

EXHIBIT A  
Findings of Fact and Statement of Overriding Considerations  
for the  
**Owens Lake Revised Moat and Row Dust Control Measures**



Lead Agency:  
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111 North Hope Street, Room 1044  
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September 2009

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## ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ATV	all-terrain vehicle
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CSLC	California State Lands Commission
DCA	dust control area
DCM	dust control measure
DFG	California Department of Fish and Game
GBUAPCD	Great Basin Unified Air Pollution Control District
GHG	greenhouse gas
IS	initial study
LADWP	City of Los Angeles Department of Water and Power
MMRP	Mitigation Monitoring and Reporting Program
NAAQS	National Ambient Air Quality Standards
NOP	notice of preparation
PRBO	Point Reyes Bird Observatory.
PM <sub>10</sub>	particulate matter
PRC	Public Resources Code
proposed project	Revised Moat and Row Project
RWQCB	Regional Water Quality Control Board
SEIR	Supplemental Environmental Impact Report
USEPA	United States Environmental Protection Agency

# 1 STATEMENT OF FINDINGS

## 1.1 INTRODUCTION

The Revised Moat and Row Project (proposed project) is 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 part of a larger dust control plan that was approved in 2008. The proposed project would encompass approximately 3.5 square miles of the 110-square mile dry Owens Lake bed located in Owens Valley approximately 5 miles south of the community of Lone Pine and approximately 61 miles south of the City of Bishop. LADWP proposes to reduce dust emissions in the Owens Valley Planning Area in order to eliminate exceedances of the federal particulate matter (PM<sub>10</sub>) standard, through the construction of landform features called moats and rows, which do not require the addition of supplemental water to reduce dust emissions from the lake bed.

A Supplemental Environmental Impact Report (SEIR) was prepared to evaluate the environmental effects of the Revised Moat and Row Project in accordance with the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 21000 et seq., and the State CEQA Guidelines, Title 14 California Code of Regulations (CCR) Section 15000 et seq. The SEIR is composed of the *Draft Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, June 2009, (2009 DSEIR) and the *Final Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, August 2009 (2009 FSEIR) (State Clearinghouse Number 2008121074). Prior to its proposed revision, the project was evaluated and adopted as part of the *2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (2008 FSEIR) (State Clearinghouse Number 2007021127) adopted by the Great Basin Unified Air Pollution Control District (GBUAPCD) in February 2008. Therefore, the Revised Moat and Row Project is a component of the larger, previously approved 2008 State Implementation Plan (SIP).

LADWP, as lead agency or public agency that has the primary authority to approve the Revised Moat and Row Project, must certify that the 2009 FSEIR is adequate according to the CEQA. LADWP must consider the 2009 FSEIR's environmental information when taking action on the project. Other public agencies with approval authority over the project, or elements of it, are considered responsible agencies; these agencies would consider the environmental effects of the project based on the 2009 FSEIR.

CEQA (PRC Section 21081) and the State CEQA Guidelines (Section 15091) provide that:

*[N]o public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:*

*(a) The public agency makes one or more of the following findings with respect to each significant effect:*

- (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.*
- (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.*
- (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.*

*(b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.*

Because the 2009 FSEIR identified significant environmental effects that may occur as a result of the project, and in accordance with the provisions of the State CEQA Guidelines, Board of Water and Power Commissioners hereby adopts these findings as part of the approval of the proposed project.

## **1.2 DESCRIPTION OF THE APPROVED PROJECT**

### **PROJECT LOCATION**

The Revised Moat and Row Project encompasses approximately 3.5 square miles of the 110-square-mile dry Owens Lake bed (which is part of the larger Owens Lake Planning Area) located in Owens Valley. Owens Lake is located approximately 5 miles south of the community of Lone Pine and approximately 61 miles south of the city of Bishop. In addition, Owens Lake is located approximately 11 miles east of the easternmost boundary of Sequoia National Park and approximately 19 miles west of the westernmost boundary of Death Valley National Park. It is bounded by State Route 136 to the north, State Route 190 to the south, and U.S. Highway 395 to the west. Part of the project is adjacent to the California Department of Fish and Game's (DFG's) Cartago Springs wildlife area.

### **OBJECTIVES OF THE PROJECT**

The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) by the implementation of 3.5 square miles of moat and row DCMs on the bed of Owens Lake by 2010. The dry Owens Lake bed is primarily owned by the state of California and managed by California State Lands Commission (CSLC). The objectives of the project are to:

- ▶ Implement 3.5 square miles of moat and row DCMs by April 1, 2010, pursuant to the 2008 SIP to achieve the PM<sub>10</sub> NAAQS;
- ▶ provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service;
- ▶ allow for the sparing use of water that would otherwise be delivered for municipal and industrial use and substantially reduce or eliminate the use of water in implementing new dust control projects on the Owens Lake bed;
- ▶ minimize or compensate for long-term, significant adverse changes to sensitive resources in the natural and human environment by implementing mitigation strategies proposed in this SEIR;
- ▶ create a dust control program with a high likelihood of success and without substantial delay;
- ▶ substantially conform to adopted plans and policies and existing legal requirements. These requirements include the NAAQS, the 1998, 2003 and 2008 SIPs and their associated EIRs, lease agreements and environmental and administrative permits with other agencies including CSLC, Lahotan Regional Water Quality Control Board (RWQCB), DFG, United States Environmental Protection Agency (USEPA) and GBUAPCD;
- ▶ minimize the long-term consumption of natural resources (e.g., water); and,

- ▶ be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake.

## ELEMENTS OF THE PROJECT

LADWP proposes to reduce dust emissions in the Owens Valley Planning Area in order to eliminate exceedances of the federal particulate matter (PM<sub>10</sub>) standard, through the construction of landform features called moats and rows. The moat and row DCM, as initially configured, is a method of dust control that does not require the addition of supplemental water to reduce dust emissions from the lake bed. A moat and row element is up to an 89-foot wide linear corridor that consists of an earthen berm (row) approximately 5-feet-high with 1.5:1 (horizontal to vertical) sloping sides and a base of up to 19 feet wide, an access road on both sides of the row of up to 15 feet wide, flanked on the other side by ditches (moats) approximately 4 to 5.5-feet-deep and up to 20 feet wide at the widest point. Rows serve as wind breaks and the primary function of the moats is to capture sand. Moat and row elements would typically be arrayed in a grid pattern oriented to be perpendicular with the primary and secondary wind directions. Minimum spacing of the elements will be approximately 100 feet center to center. Generally, the rows would run the length of the dust control area (DCA) with breaks in the rows at distances determined to be suitable for the habitat requirements for biological species present in the area as determined in the SEIR analysis. Other features that would be constructed within the moat and row DCAs include sand fences. Sand fences are generally constructed of a mesh fabric up to 5-feet tall with 14-inch diameter round or square arsenic-free wood treated posts supporting the fabric. The sand fences would be placed on top of rows or in open playa areas as determined to be appropriate through on-site monitoring of prevailing wind direction and speed. Construction of the moat and row DCMs may also include the application of a variety of enhancements within the moat and row areas to gain greater dust control efficiencies within the Owens Valley Planning Area. If in the future it were determined necessary, these enhancements would be implemented in response to air quality monitoring of PM<sub>10</sub> emissions in the moat and row DCAs.

### 1.3 ENVIRONMENTAL REVIEW PROCESS

Moat and row DCMs were evaluated and adopted as part of the *2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (State Clearinghouse Number 2007021127) adopted by GBUAPCD in February 2008. The 2008 FSEIR evaluated the implementation of 15.1 square miles of DCMs in the Owens Lake Planning Area. DCMs evaluated and approved included shallow flooding, moat and row elements, gravel blanket, and application of gravel as riprap (a loose assemblage of broken stones) on berms in shallow flooding ponds or as a cap on rows in moat and row elements. Approximately 3.5 square miles of moat and row DCMs were evaluated and approved in that project.

LADWP proposed changes to the design of the moat and row DCMs, and a more refined operations and maintenance plan in December 2007/January 2008 because modeling and field testing indicated that the originally proposed serpentine layout and spacing would not sufficiently control PM<sub>10</sub> emissions. These revisions to moat and row were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD. GBUAPCD determined that the design changes would not result in the need for any new additional environmental analysis and, thus, certified in the 2008 SIP FSEIR in February 2008. However, subsequent to publication and certification of the 2008 FSEIR, DFG and CSLC raised concerns over specific features of the moat and row DCM and its impact on wildlife, as well as other issues. In response to those concerns, LADWP agreed to prepare a supplemental EIR to address the design changes and revised operation and maintenance plan. The 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. In cases where only minor additions or changes to a previous EIR are required to make the previous EIR apply to the changed project, CEQA Guidelines Section 15163 allows the preparation of a supplement to a previously certified EIR if any of the conditions that require the preparation of a supplemental EIR are present. Further, CEQA Section 15163(b) states that the supplemental EIR need contain only the information necessary to make the previous EIR adequate.

Section 15162 of the State CEQA Guidelines specifies that when an EIR has been certified for a project, no subsequent EIR shall be prepared for a project unless the agency determines, based on substantial evidence, that:

- ▶ substantial changes are proposed or occur with respect to the circumstances under which the project is undertaken that will require major revisions to the previous EIR due to the involvement of significant effects or a substantial increase in the severity of previously identified significant effects;
- ▶ new information of substantial importance, which was not known and could not have been known at the time the previous EIR was certified, shows the following:
  - the project would have one or more significant effects not discussed in the previous EIR;
  - the significant effects previously examined would be substantially more severe than shown in the previous EIR;
  - mitigation measures or alternatives previously found to be infeasible would in fact be feasible and would substantially reduce one or more significant effects of the project; or
  - mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment.

In December 2008, an initial study (IS) was prepared by LADWP to determine whether the Revised Moat and Row Project would have a new or more severe significant effect on the environment when compared to the project considered in the 2008 FSEIR. Most of the issues related to land use (e.g., geology, hydrology, hazards, public services and utilities, recreation, mineral resources, agricultural resources, noise, and land use itself) were sufficiently evaluated in the 2008 FSEIR, and implementing the proposed project would not result in any new significant impacts in these areas. However, new potentially significant effects were identified for construction-related air quality, biological resources, and visual resources. Therefore, LADWP determined that a supplemental EIR was needed to analyze those effects. A notice of preparation (NOP) of the SEIR, along with the IS, was prepared and distributed (on December 16, 2008) to potential responsible and trustee agencies, and other parties of interest. A copy of the NOP/IS and comments received on the analysis are included in Appendix A of the 2009 DSEIR.

Consistent with Sections 15162 and 15163 of the State CEQA Guidelines, the 2009 DSEIR evaluated the impacts that would result from implementing the changed project that were not identified in the 2008 FSEIR or that would be more severe significant impacts under the proposed project. The 2009 DSEIR was released for public review from June 8, 2009 to July 22, 2009 to receive comments from interested parties on its completeness and adequacy in disclosing the environmental effects of the proposed project. Written responses to substantial environmental points raised in comments were prepared and published in the FSEIR dated August 2009. Together, the DSEIR, comments received on the DSEIR, responses to comments and any associated edits to the DSEIR text constitute the 2009 FSEIR, which was distributed to the agencies that had submitted written comments on the DSEIR on August 28, 2009.

## 1.4 RECORD OF PROCEEDINGS

The record of proceedings for LADWP's decision on the Revised Moat and Row Project consists of the following documents, at a minimum:

- ▶ *2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (State Clearinghouse Number 2007021127) adopted by GBUAPCD in February 2008



- ▶ *2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment of the State Implementation Plan Notice of Determination* February 2008
- ▶ Notice of Preparation and IS, dated December 16, 2008, and all other public notices issued by LADWP in conjunction with the project
- ▶ Scoping comments received from agencies and the public in response to the NOP, including comments received at the public meeting held on January 7, 2009 at the Inyo County, County Administrative Center, 224 North Edwards, Independence
- ▶ Notice of Availability, dated June 8, 2009, providing notice that the DSEIR had been completed and was available for public review and comment
- ▶ *Draft Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, June 2009 (State Clearinghouse Number 2008121074)
- ▶ Comments received from agencies and the public during the 45-day comment period on the DSEIR
- ▶ Comments received from agencies and the public at the public meeting on June 25, 2009 at the Inyo County, County Administrative Center, 224 North Edwards, Independence
- ▶ *Final Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measures*, August 2009
- ▶ Notice stating that the FSEIR is available, dated August 28, 2009
- ▶ The mitigation monitoring and reporting program for the project
- ▶ Findings of Fact, Statement of Overriding Considerations, and Resolution adopted by LADWP in connection with the project and all documents cited or referred to therein including:
  - All reports, studies, memoranda, maps, staff reports or other planning documents relating to the project prepared by LADWP, consultants to LADWP, or responsible or trustee agencies with respect to LADWP's compliance with the requirements of CEQA and with respect to LADWP's action on the project
  - All documents submitted to LADWP by other public agencies or members of the public in connection with the project, up through the certification of the 2009 FSEIR and approval of the project
  - Any minutes and/or verbatim transcripts of all information sessions, including public meetings and public hearings held by LADWP in connection with the project
  - Any documentary or other evidence submitted to LADWP at such information sessions, public meetings, and public hearings

LADWP is the custodian of the documents and materials that constitute the record of proceedings for the Owens Lake Revised Moat and Row DCMs. These documents are available for review upon request at:

City of Los Angeles Department of Water and Power  
 111 North Hope Street, Room 1044  
 Los Angeles, CA 90012  
 Contact: Tom Dailor, Environmental Supervisor 213/367-0221

## **1.5 MITIGATION MONITORING AND REPORTING PROGRAM**

A Mitigation Monitoring and Reporting Program (MMRP) was prepared for the project pursuant to the requirements of CEQA (see PRC Section 21081.6[a][1] and State CEQA Guidelines Section 15097). LADWP finds that the MMRP fulfills the requirements of CEQA, and the MMRP has been approved by the Board of Water and Power Commissioners within the same resolutions that adopt these findings. LADWP will use the MMRP to track compliance with the project mitigation measures. The MMRP will remain available for public review during the compliance period.

## **1.6 FINDINGS OF FACT**

### **1.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT**

The IS prepared for the Revised Moat and Row Project (December 16, 2008, see Appendix A of the 2009 DSEIR) identified those effects that were already addressed in the 2008 FSEIR, 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 FSEIR 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 FSEIR 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, the lead agency for the 2008 FSEIR, the GBUAPCD, 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 FSEIR. GBUAPCD adopted a Mitigation and Monitoring Plan, Findings of Fact and a Statement of Overriding Considerations dated January 14, 2008. These documents 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.

As described in Section 1.3, because new potentially significant effects were identified for construction-related air quality, biological resources and visual resources, these three resource areas were studied in the 2009 FSEIR. LADWP, as lead agency for the 2009 FSEIR, makes specific findings for impacts in these three resource areas in Section 1.6.2, "Effects Found to Be Significant," below.

### **CULTURAL RESOURCES**

GBUAPCD found that implementation of the 2008 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. GBUAPCD 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 FSEIR 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **HAZARDS AND HAZARDOUS MATERIALS**

GBUAPCD 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 increase occurrence of wildland fires. GBUAPCD 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 FSEIR 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **HYDROLOGY AND WATER QUALITY**

GBUAPCD 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. GBUAPCD 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 FSEIR 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **LAND USE AND PLANNING**

GBUAPCD 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. GBUAPCD 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **MINERAL RESOURCES**

GBUAPCD 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 designated by the U.S. Borax lease. GBUAPCD 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 FSEIR 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 Findings of Fact

and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **TRANSPORTATION AND TRAFFIC**

GBUAPCD found that implementation of the 2008 SIP has the potential to result in significant impacts to transportation and traffic related to substantially increasing hazards during construction due to turning vehicles or heavy trucks transporting materials and equipment to the site. GBUAPCD 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 FSEIR 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

## **UTILITIES**

GBUAPCD 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 mineral lease, causing either erosion, deposition of sediment, or loss of ore material to brine pool. GBUAPCD 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 FSEIR 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 Findings of Fact and Statement of Overriding Considerations dated January 14, 2008. LADWP, the lead agency for the 2009 Revised Moat and Row Project FSEIR, concurs with these findings of fact and hereby incorporates by reference those findings into this document.

### **1.6.2 EFFECTS FOUND TO BE SIGNIFICANT**

After reviewing the public record, as composed of the elements described in Section 1.4, “Record of Proceedings,” LADWP hereby makes the following findings regarding the significant effects of the proposed project, pursuant to Public Resources Code Section 21081 and Section 15091 of the State CEQA Guidelines, as explained in Section 1.1, “Introduction.”

## **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**

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the potentially significant adverse effects on western snowy plover.

## **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 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 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.

<b>Table 3.2.5-1 Biology-7, Postconstruction Bioaccumulation Monitoring Schedule</b>				
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 longterm 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.

<b>Table 3.2.5-2 Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule</b>			
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 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).

### 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 proposed 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

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.

A Statement of Overriding Considerations has been prepared (see Chapter 2, “Statement of Overriding Considerations,” of this document) to address the short-term construction emissions associated with implementation of the project.

### **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**

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, and 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, and the project could contribute to the continued potential violation of the NAAQS and the subsequent exposure of sensitive receptors to substantial pollutant concentrations. Thus, 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 result, 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**

Changes or alterations, which reduce but do not completely avoid the project's contribution to increased emissions, have been incorporated into the project, as explained below. While these mitigation measures would substantially reduce the significant project-generated emissions of criteria air pollutants, the residual impact would continue to be significant. Therefore, this cumulative air quality impact would be significant and unavoidable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address the project's contribution to the cumulatively considerable net increase in emissions and violation of the NAAQS.

#### **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 following 2008 FSEIR mitigation measures, 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 the continued exceedance of state and federal ambient air quality standards for ROG, NO<sub>x</sub>, PM<sub>10</sub>, and TACs. No other feasible mitigation is available. This would be a cumulatively significant and unavoidable impact.

### **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 would be included in the 2008 FSEIR CO<sub>2</sub> 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 CO<sub>2</sub> 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**

Changes or alterations, which reduce but do not completely avoid the project-generated GHG emissions, have been incorporated into the project, as explained below. While these mitigation measures would substantially reduce the significant effect due to increased GHG emissions, the residual impact would continue to be significant. Therefore, this cumulative air quality impact would be significant and unavoidable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address the project's contribution to cumulative GHG emissions.

### **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 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**

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. Thus, the actual amount of GHG emissions related to the project would be zero. As a result, the moat and row project would not contribute a significant amount of GHG to the cumulative condition beyond what was previously analyzed in the 2008 FSEIR. Therefore, the project's contribution to cumulative GHG emissions would be less than significant.

However, the GHG emissions quantified in 2008 FSEIR would continue and would contribute a significant amount to the cumulative condition. As a result, this impact would be the same as described in the 2008 FSEIR: cumulatively significant and unavoidable.

## **1.7 ALTERNATIVES**

In accordance with the Section 15126.6 of the State CEQA Guidelines, a range of reasonable alternatives to the project that could feasibly attain the basic project objectives was addressed in the 2009 FSEIR. First, three alternatives were evaluated as part of the 2008 FSEIR:

- ▶ Shallow Flooding Alternative
- ▶ All Managed Vegetation Alternative
- ▶ Gravel Application Alternative

Additionally, the 2009 FSEIR evaluated two alternatives to the proposed project:

- ▶ No-Project Alternative – continuation of 2008 SIP
- ▶ Off-Site Alternative

With regard to the alternatives evaluated in the SEIR, it is important to remember that the 2009 SEIR is a "supplement" to a previously prepared and approved EIR. LADWP has prepared a supplement to the Great Basin

Unified Air Pollution Control District's (GBUAPCD) 2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment State Implementation Plan (SIP) Final Subsequent EIR (approved February 2008) (2008 FSEIR). Per State CEQA Guidelines Section 15163, a supplemental EIR is needed if any of the conditions of a subsequent EIR (Section 15162 of the State CEQA Guidelines; generally the addition of significant new information that results in new or more severe environmental effects) occurs, but only minor changes are needed to make the previous EIR adequately apply to the project. "The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised." With specific regard to alternatives, the CEQA Guidelines are silent on whether to include an evaluation of alternatives in a subsequent or supplemental EIR. The decision to do so, therefore, falls to the lead agency's determination as to whether the significant new information requires consideration in the alternatives analysis. In the case of the Revised Moat and Row Project, new information regarding the availability of water supplies became known after the certification of the 2008 FSEIR and that information led to the development of two additional project objectives. The 2008 FSEIR alternatives analysis did not evaluate the alternatives against the two additional project objectives; therefore, LADWP incorporated the alternatives analysis included in the 2008 FSEIR and supplemented it with new information regarding the project objectives. This is consistent with the requirements of CEQA.

## **SHALLOW FLOODING ALTERNATIVE**

### *Characteristics*

The Shallow Flooding Alternative involves implementing the shallow flooding DCM over 15.1 square miles of the Owens Lake bed, including the 3.5 square miles of moat and row dust control areas (DCAs). No other DCMs would be implemented on Owens Lake. Shallow flooding generally consists of wetting emissive lake bed surfaces sufficiently to control dust emissions between October 1 and June 30 of each year. Approximately 75% of the DCAs would be wetted to achieve 99% dust control efficiency. Water would be released on the lake bed and would spread across the surface. Approximately 3–4 acre-feet of water would be used annually per acre of shallow flooding DCAs. In areas where moat and row DCMs are proposed (3.5 square miles of lake bed), this alternative would require installation of additional shallow flooding infrastructure (e.g., mainline, submain, lateral, and raiser pipes; perimeter berms; tailwater recycling facilities). Construction activities would result in disturbances to the lake bed throughout the 3.5-square-mile DCA; therefore, construction-related air quality impacts would be similar to the proposed project.

### *Comparative Impacts*

Although construction activities would result in comparable environmental impacts (e.g., air quality) to the proposed project, implementing the Shallow Flooding Alternative would provide greater habitat for biological species of concern, thereby resulting in a net biological benefit. Implementing this alternative would change the visual landscape from a dried lake bed to a wet lake bed, which is representative of historical conditions. Therefore, although views would be changed, they would be changed to reflect historic natural conditions and would be considered to be less adverse than under the proposed project.

### *Feasibility*

LADWP finds that the Shallow Flooding Alternative is not feasible to implement on an expanded basis on Owens Lake. No additional water supplies are available to expand shallow flooding (i.e., more water used) beyond what is previously approved for the lake bed.

### *Consistency with Project Objectives*

The 2008 FSEIR concluded that the Shallow Flooding Alternative would meet most of the 2008 FSEIR project objectives; however, because this alternative would entail the use of shallow flooding, the objective to minimize the long-term use of natural resources (e.g., water) would not be met (GBUAPCD, Findings of Fact and Statement

of Overriding Considerations, January 14, 2008, page V-11). This alternative was, therefore, rejected from further consideration by GBUAPCD (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, page V-7). LADWP concurs with this finding and incorporates by reference this finding into this document.

### ***Conclusion***

Overall, this alternative would result in reduced environmental impacts compared to the proposed project but would not meet important project objectives related to conservation of natural resources. Further, with regard to objectives established for the 2009 SEIR, this alternative would not meet the objectives to allow for the sparing use of water for non-municipal and industrial uses or to eliminate the use of water for new DCMs on Owens Lake. Further, in light of the changing water supply picture for LADWP, no additional water supplies are available to expand shallow flooding (i.e., more water used) beyond what is previously approved for the lake bed. Therefore, LADWP rejects the Shallow Flooding Alternative.

## **ALL MANAGED VEGETATION ALTERNATIVE**

### ***Characteristics***

The All Managed Vegetation Alternative involves implementing the managed vegetation DCM over 15.1 square miles of the Owens Lake bed, including the 3.5 square miles proposed for moat and row DCAs. No other DCMs would be implemented on Owens Lake. Under this alternative, vegetation would be planted in approximately 40-acre blocks and would be irrigated by a system of turnouts and pipelines. Implementing this alternative would require installation of infrastructure (e.g., mainline, submain, lateral, and riser pipes; irrigation lines; fertilizer injection; water treatment systems) in the 3.5-square-mile moat and row DCA. Construction activities would result in disturbances to the lake bed throughout the 3.5-square-mile DCA; therefore, construction-related air quality impacts would be similar. However, implementing this alternative would result in the complete transformation of the moat and row DCA from a sandy lake bed surface to planted vegetation.

### ***Comparative Impacts***

This alternative would affect the habitat of a biological species of concern (i.e., snowy plover) to a greater degree than the proposed project. Implementing the moat and row DCM would result in changes within a maximum 33% of the DCA, whereas the All Managed Vegetation Alternative would cover a greater percentage of the DCA; therefore, habitat impacts would be greater under this alternative. With regard to visual impacts, this alternative, like the proposed project, involves installation of human-made features (i.e., rows of vegetation) and would change views of the lake bed. The magnitude of the changes would be comparable to the changes that would occur under the proposed project but would present a different visual landscape (i.e., vegetation vs. moats and rows).

### ***Feasibility***

LADWP finds that the All Managed Vegetation Alternative is not feasible to implement on an expanded basis on Owens Lake because of the time needed for vegetation to reach the level of growth required for dust control would not allow dust control efficiencies to be achieved by April 2010, as prescribed in the 2008 SIP.

### ***Consistency with Project Objectives***

The 2008 FSEIR concluded that the All Managed Vegetation Alternative would meet most of the 2008 FSEIR project objectives; however, because of the time needed for vegetation to reach the level of growth required for dust control, the likelihood for success would be difficult to achieve by April 2010, as prescribed in the 2008 SIP. Further, this alternative would be costlier to implement compared to other alternatives considered (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, Page V-12). This alternative was,



therefore, rejected from further consideration by GBUAPCD. LADWP concurs with this finding and incorporates by reference this finding into this document.

### ***Conclusion***

Overall, impacts would be greater under this alternative than the proposed project. The All Managed Vegetation Alternative would meet most of the FSEIR project objectives; however, because of the time needed for vegetation to reach the level of growth required for dust control, the likelihood for success would be difficult to achieve by April 2010, as prescribed in the 2008 SIP. Further, implementing this alternative would result in greater biological habitat impacts compared with the proposed project. Finally, with regard to the objectives established for this SEIR, this alternative would not meet the objective to eliminate the use of water for new DCMs on Owens Lake.

## **GRAVEL APPLICATION ALTERNATIVE**

### ***Characteristics***

The Gravel Application Alternative involves applying gravel to cover 15.1 square miles of the Owens Lake bed, including the 3.5 square miles proposed for the moat and row DCMs. After the gravel cover is applied, limited maintenance would be required to preserve the gravel blanket. The gravel would be visually monitored to ensure that the gravel blanket was not filled with sand or dust or has not been inundated or washed out by flooding. If any of these conditions were observed, additional gravel would be transported to the project site and applied to the surface. Operation this alternative 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).

### ***Comparative Impacts***

Construction activities would result in disturbances to the lake bed throughout the 3.5-square-mile DCA; however, implementing this alternative would require the substantial importation of rock material from off-site areas, which would require a substantial number of truck trips to deliver this material. These truck trips would generate substantially greater diesel emissions compared to the construction activities associated with the proposed project; therefore, construction-related air quality impacts would be greater under this alternative. Additionally, implementing this alternative would result in the complete transformation of the moat and row DCA from a sandy lake bed surface to an imported gravel surface. These changes would affect the habitat of a biological species of concern (i.e., snowy plover) to a similar degree as the proposed moat and row DCA. Regarding visual impacts, this alternative, like the proposed project, involves installation of human-made features (i.e., a layer of gravel) and would change views of the lake bed. The magnitude of the changes would be comparable to the changes that would occur under the proposed project but would present a different visual landscape (i.e., rocky substrate vs. moats and rows).

### ***Feasibility***

LADWP finds that the Gravel Application Alternative is not feasible to implement in place of the project. Although gravel is a proven dust control measure and it would conform to adopted plans and policies, it could be incompatible with the State of California's public trust values because it would cover the lake bed with nonnative (to the lake) materials.

### ***Consistency with Project Objectives***

The 2008 FSEIR concluded that the Gravel Application Alternative would not meet most of the project 2008 FSEIR objectives. Although this alternative would conform to adopted plans and policies, it could be incompatible with the State of California's public trust values because it would cover the lake bed with nonnative (to the lake) materials. This alternative was, therefore, rejected from further consideration by GBUAPCD. LADWP concurs with this finding and incorporates by reference this finding into this document.

## ***Conclusion***

The Gravel Application Alternative would not meet most of the project objectives. Although this alternative would conform to adopted plans and policies, it could be incompatible with the State of California's public trust values because it would cover the lake bed with nonnative (to the lake) materials. This alternative would not minimize the proposed project's impacts on sensitive biological resources, and would result in comparable impacts with environmental tradeoffs. This alternative would result in greater construction-related diesel emissions compared to the proposed project and would result in similar impacts to visual resources. In addition, this alternative would not meet most of the 2008 FSEIR project objectives. Therefore, LADWP rejects the Gravel Application Alternative.

## **OFF-SITE ALTERNATIVE**

### ***Characteristics***

Off-site alternatives generally are considered in EIRs when one of the means to avoid or eliminate the significant impacts of a proposed project is to develop the project in a different, available location. They also are considered to provide a greater range of possible alternatives to consider in the decision-making process. The key question is whether an off-site alternative is available that would feasibly attain most of the basic objectives of the proposed project and that would avoid or substantially lessen any of the environmental effects of the project (State CEQA Guidelines Section 15126.6[a]).

### ***Consistency with Project Objectives***

The proposed project would need to be located in the historic Owens Lake bed because the main objective of the DCM is to reduce PM<sub>10</sub> emissions created on the dry lake bed. Goals and objectives of the proposed project would not be applicable to any sites other than the historic Owens Lake bed. In addition, the specific locations of dust control areas to construct DCMs were determined and identified as part of the 1998 SIP, 2003 Revised SIP, and 2008 SIP. Given this consideration, there are no alternative sites that can feasibly meet the project objectives. For this reason, an off-site alternative is not evaluated further in this SEIR.

### ***Feasibility***

Because the goals and objectives of the project would not be applicable to any sites other than the historic Owens Lake bed, there are no alternative sites that can feasibly meet the project objectives.

## ***Conclusion***

There are no alternative sites that can feasibly meet the project objectives. Therefore, LADWP rejects the Off-site Alternative.

## **NO-PROJECT ALTERNATIVE – CONTINUATION OF EXISTING CONDITIONS**

### ***Characteristics***

Under the No-Project Alternative – Continuation of Existing Conditions, moat and row DCMs would be constructed, operated, and maintained on Owens Lake in accordance with the 2008 SIP, which designed moat and row elements in a serpentine layout with spacing between 250 and 1,000 feet. Although moat and row DCMs were approved, as outlined in the 2008 SIP, LADWP modeling and field testing indicated that the originally proposed moat and row design would not sufficiently control PM<sub>10</sub>. In addition, the moat and row DCM likely would not be implemented because LADWP would not be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC). DFG and CSLC raised concerns over specific features of the moat and row DCMs related to potential impacts on wildlife and other issues. Without the changes

proposed for the moat and row DCMs, PM<sub>10</sub> emissions would not be sufficiently controlled and the regulatory agencies would not issue their permits for the moat and row DCMs; therefore, this element of the 2008 SIP would not be implemented.

### ***Comparative Impacts***

Because no construction activities would occur in the 3.5 square miles where moat and row DCMs are proposed, no construction-related air quality impacts would occur. Implementing the No Project Alternative would not result in the generation of short-term construction emissions beyond what was analyzed in the 2008 FSEIR, because the proposed modifications would not require any additional daily land disturbance, heavy-duty equipment usage, or construction personnel. Further, because the lake bed would not be altered with any human-made features, the less-than-significant visual impacts of the proposed project would not occur under the No-Project Alternative. Implementing this alternative also would eliminate the project's considerable contribution to a significant cumulative visual impact. Finally, biological resources impacts associated with the proposed project would not occur under this alternative, because no construction would occur on the 3.5-square-mile project site.

### ***Feasibility***

Without the revisions to the moat and row DCMs and the supplemental environmental analysis, the regulatory agencies would not issue permits for the moat and row DCMs and this element of the 2008 SIP would not be implemented.

### ***Consistency with Project Objectives***

Without implementation of the moat and row DCM, LADWP would not be able to meet the important dust control objectives outlined in the 2008 SIP. Therefore, implementation of the No-Project Alternative would result in a conflict with implementation of an adopted air quality plan.

### ***Conclusion***

Implementing the No-Project Alternative – Continuation of Existing Conditions would not meet the important dust control objectives of the 2008 SIP; would not achieve prescribed dust control efficiencies for the 3.5 square miles of the lake bed where moat and row DCMs are proposed; and would result in the inability of the air quality control plan to be fully implemented. Therefore, LADWP rejects the No-Project Alternative.

## **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

In addition to the discussion and comparison of impacts of the alternatives to the proposed project, CEQA Section 15126.6 provides for the identification of the “environmentally superior” alternative among the alternatives considered. In general, the environmentally superior alternative is the alternative that would generate the fewest or least severe adverse impacts. The No-Project Alternative was considered in this analysis, but it would not achieve any goals or objectives of the proposed project and would not achieve dust control efficiencies needed to protect public health in and around Owens Lake. Therefore, this alternative would result in environmental tradeoffs compared to the proposed project. Although other alternatives were evaluated as part of the 2008 FSEIR, two alternatives (i.e., All Shallow Flooding, All Managed Vegetation) were determined to not be feasible because of long-term use of natural resources (e.g., water). To elaborate, these alternatives are proven dust control measures to reduce dust emissions from Owens Lake. However, both of the alternatives rely on the availability of water to ensure success. For the reasons described on page 2-7 for the 2009 Draft SEIR, under “Current State of LADWP Water Supplies,” additional water to expand shallow flooding or managed vegetation dust controls on Owens Lake is not available and vegetation requires too much time to be useful. Further, the All Shallow Flooding Alternative would have been identified as the environmentally superior alternative, but it had already been considered and rejected based on the adoption of the 2008 Findings of Fact and Statement of Overriding Considerations for the 2008 FSEIR, including the fact that this alternative was not selected, despite it being

environmentally superior to the project. So while these alternatives are successful at achieving prescribed dust control efficiencies, they are not feasible alternatives to implement on Owens Lake in place of the moat and row project. The third alternative (i.e., Gravel Application) was determined to result in comparable impacts as the project. No other environmentally superior alternatives are available that would attain most of the proposed project's basic objectives and that could be feasibly implemented in the face of water scarcity. As a result, the proposed project is the environmentally superior alternative.

## **2 STATEMENT OF OVERRIDING CONSIDERATIONS**

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 (PRC Section 21083 and CEQA Guidelines Section 15093). The 2009 FSEIR identifies and discusses unavoidable significant effects that would occur as a result of the proposed project. With the implementation of the MMRP adopted by LADWP, 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 GHG. LADWP proposes to approve the Owens Lake Revised Moat and Row Dust Control Measures despite these significant unavoidable adverse impacts.

### **2.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

#### **2.1.1 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<sub>10</sub>) standard. The 6-month or more delay in implementation of 3.5 square miles of DCMs, due to the need for project changes to address wildlife impact concerns, would technically conflict with implementation of the applicable air quality plan. The project could contribute to the potential for additional violations of the 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.

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. Thus, the actual amount of GHG emissions related to this project would be zero. As a result, the moat and row project would not contribute a significant amount of GHG to the cumulative condition beyond what was previously analyzed in the 2008 FSEIR. Therefore, the project's contribution to cumulative GHG emissions would be less than significant.

However, the GHG emissions quantified in 2008 FSEIR would continue and would contribute a significant amount to the cumulative condition. As a result, this impact would be the same as described in the 2008 FSEIR: cumulatively significant and unavoidable.

### **2.2 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, LADWP 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 National Ambient Air Quality Standard (NAAQS) by 2010 of the largest single source of particulate matter (PM<sub>10</sub>) 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<sub>10</sub> 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<sub>10</sub> 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.
- ▶ The revised moat and row DCMs would minimize the long-term consumption of natural resources (e.g., water).
- ▶ In the absence of these additional areas of DCMs, there is no feasible way to accomplish the reduction of PM<sub>10</sub> through implementation of all Owens Lake bed PM<sub>10</sub> control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS without the addition of GHG emissions.
- ▶ LADWP has ensured that the project complies with Assembly Bill (AB) 32 goals to reduce GHG emissions to 1990 levels by estimating the GHG emissions and adopting feasible measures to avoid or reduce those emissions to the maximum extent practicable.<sup>1</sup>
- ▶ The State Attorney General purports that neither the California Environmental Quality Act (CEQA) nor the regulations authorize a lack of agency-adopted standard as a basis for determining that a project's potential cumulative impact is not significant. LADWP's inclusion of mitigation measures for GHG emissions exceeds the State Attorney General's current recommendations regarding CEQA-defined cumulative impacts related to GHG emissions.<sup>2</sup>

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<sup>1</sup> Association of Environmental Professionals. 29 June 2007. *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. Sacramento, CA. Available at: [http://www.califaep.org/userdocuments/File/AEP\\_Global\\_Climate\\_Change\\_June\\_29\\_Final.pdf](http://www.califaep.org/userdocuments/File/AEP_Global_Climate_Change_June_29_Final.pdf).

<sup>2</sup> State of California Office of the Attorney General. 7 May 2007. Comments on the ConocoPhillips Rodeo Refinery Expansion Project and Final Environmental Impact Report (File # LP052048). Letter from Jamie Jefferson to the Contra Costa County Planning Commission. Oakland, CA.

- ▶ CEQA requires that Lead Agencies inform decision makers and the public regarding potential significant environmental effects of proposed projects, feasible ways that environmental damage can be avoided or reduced through the use of feasible mitigation measures and/or project alternatives, and reasons why the Lead Agency approved a project if significant environmental effects are involved (State CEQA Guidelines §15002).
- ▶ The substantial evidence that mitigation measures Air-3, Air-4, Air-5, and Air-6 are capable of reducing GHG emissions regulated pursuant to the NAAQS is provided in the South Coast Air Quality Management District Air Quality Handbook<sup>3</sup> and the California Climate Action Registry.<sup>4</sup>
- ▶ In conjunction with approval of this project, LADWP has committed to the long-term reduction of PM<sub>10</sub> 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.

LADWP proposes to implement the Revised Moat and Row Dust Control Measures in order to reduced fugitive dust emissions and meet regulatory air quality standards. The project must be implemented notwithstanding the significant unavoidable adverse impact identified in the 2009 FSEIR.

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Department of Water and Power  
City of Los Angeles

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Date

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<sup>3</sup> South Coast Air Quality Management District. April 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

<sup>4</sup> California Climate Action Registry. March 2007. *California Climate Action Registry General Reporting Protocol: Reporting Entity-wide Greenhouse Gas Emissions. Version 2.2*. Los Angeles, CA. Available at: [http://www.climateregistry.org/docs/PROTOCOLS/GRP%20V2-March2007\\_web.pdf](http://www.climateregistry.org/docs/PROTOCOLS/GRP%20V2-March2007_web.pdf).

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