moats; their behavior, state or condition when detected; side-slopes and water depths measured in association with each detection; and whether any mortalities or other entrapments were observed. After completing the second year of monitoring, annual reports that summarize the cumulative results of monitoring efforts shall also be submitted to DFG, CSLC, and GBUACD. **Integration with Existing Snowy Plover Monitoring and Management** The specific monitoring and adaptive management program for moat entrapment could be incorporated directly into existing plover monitoring and management commitments as appropriate, including as an element of the Long-term Monitoring Program for Western Snowy Plover (Mitigation Measure 3.1-8; Measure Biology-10 in the 2008 FSEIR) or the Long-term Habitat Management Plan (Mitigation Measure 3.1-9; Measure Biology-14 in the 2008 FSEIR).						
3.2 Air Quality							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
As required by Mitigation Measure 3.2-1 and as discussed in the 2008 FSEIR, GBUAPCD requires that all feasible DCMs, dependent on the size of the construction area and the nature of the activities involved, shall be incorporated into project design and implemented during project construction. As a result, 2008 FSEIR Mitigation Measures Air-1 through Air-6 are incorporated into the project. These previously adopted mitigation measures are presented below in their entirety with no revisions.							
3.2-1	**Measure Air-1 in 2008 FSEIR: Construction Activities Fugitive Dust Emissions Control and Minimization (2008 SIP MMP, Table III-1)** Fugitive dust emissions during construction shall be controlled and minimized, to comply with GBUAPCD Rules 400 and 401 (EPA 1992), through the LADWP'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 LADWP shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by the LADWP and approved by the GBUAPCD prior to the start of construction and the submission of weekly monitoring reports to the GBUAPCD and the CSLC. The GBUAPCD 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.	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency
	Measure Air-2 in 2008 FSEIR: Construction Equipment Low-emissions Tune-ups Schedule (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP 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 GBUAPCD during the project's construction phase. Prior to implementation of the schedule, the LADWP shall submit the schedule to the GBUAPCD and the CSLC. The GBUAPCD shall ensure conformance of the equipment operation with the approved schedule.	LADWP	Preconstruction and Construction	GBUAPCD	GBUAPCD	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency

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	Measure Air-3 in 2008 FSEIR: Low-emission Construction Equipment Utilization (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless the LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. The GBUAPCD 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.	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency
	Measure Air-4 in 2008 FSEIR: Low-sulfur Fuel Utilization during Construction (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP 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 LADWP submits documentation and consults with the GBUAPCD and the CSLC that the use of such equipment is not practical, feasible, or available. The GBUAPCD 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.	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring Reports	_____ (Signature/Date of Monitoring Agency
	Measure Air-5 in 2008 FSEIR: Low-emission Mobile Vehicle Utilization during Construction (2008 SIP MMP, Table III-1) 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 LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by the LADWP to reduce vehicular emissions.	LADWP	Construction	GBUAPCD	GBUAPCD CSLC	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency
	Measure Air-6 in 2008 FSEIR: Low-emission Mobile Vehicle Utilization during Operation (2008 SIP MMP, Table III-1) 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 LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. The LADWP shall provide the GBUAPCD 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 LADWP to reduce vehicular greenhouse gas emissions.	LADWP	Operation	GBUAPCD	GBUAPCD CSLC	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency

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Cultural Resources							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Cultural-1 in 2008 FSEIR: Paleontological Resources Construction Monitoring (2008 SIP MMP, Table III-1) The impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource that has the potential to be present in older Pleistocene and late Holocene portions of geological units in the eastern and southern Owens Lake playa shall be reduced to below the level of significance through construction monitoring of ground-disturbing activities and salvage of paleontological resources. Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. Where any such activity is anticipated in older Pleistocene and late Holocene portions of geological units in the eastern and southern Owens Lake playa in conjunction with the construction of DCMs, the GBUAPCD shall require construction monitoring. The GBUAPCD 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: ► 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. ► Shallow Flooding without any excavation does not require mitigation. However, planned grading, trenching, and excavation activities associated with Moat & Row (or flooding areas associated with older Pleistocene and Late Holocene portions of geological units in the eastern and southern Owens Lake playa) shall be monitored. Sediments located near the surface are recent and are not anticipated to be paleontologically sensitive. However, those sediments located approximately 4 feet or more below the surface may contain paleontological resources and 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 reviews what fossils are, what fossils might potentially be found, and the appropriate procedures to follow if fossils are found. 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 CSLC. ► Within 90 days of the completion of the paleontological monitoring, the qualified paleontologist shall prepare a final mitigation report to be submitted to the GBUAPCD and the CSLC with an appended, itemized inventory of the specimens. The report shall include a list of specimens recovered, documentation of each locality,	LADWP GBUAPCD	Construction	GBUAPCD CSLC	GBUAPCD CSLC	Monitoring Reports and Recovered Fossils Technical Report (submitted to the GBUAPCD within 90 days of completion of paleontological monitoring	_____ (Signature/Date of Monitoring Agency

Owens Lake Revised Moat and Row Dust Control Measures
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Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	interpretation of fossils recovered, and any technical or specialist's reports as appendices. The report and inventory, when submitted to the GBUAPCD, shall signify the completion of the program to mitigate impacts to paleontological resources.						
	Measure Cultural-2 in 2008 FSEIR: Cultural Resources Investigations (2008 SIP MMP, Table III-1) ► The GBUAPCD 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 CSLC shall be undertaken to mitigate impacts consistent with CSLC 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 GBUAPCD 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 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 GBUAPCD, and the LADWP 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 CSLC.	LADWP GBUAPCD	Construction	GBUAPCD	CSLC GBUAPCD 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

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Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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	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 GBUAPCD for those sites determined to be significant, pursuant to the State of California Environmental Quality Act, through Phase II testing and evaluation. The GBUAPCD 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 CSLC.						
	Measure Cultural-3 in 2008 FSEIR: Cultural Resources Monitoring Program (2008 SIP MMP, Table III-1) 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 GBUAPCD 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 historical resources as defined by the State of California Environmental Quality Act Guidelines Section 15064.5(a). ► 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 CSLC shall be made by the CSLC. Artifacts collected during past efforts on CSLC 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 CSLC has indicated that those artifacts collected from sites that were not eligible for the	LADWP	Preconstruction and Construction	GBUAPCD	CSLC GBUAPCD Native American Heritage Commission	Daily Monitoring Logs, Quarterly Monitoring Reports, and Final Monitoring Report	_____ (Signature/Date of Monitoring Agency

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Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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	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., BLM) 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. 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 GBUAPCD. A complete set of the daily monitoring logs shall be kept 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						

Owens Lake Revised Moat and Row Dust Control Measures
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Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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	the completion of the archaeological monitoring, a monitoring report shall be submitted to the GBUAPCD, the LADWP, the CSLC, and to the Eastern Information Center at the University of California, Riverside. The report, when submitted to the GBUAPCD, shall signify the completion of the program to mitigate impacts to unique archaeological resources or historical resources.						
Hazards and Hazardous Materials							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Hazards-1 in 2008 FSEIR: Hazardous Materials Transport (2008 SIP MMP, Table III-1) 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 Revised 2008 SIP, the LADWP 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. The LADWP shall submit proof of incorporation of this requirement in all construction contracts related to work specified in the Revised 2003 SIP to the GBUAPCD and Inyo County. The LADWP shall submit an Operation Plan for the routine transport, use, storage, handling, and disposal of hazardous materials to the GBUAPCD and Inyo County prior to the operation of DCMs specified in the Revised 2003 SIP. The LADWP shall provide to the GBUAPCD and Inyo County an annual update as required for the transport, use, storage, handling, and disposal of hazardous materials.	LADWP	Construction	Inyo County	CSLC GBUAPCD Inyo County	Operations Plan Report and Annual Updates	_____ (Signature/Date of Monitoring Agency
	Measure Hazards-2 in 2008 FSEIR: Spill Prevention Control and Countermeasure Program (2008 SIP MMP, Table III-1) To minimize impacts related to the unauthorized release of hazardous materials into the environment, the LADWP shall prepare a Spill Prevention Control and Countermeasure program applicable to all statutes and regulations. The LADWP shall submit a Spill Prevention Control and Countermeasure to Inyo County for review and approval. The LADWP shall demonstrate approval of the Spill Prevention Control and Countermeasure by Inyo County to the GBUAPCD prior to the use, storage, and handling of hazardous materials in conjunction with construction or operation of work specified in the Revised 2008 SIP. The Spill Prevention Control and Countermeasure shall address all above-ground storage tanks within the fertilizer injection and water treatment systems in accordance with all federal, state, and local laws and regulations. The LADWP shall enclose all the fertilizer injection and water treatment systems with a minimum 6-foot-high, barb-wiretopped, chain-link fence or equivalent enclosure and locked gate to prevent unauthorized access. The LADWP shall amend its existing lease with the State Lands Commission to allow for the improvement specified in this measure. The Spill Prevention Control and Countermeasure shall be in place throughout construction, operation, and maintenance of work specified in the Revised 2008 SIP.	LADWP	Construction, Operation, and Maintenance	CSLC	CSLC GBUAPCD Inyo County	Spill Prevention Control and Countermeasure Program	_____ (Signature/Date of Monitoring Agency
	Measure Hazards-3 in 2008 FSEIR: Emergency Response Business Plan (2008 SIP MMP, Table III-1) To minimize impacts related to the unauthorized release of hazardous materials into the environment, the LADWP shall develop a business plan for emergency response for the routine transport, use, storage, handling, and disposal of hazardous materials. The business plan for emergency response shall address preparation for possible emergencies involving hazardous materials. The LADWP shall provide copies of the approved business plan for emergency response to the GBUAPCD and Inyo County. The LADWP shall provide to the GBUAPCD and Inyo County an annual update to the approved business plan as required for the transport, use, storage, handling, and disposal of hazardous materials.	LADWP	Construction and Operation	CSLC	CSLC GBUAPCD Inyo County	Business Plan for Emergency Response and Annual Updates	_____ (Signature/Date of Monitoring Agency

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Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	Measure Hazards-4 in 2008 FSEIR: Fire Protection Services (2008 SIP MMP, Table III-1) To minimize the direct, indirect, and cumulative impacts related to the occurrence of wildland fires during construction and operation of work specified in the Revised 2008 SIP, the LADWP 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 GBUAPCD prior to construction of any additional DCMs.	LADWP	Construction	Inyo County	GBUAPCD Inyo County	Fire Protection Services Compliance Report	_____ (Signature/Date of Monitoring Agency
Hydrology and Water Quality							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Hydrology-1 in 2008 FSEIR: Acquire and Adhere to National Pollution Discharge Elimination System General Permit (2008 SIP MMP, Table III-1) To mitigate for direct, indirect, and cumulative surface water quality impacts caused by construction pollutants contacting storm water, products of erosion moving off site into receiving waters, and unauthorized non-storm water discharges, the LADWP 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 SIP. 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. 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 LADWP 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 LADWP shall submit the final Storm Water Pollution Prevention Plan to the GBUAPCD and the CSLC after its approval by the Regional Water Quality Control Board for the Lahontan Region.	LADWP	Construction	GBUAPCD	CSLC GBUAPCD RWQCB	Storm Water Pollution Prevention Plan and National Pollution Discharge Elimination System General Permit	_____ (Signature/Date of Monitoring Agency
	Measure Hydrology-2 in 2008 FSEIR: Water Quality Monitoring and Reporting Program (2008 SIP MMP, Table III-1) The LADWP, prior to issuing any Notices to Proceed for construction of work in the areas specified in the 2008 SIP, 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 GBUAPCD and the CSLC prior to the start of construction in the areas designated for dust control in the 2008 SIP. 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 GBUAPCD, the CSLC, 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	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Water Quality Monitoring Reports (submitted to the GBUAPCD and RWQCB within 60 days of end of monitoring period, and monitoring and reporting continued until monitoring completion in 2023 unless deemed unnecessary by the GBUAPCD)	_____ (Signature/Date of Monitoring Agency

<table>
<tr><th rowspan="2">Mitigation Number</th><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>
<tr><th>Source</th><th>Signature/Date</th></tr>
<tr><td></td><td>statistical analysis of current and baseline data) variation from the long-term baseline water data collected by the GBUAPCD for surface and groundwater quality and groundwater levels. The GBUAPCD 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 DCM areas shall be monitored for each day and month for the first five years of work specified in the 2008 SIP and thereafter as specified in Table 3.5.5-1.
► 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, potassium, selenium, sodium, carbonate, bicarbonate, phosphate, sulfate, vanadium, total alkalinity, total organic carbon (TOC), copper, chromium, zinc, bromide, Treflan (or Trifluralin), and sulfur.
<table>
<tr><th colspan="9">Table 3.5.5-1
Hydrology Monitoring and Reporting Schedule</th></tr>
<tr><th rowspan="2">Description</th><th colspan="8">Monitoring Schedule</th></tr>
<tr><th>2010</th><th>2011</th><th>2012</th><th>2013</th><th>2014</th><th>2016</th><th>2018</th><th>2023</th></tr>
<tr><td>Flow rates and total volumes of flow to all DCM areas</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td><td>Daily (report monthly)</td></tr>
<tr><td>Surface water quality of Shallow Flood areas</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td></tr>
<tr><td>Surface water quality of Managed Vegetation areas, if any</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td></tr>
<tr><td>Quality of groundwater that becomes exposed in Moat and Row areas</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td></tr>
<tr><td>Groundwater monitoring of perimeter project observation well</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Quarterly</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td><td>Annually (during DCM operation)</td></tr>
<tr><td colspan="9">Note: DCM = dust control measure</td></tr>
</table></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood Potential (2008 SIP MMP, Table III-1)
LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB.</td><td>LADWP</td><td>Operation</td><td>GBUAPCD</td><td>CSLC
GBUAPCD
RWQCB</td><td>Final Plans and Specifications</td><td>_____
(Signature/Date of Monitoring Agency</td></tr>
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Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
Land Use and Planning							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Land Use and Planning–1 in 2008 FSEIR: Resident Insect Control Program (2008 FSEIR Clarification Sheet, dated January 23, 2008) 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 LADWP shall institute a program for existing nearby residents whereby windows of existing residences in the potentially impacted communities of Swansea, Keeler, Cartago, and Olancha that are within three (3) miles of a water-based dust control measure shall be screened or other insect control devices shall 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 LADWP shall make arrangements for vector control treatments on the dust control measure areas and within the above-mentioned 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, or by other means, if the dust control measures are found to cause insect pest problems. This study shall be conducted by the LADWP, approved by Inyo County, and implemented before April 1, 2010.	LADWP	Operation	Inyo County	Inyo County GBUAPCD	Insect Control Program, Final Study Report, and Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency
Minerals							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
The mineral resources impact: erosion, deposition of sediment, or loss of ore material to brine pool, would be reduced to a less-than-significant level through the adoption of mitigation measures.							
	Measures Minerals – 1 in 2008 FSEIR: U.S. Borax Lease Area Approval and Compensation (2008 FSEIR Clarification Sheet, dated January 23, 2008) The LADWP shall be required to obtain approval from the CSLC prior to working in the areas that overlap areas leased to U.S. Borax. This includes areas requiring rerouting of access roads under mineral leases PRC 5464.1 and PRC 3511.10.	LADWP	Operation	CSLC	CSLC	Final Plans and Specifications	_____ (Signature/Date of Monitoring Agency
	Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood and Alluvial Sediment Damage Potential (2008 SIP MMP, Table III-1) The LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB.	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Final Plans and Specifications	
Transportation and Traffic							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Traffic-1 in 2008 FSEIR: Traffic Work Safety Plan (2008 SIP MMP, Table III-1) The LADWP 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 LADWP for each location on U.S. Highway 395, State Route 136, and State Route 190 that would be affected by the construction phase	LADWP	Construction and Operation	GBUAPCD	CSLC GBUAPCD Caltrans	Final Traffic Work Safety Plan	_____ (Signature/Date of Monitoring Agency

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Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	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 LADWP shall document to the GBUAPCD and CSLC 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 SIP, 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 LADWP 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 LADWP 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 LADWP would be subject to an encroachment permit from the California Department of Transportation.						
	Measure Traffic-2 in 2008 FSEIR: Traffic Work Safety Plan Conformance (2008 SIP MMP, Table III-1) The LADWP 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 LADWP shall demonstrate conformance with the measures specified in the approved Traffic Work Safety Plan by submitting quarterly compliance reports to the GBUAPCD, CSLC, and State of California Department of Transportation throughout the duration of the construction work specified by the 2008 Revised SIP, and related transportation and staging.	LADWP	Construction	GBUAPCD	CSLC GBUAPCD Caltrans	Final Traffic Work Safety Plan and Quarterly Compliance Reports (submitted until construction is complete)	
	Measure Traffic-3 in 2008 FSEIR: Regional Transportation Network Damage Repair (2008 SIP MMP, Table III-1) The LADWP 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 SIP to pre-project conditions. Prior to initiating construction of work specified by the 2008 Revised SIP, or related transportation and staging of equipment and materials, the LADWP 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 SIP. A California Department of Transportation representative shall participate with the qualified pavement consultant engineer. The LADWP 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 SIP and repair any damage immediately or in short term, or as specified by California Department of Transportation. The LADWP 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 LADWP, 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 SIP is completed, the LADWP shall provide written documentation to the GBUAPCD, CSLC 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	LADWP	Construction	GBUAPCD	CSLC GBUAPCD Caltrans	Final Plans and Specifications and Final Compliance Report (within 12 months of completing construction)	_____ (Signature/Date of Monitoring Agency

Owens Lake Revised Moat and Row Dust Control Measures
Mitigation Monitoring and Reporting Program
Summary Table

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	▸ 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						
Utilities and Service Systems							
Incorporation of Previously Adopted 2008 Final Subsequent Environmental Impact Report (2008 FSEIR) Mitigation Measures – No Revisions, Presented Below in their Entirety							
	Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood and Alluvial Sediment Damage Potential (2008 SIP MMP, Table III-1) The LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB.	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Pinal Plans and Specifications	_____ (Signature/Date of Monitoring Agency