

Final Supplemental Environmental Impact Report
Owens Lake Revised Moat and Row
Dust Control Measures



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September 2009

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ACRONYMS AND ABBREVIATIONS

2008 FSEIR	<i>2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Subsequent Environmental Impact Report</i>
2009 DSEIR	2009 Draft Supplemental Environmental Impact Report
BACM	best available control measures
BLM	Bureau of Land Management
CAP	comprehensive lake-wide resource management plan
CEQA	California Environmental Quality Act
City	City of Los Angeles
CSLC	California State Land Commission
DCA	dust control areas
DCM	dust control measure
DFG	California Department of Fish and Game
DSEIR	Draft Supplemental Environmental Impact Report
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
FSEIR	Final Supplemental Environmental Impact Report
GBUAPCD	Great Basin Unified Air Pollution Control District
GBVAB	Great Basin Valleys Air Basin
GPS	global positioning system
IS	Initial Study
LAA	Los Angeles Aqueduct
LADWP	City of Los Angeles Department of Water and Power
mph	miles per hour
MWD	Metropolitan Water District
NAAQS	National Ambient Air Quality Standards
NOD	Notice of Determination
NOP	Notice of Preparation
NO _x	oxides of nitrogen
OVPA	Owens Valley Planning Area
PM ₁₀	particulate matter 10 microns in diameter or less
PM _{2.5}	fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less
proposed project	Owens Lake Revised Moat and Row Dust Control Measures Project
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SIP	State Implementation Plan
VRMP	Visual Resource Management Program

1 INTRODUCTION

This Final Supplemental Environmental Impact Report (FSEIR) has been prepared to respond to comments received on the Draft Supplemental Environmental Impact Report (SCH #208121074) dated June 2009 (2009 DSEIR) for the Owens Lake Revised Moat and Row Dust Control Measures Project (proposed project). The FSEIR has been prepared on behalf of the City of Los Angeles (City), Department of Water and Power (LADWP), the lead agency, in accordance with the requirements of the California Environmental Quality Act (CEQA).

Owens Lake is part of an ancient chain of lakes that was active during the Pleistocene era, about 1.8 million years ago. Due to geological factors (i.e., seismic uplift along the Coso Range, the post-glacial drying trend), water diversions to serve the Los Angeles Metropolitan Area, evaporation, and periodic drought the lake bed has become a brine pool surrounded by unstable soils. The unstable soils contribute to fugitive dust (particulate matter 10 microns in diameter or less, or PM₁₀) emissions during wind events. As a result of these emissions, in 1987 the U.S. Environmental Protection Agency (EPA) designated the Owens Lake Planning Area as non-attainment for the National Ambient Air Quality Standards (NAAQS) for PM₁₀. This required the Great Basin Unified Air Pollution Control District (GBUAPCD) to prepare a State Implementation Plan (SIP), which the EPA approved in 1998. The LADWP is required to implement the SIP.

After monitoring the lake bed and assessing the effectiveness of dust control measures (DCMs) already in place, GPUAPCD revised the SIP in 2003 to expand the area where DCMs would be implemented by 10.4 square miles. Additional areas were outlined in the 2008 SIP and potential environmental impacts were analyzed in the *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Subsequent Environmental Impact Report* (2008 FSEIR). LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner.

On June 8, 2009, the LADWP released the DSEIR for public and agency review and comment. The 2009 DSEIR evaluated the potential environmental effects of the proposed project, the No-Project Alternative, and the Off-Site Alternative. Ten comment letters were received from state and local agencies; organizations; and individuals, as well as oral testimony at a public hearing held at the Inyo County Administrative Office on June 25, 2009. The comment period closed on July 22, 2009.

This document and the 2009 DSEIR together comprise the 2009 FSEIR.

1.1 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

1.1.1 PROJECT LOCATION

The proposed project encompasses approximately 3.5 square mile of the 110-square-mile dry Owens Lake bed (which is part of the larger Owens Lake Planning Area) located in Owens Valley, California. 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 DFG's Catago Springs wildlife area.

1.1.2 PROJECT OBJECTIVES

The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the NAAQS for PM₁₀. This would be accomplished by the implementation of moat and row DCMs on the bed of Owens Lake by 2010. The dry Owens Lake Bed is primarily owned and operated in trust for the people of California by CSLC. Therefore, the project must also be consistent with the State of California's obligation of land and resource stewardship. 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 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 Owen 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 the 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 environmental impact reports (EIRs), lease agreements, and environmental and administrative permits with other agencies including CSLC, Lahontan Regional Water Quality Control Board (RWQCB), DFG, EPA, and GBUAPD;
- ▶ 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.

1.1.3 ELEMENTS OF THE PROPOSED PROJECT

Prior to considering the proposed project revisions included in this EIR, a variant of the project was evaluated and adopted as part of the 2008 FSEIR (adopted by the Great Basin Unified Air Pollution Control District in February 2008). The 2008 FSEIR evaluated the implementation of 15.1 square miles of DCMs in the Owens Lake Planning Area including: shallow flooding, approximately 3.5 square miles of moat and row elements (the subject of this SEIR), 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.

Implementation of the proposed project would result in changes to the design of the moat and row elements and a more robust operations and maintenance plan. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project.

However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner. The proposed project involves a change to only one element, moat and row, of the larger dust control program evaluated in the 2008 FSEIR. Most of the issues related to land use (e.g., geology, hydrology, land use, hazards, public services, 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. For this reason, LADWP determined that an SEIR that focuses on the issues of construction-related air quality, visual resources, and biological resources would comply with CEQA requirements. Consistent with Section 15162 and 15163 of the State CEQA Guidelines, this SEIR evaluates the impacts that would result from implementing the changes to the project that would cause more severe significant impacts than identified in the 2008 FSEIR. LADWP proposes to reduce dust emissions on the dry Owens Lake bed, particularly achieving adopted control efficiencies for PM₁₀, through the construction of landform features called moats and rows. Moat and row DCMs would be constructed on 3.5 square miles of the Owens Lake bed.

1.1.4 SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

1.1.4.1 ALTERNATIVES EVALUATED IN THE 2008 FSEIR

The moat and row DCM was originally approved as part of the 2008 SIP project (approved by GBUAPD in February 2008). The 2008 FSEIR evaluated project alternatives associated with implementing moat and row DCMs on the historic Owens Lake bed, as well as other alternatives. In addition to the 2008 FSEIR proposed project, three action alternatives were analyzed, as discussed below.

- ▶ **Shallow Flooding Alternative:** The Shallow Flooding Alternative involves implementing the shallow flooding DCM over 15.1 square miles of the Owens Lake bed, including the 3.5 miles of moat and row dust control areas (DCAs). The 2008 FSEIR concluded that while the Shallow Flooding Alternative would result in reduced environmental impacts compared to the proposed project, it would not meet the objective to minimize the long-term consumption of natural resources. It also found that this alternative may be difficult to implement due to maintenance issues. Further, with regard to objectives established for this SEIR, this alternative would not meet the objectives to allow for the sparing use of water for new dust control measures on Owens Lake and would reduce LADWP's ability to provide reliable water to its customers.
- ▶ **All Managed Vegetation Alternative:** 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. The 2008 FSEIR concluded that 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, per the 2008 FSEIR, 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 minimize the use of water for new DCMs on Owens Lake.
- ▶ **Gravel Application Alternative:** The Gravel Application Alternative involves applying gravel to cover 15.1 square miles of the Owens Lake bed, including 3.5 square miles proposed for the moat and row DCMs. 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 would not minimize the proposed project's impacts on sensitive biological resources, and would result in comparable impacts with environmental tradeoffs.

1.1.4.2 Alternatives Evaluated in the 2009 DSEIR

- ▶ The 2009 DSEIR also evaluated two alternatives to the proposed project, as follows.
- ▶ **No-Project Alternative – continuation of 2008 SIP:** Under the No-Project Alternative, moat and row DCMs would be constructed, operated, and maintained on the Owens Lake in accordance with the 2008 SIP. Although moat and row DCMs were approved, as outlined in the 2008 FSEIR, DFG and CSLC raised concerns over specific features of the moat and row DCMs (e.g., wildlife). Because it would be unlikely that LADWP would be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC), the revisions discussed in this SEIR were made. Without issuance of necessary permits, 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.
- ▶ **Off-Site Alternative:** Off-site alternatives are generally considered in EIRs as a means to avoid or eliminate the significant impacts of a proposed project in a different, available location. Because the proposed project would need to be located in the historic Owens Lake bed to reduce PM₁₀ emissions, an off-site alternative is not feasible.

1.2 PURPOSE OF THE FINAL SEIR

CEQA requires a lead agency that has completed a Draft EIR, including a Draft SEIR, to consult with and obtain comments from public agencies that have legal jurisdiction with respect to the proposed action, and to provide the general public with opportunities to comment on the Draft EIR. This FSEIR has been prepared to respond to comments received on the 2009 DSEIR for the proposed project.

1.3 CEQA REQUIREMENTS FOR RESPONDING TO COMMENTS

The State CEQA Guidelines Section 15088 states that the lead agency shall evaluate and prepare written responses to comments on the Draft EIR received during the noticed comment period. Responses must provide a reasoned analysis, supported by factual information. Responses to comments from public agencies must be provided 10 days prior to certification of an EIR, including an SEIR.

1.4 REQUIREMENTS FOR EIR CERTIFICATION AND FUTURE STEPS IN PROJECT APPROVAL

This FSEIR is intended to be used by the LADWP when considering approval of the proposed project or an alternative to the proposed project.

In accordance with CEQA, the 2009 DSEIR was circulated for public and agency review and comment on June 8, 2009. The comment period closed on July 22, 2009. During the comment period on the 2009 DSEIR, written comments were received from state and local agencies; organizations; and individuals, as well as oral testimony at a public hearing held during the review period on June 25, 2009. Following completion of this FSEIR, the LADWP will hold a public meeting to consider certification of the FSEIR and to decide whether or not to approve the Proposed Action or an alternative. A Notice of Determination (NOD) will then be filed. If the LADWP approves the proposed project (or an alternative), it will prepare and adopt written findings of fact for each significant environmental impact identified in the FSEIR; a Statement of Overriding Considerations, if needed; and a Mitigation Monitoring and Reporting Program.

1.5 ORGANIZATION AND FORMAT OF THE FINAL SEIR

This document is organized as follows:

- ▶ **Chapter 1, “Introduction,”** describes the purpose and content of the FSEIR, provides an overview of the environmental review process, and presents a summary of the proposed project and alternatives.
- ▶ **Chapter 2, “Comments and Responses,”** contains a list of all those who submitted comments on the 2009 DSEIR during the public review period, copies of the comment letters received, and individual responses to the comments.
- ▶ **Chapter 3, “Revisions to the Draft EIR,”** presents revisions to the 2009 DSEIR text based on issues raised by comments, clarifications, or corrections. Changes in the text are signified by ~~strikeouts~~ where text is removed and by underline where text is added.
- ▶ **Chapter 4, “Report Preparation,”** lists the individuals who assisted in the preparation of this FSEIR.

2 COMMENTS AND RESPONSES

This chapter contains comments received during the public review period for the 2009 Draft Supplemental Environmental Impact Report (2009 DSEIR) for the Owens Lake Revised Moat and Row Dust Control Measures (SCH#2008121074). In conformance with State CEQA Guidelines Section 15088(a), written responses to comments on environmental issues received from reviewers of the 2009 DSEIR have been prepared.

Comment letters and responses to comments are arranged in the following order: state agencies, local agencies, organizations, individuals, and comments from the June 25, 2009 Public Hearing. Each letter and each comment within a letter have been given an identification number. Responses are numbered so that they correspond to the appropriate comment. Where appropriate, responses are cross-referenced between letters.

As noted previously, a public hearing on the 2009 DSEIR was conducted at the Inyo County Administrative Center on June 25, 2009. Eight public comments were received at this hearing.

2.1 LIST OF COMMENTERS

Table 2-1 provides a list of 2009 DSEIR commenters, the ID number for their comment letter, and the page on which to find the comment letter and the associated responses.

Table 2-1 List of Commenters			
Commenter	Agency	Letter ID	Page Number
State Agencies (S)			
Bruce Kinney, Deputy Regional Manager	California Department of Fish and Game	S1	2-17
Gail Newton, Chief, Division of Environmental Planning and Management	California State Lands Commission	S2	2-37
Local Agencies (L)			
Theodore D. Schade, P.E., Air Pollution Control Officer	Great Basin Unified Air Pollution Control District	L1	2-72
Organizations (O)			
Richard Button, Tribal Chairman	Lone Pine Paiute-Shoshone Reservation	O1	2-91
Thomas R. Noland, President	Inyo Mono Alpine Cattlemen's Association	O2	2-94
Daniel Taylor, Director of Public Policy	Audubon California	O3	2-96
Daniel Taylor, Director of Public Policy	Audubon California	O4	2-98
Mark Bagley	Sierra Club Owens Valley MOU Representative and Owens Valley Committee Legal and Policy Liaison	O5	2-120
Individuals (I)			
Thomas J. Talbot, D.V.M.	----	I1	2-109
Bruce Pischel	----	I2	2-111
Public Hearing (PH)			
June 25, 2009 Public Hearing	----	PH1	2-113

2.2 COMMENTS AND RESPONSES

The comments received on the 2009 DSEIR and the responses to those comments are provided in this section. Each comment letter, as well as the public hearing transcript, are reproduced in their entirety and are followed by the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter.

Because some topics were raised in multiple comments, Section 2.2.2 contains three “master” responses. The master responses address comments related to disagreement with the conclusions of the DSEIR, project objectives and alternatives, and compensatory mitigation for biological resources. The intent of a master response is to provide a comprehensive response to an issue or set of interrelated issues, so that all aspects of the issue can be addressed in a coordinated, organized manner in one location. When an individual comment raises an issue discussed in a master response, the response to the individual comment is cross-referenced to that appropriate master response.

2.2.1 COMMENTS THAT DO NOT RAISE ENVIRONMENTAL ISSUES

As specified in Section 15088(b) of the State CEQA Guidelines, the focus of the responses to comments shall be on the disposition of significant environmental issues. Responses are not required on comments regarding the merits of the project. Many of the comments express opinions about the merits of some aspect of the project. Comments on the merits of the project are being forwarded to the Los Angeles Department of Water and Power (LADWP) decision-makers for consideration prior to taking an action on the project. The phrase “the comment is acknowledged” is used to acknowledge a comment that does not directly pertain to the environmental issues analyzed in the 2009 DSEIR; does not ask a question about the 2009 DSEIR; or does not challenge information in or conclusions of the 2009 DSEIR. The intent is simply to recognize the comment.

2.2.2 MASTER RESPONSES TO COMMENTS

LADWP prepared “Master Responses” to respond to environmental issues that were raised multiple times by multiple commenters. The master responses are generally more extensive than individual responses provided in this Chapter, and may cover several related issues raised by a variety of commenters. The master responses are provided below.

MASTER RESPONSE 1 – DISAGREEMENT REGARDING THE CONCLUSIONS OF THE 2009 DSEIR

Several commenters expressed their disagreement with the conclusion that the project’s impacts would be less than significant for visual resources. The State CEQA Guidelines require that decisions regarding the significance of environmental effects addressed in an EIR be based on substantial evidence and recognize that other evidence suggesting a different conclusion may exist. The DSEIR provides a comprehensive evaluation of the project’s environmental impacts in compliance with CEQA and the State CEQA Guidelines and in accordance with professionally accepted methodology for the evaluation of environmental resources. The DSEIR and this Response to Comments document present substantial evidence to support the conclusions drawn within these documents regarding the significance of the project’s environmental effects. When commenters disagree with an EIR’s conclusions, the EIR can acknowledge that disagreement, but it need not resolve all debates. Section 15151 of the State CEQA Guidelines states that: “Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts.” The lead agency will ultimately determine which conclusion is appropriate, based on the substantial evidence presented in the EIR, comments on the EIR, and other documents which, together, form the whole of the record.

The comment letters and responses to them present summaries of the areas of disagreement. In some cases, there is no substantial evidence offered by commenters to support that a different conclusion should be drawn. As such, no further response to disagreements presented in the comment letters is necessary. If evidence is provided by the

commenter to support the disagreement with the DSEIR's conclusion, the evidence is summarized and considered in making the DSEIR's conclusion. LADWP will review and consider all the substantial evidence in light of the whole of the record in making its decisions about the project and its environmental effects.

MASTER RESPONSE 2 – ADEQUACY OF THE ALTERNATIVES ANALYSIS PRESENTED IN THE EIR

Multiple commenters addressed issues regarding the appropriateness and adequacy of the alternatives analysis presented in the EIR. Among the comments raised were the following:

- ▶ The alternatives analysis goes beyond what is required by CEQA for a supplemental EIR and should be deleted from the EIR;
- ▶ The EIR introduces significant new information regarding new project objectives;
- ▶ The project objectives alter the setting of the alternatives analysis;
- ▶ The alternatives analysis should focus only on the 3.5 square miles of proposed moat and row dust control measures (DCMs);
- ▶ The EIR should address multiple alternatives for each dust control area (DCA);
- ▶ The analysis of the No Project Alternative is not correct and does not assume that the moat and row DCMs would be implemented according to the design plans approved in the *2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent EIR* (2008 FSEIR); and
- ▶ Other issues were raised by individual comments.

These individual comments can be found later in this section. The following information is provided as a master response to the above issues.

CEQA Requirements for Alternatives Analysis

Section 15126.6 9 (a) of the State CEQA Guidelines prescribes the requirements for alternatives analysis in an EIR. As stated therein,

“an EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the project objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider project alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature and scope of the alternatives to be discussed other than the rule of reason.”

The guidance specifically states that the alternatives should: 1) feasibly attain most of the project objectives; 2) evaluate the comparative merits of the alternatives; and 3) consider a reasonable range of alternatives and explain why those alternatives were selected. Section 15126.6 (b) of the State CEQA Guidelines provides further guidance that the discussion of alternatives should focus on those that “are capable of avoiding or substantially lessening any significant environmental effects of the project.” Therefore, in developing a reasonable range of alternatives to be evaluated, lead agencies are directed to develop alternatives that accomplish most of the basic objectives of the project and that avoid or lessen one or more of the significant environmental impacts of the

project (Section 15126.6(c)). Under this legal structure, neither mitigation nor alternatives need to be considered unless a proposed project will cause significant adverse environmental effects.

Supplemental EIRs

With regard to the alternatives evaluated in this EIR, it is important to remember that this EIR 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 PM₁₀ 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.”

The 2008 FSEIR evaluated the implementation of 15.1 square miles of DCMs within the Owens Lake Planning Area. DCMs evaluated and approved included shallow flooding, moat and row elements, and application of gravel as riprap (a loose assemblage of broken stones) on berms within 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 by GBUAPCD. While GBUAPCD was the agency responsible for regulating air emissions from the dry Owens Lake bed, adopting the 2008 SIP, and certifying the 2008 FSEIR, LADWP was the agency charged with constructing, operating, and maintaining the dust control measures described and evaluated in the 2008 FSEIR, including 3.5 square miles of moat and row DCMs. LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner.

Consistent with the requirements of CEQA, LADWP engaged in discussions with GBUAPCD regarding the details of the proposed design changes for the moat and row DCM element, or component, of the approved 2008 SIP. No other changes to SIP’s other DCM elements (e.g., managed vegetation or shallow flooding), or operations evaluated in the 2008 FSEIR were proposed. It was determined that LADWP would serve as the CEQA lead agency in determining whether the effects of the proposed moat and row design changes were adequately evaluated in the GBUAPCD’s 2008 FSEIR. In response to concerns expressed about the new design from DFG and CSLC, and to support and inform LADWP’s review of the proposed design changes, LADWP prepared an Initial Study (included as Appendix A to the 2009 DSEIR) that comprehensively evaluated the potential environmental effects of LADWP’s proposed design changes to the moat and row component of the 2008 SIP (*i.e.*, “Revised Moat and Row Project”¹) and considered whether the previously certified 2008 FSEIR adequately addressed all environmental impacts associated with the moat and row design changes. Importantly, the Initial Study described whether the Revised Moat and Row Project (*i.e.*, the revised moat and row element of

¹ It is essential to recognize that the “Revised Moat and Row Project” is not an isolated, stand-alone project that is separate and apart from the shallow flooding and other DCM elements approved in the adopted 2008 SIP. Rather, the Revised Moat and Row Project is an element of the approved 2008 SIP that has been called out for further CEQA review to ensure that LADWP and other responsible and trustee agencies are fully informed about the significance of any environmental effects arising from the refinements in the design and operation of this particular 2008 SIP DCM element.

the approved 2008 SIP) would result in any new or more severe significant environmental impacts not addressed in the GBUAPCD's 2008 FSEIR. The Initial Study concluded that the Revised Moat and Row Project might result in potentially significant environmental impacts with respect to construction-related air quality, biological resources and visual resources.

Pursuant to Section 15162(a) and (c) of the State CEQA Guidelines (related to preparation of subsequent EIRs), when a project has been approved based on a certified EIR, no subsequent EIR shall be prepared in connection with any further discretionary decisions on the project unless the decisionmaking agency determines, based on substantial evidence, that:

- ▶ substantial changes are proposed with respect to the project 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;
- ▶ substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- ▶ 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.

Here, the design of the originally approved moat and row element of the 2008 SIP has been revised, and this revised element's operations and maintenance plan has been refined. Those changes were not known when the 2008 FSEIR was prepared. Therefore, further analysis of the environmental effects of the changes is required under CEQA. However, these changes only affect the moat and row element of the larger dust control program approved in the adopted 2008 SIP that was evaluated in the GBUAPCD's 2008 FSEIR. For example, the shallow flooding element of the 2008 SIP already is fully approved is now under construction. 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 (*i.e.*, an "SEIR") if any of the conditions that require the preparation of a subsequent EIR are present. Further, CEQA states that the SEIR need contain only the information necessary to make the previous EIR adequate. There is no other guidance within CEQA prescribing detailed content requirements for a supplemental EIR or, for that matter, a subsequent EIR. In either case, the document is prepared in light of the information in the prior EIR, and must address the new information and provide the analysis that, along with the prior EIR, will inform the public and decision makers of the environmental impacts of the project (here, the revised moat and row component of the 2008 SIP, or the "Revise Moat and Row Project"). Thus, it is the lead agency's obligation to include all of the information it finds relevant to addressing the new significant information in a way that, together with the prior EIR, makes the analysis complete and adequate.

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 an alternatives analysis is relevant to the new information resulting in preparation of a

subsequent or supplemental EIR. For a discussion of LADWP’s reasoning on why it chose to re-evaluate the alternatives presented in the 2008 FSEIR, please refer to the section below, titled “The Relationship Between Project Objectives and Alternatives.”

RELATIONSHIP BETWEEN PROJECT OBJECTIVES AND ALTERNATIVES

As described above, one purpose of an alternatives analysis is to view the various alternatives to the project in the context of whether they attain most of the basic objectives of the project. State CEQA Guidelines Section 15124 requires that an EIR include in the project description “a statement of objectives sought by the project” and that the “statement of objectives should include the underlying purpose of the project.” Consistent with the requirements of CEQA, LADWP in its role as the CEQA Lead Agency and project proponent developed its objectives for the project in light of best available information at the time the 2009 DSEIR was published. These objectives are presented in Section 2.3, “Project Goals and Objectives,” of the 2009 DSEIR.

Some commenters have expressed concern that the project objectives presented in the 2009 DSEIR are not a verbatim repetition of the objectives presented in the GBUAPCD’s 2008 FSEIR. In that regard, it is important to note that the GBUAPCD, not LADWP, was the CEQA lead agency for the 2008 FSEIR. As a result, it was GBUAPCD’s responsibility to develop its objectives for that project. LADWP is the lead agency for further CEQA review of the Revised Moat and Row Project. As the lead agency, LADWP is obliged to review the GBUAPCD’s statement of its project objectives in the 2008 FSEIR and to consider whether the GBUAPCD’s objectives adequately encompass LADWP’s lead agency objectives for the Revised Moat and Row Project. Upon completing that review, LADWP concluded that the project objectives stated by the GBUAPCD—as a single-purpose air pollution regulator—did not encompass with sufficient breadth and clarity some of LADWP’s most basic objectives in proposing to carry out the Revised Moat and Row Project as an element of the 2008 SIP. Although LADWP’s objectives encompass the ones stated by the GBUAPCD in its 2008 FSEIR, LADWP determined that its 2009 SEIR must also expressly acknowledge LADWP’s role as a public water supplier confronting mounting threats to the long-term reliability of its water supply sources. The threats to LADWP’s largest single source of water supply dramatically increased after the GBUAPCD’s certification of the 2008 FSEIR and SIP. Thus, although LADWP’s statement of objectives for the Revised Moat and Row Project encompassed the objectives previously stated by the GBUAPCD, LADWP’s 2009 Draft SEIR expanded the statement of objectives to clarify one of the most basic purposes of the Revised Moat and Row Project as an element of the 2008 SIP that would control dust without using fresh water supplies that otherwise would serve the citizens, workplaces, and public facilities of Los Angeles. This information was not known at the time the GBUAPCD prepared the 2008 FSEIR; in fact, this information did not exist at the time of the 2008 FSEIR. Because the new information regarding the availability of water supplies had, and still has, substantial implications on LADWP’s ability to serve fresh water to its customers, it was incumbent on LADWP to add objectives related to this new information to ensure that it would be considered by LADWP’s Board in making their determinations. Thus, LADWP’s 2009 DSEIR added the following two objectives to the ones previously stated by the GBUAPCD (refer to page 2-9 of the 2009 DSEIR and page 2-8 of the 2008 FSEIR):

- ▶ provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service; and
- ▶ 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.

The preceding additional objectives acknowledge LADWP’s role as the public water supplier for the largest city in California and respond to new information about increasing threats to the reliability of LADWP’s sources of water supply. LADWP as a retail water provider is charged with ensuring that it has adequate water supplies to serve its customers now and into the future. LADWP has been actively engaged in monitoring the physical

drought conditions that are persistent throughout the State, as well as increasing environmental regulatory restrictions affecting LADWP's sources of water supply.

Those environmental regulatory restrictions include new federal Biological Opinions issued under the federal Endangered Species Act (ESA) by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) for the coordinated operation of the State Water Project (SWP) and federal Central Valley Project (CVP) to protect delta smelt, salmon, steelhead and other threatened and endangered fish species in the Sacramento-San Joaquin River Delta (Delta). The USFWS Biological Opinion was issued in December 2008 and the NMFS Biological Opinion was issued in June 2009. These Biological Opinions have reduced the water supplies available to LADWP and other public water suppliers in the region.

As described on page 2-7 of the 2009 DSEIR under "Current State of LADWP Water Supplies" and in Appendix D of the 2009 DSEIR, LADWP receives the majority of its water from the Los Angeles Aqueduct (LAA) and from Metropolitan Water District (MWD), with some supplies provided by groundwater and recycled water. Of all LADWP's sources of water supply, water purchased from MWD is by far the largest percentage of supplies (i.e., 53%). MWD imports water to Southern California from two sources, the Colorado River and the SWP. Of the water that LADWP obtains from MWD, 100 percent of the water that LADWP obtains to replace the LAA water consumed by Owens Lake dust mitigation originates from MWD's SWP supplies. (*See* Appendix D to 2009 Draft SEIR.) Those SWP supplies are delivered through the Delta. That means that natural drought conditions and environmental regulatory restrictions that affect SWP supplies (some have referred to this as a "regulatory" or a "legal" drought) have a direct effect on LADWP supplies. In fact, because SWP supplies are the largest component of total LADWP water supplies, even a seemingly small reduction in SWP water delivered to MWD has a substantial affect on LADWP's ability to obtain replacement water needed to maintain water service.

Information regarding the changing state of water supplies and how the long-term availability of replacement water from the SWP would be reduced did not start to become known until after the 2008 FSEIR was approved (mid-February 2008). The December 2008 USFWS Biological Opinion and the June 2009 NMFS Biological Opinion reducing the long-term availability of SWP water to MWD, and thence to LADWP, both arose after the GBUAPCD certified the 2008 FSEIR and approved the 2008 SIP in February 2008. The long-term average annual SWP water delivery reductions projected to result from the NMFS Biological Opinion are expected to range from a high of 260,000 acre feet per year (AFY) to a low of 80,000 AFY, with a reduction of 150,000 AFY deemed most likely. The long-term average water delivery reduction projected to result from the USFWS Biological Opinion and the NMFS Biological Opinion, combined, is expected to range from a high of 42% (1.33 million AFY) to a low of 18% (620,000 AFY), with a 30% reduction (1.01 million AFY) deemed most likely. These projections of delivery reductions are understood to be the best estimates currently available.

These reduced water supplies in combination with the statewide drought conditions and resulting water crisis have led LADWP to undertake serious water conservation actions within its jurisdiction. One of those actions is to reduce or eliminate water uses that are not essential to delivering water to the families and workplaces that are LADWP's customers. In the case of the Revised Moat and Row Project, LADWP's approaches to controlling dust at Owens Lake must be informed by the need to provide adequate public water supplies to its customers in the face of supply sources that are diminishing. The Revised Moat and Row Project is a feasible, proven measure to control Owens Lake dust without using fresh water. In the face of diminishing water supplies, LADWP's Draft SEIR simply acknowledged that one of the most basic objectives of the Revised Moat and Row Project is to achieve effective dust control through measures that minimize or avoid the use of water. That simply amplifies, or clarifies, the original 2008 FSEIR objective that is carried through in this SEIR, at page 2-10, to: "minimize the long-term consumption of natural resources (e.g., water)."

Some commenters suggest that before this SEIR may expressly recognize the objective to reduce or minimize the use of water, a comprehensive and detailed study of the availability of water supplies must be completed and water-reducing measures on existing dust control areas at Owens Lake must be investigated and evaluated in the EIR. Although LADWP agrees that it should investigate how to reduce the use of water for dust control at Owens

Lake (i.e., reduce the use of water for existing shallow flooding and managed vegetation areas), which is consistent with the agency's mission, the purpose of the present SEIR is to evaluate the impacts of the Revised Moat and Row Project—the action proposed for approval now—based on what is currently known regarding the affected environment.

Separate from the Revised Moat and Row Project, and in response to the increasing unreliability of statewide water supplies, LADWP has initiated an investigation into the feasibility of pumping groundwater from beneath Owens Lake to conserve the water diverted from the LAA for dust control (e.g., for shallow flooding and managed vegetation). LADWP is currently gathering data and conducting pump tests to determine what (if any) groundwater can be pumped sustainably from the groundwater basin. This investigation is expected to conclude in Fall 2010. Depending on what information is provided in that study, LADWP then can engage in the process of determining how it could re-design the existing shallow flooding and managed vegetation areas to effectively control dust at Owens Lake while avoiding or reducing the diversion of fresh LAA water to dust control and thereby protecting the availability of fresh water supplies for families, workplaces and public facilities served by LADWP. It is unknown what the groundwater study will reveal. Therefore, at this time it is premature to determine or propose how the use of fresh water for Owens Lake dust control can be reduced.

Further, State CEQA Guidelines Section 15151 requires that EIRs be “prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences.” There is substantial evidence available and presented in the 2009 DSEIR that water supplies (especially through the SWP) are diminishing and that public water supply agencies, like LADWP, must take action to conserve water. In light of this and the requirements of CEQA, LADWP has made a good faith effort to provide decision makers with current information about water supply, has adhered to its mission of efficiently using water resources through the inclusion of two additional water-specific objectives for the project, and is taking all reasonable and prudent steps to resolve the existing adverse air quality conditions on Owens Lake by proceeding with a previously approved waterless dust control measure, namely moat and row.

Although from a public water supply perspective it would be ideal for LADWP to delay the entire 2008 SIP's shallow flooding and managed vegetation elements until completion of the pending groundwater investigation, LADWP already is physically carrying out those dust control measures in order to achieve the resulting air quality benefits as soon as possible. As previously explained, the moat and row element of the 2008 SIP (analyzed here as the “Revised Moat and Row Project”) does not use water to control dust. Therefore, there is no reason to delay completion of the 2009 SEIR review of the Revised Moat and Row Project in order to complete the separate, pending groundwater investigation or any other water-related investigation. Such a delay is not required by CEQA and would be unreasonable. LADWP has considered the best available information and presented that information in the 2009 DSEIR and this FSEIR. LADWP must also balance the competing objectives and needs of the project in order to minimize environmental damage (State CEQA Guidelines Section 15021). That means implementing dust control measures on Owens Lake to protect air quality while being a prudent steward of increasingly precious fresh water supply resources to meet existing and future needs of the families, workplaces and public facilities who depend upon LADWP. To delay the 2009 SEIR and Revised Moat and Row Project until completing an investigation of groundwater that is not needed to carry out the waterless moat and row DCM would prevent LADWP from meeting the requirements of the 2008 SIP and would continue to expose the region's residents to poor air quality for a longer period of time. LADWP has chosen to move forward with completing the 2009 SEIR review of a proven, previously approved—and waterless—dust control project (i.e., moat and row) that would achieve dust control standards in a timely manner while LADWP continues to investigate how the diversion and consumption of precious fresh water for dust control at Owens Lake can be reduced.

Certain public comments mistakenly assume that the 2009 DSEIR's factual information relating to the current state of water supplies is a new analysis of water supply availability for the shallow flooding elements of the approved 2008 SIP. That is incorrect. The 2009 DSEIR does not re-evaluate the water supplies available to carry out the shallow flooding of the approved 2008 SIP or re-evaluate the impacts of using those supplies and having

to obtain replacement water to maintain service to LADWP's customers. That water availability analysis was completed in the GBUAPCD's approved 2008 FSEIR, which LADWP has determined to be adequate for the its present consideration of the Revise Moat and Row Project, which controls dust *without water*. Instead, the 2009 DSEIR makes a reasonable, good-faith effort to provide the best available information about the current state of water supplies, which are to LADWP's basic project objectives and the ability of shallow flooding and managed vegetation alternatives to feasibly meet those objectives without causing other adverse environmental impacts. To ignore this existing information, which was publicly circulated as part of the 2009 DSEIR, would be improper, illogical, and would jeopardize the legal adequacy and defensibility of the CEQA review upon which this dust control project depends. Further, this information does not affect the analysis of the project impacts in the 2009 DSEIR: it would not change any conclusions regarding impacts. The water supply information is required in order to inform the public and decision makers about the feasibility of expanding the use of water to control dust when a proven waterless dust control measure, like the Revised Moat and Row Project, is proposed for approval. This information will also inform LADWP and other responsible agencies, including CSLC, regarding the project's consistency with Public Trust values of Owens Lake. Protection of public health through minimizing dust, preservation of precious water supply resources, and protection of the land within Owens Lake all must be considered in making a public trust consistency determination. Without this information regarding water supply, decision makers may not be able to make an informed decision about whether to proceed with the project.

With regard to the evaluation of alternatives in light of the project objectives established in the 2009 DSEIR, State CEQA Guidelines Section 15126.6 requires that lead agencies evaluate feasible alternatives that achieve most if not all of the project objectives. As described in the "Supplemental EIRs" section above, the CEQA Guidelines are silent on whether to include an evaluation of alternatives in a subsequent or supplemental EIR and 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 (combined with a public water supplier serving as lead agency) 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 requirement of CEQA and a request from the CSLC that the 2009 DSEIR provide a comparative evaluation of the Shallow Flooding and Managed Vegetation alternatives to the Revised Moat and Row Project (Letter from Gail Newton, California State Lands Commission to Tom Dailor, LADWP, March 3, 2009).

Further, the project analyzed in the 2009 DSEIR is the moat and row component of the overall 2008 SIP approved by GBUAPCD. The moat and row component is waterless and, therefore, the only manner in which water supply availability for expanded water-based dust control measures is relevant to the 2009 SEIR review is in connection with analysis of alternatives that would avoid or reduce significant impacts of the project. In this regard, the 2009 DSEIR appropriately considered the current and projected future water shortage confronting LADWP in its review of alternatives. The California Supreme Court upheld such an approach to assessing and rejecting alternatives in the *Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings*, 43 Cal.4th 1143 (2008) ("CalFed EIR Proceedings"). In that case, the project opponents argued that the CalFed EIR unlawfully rejected a project alternative that would reduce SWP and CVP water deliver levels on the ground that it failed to meet just one of the many project objectives listed in the CalFed EIR. The Supreme Court rejected that claim, holding that "[a]lthough a lead agency may not give a project's purpose an artificially narrow definition, a lead agency may structure its EIR alternative analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that *basic goal*." (*CalFed EIR Proceedings* at 1166 [emphasis added]). The CalFed goal of restoring SWP and CVP water delivery reliability is analogous to the project's goals to:

- ▶ provide clean reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service;

- ▶ minimize the long-term consumption of natural resources (e.g., water);
- ▶ and 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.

None of the preceding objectives are overly narrow, such that they would only allow moat and row to be implemented. In fact, other dust control measures (e.g., gravel application, brine, or other yet to be developed options) could be implemented while still meeting these objectives. Therefore, the alternatives analysis is appropriate and properly considers basic objectives of the project.

Level of Detail for Alternatives Analysis in a Supplemental EIR

Some commenters suggest that either the alternatives analysis should be entirely removed from the 2009 DSEIR, because the focus of the analysis is only on the minor design changes as they relate to construction-related air quality, visual resources, and biological resources, or that a stand-alone alternative analysis focused solely on the 3.5 square mile moat and row DCA should be provided. With regard to why an alternatives analysis was included in the 2009 DSEIR, please refer to the discussion above, “Relationship Between Alternatives and Project Objectives.”

With regard to why the alternatives analysis did not focus on the 3.5 square miles of moat and row DCAs, but rather it considered alternatives that addressed changes to the entire 15.1 square miles of DCAs evaluated in the 2008 FSEIR, the alternatives analysis in the 2009 DSEIR carried forward the analysis of alternatives presented in the 2008 FSEIR because only minor changes were necessary to make the analysis adequate. As described above, the minor changes relate to the addition of two water-specific project objectives and enhancement of a previously approved biological mitigation measure. Nothing else about the project would make the previous alternatives analysis invalid. The Revised Moat and Row Project would continue to be one component of an overall dust control program approved in the 2008 SIP. The location and boundaries of the moat and row DCAs would not change, the construction elements (i.e., moat, row, sand fence) and activities (i.e., excavation, compaction, installation of sand fences) would not change, and most importantly the project would not result in any new significant impacts that could not be mitigated by the alternatives considered in the 2008 FSEIR (with the exception of the significant and unavoidable criteria air pollutant impact. However, none of the alternatives could reduce or eliminate this impact without resulting in a new significant impact and no other feasible alternatives are available.) Therefore, because the project is one component of a larger program, it is appropriate to evaluate alternatives that consider changes to the larger dust control program. Further, to look at alternatives that only consider changes to the moat and row DCAs, when the 2008 FSEIR has shown that for the impacts identified there are no feasible alternatives that could reduce the project’s only significant and unavoidable impact (air quality) without resulting in new significant impacts, would not be productive and would instead result in an iterative evaluation of multiple variations of the same larger dust control program.

The State CEQA Guidelines Section 15126.6 requires lead agencies to consider a “reasonable range” of alternatives to a project and an EIR “need not consider every conceivable alternative to a project.” LADWP has presented an alternative analysis that adequately informs decision makers of the environmental impacts of the alternatives (for the larger dust control program) in comparison to the project, as a component of the larger dust control program, and evaluated those alternatives against the project objectives. To evaluate alternatives that consider all shallow flooding, all managed vegetation, or a combination of shallow flooding, managed vegetation, and moat and row DCMs within the seven DCAs would, in effect, only provide another variation of the alternatives considered and evaluated in the 2009 DSEIR. Therefore, it would not provide additional meaningful information to decision makers that has not been previously provided in the 2009 DSEIR analysis. Finally, because this is a supplemental EIR, and the shallow flooding and managed vegetation elements of the 2008 SIP are finally approved and under construction, we are past the point of re-evaluating whether it is appropriate to consider an alternate mix of dust control measures for the 15.1 square miles of dust control areas. The 2008 SIP

approved 9.2 square miles shallow flooding, 3.5 square miles moat and row, 1.9 square miles study area, and 0.5 square miles of channel area. Therefore, this issue was laid to rest with the certification of the 2008 FSEIR and the approval of the 2008 SIP. LADWP, as lead agency, has a responsibility to focus its analysis on whether the revised moat and row element of the 2008 SIP would cause any significant impacts that can be reduced or avoided through mitigation or alternatives. As described in the 2009 DSEIR, no significant effects would occur that could not be reduced or avoided through mitigation, with one exception. That exception—the air quality impact arising from the time required to revise the moat and row element of the 2008 SIP and to complete the related further 2009 SEIR review—would persist regardless of any feasible mitigation or alternative dust control approach.

No Project Alternative

Commenters have raised the concern that the evaluation of the No Project Alternative in the 2009 DSEIR incorrectly assumes that no development within the seven moat and row DCAs would occur. LADWP in its role as CEQA Lead Agency and the agency responsible for implementation of the DCMs on the dry Owens Lake bed finds that substantial evidence (e.g., correspondence with resource agencies) shows that if the Revised Moat and Row Project were not approved (i.e., were rejected by LADWP or a responsible agency), then the other dust control measures approved under the 2008 SIP would be implemented without the moat and row DCMs, and the dust control areas that the 2008 SIP approved for moat and row would remain in their existing condition (i.e., no dust control).

As described on page 5-5 of the 2009 DSEIR, although moat and row DCMs were approved, as outlined in the 2008 SIP, 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). To elaborate, it would be improper for the DSEIR to include a No Project Alternative that assumes that permits would be issued by DFG and CSLC for the previously approved moat and row DCM design, when it is known by LADWP and GBUAPCD that the previously approved design would not meet adopted dust control efficiency standards outlined in the 2008 SIP. As described above, CEQA does not require lead agencies to evaluate alternatives that are infeasible or fail to meet basic project objectives. The previously approved moat and row DCM design would not feasibly meet adopted dust control standards. Therefore, evaluation of the previously approved moat and row design as a “feasible” alternative would not be appropriate. The 2009 DSEIR’s conclusion that no development would occur within the proposed moat and row DCAs is appropriate and is reasonable in light of the information known regarding the feasibility of the previously approved design.

Page 5-5, paragraph 3, of the DSEIR has been revised to clarify this point. The changed text is presented below and in Chapter 3, “Corrections and Revisions to the DSEIR.” This change does not alter the conclusions of the DSEIR.

“Although moat and row DCMs were approved, as outlined in the 2008 SIP, the previously approved moat and row DCM likely would not be implemented because City of Los Angeles Department of Water and Power (LADWP) because LADWP has determined the previously approved design would not feasibly attain dust control efficiency standards approved in the 2008 SIP and it would not be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC). As described in State CEQA Guidelines Section 15126.6 (a), lead agencies are not required to evaluate alternatives that are infeasible. In the case of the previously approved moat and row design, LADWP has determined that this design is infeasible and would not attain adopted dust control efficiency standards. Therefore, the analysis that follows assumes that if the No Project Alternative were implemented, no development would occur within the moat and row DCAs.”

As described in Chapter 2, “Project Description,” DFG and CLSC raised concerns over specific features of the moat and row DCMs previously approved design and the proposed new design related to potential impacts on wildlife and other issues. This SEIR is intended to address those issues of

concern. Without the changes proposed for the moat and row DCMs (see Chapter 2, “Project Description”) and the supplemental analysis provided in this SEIR, there would not be a feasible moat and row design 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. 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. Although the discussion of Impact 3.2-1, Project-Generated Emissions of Criteria Air Pollutants and Precursors, (see Chapter 3.2, “Air Quality”) states that implementing the proposed project would result in a conflict with implementation of an adopted air quality control plan, the conflict is a delay in implementation of the plan rather than the inability of the plan to be fully implemented, which is the case under this alternative. Implementing this alternative would not meet an important objective of the 2008 SIP and would not achieve prescribed dust control efficiencies for the 3.5 square miles of the lake bed where moat and row DCMs are proposed.”

MASTER RESPONSE 3 – COMPENSATORY BIOLOGICAL MITIGATION

A number of comments addressed the compensatory mitigation for impacts to snowy plover in the 2009 DSEIR. These comments can be grouped into three general categories of concern:

- ▶ The 2009 DSEIR underestimates the number of acres of snowy plover habitat affected by the moat and row project;
- ▶ Compensatory mitigation included in the 2009 DSEIR has already been used to mitigate impacts authorized by DFG under prior approved Lake and Streambed Alteration Agreements.
- ▶ Existing shallow flooding DCAs cannot be recognized as mitigation for moat and row unless this acreage is protected as long as dust control is required on Owens Lake.

The following information is provided as a master response to the above issues.

Acres of Snowy Plover Habitat Affected by the Moat and Row Project

Several commenters raised concerns that the compensatory mitigation recommended in the 2009 DSEIR for impacts to snowy plover (see Mitigation Measure 3.1-12 starting on page 3.1-42) did not adequately identify the total snowy plover habitat loss that would occur with implementation of the project. The comments appear to focus on the fact that only 1,503.8 acres of the 2,238-acre (i.e., 3.5 square miles) moat and row DCAs were identified as suitable habitat for snowy plover. Commenters contend that the entire 3.5 square miles of moat and row DCAs would be suitable habitat. Section 3.1, “Biological Resources,” of the 2009 DSEIR provides considerable information and evidence about the location and magnitude of potential project impacts on snowy plover and its habitat. The magnitude of the project’s impact on snowy plover habitat was determined, in part, based on the anticipated total number of acres that would be affected by ground-disturbing activities including areas where moats and rows, access roads, and sand fences would be constructed. Other information considered in the analysis included the results of a detailed evaluation of snowy plover habitat suitability and distribution in the project area, which are depicted on Exhibit 3.1-11 of the 2009 DSEIR. The results of the habitat suitability analysis are an important component of the impact analysis in the 2009 DSEIR because the analysis is supported by the best scientific information available with regards to snowy plover habitat requirements, and their status and distribution on the Owens Lake bed. In determining project impacts to snowy plover and their habitats, the analysis considered where suitable habitat was present, where snowy plover individuals have been observed based on sustained monitoring data, and where project activities (i.e., ground disturbance) would occur in relation to suitable habitat and presence of individuals. This is a reasonable methodology for assessing project-related impacts and is consistent with the requirements of CEQA Statutes and Guidelines.

The acreage of suitable habitat for snowy plover was quantified and mapped specifically for the 2009 DSEIR; this process and preliminary maps were presented to and reviewed by DFG and other reviewing parties prior to completing the 2009 DSEIR. Within the project site (i.e., within all DCA cells), the estimated amount of existing suitable habitat for snowy plover is 1,751 acres (not 2,238 acres). Some of the areas within DCA cells were not mapped as presently suitable for snowy plover, due to the presence of existing moat and row development (in demonstration project cells) or ecological factors that affect habitat suitability (e.g., distance to suitable wetland foraging habitat). (This is further discussed in responses to comments S1-6 and S1-31.) The commenters offer no biological or other basis for concluding that the entire site (2,238 acres) is suitable for snowy plover. Of the 1,751 acres of suitable habitat identified within the project site, the 2009 DSEIR conservatively assumed that all (100% of) suitable habitat within cells with moat and row elements (i.e., all cells except T1A-1) would be lost; this amount was 1,503.8 acres.

Although the 2009 DSEIR identified a loss of 1,503.8 acres of snowy plover habitat, some commenters stated that they consider habitat loss induced by project impacts to be 3.5 square miles or 2,238 acres, which is equivalent to the entire project site evaluated in the 2009 DSEIR. While assertions to the amount of snowy plover habitat affected by the project have been made by commenters, no supporting evidence has been offered to support these conclusions. Further, while the acres of effect are an important consideration in determining the magnitude of a particular impact, a number of other considerations must be taken into account to measure or otherwise predict how a specific resource could be affected by a project under CEQA review. The snowy plover impact analysis in the 2009 DSEIR is comprehensive and was conducted by experienced professionals, using acceptable methodologies. The loss of snowy plover habitat was determined to be a potentially significant impact. Mitigation was recommended that would reduce this impact to a less-than-significant level consistent with the mitigation requirements outlined in State CEQA Guidelines Section 15126.4.

Nonetheless, LADWP offers the response that follows to address some of the specific concerns raised by commenters related to the analysis of snowy plover impacts and compensatory mitigation proposed for the project's impacts, including the comments that appear to suggest that mitigation should be based on total acreage of disturbance within the 3.5 mile project site, rather than focused on the project's significant environmental impacts on snowy plover habitat.

Compensatory Mitigation

Commenters have expressed concerns that the 2009 DSEIR relies on mitigation that has already been implemented to compensate for impacts evaluated in the approved 2008 FSEIR. The mitigation in the 2008 FSEIR included mitigation for impacts to the 3.5 mile project site from implementation of moat and row elements. Thus, it is appropriate to revisit the previously adopted mitigation, determine if the modified project addressed in the 2009 DSEIR would result in the similar impacts and, therefore would be mitigated by similar measures, and if not, what additional mitigation would be needed. That is what the 2009 DSEIR did.

Specifically, Mitigation Measure 3.1-9 in the 2009 DSEIR requires LADWP to manage 1,000 acres of shorebird and snowy plover habitat in perpetuity and an additional 523 acres or more of habitat specifically for snowy plover, in perpetuity. On the basis of the 2008 SEIR impact analysis and mitigation contained therein, GBUAPCD concluded that following completion of construction of the 2008 SIP DCMs, "the Shallow Flooding element of the proposed project would be expected to result in a net increase in suitable habitat for the western snowy plover, due to an increase in the amount of suitable foraging habitat created within the Shallow Flooding areas (Figure 3.2.2-5 of the 2008 FSEIR)."² The 2008 SEIR further concluded that, in connection with wildlife migratory corridors and nursery sites, "it is expected that the overall impact of the proposed project [*i.e.*, the 2008 SIP, which included the 3.5 square miles of moat and row DCM] would be beneficial for western snowy plover and other shorebirds by increasing the amount of available foraging habitat and providing a reliable water source for

² 2008 DSEIR at pp. 3.2-31 to 3.2-34 (mitigation measures), and p. 3.2-41 ("Level of Significance after Mitigation").

foraging and support of nestlings.”³ (see Biological Technical Resources Report, September 16, 2007, pages 5-18 through 5-20 Appendix D of the 2008 FSEIR.)”

Despite the GBUAPCD’s recognition of the overall beneficial effects of the 2008 SIP, including the moat and row component, LADWP’s 2009 DSEIR took a very conservative approach by not taking credit or accounting for the habitat benefits that would be provided through shallow flooding when LADWP considered the impacts of the Revised Moat and Row Project. Because moat and row DCMs were included within the 2008 SIP project and evaluated and mitigated for in the 2008 FSEIR, it would have been appropriate for LADWP, as the CEQA Lead Agency, to account for the habitat benefits of shallow flooding to snowy plover when determining the significance of habitat impacts resulting from moat and row. Accounting for the 2008 SIP’s net snowy plover habitat benefits would likely support a determination that the impacts of the Revised Moat and Row Project on snowy plover are less than the impacts presented in the 2009 DSEIR. In fact, accounting for the 2008 SIP’s net snowy plover habitat benefits would support a determination that that the impacts of the Revised Moat and Row Project on snowy plover are less than significant—a determination that would relieve the lead agency of any need to consider snow plover habitat mitigation. Nonetheless, the 2009 DSEIR embraced a highly conservative impact assessment approach to conclude that the potential loss of snowy plover habitat as a result of the moat and row DCAs would be potentially significant. Mitigation was recommended that more than compensates for any effects on snowy plover.

Commenters have stated that the proposed compensatory mitigation in the 2009 DSEIR was for a different or past project in previously approved Lake and Streambed Alteration Agreements and that the mitigation could not be considered as compensation for snowy plover habitat loss associated with the revised Moat and Row Project. It is important to distinguish that LADWP, as the CEQA Lead Agency for the Revised Moat and Row Project, is required to ensure that the environmental impacts of a project are adequately evaluated consistent with CEQA. Other resource agencies that may issue permits for the Revised Moat and Row Project might seek to apply their regulatory authorities in a way that goes beyond CEQA’s requirements to mitigate significant environmental impacts. For example, DFG asserts trustee and responsible agency authority through the Fish and Game Code’s Lake and Streambed Alteration Agreement program. How DFG might seek to apply its trustee and responsible agency authority to the Revised Moat and Row Project is yet to be determined.

Comments have suggested that that the 2008 FSEIR compensatory mitigation (1,000 acres of shorebird and snowy plover habitat and an additional 523 acres of snowy plover habitat) did not account for the impacts of the 3.5 square miles of proposed moat and row DCMs. That is incorrect. The 2008 SIP that the GBUAPCD approved after certifying the 2008 FSEIR encompassed 15.1 square miles of DCAs, including the 3.5 square miles of moat and row DCAs that constitute the Revised Moat and Row Project. Nothing about the location or size of the proposed moat and row DCAs has changed since approval of the 2008 FSEIR. Therefore, the focus of the 2009 DSEIR was whether this already adopted mitigation was adequate to address the changed project circumstances. Regarding the compensatory mitigation proposed in the 2008 FSEIR, the 2008 FSEIR proposed and approved the compensatory mitigation program for the entire 15.1 square miles of DCMs: shallow flooding and moat and row. Nothing limited the compensatory mitigation to effects of just the shallow flooding element of the 2008 SIP. This mitigation was determined to be adequate to reduce the impacts of the overall 2008 SIP (including the 3.5 square miles of moat and row) to a less-than-significant level. That conclusion was carried forward to the 2009 DSEIR, because nothing about the 2008 SIP or its moat and row element (*i.e.*, the Revised Moat and Row Project) had changed in any way that could change the mitigation and impact conclusion. This analysis is consistent with the requirements of CEQA and no challenges to the conclusions were brought forward for the 2008 FSEIR.

Some comments imply that through the Lake and Streambed Alteration Agreement permitting process for the 2008 SIP (2008 FSEIR), DFG limited the compensatory mitigation identified in the 2008 FSEIR (1,523 acres) to addressing effects of the shallow flooding areas, because moat and row was not specifically authorized for construction by DFG at that time. These comments seem to embrace a piecemeal approach to CEQA review,

³ 2008 DSEIR at p. 3.2-30.

under which the environmental impact and mitigation analysis of actions to carry out the overall 2008 SIP (*i.e.*, the whole of the action here) are segmented according to individual permitting approvals by responsible agencies, like DFG. CEQA prohibits the piecemealing of environmental impact review according to separate permitting approvals and, instead, requires lead, responsible and trustee agencies to consider the effects of the whole of the action being undertaken. The whole of the action here is the 2008 SIP, including shallow flooding, managed vegetation and moat and row DCMs. Just because LADWP agreed to front-load its implementation of all compensatory mitigation for the entire 2008 SIP in connection with a responsible agency's approval of one element of the 2008 SIP in no way prevents that mitigation from continuing to avoid or reduce impacts of the 2008 SIP's other elements.

The 2009 FSEIR identifies more than adequate compensatory mitigation for the impacts of the Revised Moat and Row Project. No substantial evidence has been offered to suggest that the impacts analysis or mitigation measures described in the 2009 FSEIR are inadequate or do not compensate for effects of the Revised Moat and Row Project (as an element of the overall 2008 SIP). DFG did not approve moat and row DCMs at the same time as the shallow flooding DCMs, because LADWP decided to revise the moat and row DCM design and to refine its associated operation and maintenance approach. Nothing about the previous compensatory mitigation was ever determined to be inadequate in regards to moat and row DCMs. Moat and row DCMs are still one element of the larger dust control program approved in the 2008 SIP and evaluated in the certified 2008 FSEIR. The moat and row DCMs continue to be located in the same location, would occupy the same area, and would consist of a moat, row, and/or sand fence as that evaluated in the 2008 FSEIR. As described in the 2009 DSEIR, nothing about the area of impact has changed; therefore, mitigation recommended in the 2008 FSEIR is appropriately relied upon in the 2009 FSEIR.

Shallow Flooding as Mitigation

As described in the 2009 DSEIR, shallow flooding approved as part of the 2008 SIP (evaluated in the certified 2008 FSEIR) would result in the creation and enhancement of 3,177 acres of snowy plover habitat. Although the shallow flooding element of the 2008 SIP creates and enhances more snowy plover habitat than would be affected by the Revised Moat and Row Project, LADWP's 2009 SEIR does not rely upon the 3,177 acres of snowy plover habitat as compensatory mitigation (see Mitigation Measure 3.1-12). The 2009 DSEIR describes the benefits of shallow flooding because it is an important component of the conditions that were used to evaluate impacts of the revised moat and row project on snowy plover. The 2009 DSEIR does not describe existing shallow flooding on Owens Lake as mitigation for the Revised Moat and Row Project, and, therefore, a commitment by LADWP to permanently implement shallow flooding in perpetuity is not required.

LADWP has only committed to implement shallow flooding on Owens Lake for as long as dust control is required or until such time that LADWP, with GBUAPCD's approval, can develop alternative dust control measures that conserve water but maintain or enhance existing habitat values on Owens Lake (please refer to Master Response 2). The 2009 DSEIR describes this condition, but does not rely upon the habitat benefits of existing shallow flooding at Owens Lake as mitigation for the revised moat and row project. As such, the 2009 DSEIR appropriately identifies the project impacts and recommends mitigation consistent with the requirements of CEQA.

2009 DSEIR Mitigation for Impacts to Biological Resources

As described in the 2009 DSEIR, impacts to snowy plover would be reduced to a less-than-significant level through implementation of a combination of mitigation measures in the 2008 FSEIR, and revised and new measures proposed in the 2009 DSEIR. This conclusion is consistent with the requirements of CEQA. However, LADWP recognizes that based on the comments received on the 2009 DSEIR, DFG might seek to assert trustee or responsible agency authority to request additional mitigation from LADWP as a condition for approving any new or revised Lake and Streambed Alteration Agreement that might be required to carry out the Revised Moat and Row Project. LADWP believes that the analysis provided in the 2009 DSEIR clearly and adequately

evaluates effects on snowy plover and recommends mitigation that is more than adequate to compensate for effects on snow plover—including mitigation that goes above and beyond that prescribed in the 2008 FSEIR. To the extent that DFG’s Lake and Streambed Alteration Agreement jurisdiction applies to the Revised Moat and Row Project, LADWP would work with DFG to incorporate reasonable measures necessary to protect existing wildlife resources from any substantial adverse effects of the Revised Moat and Row Project as an element of the 2008 SIP, based on the mitigation from the 2008 FSEIR and 2009 FSEIR.



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July 21, 2009

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**Draft Supplemental Environmental Impact Report for the Owens Lake
Revised Moat and Row Dust Control Measure Plan
(State Clearinghouse Number: 2008121074)**

Dear Mr. Dailor and Mr. Van Wagoner:

The Department of Fish and Game (Department) has reviewed the Draft Supplemental Environmental Impact Report (DSEIR) for the Owens Lake Revised Moat and Row Dust Control Measure Plan. Los Angeles Department of Water and Power (LADWP) proposes to reduce dust emissions on approximately 3.5 square miles of the Owens Lake bed in order to eliminate exceedances of the federal particulate matter (PM10) standard, through construction of a landform feature called Moat and Row. Moat and Row is a method of dust control that typically does not require the addition of supplemental water to reduce dust emissions. A typical Moat and Row element is an 89-foot wide disturbed 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, with a five-foot sand fence at the top flanked on either side by two ditches (moats) approximately 4 to 5.5 feet deep and up to 20 feet wide at the widest point. Rows serve as windbreaks and the primary function of the moats is to capture sand.

The Department is providing comments on the DSEIR as the State agency which has the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's Fish and wildlife management functions are implemented through its administration and enforcement of Fish and Game Code (Fish and Game Code §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 Cal. Code Regs. §15386(a)). The

Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The Department offers the following comments and recommendations:

Comments from the text of the DSEIR:

P. 2-10. Many of the Project Objectives in the DSEIR are newly proposed as compared to those objectives identified in the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Subsequent Environmental Impact Report (ISEIR). The goal of the project is to reduce PM₁₀ emissions on 3.5 square miles of Owens Lake using the experimental Moat and Row dust control method. However, the DSEIR's objectives often do not appear to reflect this goal, and some statements seem out-of-context as no nexus is provided to correlate dust control with "...providing clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service,..." In the Final Supplemental Environmental Impact Report (FSEIR), each objective should also be analyzed for each project alternative followed by a discussion as to why each alternative does or does not meet each project objective.

Both the DSEIR and the 2008 ISEIR include this objective: "Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake." As a trustee for the public's fish and wildlife for the state of California, the Department does not recognize how the proposed project would preserve and enhance the public trust values described in the objective above. Although the Moat and Row project may be shown to control dust, other impacts associated with this method would appear to potentially harm Owens Lake's public trust values. An analysis of this objective must be discussed in all the project alternatives, as well as the environmentally superior alternative.

P. 2-15. The DSEIR is unclear and confusing regarding the maximum 33% total ground surface disturbance within Moat and Row DCAs. The DSEIR states, "For example, if a DCA is 100 acres in size, then ground disturbance would not exceed 33.3 acres," and that "for 3.5 square miles of dust control, no more than 1.16 square miles of the project area would be constructed with permanent Moat and Row features." The DSEIR seems to infer that *each* dust control cell will not exceed 33% *and* the total project area will not exceed 1.16 square miles. If this is correct, then Moat and Row cell T37-1 exceeds this standard, with 42.6% permanent disturbance. If the 33% is to only be applied to the project as a whole, then the example above should be removed from the document.

P. 2-39. The Operation and Maintenance Plan describes the frequency of maintenance for moats, rows, sand fences, etc. The FSEIR should specify the time of year that these activities will take place. For any area that could support nesting shorebirds, O&M should be scheduled outside of the shorebird breeding season. For sand fences, it is anticipated that "materials removal would need to occur once sand has reached 50% of the height of the sand fence (or approximately 2.5 feet)." If this is the case, how will mitigation measure 3.1-10 mitigate for potential effects on snowy plover brood movements at site T1A-1? If option one of measure 3.1-10 is implemented with a 2-inch vertical gap, 2.5 feet of sand buildup will negate the mitigation. If option 2 of the measure is implemented with a 1-foot horizontal gap, sand piles 2.5 feet high have a high potential to fill these gaps and will become a visual obstruction. The FSEIR should address how mitigation measure 3.1-10 can be functional in light of the Operation and Maintenance Plan.

P. 3.1-20 to 21. The DSEIR states that, “nests of interior populations of snowy plover have been detected as little as 1 meter to as much as 3 kilometers from water... but that, on average, nests were placed 8 meters from water where artificial flooding occurred.” This statement implies that on Owens Lake, suitable nesting habitat for snowy plovers can range anywhere from one meter to one mile from water. Because all proposed Moat and Row cells are within this range, the entire project site should be considered potentially suitable snowy plover nesting habitat.

The DSEIR identifies a total of 1,752 acres of potentially suitable snowy plover habitat occurring within the 2,238 acre project site. Cell T12-1 was not identified in Exhibit 3.1-11 as containing suitable habitat for this species. Based on Table 3.1-3, a nest was detected adjacent to the T12-1 cell in the 2007-2008 surveys. Therefore, suitable habitat must be present nearby. Cells T10-2 and T10-16 are proposed to become shallow flooding cells as part of the approved Phase 7 shallow flooding project. After implementation of shallow flooding within these cells, T12-1 will be completely surrounded by water, creating more suitable habitat. The DSEIR states that “habitat value could improve at Moat and Row cells T1A-1 and T1A-3 as a result of Phase 7 sheet-flow shallow flooding planned nearby,” but that “habitat quality would remain low within and adjacent to T12-1 as a result of the low-value ponded shallow flooding areas planned around this cell.” The DSEIR does not describe and discuss what low-value ponded shallow flooding is, why it is not considered potentially suitable habitat for snowy plovers (when they nest on average within 8 meters of water), how this conclusion was derived and why T12-1 is not included in the total acreage of suitable habitat when a nest was found present adjacent to the cell.

Previous project phases where ponded shallow flooding has been implemented indicates a considerable number of snowy plover broods and some nests from the 2007-2008 surveys. Cells T2-2, T2-3, T2-4 and T4-4 indicated the presence of broods and nests while cells T36-2, T36-3, T29-4, T-27Addition, and T18N indicated the presence of broods. Ponded shallow flooding cells T13-3 and T13-2, which border the east side of proposed Moat and Row cell T12-1, also encountered multiple broods. To claim that “habitat quality would remain low within and adjacent to T12-1 as a result of the low-value ponded shallow flooding areas planned around this cell,” is inconsistent with survey results at previously implemented ponded shallow flooding cells. The acreage within cell T12-1 should be added to the 1,752 acres of potentially suitable snowy plover habitat occurring within the 2,238 acre project site.

P. 3.1-33 to 34. Moat and Row cell T1A-1 contains 247.7 acres of suitable and predicted high-suitability habitat and has been excluded from the analysis for habitat loss due to the assumption that habitat suitability “would remain intact following project implementation.” The DSEIR states that “plovers prefer to nest in large, flat area where they can see their surroundings well,” and “where broods occur, the presence of moats, rows *and fences* could impose barriers and impede movements and access to resources necessary for survival of juvenile plovers.” Sand fencing in T1A-1 will create a visual barrier, reducing wildlife visibility and thus, decreases habitat suitability in cell T1A-1. Implementation of mitigation measure 3.1-10, combined with the Operation and Maintenance Plan identifying 2.5 feet sand build-up before removal occurs, does not alleviate visual obstruction to the site’s natural conditions. Therefore, this habitat is considered a loss and 247.7 acres of suitable habitat at T1A-1 should be added to the total acreage of potentially suitable snowy plover habitat loss.

The DSEIR states that “there is low potential for plover nesting and isolation of broods at Moat and Row cells T37-1, T32-1, T37-2, T1A-4 and T1A-3 because of reduced habitat quality

within the cells and the availability of more high-suitable habitat nearby.” With the exception of T1A-4, all cells supported broods and T1A-3 supported nests in the 2007-2008 surveys. Cells T1A-3, T37-1 and T37-2 all contain predicted high suitable habitat. Cell T1A-3 has been identified as having a high potential for snowy plover encounters while T37-1 and T37-2 have been identified as having a medium potential for plover encounters. Based on this information, the Department does not understand how there could be a low potential for plover nesting and brood isolation if these cells are identified as containing high suitable habitat and medium to high plover encounters. The FSEIR should re-evaluate these contradictory statements.

P. 3.1-37 to 38. The DSEIR describes the mortalities of two snowy plover chicks from a 3-4 foot deep vertical dewatering trench that contained mud, and also indicates that occasional entrapment of juvenile plovers in mud may occur under natural conditions. Because vertical dewatering trenches and Moat and Row are not considered natural conditions, it can be assumed that there will be some degree of plover chick loss in a 5-foot deep moat that may contain mud and water.

The DSEIR identifies that snowy plover chicks have been observed “hopping up and over a steep rip-rapped berm,” but does not identify how steep this berm was. The FSEIR should evaluate and analyze the feasibility of placing rip-rap on moat slopes on the perimeter of Moat and Row cells for mitigation *before* the response trigger threshold is met for snowy plover moat entrapment. The example of observing plovers hopping up a steep rip-rapped berm followed by an exhibit example of rip-rap bordering shallow flooding cells implies that rip-rap may be a substrate potentially suitable for plovers to navigate through for the proposed project. If this is not the intention, then these examples should be removed from the document.

Brine fly populations were identified in moats with water at cell T12-1. Although it is discussed that groundwater on Owens Lake is generally too saline to support brine fly populations on a regular basis, cell T12-1 indicates that “groundwater in moats may be suitable to support a food source for snowy plovers in some areas.” Based on this conclusion, cell T12-1 contains suitable foraging habitat for snowy plovers.

P. 3.10-40. For Mitigation Measure 3.1-10, Gary Page, by personal communication, estimated that, 1-foot wide gaps placed every 10 feet along fence rows could potentially allow for unimpeded plover movement. The DSEIR continues to conclude that based on 1 foot of gap within a 10-foot segment, fence gaps shall total a minimum of 10 percent of the total fence perimeter and that for a 500-foot fence perimeter, a gap would be required every 50-feet. The Department would like the FSEIR to describe what scientific justification was used to “extrapolate” 10 percent fence gaps for the entire length of any fence perimeter, when Page identified a 1-foot gap for *every 10-feet* of fence. It is also identified that, in addition to the 10 percent gap condition, gaps shall be spaced regularly and no more than 100 feet apart. The FSEIR should describe what analysis was conducted to conclude that plovers two inches tall can visually see a 1-foot gap within 100-feet of fence. This is not the estimation presented in the document. This inconsistency should be evaluated and clarified in the FSEIR.

P. 3.1-45. The DSEIR states, “If the response threshold is met, LADWP shall notify DFG as soon as possible and within three business days of the incident.” The Department requests this notification to be in writing to Brad Henderson or Tammy Branston at the letterhead address.

P. 3.1-46. Mitigation Measure 3.1-9 (The Long Term Habitat Management Plan) requires LADWP to manage 1,000 acres of shorebird and snowy plover habitat in perpetuity and an additional 523 acres or more of habitat specifically for snowy plover, in perpetuity. The

DSEIR states that “this long-term commitment and habitat benefit would compensate for the anticipated loss of 1,503.8 acres of snowy plover habitat due to Moat and Row implementation.” As identified previously by the Department, these habitat requirements, held in perpetuity, were conditions of past projects relating to Lake and Streambed Alteration Agreements R6-2001-060 and 1600-2008-0125-R6. These past requirements for projects unrelated to Moat and Row will not be considered compensation or mitigation for snowy plover habitat loss. The DSEIR continues to state, “Additional benefits would also be recognized from the implementation of Phase 7 Shallow Flooding as part of the 2008 FSEIR, which would result in creation and enhancement of 3,177 acres of snowy plover habitat.” Habitat benefits from shallow flooding cannot be recognized as mitigation for Moat and Row unless this acreage is held in perpetuity.

P. 3.1-49. The DSEIR discusses that “for some shorebird species, ground movements of juveniles and adults for can be frequent” and “could occur near moats at the perimeter of cells T32-1, T37-1, T37-2, T12-1, T1A-4 and T1A-3, where suitable wetland habitat would occur.” The DSEIR then follows to say, “Moats at these cells are not expected to impose a substantial entrapment hazard or a barrier to ground movements (e.g. walking) of juvenile or adult shorebirds (e.g. American avocet, which breed on Owens Lake). The movements of these species are closely associated with the presence of surface water or saturated soils; these conditions would not typically occur immediately adjacent to moats.”

This paragraph is contradictory and confusing. It first discusses that shorebirds could frequently encounter moats near the perimeters of cells at the locations above where wetland habitat would occur and then follows to state that wet conditions don't typically occur near moats. Based on Exhibit 3.1-2, suitable wetland habitat occurs at two Moat and Row cell locations: the NW Seeps are located on the southern perimeter of cell T37-1 and Bartlett Springs is located on the NE section of cell T37-2. Exhibit 3.1-2 also identifies “Managed Wetlands” as ponds or sheet flow, which partially or fully border all of the proposed Moat and Row DCMs. Based on this evidence and availability of suitable habitat present, there is a good chance that American avocet and other shorebird species will encounter the perimeters of Moat and Row cells. The Department's past requests to evaluate and discuss use within the project site by American avocets and other shorebirds species has not been addressed. The DSEIR identifies that American avocets breed on Owens Lake and that ground movement by shorebirds can be frequent, but no data has been provided to show any locations of these shorebird movements. The DSEIR claims that moats are not expected to impose a substantial entrapment hazard or a barrier to ground movements of shorebirds, yet no assessment has been conducted to support this statement. As previously requested, the FSEIR should adequately evaluate, assess and propose mitigation for impacts of Moat and Row to American avocet and other shorebird species.

P. 5-3 to 5-5. The evaluation of alternatives to the proposed project identifies the implementation of 15.1 square miles for each alternative in an “all or nothing” approach. Of the 15.1 square miles, 9.7 square miles of shallow flooding has already been approved for the Phase 7 project and is now under construction. The DSEIR describes the proposed project to encompass approximately 3.5 square miles of Moat and Row. The evaluation of alternatives is inconsistent with the proposed project of 3.5 square miles, and should not evaluate approved projects currently being implemented. The alternatives analysis as presented in the DSEIR appears misleading and incorrect. Not only does the analysis need to focus on the Moat and Row project, but it should also assess the option of implementing multiple alternatives at each site. For example, the shallow flooding alternative was concluded to result in a net biological benefit with reduced environmental impacts compared to the proposed project, resulting overall in “lesser” impacts. Perhaps shallow flooding could be implemented in high impact areas

whereas Moat and Row could be implemented in low impact areas. The implementation of multiple alternatives should be evaluated in the FSEIR. The FSEIR should also analyze each project objective and whether or not these objectives meet each project alternative. As currently written, the discussion of alternatives lacks logic, clarity and justification.

The DSEIR claims that the "all managed vegetation alternative" would have greater impacts overall compared to Moat and Row. On page 2-15, the document describes that grading or digging holes associated with vegetation enhancements, along with vegetation planted between Moat and Row elements or on faces of rows, are activities that would *not* be included in the maximum 33 percent of total ground disturbance. If this is true, then the managed vegetation alternative does not violate the maximum 33 percent ground disturbance condition. Habitat impacts are not greater than Moat and Row under this alternative because salt tolerant plant species occur in transmontane alkali meadows naturally on the lake bed. The magnitude of visual changes are not comparable to the visual changes that would occur under the proposed project as the DSEIR implies. Visual impacts under this alternative would change views of the lake bed to reflect naturally occurring patches of dry transmontane alkali meadow, while Moat and Row visually portrays an industrial, man-made appearance. Overall, project impacts with the managed vegetation alternative would be "lesser," not "greater," than those induced by Moat and Row.

The discussion of the "no project alternative" does not make sense. The DSEIR states that "under the no-project alternative, Moat and Row DCMs would be constructed, operated, and maintained on Owens Lake in accordance with the 2008 FSEIR, which involves construction, operation, and maintenance of Moat and Rows along with the application of DCM enhancements..." The DSEIR then follows to state, "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." The DSEIR discusses that, because the lake bed would not be altered with human-made features or construction activities, the visual impacts, as well as the biological resource impacts of the proposed project would not occur. If Moat and Row would be constructed in accordance with the 2008 FSEIR under the "no project alternative," then it is impossible that no construction activities or impacts would occur. This section needs clarification.

The "environmentally superior alternative" needs further discussion. The DSEIR describes that the all shallow flooding and managed vegetation alternatives are not feasible because of long-term use of natural resources (e.g. water). However, the 2008 ISEIR states on page 12-5 that, "the District, in cooperation with the City, has developed three PM₁₀ control measures that it has found to be feasible and effective: Shallow Flooding, Managed Vegetation, and Gravel Cover." The 2008 ISEIR also identifies the existing DCMs which include 15.4 square miles of shallow flooding and 3.75 square miles of managed vegetation. Currently under construction is the phase 7 shallow flooding project, where 9.7 square miles of shallow flooding are to be implemented. If shallow flooding and managed vegetation are "not feasible" the Department does not understand how they are currently being implemented on Owens Lake. The DSEIR does not seem to consider the fact that many of the existing shallow flooding cells may unnecessarily use more water (e.g. in some areas substantially more water) than necessary under their current configuration and management. The FSEIR needs to discuss ways of making shallow flooding a more efficient DCM in terms of water use. The Department believes that there are many opportunities to improve habitats while lowering water use on Owens Lake. The labeling of shallow flooding as "infeasible" is inappropriate.

The alternatives analysis section lacks clarification and justification as to why Moat and Row is called out as the environmentally superior alternative. The Department believes that with careful design of both existing and any future shallow flooding, overall use of aqueduct water for dust control can be reduced while maintaining or enhancing habitat quality and public trust values. The FSEIR should include this discussion within the project objectives and alternatives.

Comments from the Department's NOP letter not addressed in the DSEIR:

1. Habitat values should be evaluated in light of possible changes to Moat and Row areas that may require enhancements in the future.
2. Mitigation for loss or degradation of existing snowy plover use areas should be proposed in the draft SEIR.
3. The SEIR should describe the expected water quality (particularly concentrated salts) in the moats, and explain any water quality impacts on all life stages of wildlife that may enter water in the moats.
4. The SEIR should describe a basic procedure for possible decommissioning of Moat and Row and describe the environmental analysis that would be completed in such an event.
5. For unavoidable impacts, the feasibility of on-site, in-kind habitat restoration or enhancement should be discussed. If on-site mitigation is not feasible, off-site mitigation through habitat creation, enhancement, acquisition and preservation should be addressed.
6. Mitigation for loss or degradation of existing nesting areas should be proposed in the draft SEIR.

General Comments from the Department:

The DSEIR describes in multiple sections of the document that Moat and Row features within the 3.5 square miles for the Moat and Row DCAs would not exceed a maximum of 33 percent ground disturbance. The Department has determined this ground disturbance condition is insignificant in relation to project impacts to nesting and juvenile shorebirds.

After thorough review of the DSEIR for the proposed project, the Department considers habitat loss induced by project impacts to be 3.5 square miles or 2,238 acres. Mitigation to compensate for habitat loss has not been adequately addressed in the DSEIR. Mitigation for previous projects cannot be considered for the current proposed project. Habitat benefits from shallow flooding cannot be recognized as mitigation for Moat and Row without a commitment to manage this acreage for wildlife as long as dust control is required. The Department will require a 1:1 mitigation ratio to compensate for Moat and Row project impacts. This compensatory mitigation should include the habitat components necessary to permanently replace occupied or potential nesting habitat replaced by Moat and Row. An essential component will be proximity of these habitats to a water source for shorebird foraging. These habitat components would likely include shallow flooding areas currently providing dust control. The Department recognizes the need to consider LADWP's operational requirement through provisions for flexibility in the mitigation program. The Department believes that habitat values can be maintained, and even enhanced without additional commitments of aqueduct water.

The grid pattern and fencing design of Moat and Row visually portrays an industrial, man-made appearance in significant contrast to the current and historical "natural" appearance of Owens Lake. The design of Moat and Row is to construct five foot rows on top of five foot berms, equaling a height of ten feet above ground level. Constituents have brought to the Department's attention that blocking or obstructing wildlife viewing from public access locations on the lakebed will result in a significant visual impact. The current Moat and Row design is also expected to have a substantially adverse impact to the overall quality of wildlife viewing on and across the lake bed versus present and pre-project habitat conditions. The Department realizes this concern to be new in the sequence of our commenting process for Moat and Row. However, §1802 of the California Fish and Game Code identifies the Department's responsibility to "provide for aesthetic, educational, and nonappropriative uses of the various wildlife species," and "to maintain diversified recreational uses of wildlife," with a "quality outdoor experience." Pursuant to CEQA § 21001, the Department, as a trustee agency, has the responsibility to "take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise." The Department is willing to discuss with the agencies and public how long-term preservation assurances from shallow flooding currently in place for dust control may provide some assemblage of mitigation for these impacts to wildlife viewing.

The Long-Term Habitat Management Plan (LTHMP) as well as the Conservation Action Plan (CAP) for Owens Lake facilitated by Audubon California and The Nature Conservancy can also complement the Moat and Row mitigation program. Assurances for protection of habitat to replace the acreage lost to Moat and Row will lessen overall long-term risks to Owens Lake by other forms of development or habitat modification. We encourage LADWP to work collaboratively with the Department and other involved parties in developing this program.

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Brad Henderson at (760) 873-4412 or Tammy Branston at (760) 872-0751, or at the letterhead address.

Sincerely,

Bruce Kinney
Original signature on 21July09

Bruce Kinney
Deputy Regional Manager

cc: Department of Fish and Game
State Clearinghouse
State Lands Commission
GBUAPCD

- S1-1 The commenter provides an introduction to subsequent comments. This comment does not raise any issues related to the environmental analysis presented in the DSEIR. No further response is required.
- S1-2 The commenter is correct, the goal of the project is to reduce dust emissions through the implementation of moat and row DCMs on 3.5 square miles of Owens Lake. LADWP disagrees that this goal is inconsistent with the project's objectives. Please refer to Master Response 2 for a discussion of how the project objectives relate to the proposed project.

The commenter also suggests that the moat and row DCM is "experimental." This is not the case. LADWP has implemented demonstration moat and row dust control measures in two dust control areas on Owens Lake (T32-1 and T12-1, see Exhibit 2-2 of the 2009 DSEIR). These demonstration areas were constructed in October 2007 and have been in operation since that time. As described in the *Final Moat and Row Demonstration Project Control Efficiency Report (Air Sciences, Inc., 2008)*, sand motion and meteorological data were collected from October 2, 2007 through June 10, 2008 (eight months). These data were then used to calculate the dust control efficiencies achieved by the demonstration areas. The results indicated that area-average dust control efficiency values of greater than 99 percent and 98 percent were observed for demonstration areas T12-1 and T32-1, respectively, which is consistent with or greater than the dust control efficiencies required by the 2008 SIP and 2006 Settlement Agreement. Therefore, based on the data and results gathered from these two demonstration areas, LADWP and GBUAPCD have proceeded with implementing moat and row over 3.5 square miles of Owens Lake. The two demonstration areas have shown that moat and rows adequately minimize dust emissions and achieve the minimum dust control efficiencies established in the 2008 SIP.

Finally, the following table presents an evaluation of how each of the alternatives evaluated in the 2009 DSEIR meets or does not meet each project objective. This information is a summary of the information presented in the 2009 DSEIR, but presented in a tabular format.

Project Objective	Proposed Project	Shallow Flooding Alternative	Managed Vegetation Alternative	Gravel Application Alternative	Off-Site Alternative	No Project Alternative
Implement 3.5 square miles of ¹ Moat and Row DCMs by April 1, 2010, pursuant to the 2008 SIP to achieve the NAAQS	No ²	No	No	No ²	No	No
Provide clean, reliable water in a safe, environmental responsible and cost-effective manner with excellent customer service	Yes	Possibly	Possibly	Yes	Yes	Yes
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	Yes	No	No	Yes	No	Yes
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	Yes	Yes	Yes	No	Possibly	No
create a dust control program with a high likelihood of success and without substantial delay	Yes	Yes	No	Yes	No	No
substantially conform to adopted plans and policies and existing legal requirements. These requirements include the National Ambient Air Quality Standards, the 1998, 2003 and 2008 SIPs and their associated EIRs, lease agreements and environmental and administrative permits with other agencies including California State Lands Commission, Lahontan Regional Water Quality Control Board, California Department of Fish and Game, United States Environmental Protection Agency and Great Basin Unified Air Pollution Control District	Yes	Yes	Yes	Possibly	Possibly	No
minimize the long-term consumption of natural resources (e.g., water)	Yes	No	No	Yes	Possibly	No
be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake	Yes	Yes	Yes	Possibly	Possibly	No
Total Objectives Met	7	4	3	4	1	2
<p>1 This objective was clarified in response to comment O5-5. See response to comment O5-5 for additional details.</p> <p>2 The proposed project and the gravel application alternative could be implemented on the fastest time schedule compared to any of the other dust control alternatives: gravel application approximately 1 year (12 months) to construct and achieve dust control efficiencies adopted in the 2008 SIP; proposed project, 1 year (12 months); managed vegetation 5.9 years (CDM 2009); shallow flooding, 1.9 years (CDM 2009).</p>						

S1-3 Please refer to response to comment S1-2.

S1-4 The 33% disturbed area represents the maximum amount of ground surface that can be disturbed within all moat and row dust control areas (DCAs). As currently proposed (see Exhibits 2-6 through 2-16 of the 2009 DSEIR), the total amount of disturbed ground, when all dust control measures are combined is approximately 25%; however, some DCAs may have less than 33% ground disturbance and some may have greater than 33% depending on the dust control needs of the area. Overall, disturbance within the seven DCAs would not exceed 33%.

The second paragraph on page 2-15 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“The ground disturbance for the moat and row elements, including enhancements (see description below), would vary within each DCA. Nonetheless, moat and row features within the 3.5 square miles of the moat and row DCAs would not exceed a maximum of 33% of the total ground surface area (refer to Exhibit 2-5). ~~For example, if a DCA is 100 acres in size, then ground disturbance would not exceed 33.3 acres.~~ For the 3.5 square miles of dust control, no more than 1.16 square miles of the project area would be constructed with permanent moat and row features including small grading berms, access roads, moats, rows, rock armoring on rows, application of brine on roads and rows, and sand fences. These features would generally be above the surface of the lake bed.”

S1-5 The frequency of monitoring and necessary maintenance of the sand fencing subject to Mitigation Measure 3.1-10 (the three fence blocks located in the northeast corner of cell T1A-1) would exceed that described generally in the Operations and Maintenance Plan, to meet the intent of the mitigation.

Mitigation Measure 3.1-10, first paragraph under “Option 1,” page 3.1-40 (and Executive Summary page 9) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the DSEIR.

“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 make all reasonable attempts to avoid or minimize disturbances to nesting plovers while conducting the monthly inspections.

Mitigation Measure 3.1-10, first paragraph under “Option 2,” page 3.1-40 (and Executive Summary page 10) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“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.”

S1-6 In the 2009 DSEIR analysis, areas initially considered potentially suitable for snowy plover included all areas within one mile of water. Through further analysis, areas mapped as potentially suitable within this distance were included based on specific on-the-ground ecological conditions that affect habitat suitability. Distance to water is only one factor that contributes to habitat suitability for snowy plover. Other factors include salinity of the water source (e.g., the brine pool on Owens Lake is not known to support snowy plover and was not considered suitable), substrate, and vegetation conditions. For example, moat and row cell T12-1 (demonstration project cell) is within one mile of water but is not suitable for breeding plover; this cell is already developed with a dense pattern of moat and row elements. Therefore, the comment stating that the entire project site should be considered potentially suitable snowy plover nesting habitat is incorrect. Additionally, please see response to comment S1-31 for related discussion and Master Response 3.

S1-7 As described in the 2009 DSEIR, cell T12-1 was not identified as containing suitable habitat for snowy plover because it is one of the demonstration project cells and is already developed with a dense, grid pattern of moat and row elements. Any increases in habitat value in nearby areas are not expected to increase the likelihood of snowy plovers nesting within cell T12-1, due to conditions within the cell itself. Therefore, it would be inappropriate to add the acreage of cell T12-1 to the estimate of 1,752 acres of potentially suitable snowy plover habitat lost as a result of project implementation as suggested by the commenter.

The commenter’s interpretation of the following text in the 2009 DSEIR (page 3.1-21) appears out of context: “Implementation of approved Phase 7 Dust Control Measures is anticipated to affect existing habitat value for snowy plover within and adjacent to some moat and row cells. Habitat value could improve at moat and row cells T1A-1 and T1A-3 as a result of sheet-flow shallow flooding planned nearby; habitat quality would remain low within and adjacent to T12-1 as a result of the low-value ponded shallow flooding planned in areas surrounding this cell; and no changes to habitat value would be expected at remaining moat and row cells due to their distance from approved Phase 7 Dust Control Measures.” It is important to note that this text was included in section “3.1.2 Environmental Setting,” and applies specifically to how shallow flooding DCMs would change the existing conditions of proposed moat and row cells, not the post-project conditions. As stated in the impact analysis, where suitable habitat occurs in proposed moat and row cells, it would be lost where moat and row elements would be developed (regardless of conditions adjacent to the cell).

The commenter states that the 2009 DSEIR does not discuss what low-value ponded shallow flooding is and why it was not considered potentially suitable habitat for snowy plovers. Generally, two types of shallow flooding are being implemented on Owens Lake by LADWP: (1) sheet-flow shallow flood, which creates relatively flat mosaics of shallow water, mudflats, and variable wet-dry interface zones; and (2) deeper-water ponds. On page 3.1-20, the 2009 DSEIR describes that suitable foraging habitat for snowy plover on Owens Lake consists of shallow water (1–2 cm deep), and wet mud or sand with limited to no vegetative cover. Ponds in which water depths are greater than a few centimeters are not considered suitable for foraging. In Appendix B (“Summary of Snowy Plover Ecology and Life History Information Relevant for Impact Analysis”), the 2009 DSEIR also states that adults and broods generally forage near shallow water (0.39–0.79 inch deep) (Shuford, Abbot, and Ruhlen 2008). Ponded shallow flood areas (as opposed to sheet-flow shallow flood) on Owens Lake are considerably deeper than what is considered suitable habitat, and are contained within relatively steep berms that generally do not provide abundant shallow mudflat conditions around the pond edges. However, artificial

sheet-flow shallow flooding on Owens Lake does provide high-quality habitat for snowy plover and other shorebirds. This type of flooding creates relatively flat mosaics of shallow water, mudflats, and variable wet-dry interface zones for foraging, in association with nearby drier areas for nest placement. Additionally, on page 3.1-46, the 2009 DSEIR specifies that shallow flood that would be considered enhancements to snowy plover habitat are those that form sheet flow hydrologic characteristics rather than deeper-water ponds.

The commenter refers to the 2009 DSEIR's documentation of a 2007 snowy plover nest adjacent to cell T12-1, and suggests that cell T12-1 should be considered suitable for snowy plover based partly on this record. The nest in question was located within cell T13-3, which is a deeper-water artificial flooding cell that was first implemented in 2006. This nest was located in 2007 by a LADWP biologist, on an island of soil within cell T13-3 that can exist due to fluctuating water depths. Islands are not a typical feature within ponded shallow flood areas on Owens Lake; however, the 2009 DSEIR specifically acknowledges that snowy plovers occasionally use small islands when they exist. The 2009 DSEIR, Page 3.1-20, third paragraph describes that snowy plover "has been known to nest in areas with sandy and gravelly substrate, including berms, roadways, and occasionally on small islands within ponded areas (Prather, pers. comm., 2008)." The 2007 nest on the island in cell T13-3 was considered in the 2009 DSEIR analysis. The presence of the nest or the variable island in cell T13-3 does not increase the likelihood of snowy plovers nesting within cell T12-1, due to the existing developed conditions within the cell itself (i.e., existing development of moat and row elements, as discussed previously).

The commenter states that, based on Exhibit 3.1-11, several nests were located at ponded shallow flooding areas during 2007–2008 surveys; and, therefore, the 2009 DSEIR's assumption that ponded shallow flooding does not provide suitable habitat is inconsistent with the survey data. To clarify, all of these nests were located on or along roads (not within the ponded areas themselves), with the exception of the 2007 nest located on an island within cell T13-3. In the 2009 DSEIR's calculations and analysis of suitable habitat, these roads (and others that could provide a nesting substrate within one mile of suitable foraging habitat) were included as potentially suitable for snowy plover nesting habitat. Page 3.1-3, third paragraph, summarizes how the suitable habitat map was developed, and specifies that it was based partly on "roads within existing ponded shallow flood cells."

- S1-8 The installation of sand fencing as proposed for cell T1A-1 would not result in a substantial loss of snowy plover habitat because, as discussed on page 3.1-35 of the 2009 DSEIR, the existing hydrologic and topographic conditions of the cell that are consistent with high-quality plover habitat would remain intact following construction, and large contiguous blocks of suitable nesting habitat would remain following construction due to the relatively low density of sand fencing proposed within this cell. Also, with the exception of the three proposed fence blocks in the northeast corner of cell T1A-1, there is no enclosed grid pattern of fence spacing proposed; visual obstruction would be limited compared to other moat and row cells with dense grid patterns and altered topography. In the three northeast fence blocks that would be enclosed, it is expected that distances between parallel fences (approximately 600 feet) and the block size (approximately 8.3 acres) would still provide suitable conditions (including sufficient visibility for nesting snowy plovers) within those blocks. Also, the revisions to Mitigation Measure 3.1-10 (see response to comment S1-5) would ensure that gaps along those fences are regularly inspected and maintained.
- S1-9 The comment states that the 2009 DSEIR is contradictory by concluding that several proposed moat and row cells have a low potential for plover nesting and brood isolation, yet some of these were identified as containing high-suitability habitat and moderate to high potential for plover encounters. The portion of the analysis referenced by the commenter (i.e., low potential for plover

nesting and brood isolation) focused specifically on post-project conditions (i.e., project effects) within moat and row cells (see page 3.1-34, “Brood Movements Within Cells”). Although some of these cells presently contain suitable habitat as described in the 2009 DSEIR, nesting is not expected to occur where moat and row elements would be developed; and hence, brood isolation is not expected as well. The analysis is not contradictory with the survey data or habitat suitability assessment.

S1-10 Regarding the fatal entrapment of two plover chicks in a dewatering trench, as stated in the 2009 DSEIR (see page 3.1-38), the degree to which moat side-slope, presence of mud, or other soil conditions contributed to this incident is unknown. The dewatering trench had vertical sides (90 degrees), whereas side slopes of DCA moats would be 33.7 degrees. Although the incident provides potential evidence that construction and operation of the moats could result in mud entrapment, it does not provide evidence that frequent entrapment should be anticipated. The commenter provides no evidence that would suggest that entrapment should be expected to occur more frequently than described in the 2009 DSEIR. Nonetheless, the 2009 DSEIR acknowledges that fatal entrapment of snowy plovers could result from implementation of the project and as a result a comprehensive adaptive management strategy to prevent significant losses of plovers has been proposed (see Mitigation Measure 3.1-12).

S1-11 Regarding the ability of plovers to successfully navigate slope angles for moat or other angled surfaces, scientific studies are lacking for this subject. In the absence of studies that are directly applicable to this project and impacts on snowy plovers, biologists relied on the best available information to substantiate the conclusions presented in the 2009 DSEIR. The slope information presented is from the few anecdotal observations and opinions made by biologists who have studied snowy plover, and in some cases, are recognized experts on the species (namely Gary Page). The 2009 DSEIR does not identify a maximum slope navigable by plovers. The statement by Page that snowy plovers of all ages are expected to be able to navigate slopes of 30 degrees (1.7:1) or less does not indicate a maximum slope; this was a value that Page believed should pose no problems to snowy plovers, but that was reasonable based on his observations of the species. Also, this value was not based on empirical data. The side slopes of moats in the proposed project would be 33.7 degrees, or 3.7 degrees steeper than 30 degrees. Page also indicated that older plover chicks can navigate steeper slopes (possibly as steep as 60 degrees). It is reasonable to conclude, in the absence of data to suggest otherwise, that if snowy plover chicks can negotiate a 30 degree slope (and older chicks may be able to navigate slopes up to 60 degrees) it is likely that a 33.7 degree slope would not preclude them from being able to exit the moats.

The observation of a snowy plover moving over a steep rip-rapped slope (no slope angle was documented) was reported as part of full disclosure of all information obtained on snowy plover movements on slopes for this analysis. This observation does not suggest that rip-rap would be required along moats to prevent entrapment or erosion of the side slopes. The conclusion in the 2009 DSEIR that entrapment is expected to be rare is supported by best available information and professional opinion, which are documented in the 2009 DSEIR (see pages 3.1-37 and 38). The commenter provides no evidence that would suggest that entrapment should be expected to occur more frequently than described in the 2009 DSEIR, and that modifying the project design to include rip-rapped slopes as a preventative measure would be necessary. Nonetheless, the 2009 DSEIR analysis took a very conservative approach and considered the impact to be potentially significant due to uncertainty and lack of empirical data, and as a result a comprehensive adaptive management strategy to prevent significant losses of plovers has been proposed (see Mitigation Measure 3.1-12). The photo (Exhibit 3.1-3) that included a rip-rapped slope at cell T32-1 was introduced in a previous section to illustrate existing conditions of a ponded shallow flood area;

it was referenced again on page 3.1-37 only to illustrate what the rip-raped slope that a plover was observed moving over looked like.

S1-12 The 2009 DSEIR states that brine fly populations were associated with water in moats at T12-1, indicating that groundwater in moats may be suitable to support a food source for snowy plover in some areas. However, groundwater at Owens Lake is generally too saline to support brine flies; and moats in the project area are not expected to regularly support brine fly populations. It is reasonable to conclude that moats are not expected to provide an important food supply for snowy plovers, regardless of whether flies are present there. As discussed in the 2009 DSEIR, water in moats would generally not be visible to plovers moving on the ground, and pools of water and associated brine fly populations within moats would be isolated and relatively small. The extent, duration, and visibility of water on the landscape are important for attracting plovers to foraging areas (Page, pers. comm., 2008).

S1-13 The comment seeks clarification about extrapolating from an estimated fence-gap value provided by Gary Page to what is recommended in Mitigation Measure 3.1-10 of the 2009 DSEIR. As discussed on page 3.1-40 of the 2009 DSEIR, the minimum size and spacing of fence gaps to facilitate movement by snowy plovers is not known, and no scientific basis to develop specific fence-gap requirements exists. The 2009 DSEIR uses a reference point provided by Mr. Page to develop a reasonable assumption of spacing that would allow sufficient movement opportunities for plovers. Mr. Page estimated that approximately 1-foot-wide gaps placed every 10 feet along fence rows could potentially allow for snowy plovers to move through fenced areas without movement obstructions. This estimate is not based on empirical data. However, Mr. Page does have extensive knowledge of snowy plover behavior and life history and is considered an expert in this field.

To develop a range of feasible options that avoids a significant level of movement obstruction, Mr. Page's estimate about fence gap size and frequency was extrapolated by qualified wildlife biologists 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 would total a minimum of 10% of the total fence perimeter. 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 was assumed that this maximum spacing of gaps would be frequent enough to allow for sufficient opportunity for broods to meet their daily movement requirements. The commenter provides no scientific or other evidence that would suggest that this assumption is unreasonable, or that a different design would be necessary to avoid a significant level of movement obstruction.

S1-14 If the threshold number of plover entrapments to require corrective actions is met, LADWP shall notify DFG in writing. In response to this comment and comment (S2-38), Mitigation Measure 3.1-12, Paragraph 1, page 3.1-45 (and Executive Summary page 19) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the DSEIR.

“If the response threshold is met, LADWP shall notify DFG as soon as possible and within ~~three business days~~ 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).”

The request to notify specific individuals is noted, but it is not included in the text of the mitigation because personnel can change. However, the intent of the comment has been added to the mitigation measure.

- S1-15 Regarding the commenter's statement that habitat benefits from shallow flooding cannot be recognized as mitigation for Moat and Row unless this acreage is held in perpetuity, please refer to Master Response 3.
- S1-16 The supplemental analysis of biological resources in the 2009 DSEIR specifically addresses the potential for moat entrapment of juvenile shorebirds (particularly snowy plover) because of proposed moat side slopes and the potential for the project to create barriers to wildlife movement as a result of the proposed moat, row and fence pattern and design. American avocet is a common shorebird species; nonetheless this and other common species were considered and specifically evaluated in the 2009 DSEIR as part of the wildlife movement analysis.
- No waterbird species other than snowy plover have been documented nesting or brooding in the project site (i.e., within proposed moat and row cells). Most waterbirds on Owens Lake are highly associated with surface water for meeting their life history requirements, and generally do not use the dry playa outside these wetland areas (Page, pers. comm., 2008; Prather, pers. comm., 2008). Several shorebirds, other than snowy plover, have been regularly documented on Owens Lake and require some vegetation in association with wetlands for nesting or brooding. American avocets and black-necked stilts brood their young in nursery areas with nearby vegetation for cover (Robinson et al. 1997, Robinson et al. 1999). These conditions do not exist within or adjacent to moat and row cells; therefore, impacts on these shorebirds would not be significant under CEQA.
- The 2009 DSEIR (page 3.1-49) describes that ground movements of juvenile and adult shorebirds could occur near moats at the perimeters of cells T32-1, T37-1, T37-2, T12-1, T1A-4, and T1A-3, where suitable wetland habitat would occur. However, moats at these cells are not expected to impose a substantial entrapment hazard or a barrier to ground movements of juvenile or adult shorebirds. The movements of these species are closely associated with the presence of surface water or saturated soils; these conditions are not expected to occur immediately adjacent to moats (and attract shorebirds into moats) due to disrupted hydrology there after project construction. Also, the distribution, density, or sizes of cells would not prevent access to large blocks of high quality habitats from other areas, or isolate any known or potential nesting areas. The connectivity of suitable habitats would remain considerable after project construction, and would continue to facilitate movements between important foraging and breeding areas. Therefore, any effects on movements of these species would be less than significant. Additionally, the moat monitoring and adaptive management strategy for snowy plover (Mitigation Measure 3.1-12) requires LADWP to report all species documented within moats; therefore entrapment of American avocets and other species would be reported to DFG. There is no substantial evidence that entrapment of common shorebird species would be likely or frequent. The commenter offers no scientific or other evidence that the likelihood or levels of entrapment for common species would be significant or different than those described in the 2009 DSEIR.
- S1-17 Regarding the commenter's disagreement with the scope of the alternatives analysis, please refer to Master Response 1 and 2.
- S1-18 The commenter suggests that multiple alternatives should be evaluated within the 3.5 square miles of moat and row DCMs. With regard to the requirements of an alternatives analysis in a Supplemental EIR, please refer to Master Response 2. In response to the specific request that a variety of different alternatives should be evaluated in the 2009 DSEIR, State CEQA Guidelines Section 15126.6(a), states that an EIR "need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives to the project." For the reasons described in Master Response 2, the 2009 DSEIR evaluated all potentially feasible alternative dust control options that could be implemented in place of moat

and row, namely shallow flooding, managed vegetation, and gravel application. While the analysis carries forward the alternatives evaluated in the certified 2008 SIP SEIR and contemplates implementation of these options for the entire 15.1 square miles of dust control areas approved in the 2008 SIP, it was appropriate for the 2009 DSEIR to carry forward this analysis because: 1) the 2008 SIP EIR evaluated a larger program of dust control for Owens Lake, one element of which included 3.5 square miles of moat and row DCAs; 2) a supplemental EIR has been prepared for the approved 2008 SIP SEIR and as such the EIR need contain only the information necessary to make the previous EIR adequate (State CEQA Guidelines Section 15162); and 3) the revised moat and row project would not result in any new significant impacts for which feasible mitigation or alternatives are available to reduce those impacts. Therefore, no significant changes to the previous alternatives analysis is required as it relates to changed conditions evaluated in the 2009 DSEIR. (See Master Response 2 regarding project objectives and alternatives.)

It appears that the commenter is also suggesting that because shallow flooding may provide some biological benefits compared to moat and row, that it should be considered in certain moat and row DCAs. As described in Section 3.1, "Biological Resources," of the 2009 DSEIR, the project's biological impacts would be reduced to a less-than-significant level with implementation of recommended mitigation. No residual significant and unavoidable impacts would remain. An alternative that contemplates the implementation of shallow flooding in the 3.5 square miles of DCAs has been considered in the 2009 DSEIR: the Shallow Flooding Alternative (see page 5-3). This alternative discussion presents a reasonable evaluation of the environmental tradeoffs between moat and row and shallow flooding. The commenter's suggestion that multiple iterations or variations of this alternative where some portion of the moat and row DCAs are retained as moat and row and some are shallow flooding, would essentially provide the same evaluation and conclusions as that presented in the 2009 DSEIR, but there would be environmental tradeoffs within and among the variations. No new or different environmental information would be gained through an analysis such as this. The project's biological impacts would continue to be less-than-significant with mitigation. Lesser mitigation would not be required unless moat and row were removed from all DCAs, which is the alternative contemplated in the 2009 DSEIR. Therefore, the alternatives analysis provided in the 2009 DSEIR provides a meaningful evaluation of project alternatives consistent with the requirements of CEQA and appropriately supplements the alternatives analysis contained in the certified 2008 SIP SEIR (see also Master Response 2).

With regard to an evaluation of how the alternatives meet each project objective, please refer to response to comment S1-2.

S1-19

The commenter appears to be interpreting the analysis in the 2009 DSEIR out of context. As described on page 2-15 of the 2009 DSEIR, if managed vegetation enhancements were implemented within the moat and row DCAs (currently moat and rows are proposed without enhancements until their effectiveness in controlling dust can be determined through monitoring), then those features including the vegetation, utilities, and other ground-disturbing activities would not be included within the 33% ground disturbance area identified for moat and row. This is because these features are not planned to be implemented but could be implemented if needed based on monitoring data.

With regard to the All Managed Vegetation alternative, the 2009 DSEIR concludes that this alternative would result in greater ground disturbance compared to the proposed project. This is true for the following reasons: 1) data exists to demonstrate that moat and row DCMs adequately control dust emissions without the use of other dust control enhancements; 2) it is unknown if managed vegetation or some other enhancement option would need to be implemented for the

project; and 3) if managed vegetation were implemented it would only be in those areas where dust emission “hot spots” were identified and where vegetation could feasibly be supported. Therefore, the complete conversion of the moat and row DCAs to all managed vegetation is unlikely. Rather, it is reasonable to assume that only a smaller subarea of the DCAs would need enhancements. For these reasons, the 2009 DSEIR concluded that ground disturbance impacts associated with managed vegetation would be greater than impacts associated with the project.

The commenter disagrees with the conclusions made regarding habitat and visual impacts of the managed vegetation alternative. Please refer to response to comment S2-20, Master Response 1, and Master Response 2.

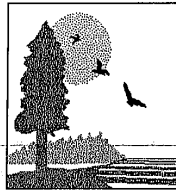
- S1-20 Please refer to Master Response 2.
- S1-21 Please refer to response to comments L1-8, S2-5, S2-7, S2-30 and Master Response 2.
- S1-22 Please refer to L1-8, S2-5, S2-7, S2-30 and Master Response 2.
- S1-23 Please refer to L1-8, S2-5, S2-7, S2-30 and Master Response 2.
- S1-24 The potential effects of implementing dust control enhancements to gain greater dust control efficiencies, if needed, are evaluated in the 2009 DSEIR on pages 3.1-34 and 3.1-35.
- S1-25 Effects of project implementation on potentially suitable habitat for snowy plover (which include existing snowy plover use areas) were evaluated and identified in the 2009 DSEIR as a potentially significant impact, and mitigation to reduce this impact to a less-than-significant level was proposed. As described in the 2009 DSEIR, impacts to snowy plover would be reduced to less than significant through implementation of a combination of mitigation measures in the 2008 FSEIR, and revised and new measures in the 2009 DSEIR. This conclusion is consistent with the State CEQA Guidelines. However, LADWP recognizes that based on the comments on the 2009 DSEIR, DFG may require additional compensatory mitigation before issuing Lake and Streambed Alteration Agreement, which must be obtained prior to implementation of the revised moat and row project. LADWP believes that the analysis provided in the 2009 DSEIR adequately evaluates the project’s impacts on snowy plover and recommends mitigation to adequately compensate for the project’s impacts, including mitigation above and beyond the 2008 FSEIR (see Master Response 3). LADWP will continue work with DFG through the Lake and Streambed Alteration permitting process to determine whether sufficient compensatory mitigation has been identified to fully compensate for project impacts consistent with DFG requirements (California Fish and Game Code).
- S1-26 The 2008 SIP FSEIR evaluated the potential water quality impacts associated with the exposure of groundwater present in moats to area wildlife (see “Surface Water Quality Impacts” page 3.5-14 of the 2008 SIP SEIR). As described therein, the 2008 SIP SEIR acknowledged that groundwater beneath Owens Lake could have elevated concentrations of salts and other heavy metals. Section 3.2, “Biological Resources,” of the 2008 SIP SEIR evaluated the potential wildlife impacts that could occur from contact with groundwater with high salt and heavy metal concentration and determined these impacts to be potentially significant. Mitigation Measure “Measure Biology-7” was adopted and required the implementation of a toxicity monitoring program to determine if the project would result in the potential bioaccumulation of toxins present in the lakebed soils and groundwater. With implementation of this mitigation, the project’s potential effects from contaminated (with salts) groundwater to wildlife would be reduced to a less-than-significant level. Nothing about the proposed project evaluated in the 2009 DSEIR would change these conclusions.

- S1-27 The project is intended to be a permanent dust control feature on Owens Lake. Decommissioning of the moat and row elements would not occur unless it is determined that the moats and rows were not adequately controlling dust emissions and supplemental enhancements (e.g., shallow flooding, gravel, and managed vegetation) could not be added or were not effective in controlling dust. There is no evidence to suggest that the moat and rows and supplemental enhancements would not be successful. In fact, moat and row, gravel, shallow flooding, and managed vegetation are all currently operating successfully on the lake bed. If the remote possibility of decommissioning the moat and row elements is realized, then consistent with the requirements of CEQA and the State CEQA Guidelines, additional environmental analysis would be conducted to evaluate the impacts of decommissioning activities.
- S1-28 The 2009 DSEIR includes feasible mitigation to reduce biological impacts to a less-than-significant level, consistent with the State CEQA Guidelines. As described in the 2009 DSEIR, impacts would be reduced to less than significant through implementation of a combination of mitigation measures in the 2008 FEIR and revised and new measures in the 2009 DSEIR. As indicated in the 2009 DSEIR comment letter, DFG may require additional compensatory mitigation before issuing Lake and Streambed Alteration Agreement, which must be obtained prior to implementation of the revised moat and row project. LADWP believes that the analysis provided in the 2009 DSEIR adequately evaluates the project's impacts on snowy plover and recommends mitigation to adequately compensate for the project's impacts, including mitigation above and beyond the 2008 FSEIR. However, LADWP will work with DFG through the Lake and Streambed Alteration permitting process to identify sufficient compensatory mitigation and related measures to fully compensate for project impacts consistent with DFG requirements (California Fish and Game Code). Please also refer to response to Master Response 3.
- S1-29 The loss of potentially suitable habitat for snowy plover, which includes existing nesting areas, was identified in the 2009 DSEIR as a potentially significant impact. As described in the 2009 DSEIR and consistent with State CEQA Guidelines, impacts would be reduced to less than significant through implementation of a combination of mitigation measures in the 2008 FSEIR, and revised and new measures in the 2009 DSEIR. Please also refer to response to comment S1-28 and Master Response 3.
- S1-30 The commenter's statement that the project's ground disturbance is insignificant in relation to project impact to nesting and juvenile shorebirds is acknowledged. This comment does not raise any issues related to the environmental analysis presented in the 2009 DSEIR. No further response is required.
- S1-31 The commenter considers "habitat loss induced by project impacts to be 3.5 square miles or 2,238 acres"; however, the commenter does not specify for which species 2,238 acres of habitat would be lost. The acreage of suitable habitat for snowy plover was quantified and mapped specifically for the 2009 DSEIR; this process and preliminary maps were presented to and reviewed by DFG and other reviewing parties prior to completing the 2009 DSEIR. Within the project site (i.e., within all DCA cells), the estimated amount of existing suitable habitat for snowy plover is 1,751 acres (not 2,238 acres). Some of the areas within DCA cells were not mapped as presently suitable for snowy plover, for reasons discussed in response to comment S1-6. The commenter offers no biological or other basis for concluding that the entire site (2,238 acres) is suitable for snowy plover, which is implied in this comment and specifically stated in comment S1-6. (Please refer to response to comment S1-6 for a discussion of why distance-to-water alone does not define where suitable habitat is located, although it was an important variable of several that were used to map suitable habitat for snowy plover.) Of the 1,751 acres of suitable habitat identified within the project site, the 2009 DSEIR conservatively assumed that all (100% of) suitable habitat within cells with moat and row elements (i.e., all cells except T1A-1) would be lost; this amount

was 1,503.8 acres. In the 2009 DSEIR, the loss of 1,503.8 acres of suitable habitat for snowy plover was identified as a potentially significant impact. As described in the 2009 DSEIR and consistent with State CEQA Guidelines, the DSEIR proposed feasible mitigation to reduce the impact to less than significant through implementation of a combination of mitigation measures in the 2008 FSEIR, and revised and new measures in the 2009 DSEIR. Please also refer to response to comment S1-28 and Master Response 3.

- S1-32 Please see Response to Comments S2-66 and S2-67. As described, the views from most locations and visible to most people, would be modified but the change would not be substantial in the viewshed. Please see Response S2-67, particularly as it relates to close-in views.
- S1-33 LADWP is interested in and will work collaboratively with DFG and other involved parties in developing the Long-Term Habitat Management Plan and the Conservation Action Plan for Owens Lake. Additionally, please refer to Master Response 3.

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July 22, 2009

Ref: PRC 8079.9
SCH# 2008121074

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

SUBJECT: Comments on Draft Supplemental Environmental Impact Report, for the Owens Lake Revised Moat and Row Dust Control Measures, Owens Lake, Inyo County

Dear Mr. Dailor:

California State Lands Commission (Commission) staff has reviewed the draft Supplemental Environmental Impact Report (SEIR) for the Owens Lake Revised Moat and Row Dust Control Measures released in June 2009 for public review. No project can be approved by the Commission unless all of the requirements of CEQA have been met. As the Commission is both a Responsible and Trustee Agency as defined in CEQA, it must review the environmental documentation prepared by the Lead Agency (in this case the city of Los Angeles (City)), and comply with all applicable, substantive and procedural requirements of CEQA.

CEQA Guidelines 15162 and 15163(c) state that a **subsequent** EIR should be prepared if the previous EIR requires major revisions, whereas a **supplemental** EIR may be prepared if the revisions are not considered major. During the meeting with City staff on August 8, 2008, Commission staff stated that a supplemental EIR would be required, as the project design revisions to the *2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (2008 FSEIR) would be minor, and did not rise to the level of "substantial changes" or "new information of substantial importance" (CEQA Guidelines section 15162). Revisions requested by Commission staff centered on an analysis of the potential for increased impacts to visual, biological, and air resources

caused by the changed project design. Accordingly, the inclusion of an alternatives analysis was neither requested nor required in accordance with CEQA Guidelines section 15163(b), which states that "the supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised." Commission staff believes that the alternatives analysis exceeds the scope of what is permitted under CEQA in a supplemental EIR (see CEQA Guidelines sections 15162 and 15163). Many of our following comments pertain to the inclusion of this new alternatives analysis and the far-reaching implications of feasibility statements regarding those alternatives. As currently written, Commission staff continues to have significant concerns about the adequacy of the CEQA analysis that may result in the inability of the Commission to use this document as the basis for its discretionary action when considering whether or not a lease should be issued for the proposed project.

Throughout the process of this draft SEIR, staffs' concerns have consistently centered on impacts to aesthetics and wildlife, the City's determination through an alternatives analysis that previously approved and feasible dust control measures (shallow flood and managed vegetation) are now infeasible, as well as whether or not Moat and Row is consistent with the public trust doctrine. Two aspects of this draft SEIR raise additional concerns, because they may have far-reaching implications for both previously-approved shallow flood and managed vegetation dust control measures, and also for similar measures that may be proposed for future projects. Specifically, the narrowly- defined project objectives constrain the alternatives analyses, and the current draft SEIR conclusion of the lack of a water supply for use as a dust control measure contradicts the 2008 FSEIR, constrains the alternatives analyses, and could restrict current and future projects.

The Project Objectives (pp. 2-9 and 2-10) have been substantially altered from those in the parent 2008 FSEIR certified by the Great Basin Unified Air Pollution Control District (GBUAPCD) and from those identified in Initial Study for this draft SEIR (see the attached Project Objectives from the 2008 FSEIR, the Initial Study for the SEIR, and the draft SEIR). Of particular concern are new, narrowly drawn project objectives that result in an inadequate and faulty alternatives analysis. The previously stated primary goal of the proposed project is to prevent emissions from the lake bed that cause or contribute to violations of PM₁₀ standard. The new objectives "to provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service," and to "substantially reduce or eliminate the use of water in implementing new dust control projects," in association with the new reference to water in the objective "to minimize the long-term consumption of natural resources (e.g. water)," significantly alter the setting of the alternatives analysis. CEQA Guideline 15124(b) directly links the importance of objectives in developing a reasonable range of alternatives and in evaluating those alternatives. The changes to the Project Objectives in the draft SEIR also make the notice provided by the Notice Of Preparation/Initial Study inadequate, because it did not disclose that water supply would be reevaluated, and thereby averted public disclosure and participation.

CEQA Guideline section 15126.6(a) provides that "[a]n EIR shall describe a *range of reasonable alternatives to the project...which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the*

significant effects of the project, and evaluate the comparative merits of the alternatives.” Alternatives need only be potentially feasible and should be evaluated even if they do not fulfill all of the project objectives or are more costly. Based on the altered project objectives, the draft SEIR reaches the conclusion that shallow flooding and managed vegetation alternatives are “infeasible” despite the opposite conclusion made by the GBUAPCD in the *Findings of Fact and Statement of Overriding Considerations* based on the analysis in the parent 2008 FSEIR (see pp. V-11 and V-13 of the *Findings*). Furthermore, nearly 10 square miles of shallow flooding approved for the Phase 7 project is currently being implemented as part of Phase 7.

As disclosed in the NOP for the SEIR and the accompanying Initial Study, water supply was **not** an issue that would be reevaluated:

Water Supply. d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlement needed?

Less-than-Significant impact. The 2008 FSEIR evaluated the water demands of the moat and row DCMs in combination with the water demands of all other proposed DCMs. The 2008 FSEIR identified that DCMs are expected to utilize an additional 20,000 AF/yr of water and may use up to 28,000 AF/yr if **all DCMs implemented shallow flooding DCMs**. This would bring the total water demand associated with all dust control activities on Owens Lake to between 75,120 AF/yr or 83,120 AF/yr, respectively. Projected water demands for DCMs **would be provided by existing entitlements and supplies of the City of Los Angeles which has planned for the water demands of all DCMs**. [p. 3-50, emphasis added]

The Initial Study also stated that the water would be supplied via the Los Angeles Aqueduct and referenced the 2008 FSEIR analysis concerning water supply. That analysis concluded that “the proposed project would not be expected to result in significant impacts to utilities related to water supplies.” (p. 3.9-7) The Initial Study concluded that water supply was not an issue that would be evaluated further in the SEIR. Therefore, the draft SEIR cannot analyze water supply issues without violating CEQA requirements for adequate notice and disclosure.

A supplemental EIR is permitted under CEQA when any of the conditions described in section 15162 of the Guidelines applies and “[o]nly **minor** changes would be necessary to make the previous EIR adequately apply to the project in the changed situation” (CEQA Guidelines section 15163(a)(2)). If water is not available for dust control abatement, this would constitute “new information of substantial importance” requiring preparation of a *subsequent* EIR. The purported conclusions concerning the feasibility of shallow flooding and managed vegetation due to an inadequate water supply would require full disclosure and analysis in a subsequent EIR, not a supplemental EIR whose noticed purpose is to examine the changes to the design of the Moat and Row DCM (“These refinements [to the Moat and Row DCM] are the subject of this SEIR.” p. 6, NOP).

The “conclusions” regarding water supply would also affect basic assumptions concerning the use of shallow flooding and managed vegetation contained in the 2008 FSEIR, the 2008 State Implementation Plan (SIP), the Settlement Agreement between LADWP and GBUAPCD, and “enhancements” that are a part of the current project. The Moat and Row Dust Control Measure (DCM) is **experimental** and has not been approved by the GBUAPCD. If the Moat and Row DCM is not effective, the 2008 SIP and 2006 Settlement Agreement call for replacing it with an approved DCM, including shallow flooding, managed vegetation, or gravel cover.

The alternatives analysis and the analysis provided in the draft SEIR concerning water supply should be deleted along with the conclusions about the feasibility of shallow flooding and managed vegetation because these determinations far exceed the scope of this supplemental EIR. A subsequent EIR could be prepared later, if necessary, that analyzes water supply. Conclusions that shallow flooding and managed vegetation are infeasible based on the lack of a water supply would require substantial evidence that water supplies are, in fact, unavailable. A detailed analysis would be necessary to include all possible sources including diverting less water from the Owens Lake watershed to the Los Angeles Aqueduct, the use of brine and groundwater, and alternative sources that could be available by increased efficiency in existing and approved shallow flood areas, as well as by purchase. For example, the GBUAPCD stated in its comment letter dated June 23, 2009, that “[c]urrent water control efficiency improvement efforts on the existing and proposed water-based dust control areas should result in significant water savings.” (see comment 5)

Further, the Environmentally Superior Alternative (p. ES-5) is identified as the proposed project based on the improper alternatives analysis, inadequately noticed and irrelevant objectives, and underlying assumptions. It also contradicts the determination made by the GBUAPCD in its *Findings of Fact and Statement of Overriding Considerations (Findings)*: “Based on the data collected during the analysis and resulting from coordination with the City [of Los Angeles], the EIR does not make the determination that the Moat & Row DCM is the environmentally superior alternative for dust control on Owens Lake.” (p. V-7)

For this SEIR to conclude that Moat and Row DCM is the environmentally superior alternative overreaches beyond the scope of what is allowed in a supplemental EIR. The limited purpose of this SEIR is to remedy the inadequate environmental analysis of the Moat and Row design in its final configuration as a grid pattern of moats and rows with sand fencing on top of the rows for four impact areas: biological resources, visual resources, and construction-related air quality and traffic (see p. 6 of Notice of Preparation).

In addition, this faulty alternatives analysis states that a managed vegetation DCM will have the same level of environmental impacts as a Moat and Row DCM (pg ES-4), even though vegetation also provides habitat value, has no entrapment potential, possesses no biological barrier to movement, and the vegetation would have no potential to obstruct views from the lake bed. The draft SEIR states that “[t]he all Shallow Flooding Alternative would have been identified as the environmentally superior

alternative, but it had already been considered and rejected in the 2008 FSEIR.” (p. ES-5). Although the “all Shallow Flooding Alternative” was rejected in the 2008 FSEIR in favor of the proposed mixed project of shallow flooding (9.2 square miles) and Moat and Row (3.5 square miles), it was found to be both feasible and effective. (p. 12-5 and Section 4.0, Alternatives to the Proposed Project); and Shallow Flooding was designated as the “environmentally superior alternative.” (*Findings*, p. V-7). It is not logical to assume that because the “All Shallow Flooding Alternative” was rejected in the 2008 project approval, that shallow flooding does not remain the environmentally superior alternative.

Commission staff believes that shallow flooding and managed vegetation are feasible alternatives as described in the 2008 FSEIR and *Findings*. Therefore, if a subsequent EIR is prepared, an alternative to the proposed project that includes a combination of DCMs should also have been evaluated. Variations or combinations of the alternatives could be very effective, as evidenced by the suggested use of vegetation and water or brine application as enhancements to the Moat and Row elements. However, as stated above, our concerns regarding the alternative analysis and objectives could be resolved by deleting the alternatives and water supply analyses and maintaining the 2008 FSEIR objectives.

Commission staff has found inconsistencies, incorrect information, and incomplete analyses in the draft SEIR. These detailed comments are included in the attached document and are incorporated by reference into this letter. CEQA provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects...” (Public Resources Code section 21002.) As both a Responsible and Trustee Agency under the California Environmental Quality Act, the Commission will be required to make this determination before granting a lease for the project. We hope that you will consider our comments and revise the draft SEIR accordingly.

The Commission considers numerous factors in determining whether a proposed use of the State's land is appropriate, including, but not limited to, consistency with the Public Trust under which the Commission holds the State's sovereign lands, protection of natural resources and other environmental values, and preservation or enhancement of the public's access to State lands. As has been discussed repeatedly in prior letters and meetings, the Commission has not made a determination whether the proposed Moat and Row DCM is or is not consistent with the Public Trust values associated with Owens Lake. Further, Commission staff continues to have doubts that the project is consistent with the Public Trust and until the Final SEIR is complete, that determination cannot be made.

If you have questions regarding leasing issues, please contact Judy Brown at (916) 574-1868 or via email at brownj@slc.ca.gov. If you have questions regarding the environmental comments, please contact Steven Mindt at (916) 574-1497 or via email at mindts@slc.ca.gov.

Sincerely,



Gail Newton, Chief
Division of Environmental Planning
and Management

ATTACHMENTS

cc: Office of Planning and Research
State Clearinghouse

Julie Brown, CSLC
Steve Mindt, CSLC

ATTACHMENT

As discussed in our letter, Commission staff believes the alternatives analysis should be deleted, unless the SEIR is revised as a **subsequent** EIR. Any of the following comments regarding alternatives would apply to a subsequent EIR.

Executive Summary:

Page ES-3 & 5-3; **Shallow Flooding Alternative:**

1. This alternative is improperly represented as 15.1 square miles. The project is 3.5 square miles as identified on page ES-1. The majority of the 15.1 square miles referred to have already been approved for Shallow Flooding and construction is well under way. Please correct for consistency.
2. The statement that “the objective to implement a DCM that minimizes the use of water to the minimum extent practical would not be met” lacks foundational details. The water availability information in Appendix D does not take into consideration minimizing the amount of water needed in shallow flooding to wet 75% and obtain the 99% dust control efficiency and the use of brine, both which could make available more water for dust control without increasing the total amount of water used on the dry lake bed.

Page ES-3 & 4 & page 5-3 & 4; **Managed Vegetation Alternative:**

1. (See comment Shallow Flood #1) Project is 3.5 square miles. Please correct.
2. The evaluation lacks a scientific basis for the statement; “implementing this alternative would result in greater biological habitat impacts compared with the proposed project.” Commission staff believes that this statement cannot be supported.
3. The conclusion was made that the impacts of vegetation are greater than the proposed project. Please provide a detailed basis for this conclusion.
4. The visual impacts of vegetation are only discussed as a change and presented as a comparable impact to the moat and row impacts.
5. The beneficial impacts of vegetation are not discussed:
 - Managed vegetation would be similar in appearance to the naturally existing vegetation in the lake area. This would suggest a neutral impact on the current view shed, or an impact less than moat and row.
 - Vegetation would not obstruct views from the lake bed, but would appear to be a continuation of what currently exists.
 - The introduction and enhancement of native vegetation would be much less of a visual impact than a grid pattern of trenches and mounds topped with fences.
 - Vegetation provides habitat to a number of species and may be considered a beneficial impact.
 - Vegetation does not have an entrapment potential.
 - Vegetation poses no biological barrier potential.
 - Vegetation does not provide corvid perch opportunities.

- Vegetation would substantially reduce water use, compared to shallow flooding.

Page ES-4 & page 5-4; **Gravel Application Alternative:**

1. (See comment Shallow Flood #1) Please correct.
2. The “All Gravel Cover” alternative was determined “not feasible” in the GBUAPCD *Findings of Fact and Statement of Overriding Consideration*.

Page ES-5 & page 5-5; **No-Project Alternative:**

1. The introduction in this section incorrectly summarizes the past moat and row approval.
2. The moat and row project described in the 2008 SIP has been evaluated through a certified CEQA document; however, the project design evaluated in the 2008 SIP FSEIR was not the project submitted to the Commission for a lease. That is, if the original serpentine design with two to one (2:1) slopes and without sand fencing had been proposed, then this additional document would have been unnecessary. Deviations from the 2008 FSEIR Moat and Row design were originally proposed by LADWP. Please correct this section of the document.
3. The moat and row project proposed in this supplemental EIR represents a significant change in the design from that approved in the 2008 SIP. Those changes include increased slopes, the addition of fencing and a design change to a grid pattern. Please correct to reflect these points.

Page ES-5 & page 5-5 & 6; **Environmentally Superior Alternative:**

1. See Shallow Flooding comment #1. Please correct.
2. The Environmentally Superior Alternative, is identified as the current project based on faulty information and assumptions. This needs to be reevaluated in light of the correct information.
3. The second sentence in the last paragraph makes the following statement: “The all Shallow Flooding Alternative would have been identified as the environmentally superior alternative, but it had already been considered and rejected in the 2008 FSEIR.” Please correct. See page 12-5, of 2008 FSEIR. **ES.2.1 Dust Control Measures**. Which states; “shallow flood was found to be feasible and effective.”
4. 9.2 square miles of Shallow Flood has already been approved and is currently being constructed. The statement made in the Environmentally Superior Alternative section on page ES-5 may be misleading or not entirely correct, that the “...other alternatives were evaluated as part of the 2008 FSEIR, two alternatives (i.e., All Shallow Flooding, All Managed Vegetation) were determined not to be **feasible because and [sic] long-term** use of natural resources (e.g., water).” The 2008 FSEIR found that All Shallow Flood did not meet all of the objectives, but that document did not state that the alternative was infeasible. The *Findings* determined that All Shallow Flood was feasible and designated it as the “environmentally superior alternative.” In addition, this document states that “No other alternatives are available that **could feasibly and have been** proven to reduce dust emissions at Owens Lake.” Again, “All” or “Nothing” Alternatives

are very narrow in focus and they do not reflect the project. Variations or combinations of the alternatives could be very effective, as evidenced by the suggested use of vegetation and water or brine application in the “enhancements” to the Moat and Row elements as enhancements to control dust. **(NOTE: See page 12-5 of FSEIR 2008 for actual feasibility statement.)**

5. The last paragraph (page ES-5), incorrectly concludes “No other environmentally superior alternatives are available that would attain **most** of the proposed project’s basic objectives.” CEQA Guidelines section 15126.6(a) provides that alternatives meet most of the basic objectives. The document does not support the conclusion that only the proposed project meets most of the objectives. The last sentence (page ES-5) is incorrect and should be removed. As stated previously, the original moat and row design was changed significantly from what was approved in the 2008 SIP. It was those significant design changes that necessitated this Supplemental EIR.
6. The document appears to contradict itself and prior discussions between LADWP and Commission staff. During the scoping discussions and as an enhancement to moat and row, LADWP has suggested that if Moat and Row failed to control the dust to the level required under the SIP, then the Moat and Row elements in question could be converted to shallow flood. However, this SEIR states “All shallow flood is not feasible.” Please correct or explain this apparent contradiction.

Page ES-7-22: **Table ES-1:**

1. Page ES-10; The document sites a Gary Page conversation that estimates a 1 foot gap for every 10 feet along the fence rows, to potentially allow unimpeded movements. But then, changes to a gap no more than 100 feet apart. Provide data or source for this change.
2. Page ES-12; mitigation 2nd to the last paragraph. The necessity to inspect and maintain the corvid perching should not be conditional; therefore, please remove the “if necessary” at the end of the inserted text.
3. Page ES-14; #3: Once again, please remove the conditional statement “if necessary” from mitigation measures.
4. Page ES-15; Implementation Schedule: Please provide the scientific basis for the frequency of monitoring.
5. Monitoring should report all species trapped in moats.
6. Page ES-19; last paragraph: If actions are not feasible, then they should not be considered as potential mitigation measures and should be removed.
7. Page ES-19. For consistency, notification should be within 48 hours not three days of incident.
8. Page ES-20; 3.1-2; This statement seems to be inconsistent with the document. If potential breeding sites are up to a mile from water, and rows and fences are installed, then access to breeding sites is affected.
9. Page ES-21; 3.3 Visual Resources: Views from the lake bed were not included in the evaluation; and therefore, the potential degradation of a scenic vista has not be adequately evaluated.

2.4.1 Dust Control Areas:

Page 2-10; The second sentence, states that LADWP intends to develop a control measure that costs less to implement; however, no cost analysis is included in the document. Provide a cost estimate for all dust control alternatives or remove this statement from the document and the objectives.

2.4.3 Moat and Row Characteristics:

1. Page 2-15; Please provide a description of the gravel, which includes the size and amount that will be applied to the access roads and roads within the moat and row elements.
2. Page 2-15; Provide information on the underground facilities to be installed in the moat and row DCMs. (first bullet)
3. Provide an estimate of the amount of material that is expected to be excavated from the moat features in the 118 miles of proposed moats.

2.4.8 Row Armoring Enhancements:

1. Page 2-26; Please provide the size and estimated amount of gravel to be applied and the method proposed to place the material.

2.6 Construction Schedule:

1. Page 2-35, This section states that construction is to begin spring of 2009 and should be changed to reflect current status.

Operation and Maintenance:

2.7.1 Moats page 2-38:

1. To adequately evaluate this project, please provide an estimate of the amount of material to be removed from the moats every five years and the number of truck trips.
2. Provide an estimate of the amount of fuel used, per year, to maintain the function of the moats and rows, especially in light of objective # 7, which is to minimize the long-term consumption of natural resources (which would include fuel).

2.7.3 Sand Fences:

1. The sand fence is designed to break free at winds over 71 mph. Please estimate how long it would take and the number of persons (or person-hours) to reattach the 20.6 miles of fence in the project after a wind event and the fuel consumed during this activity.
2. Please provide an estimate, in years, that it is anticipated to take for the sand to reach the 2.5 foot height.

3.1.2 Environmental Setting

The moat picture of Existing Cell T32-1 on Page 3.1-11 shows substantial erosion and slope sloughing after only two to three years. Please address these reoccurring issues in maintenance section.

Project Impacts:

1. Page 3.1-33; Habitat loss within Moat and row cells: Please coordinate with CDFG to identify appropriate mitigation for the +1,503.8 acres of lost nesting habitat.
2. Page 3.1-35; The discussion on cell T1A-1 states that snowy plover would likely nest in this area because only fencing will be used, but then (#5) inserts “and snowy plover habitat would not be affected by moat and row development here.” Please clarify, in the light of the statement in #5 that no moats or rows are expected to be constructed in this location.
3. Page 3.1-37; The third paragraph, incorrectly states “...59.1 linear miles of moats...,” which should read “Approximately 118.2 linear miles of moats...” Please note that a Moat and Row element contain two moats and one row. Therefore, 59.1 miles of Moat and Row elements contain twice that distance in moats.
4. Page 3.1-37; The statement “Any occurrences of plovers within moats are expected to be infrequent and limited to cell perimeters” lacks supporting evidence.
5. Pg 3.1-37, 38 & 39; The information on slopes and entrapment tend to support the conclusion that entrapment of snowy plover chicks is likely, yet the mitigation measures are deferred until a threshold of fatalities is reached, and then qualifies the mitigations with “if feasible.” This mitigation measure defers the quantification of the impact as well as the mitigation measure, and is not consistent with CEQA and with recent court cases.
6. Pg 3.1-38; several statements on this page are not supported by scientific studies or observation. Instead they seem to reflect only speculation (as stated). The third bullet states “If a snowy plover walks or falls into a moat, (1) the combination of slope angle (1.5:1, 33.37 degrees) and surface roughness would likely be sufficient to allow plovers to walk out (**in the absence of monitoring data or observations, conclusions beyond this would be too speculative**); and (2) because snowy plover are specifically adapted to moving in muddy conditions, although possible, mud entrapment would be infrequent.” These two statements are made even though information contained within this document (pg. 3.1-37) states plovers are expected to navigate a slope of 1.7:1 or 30 degrees. There is no information on a 1.5:1 or 33.7 degree slope. This statement appears to be contradictory to other statements in the document, as the only slope documented to have been traversed by a brood was 20 degrees (2.7:1). This internal inconsistency on slopes would suggest that some studies need to be done.
7. Page 3.1-38; The second to the last paragraph states that entrapment is expected to be “rare” and then admits that there is no data to accurately predict entrapment. This statement appears to be speculative and without scientific basis.
8. Page 3.1-38; last bullet, last sentence: This sentence states mud entrapment would be infrequent; however, this document (on the same page) contains an account of two plover chicks being fatally trapped in a dewatering trench. This

contradiction would suggest that the mud in combination with a trench has the potential to be a lethal combination for plover chicks and is likely to occur.

Replacement Mitigation Measures:

1. Page 3.1-40; (See Comment #1 Table ES-1) A one foot gap every ten feet (10%) cannot be extrapolated into a gap every 100 feet. Please provide data or supporting documentation.
2. Page 3.1-41; last sentence of the second to the last paragraph: Remove the words "if necessary," as inspection and maintenance are necessary.

New Mitigation Measures:

1. Page 3.1-45; The middle paragraph, first sentence states "...or if actions are determined to not be feasible..." Mitigation measures, especially those that are proposed for "Adaptive management" must be feasible.
2. Page 3.1-42 to 45; Adaptive Management for Moat Entrapment of Snowy Plover. Monitoring and withholding mitigation until a mortality threshold is reached is not mitigation. Many of the adaptive measures contain the phrases "if possible", "if feasible" or "to the extent feasible without substantially compromising overall dust control effectiveness." If the impact cannot be mitigated the draft SEIR should state that. If the DCM cannot meet dust control requirements than it should not be allowed. These should be separate issues and not tied together as a reason to not to mitigate for impacts.
3. The report identifies a slope of 1.7:1 (30 degrees) as navigable by chicks of all ages, why is this not the mitigation slope proposed for the project, at least on the outer slope of the perimeter moats?

3.3 Visual Resources:

The Commission staff is concerned about inconsistencies within the Visual Resources section of the document. The Commission staff concurs with the statement, "the dry, desert character of the historic Owens Lake bed, combined with further expanses of desert landscape immediately surrounding Owens Lake, creates a relatively **unique** and **dramatic** visual landscape." The uniqueness of this Public Trust resource was not granted the appropriate rating in Table 3.3-1 for "scarcity," which should have been 5. Staff also concurs that the visual objective for this area is "management activities may attract attention but should not dominate the view of the casual observer." The presence of many square miles of moat and row elements on the lakebed in close proximity to SR 395 will add color, texture, and man-made structural elements that will interrupt the unique and dramatic visual landscape that Owens Lake affords the public. The casual observer will easily note these features, especially T37-1, T37-2, and T1A-1, from SR 395. Therefore, Commission staff believes that the moat and row elements will have a "substantial adverse effect on a scenic vista" and that they will "substantially degrade the existing visual character or quality of the site and its surroundings." Therefore we concur with the statement in section 4.2.2 that "the proposed project would result in significant and unavoidable adverse impacts on...visual resources."

1. Page 3.3-20; view from the lake bed. See Exhibits 3.1-4a & 3.1-4b (pages 3.1-10 & 3.1-11). There is not a simulation of a lake bed view; therefore, this analysis is inadequate. As members of the public have and do access the lake bed frequently, please provide reference points on the lake bed and provide a simulated view, and then incorporate the lake bed analysis in the final document.
2. Please modify the language to note that moat and row, if approved, will be a permanent view change, whereas, mining activities are temporary.

4.2.2 Significant and Unavoidable Impacts of the Proposed Project

The statement that “the proposed project would result in significant and unavoidable adverse impacts on...visual resources” contradicts the analysis in section 3.3 Visual Resources. However, Commission staff concurs with this summary statement.

5.0 Alternatives to the Project

Objectives:

Page 5-1 & 2-9; The objectives have been changed since the NOP was released and are not consistent with the previous SEIR. The current objectives are so narrowly defined as to eliminate all but the proposed project.

1. The “Goal” is to reduce dust. The objectives are generally used in evaluating the alternatives against the proposed project’s goal.
2. Objective 2; “provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service;” The SEIR should analyze each alternative in light of the objectives. None of the alternative evaluations include a cost-effective analysis, an environmentally responsible determination, etc., or how each alternative does or does not meet each objective and subcomponent.
3. Objective 3; “allow for the sparing use of water that would otherwise be diverted 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;” Objective 3 was added after the NOP was released and was not an objective in the 2008 SEIR. Objective 4; “minimize or compensate for the long term, significant adverse changes to sensitive resources in the natural and human environment by implementing mitigation strategies proposed in this SEIR;” It appears that this is the exception to being too narrow. Instead this is so general that it has no focused meaning and seems to have no analytical value.
4. Objective 7, is poorly written; “minimize the long-term consumption of natural resources (e.g. water);” Provide evaluation of all natural resources, including fuel.

2.6 STATEMENT OF PROJECT GOAL AND OBJECTIVES

2.6.1 Project Goal

The primary goal of the proposed project is to implement DCMs on the bed of Owens Lake by 2010 sufficient to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ NAAQS. In addition, the proposed project must be consistent with the State of California's obligation of land and resource stewardship.

2.6.2 Project Objectives

- Implement all Owens Lake bed PM₁₀ control measures by April 1, 2010 pursuant to the revised 2008 SIP to achieve the NAAQS
- Revise the approved 2003 SIP by July 1, 2008
- Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment
- Provide a high technical likelihood of success without substantial delay
- Conform substantially to adopted plans and policies and existing legal requirements
- Minimize the long-term consumption of natural resources
- Minimize the cost per ton of particulate pollution controlled
- Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake

2.7 PROPOSED PROJECT

The proposed project includes numerous elements to ensure that adequate DCMs are implemented on the dry Owens Lake bed to ensure attainment of the PM₁₀ standard as mandated in the 2008 SIP.

2.3 PROJECT GOAL AND OBJECTIVES

The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM_{10} NAAQS by the implementation of moat and row DCMs on the bed of Owens Lake by 2010. The dry Owens Lake bed is primarily owned and operated in trust for the people of the State of California by CSLC. Therefore, the project must also be consistent with the State of California's obligation of land and resource stewardship.

Objectives of the project include the following:

- ▶ Implement moat and row DCMs by April 1, 2010, pursuant to the 2008 SIP to achieve the NAAQS,
- ▶ Minimize or compensate for long-term, significant adverse changes to sensitive resources within the natural and human environment,
- ▶ Create a dust control program with a high likelihood of success without substantial delay,
- ▶ Substantially conform to adopted plans and policies and existing legal requirements,
- ▶ Minimize the long-term consumption of natural resources,
- ▶ Minimize the cost per ton of particulate pollution controlled,
- ▶ Implement a DCM that minimizes the use of water to the maximum extent practical.

2.4 PROJECT CHARACTERISTICS

LADWP proposes to reduce dust emissions in the Owens Lake Planning Area, particularly achieving adopted control efficiencies for fugitive dust (PM_{10}), through the construction of landform features called moats and rows. Moat and row DCMs would be constructed on 3.5 square miles of the Owens Lake bed (Exhibit 2-2).

2.4.1 DUST CONTROL AREAS

In 2006, during settlement negotiations regarding dust control strategies between the GBUAPCD and LADWP, LADWP proposed a new Owens Lake PM_{10} control measure known as moat and row. It was LADWP's intent to develop a control measure that cost less to implement and uses significantly less water than previously approved DCMs (e.g., shallow flooding, managed vegetation). The Settlement Agreement that resulted from the 2006 negotiations contains provisions for the implementation of up to 3.5 square miles of moat and row DCMs.

2.4.2 PERFORMANCE STANDARDS FOR DUST CONTROL

GBUAPCD has monitored ambient PM_{10} concentrations within the Owens Valley including the communities of Keeler, Olancho, and Lone Pine for over 20 years. Monitoring data has been used to determine whether compliance with the federal PM_{10} standard has been achieved. Based on this monitoring data and air quality modeling conducted by GBUAPCD, minimum dust control efficiencies (MDCE) have been established for areas of the Owens Lake bed as shown in Exhibit 2-4. The MDCE standard establishes the minimum level at which the concentration of PM_{10} emissions must be reduced (through monitoring of the site) in order to achieve federal PM_{10} standards. MDCE's vary from 30 percent to 99 percent. The control efficiencies reflect the fact that different areas of the lake bed have different emissions rates and that areas closer to the historic shoreline require higher control efficiencies than areas well away from the shoreline. The MDCE for the moat and row DCAs varies from 60 to 99 percent.

- ▶ 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 National Ambient Air Quality Standards, the 1998, 2003 and 2008 SIPs and their associated EIRs, lease agreements and environmental and administrative permits with other agencies including California State Lands Commission, Lahontan Regional Water Quality Control Board, California Department of Fish and Game, United States Environmental Protection Agency and Great Basin Unified Air Pollution Control District;
- ▶ 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.

2.4 PROJECT CHARACTERISTICS

LADWP proposes to reduce dust emissions on the dry Owens Lake bed, particularly achieving adopted control efficiencies for fugitive dust (PM₁₀), through the construction of landform features called moats and rows. Moat and row DCMs would be constructed on 3.5 square miles of the Owens Lake bed (Exhibit 2-2).

2.4.1 DUST CONTROL AREAS

In 2006, during settlement negotiations regarding dust control strategies between the GBUAPCD and LADWP, LADWP proposed a new Owens Lake PM₁₀ control measure known as moat and row. It was LADWP's intent to develop a control measure that costs less to implement and uses significantly less water than previously approved DCMs (e.g., shallow flooding, managed vegetation). The Settlement Agreement that resulted from the 2006 negotiations contains provisions for the implementation of up to 3.5 square miles of moat and row DCMs.

2.4.2 PERFORMANCE STANDARDS FOR DUST CONTROL

GBUAPCD has monitored ambient PM₁₀ concentrations within the Owens Valley, including in the communities of Keeler, Olancho, and Lone Pine, for more than 20 years. Monitoring data has been used to determine whether compliance with the federal PM₁₀ standard has been achieved. Based on this monitoring data and air quality modeling conducted by GBUAPCD, minimum dust control efficiencies (MDCE) have been established for areas of the Owens Lake bed as shown in Exhibit 2-4. The MDCE standard establishes the minimum level at which the concentration of PM₁₀ emissions must be reduced (through monitoring of the site) to achieve federal PM₁₀ standards. MDCEs vary from 30% to 99%. The control efficiencies reflect the fact that different areas of the lake bed have different emissions rates and that areas closer to the historic shoreline require higher control efficiencies than areas well away from the shoreline. The MDCE for the moat and row DCAs varies from 33% to 99%.

Regarding MWD's SWP supplies, with issuance of the new Biological Opinion for Delta Smelt, demands for MWD's SWP water (i.e., 1.05 mafy) would exceed available supplies (i.e., 750,000 afy under normal years) by approximately 430,000 afy. MWD staff has reported that it will be forced to remove water from existing storage reserves to meet demands in 8 out of 10 years. Over the past three years MWD has withdrawn water from storage every year and at the beginning of 2009 MWD had only 1.0 million acre feet (maf) of stored water supplies remaining in its storage accounts with plans to draw 0.35 maf in 2009. Storage in the MWD system is now at critically low levels (i.e., 1 maf of supply is available in MWD's 5 maf capacity system and MWD intends to withdraw approximately 350,000 afy). Based on storage levels and reduced deliveries from the SWP because of the Delta Smelt Biological Opinion, the MWD Board took action on April 14, 2009 to ration water to its member agencies, including LADWP, for the first time since 1991. MWD's allocation calls for a 10% cut in deliveries to all member agencies including LADWP (Appendix D).

This shortfall has prompted the LADWP to recommend water rationing by imposing shortage year water rates and implementing water conservation measures outlined in Phase III of the City's water conservation ordinance. The City approved the adoption of 15% shortage year rates on April 17, 2009. These rates impose a higher Tier 2 water rate on homeowners who exceed 85% of their water allocation (a 15% cutback) for their specific lot (based on lot size, occupancy, and temperature zone). Phase III water conservation restrictions are inclusive of all Phase I and Phase II conservation restrictions (e.g., drinking water, landscape irrigation, washing, leaks, aesthetic uses) with the addition of prohibiting landscape irrigation on days other than Monday or Thursday.

Rationing and water conservation practices alone will not resolve LADWP's existing and projected future shortfall in supplies. LADWP anticipates, based on the body of evidence, that water supplies from MWD and the SWP will be permanently reduced, forcing LADWP to secure alternative water supply sources to meet increased demands in the future. The City of Los Angeles has developed adopted a plan by Mayor Antonio Villaraigosa entitled, "*Securing L.A.'s Water Supply*," (May 2008) which is a blueprint for creating sustainable sources of water for the future of Los Angeles. This plan is an aggressive multi-pronged approach to water conservation that includes: investments in state-of-the-art water conservation technology; issuance of a combination of rebates and incentives; installation of smart irrigation controllers (e.g., controllers sense when adequate moisture is present), efficient commercial and residential washers and urinals; and development of long-term measures including expansion of water recycling and investment in cleaning up the local groundwater supply (Appendix D).

With regard to dust control activities on Owens Lake, all water supplies uses for dust control or other environmental restoration benefits must be supplemented through additional purchases from MWD. As described above, additional water is simply not available from MWD. Based on future projections of growth within LADWP's service area, plans for increased recycling, conservation, and groundwater cleanup activities, adequate water supplies will not be available to meet existing and projected future demand plus expanded water intensive dust control measures at Owens Lake. In light of the current state of water supplies and based upon what is known about future demands, staff of LADWP has determined that future use of water intensive dust control measures are not a feasible strategy and other non-water using controls should be implemented (Appendix D).

2.3 PROJECT GOALS AND OBJECTIVES

The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ NAAQS by the implementation of moat and row DCMs on the bed of Owens Lake by 2010. The dry Owens Lake bed is primarily owned and operated in trust for the people of California by CSLC. Therefore, the project must also be consistent with the State of California's obligation of land and resource stewardship. The objectives of the project are to:

- ▶ implement moat and row DCMs by April 1, 2010, pursuant to the 2008 SIP to achieve the NAAQS;
- ▶ provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service;

- S2-1 This comment is general and does not address the specific contents of the 2009 DSEIR. Specific contents are addressed in response to comments S2-2 through S2-74.
- S2-2 Please refer to Master Response 2, which explains that the CEQA Guidelines neither clearly distinguish the differences nor the content requirement between a subsequent and supplemental EIR; further, the Guidelines do not address whether alternatives should or should not be addressed in a supplemental EIR, leaving this decision to the lead agency in determining if such an analysis is needed to address the significant new information necessitating the supplement. Additionally, the objection to the addition of the alternatives analysis is inconsistent with a prior request, by this same commenter, during preparation of the 2009 DSEIR. In a letter dated March 3, 2009, the commenter requested (in part) that the “DSEIR needs to... correctly address Managed Vegetation and Shallow Flooding Alternatives... Since the Moat and Row dust control measure is still considered an experimental dust control measure... alternatives may become necessary and should be analyzed. Once the Shallow Flooding and Managed Vegetation alternatives are reassessed with regard to feasibility, then the environmentally-superior alternative will also need to be reassessed.” (Letter from Gail Newton, California State Lands Commission to Tom Dailor, LADWP, March 3, 2009) It was in response to this comment that LADWP considered alternatives in the 2009 DSEIR. Consistent with the requirements of CEQA, the 2009 DSEIR builds off the GBUAPCD’s 2008 SIP FSEIR. Further, the fundamental purpose of an alternatives analysis is to determine whether certain of the project’s significant impacts (in this case construction-related air quality is the only significant impact) could be reduced through implementation of an alternative. None of the alternatives could reduce this impact. The alternatives analysis describes these conditions. Further, the 2009 DSEIR evaluates the alternatives in light of expanded project objectives, specifically objectives related to the changed (since certification of the 2008 SIP FSEIR) water supply conditions that affects LADWP’s mission and operational flexibility. This approach is consistent with the requirements of CEQA and the 2009 DSEIR was correct in its presentation of the alternatives analysis.
- S2-3 Please see Master Response 2 for a discussion of project objectives, why water availability to LADWP is further constrained since publication of the 2008 FSEIR, and how this relates to the feasibility of project alternatives. One of the objectives, referred to here as being overly narrow, reflects a core objective of the lead agency: providing water to its customers. This is, in fact, a very broad objective.
- S2-4 Please see Master Response 2 for a discussion of project objectives, why water availability to LADWP is further constrained since publication of the 2008 FSEIR, and how this relates to the feasibility of project alternatives.

With respect to the Notice of Preparation/Initial Study (NOP/IS), the requirements for an NOP are provided in State CEQA Guidelines Section 15082. The Guidelines require that NOPs contain a description of the project, a map with its location, and the probable environmental effects. Appendix A of the 2009 DSEIR contains the NOP/IS (and comments to the NOP/IS). The project is fully described, along with its location and probable environmental effects. Objectives were included on page 2-7 of the IS (attached to the NOP) and included “minimize the long-term consumption of natural resources” and “implement a DCM that minimizes the use of water to the maximum extent practical”. The additional objectives, added after release of the NOP and which address this lead agency’s responsibility for delivering a diminishing supply of water to its service

area, expand on the objectives included in the NOP/IS. These objectives were informed by recent and substantive information that severely restricts water availability to the LADWP (as explained in Master Response 2).

Further, the comment that the NOP/IS "...did not disclose that water supply would be reevaluated" is an inaccurate reflection of the issue. The Revised Moat and Row Project did not, at the time the NOP/IS was released, require the use of water. It still does not. Water supply for the project is not being reevaluated, as none is needed. However, because this issue is relevant to the consideration of project alternatives, alternatives which the commenter requested be considered in the DSEIR (several months after release of the NOP, letter from Gail Newton, California State Lands Commission to Tom Dailor, LADWP, March 3, 2009), and which may require the use of water, it was appropriate to provide this objective in the 2009 DSEIR (see also Master Response 2).

Finally, neither the commenter nor the public were deprived of the opportunity to consider and comment on this issue. The purpose of the NOP is to solicit from responsible and trustee agencies, and other members of the public, comments on the scope and content of the EIR. This process was followed. The 2009 DSEIR was then sent out for a 45-day review period (June 8–July 22, 2009), during which these same entities and the general public as a whole were able to review and comment on the scope and content of the DSEIR. This review period allows those agencies who will issue permits or who hold the public interest in trust to comment on whether sufficient information is included in the DSEIR, and they can comment. The 2009 DSEIR fully discloses the water issue (pages 2-7 through 2-9). The State Lands Commission, as both a trustee and permitting agency, has been given the opportunity to comment and, by virtue of this letter and its March 3, 2009 letter requesting the analysis of shallow flooding and managed vegetation alternatives, has done so.

S2-5 Please see Master Response 2 and response to comment S2-7 for a discussion of feasibility of project alternatives.

Regarding the All Shallow Flooding and All Managed Vegetation alternatives presented in the 2008 FSEIR, the GBUAPCD did make initial findings that these alternatives were feasible because they attained most of the project objectives. However, GBUAPCD later concluded, through its actions approving the project, that these alternatives were infeasible.

The All Shallow Flooding Alternative was initially found to be "feasible" based on the following statement:

"The above feasibility finding is based on the following:

- ▶ Seven of the eight objectives are met; however, the objective of minimizing the long-term consumption of natural resources is not met ..." (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, page V-11)

The All Managed Vegetation Alternative was also initially found to be "feasible" as follows:

"The above feasibility finding is based on the following:

- ▶ Six of the eight objectives are met in the All Managed Vegetation Alternative (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, Table V-1).
- ▶ The All Managed Vegetation Alternative would have grater (sic) significant impacts related to biological resources and utilities and service systems than the project." (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, page V-12)."

However, despite GBUAPCD finding these alternatives to be feasible in one part of the findings, including noting the All Shallow Flooding alternative as environmentally superior to the project, it waived on its finding of feasibility elsewhere:

“The All Shallow Flooding Alternative (Alternative 1) was identified as the environmentally superior alternative due to its proven capability to control PM₁₀ emissions needed to meet NAAQS by April 2010. Alternative 1 also has the ability to minimize impacts to biological resources (especially western snowy plover) because it provides additional wildlife habitat resources. However, it failed to minimize the long-term consumption of natural resources due to its need for more water, and it failed to provide an adequate time interval to perform the site maintenance necessary to ensure reliable operation of the dust control facilities.” (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, page V-7)

Further, GBUAPCD’s findings expressed concern with the amount of time and cost for the All Managed Vegetation Alternative.

“This alternative would not enable the District to meet its objective to provide a high technical likelihood of success without substantial delay (Objective 4) because the amount of time needed for plants to reach the level of growth required for dust control may be difficult to achieve by the determined date of April 2010. This alternative would not allow the District to meet its (sic) objective to minimize the cost per ton of particulate pollution controlled (Objective 7) due to the fact that implementation of Managed Vegetation would result in a higher cost per acre.” (GBUAPCD, Findings of Fact and Statement of Overriding Considerations, January 14, 2008, Page V-12).

These statements appear to contradict the finding that these two alternatives are feasible. Most importantly, the GBUAPCD approved the project as proposed, which included the moat and row elements that are being further evaluated in this SEIR, thereby outright rejecting the All Shallow Flooding and All Managed Vegetation Alternatives.

The fact that shallow flooding is being used over a large part of the Owens Lake dust control area (outside the boundaries of the site studies in the 2009 DSEIR) per the approved 2008 SIP further underscores the concern that the LADWP is facing a major water shortage due to demands (such as its customer base and other Owens Lake dust control measure requirements) and a severe curtailment of supply (drought, shortage of supplies from State Water Project as described on pages 2-7 through 2-9 of the 2009 DSEIR). Finally, even if the GBUAPCD did find these alternatives to be feasible (and it is questionable that they did), the LADWP is a different lead agency with a different operating mission. The objectives in the 2009 DSEIR were appropriately developed to meet the Revised Moat and Row Project needs while recognizing that this lead agency has an obligation to supply water to its customers, the same water that would be used for a shallow flooding alternative, which makes the All Shallow Flooding Alternative infeasible to LADWP. Please also see response to comment S2-7.

S2-6 Please see Master Response 2 and response to comment S2-4 regarding the NOP/IS and evaluation of water supply. Please also note that the addition of an issue to a Draft EIR, following release of an NOP, is not a violation of CEQA. An NOP is an agency’s attempt to discern the potential environmental issues of a project. Because the NOP is required to be sent out “immediately after deciding that an environmental impact report is required for a project...” (CEQA Guidelines Section 15082), the ability to fully study the environmental implications of a project would not be possible, nor would it be prudent. In fact, comments on an NOP, including those that request consideration of additional environmental impacts, help determine the scope of

analysis in an EIR. The commenter suggests that the NOP is the only vehicle that can be used to determine the issues to be addressed in an EIR. This not only ignores a key purpose of the NOP—to solicit comments on what the EIR *should* address—it also suggests that EIRs should ignore environmental issues that arise as the environment is studied during preparation of the EIR. Or, equally concerning, it suggests the EIR process should begin anew if new issues are discovered.

Section 15088.5 of the CEQA Guidelines provides the guidance on this issue. It states that lead agencies are required to recirculate an EIR if significant new information is added after circulation of the draft EIR, but prior to certification. The expanded water objective was added prior to circulation of the draft SEIR, so even if considered significant new information, the CEQA Guidelines, by developing this specific provision, can be interpreted to reflect that significant information added after release of the NOP is sufficiently addressed if included in the draft of the EIR. This is logical in light of the discussion above.

S2-7 Please see Master Response 2 for a discussion of the difference between a subsequent and supplemental EIR. Please see Response to Comment S2-4 regarding the NOP/IS and evaluation of water supply. As discussed, the Revised Moat and Row Project does not use water. It did not require the use of water in the 2008 FSEIR, which is being supplemented by this SEIR to evaluate moat and row design changes. The 2009 DSEIR fully discloses the state of LADWP water supplies (pages 2-7 through 2-9). Thus, the lack of water availability is not significant new information related to the proposed project, although it does affect the feasibility of the alternatives. This issue is fully disclosed in the 2009 DSEIR for the project. The comment does not suggest any inaccuracies in the water supply discussion included in the draft SEIR, nor does it suggest that LADWP should have concluded differently.

Even if this information *is* considered “new information of substantial importance”, as claimed by the commenter, it was adequately evaluated in the 2009 DSEIR. As described in response to comment S2-2 and in Master Response 2, there is no clear distinction between a subsequent and a supplemental EIR, and the contents of the 2009 DSEIR are sufficient to fully evaluate the refinements to the moat and row project. A discussion of the water shortage facing LADWP is provided on pages 2-7 through 2-9 of the 2009 DSEIR, which explains why there is a water shortage and how LADWP must address it, including for dust control at Owens Lake. As concluded on page 2-9, “In light of the current state of water supplies and based upon what is known about future demands, staff of LADWP has determined that future use of water intensive dust control measures is not a feasible strategy and other non-water using controls should be implemented.” Therefore, the 2009 DSEIR finds that shallow flooding and managed vegetation, both of which would intensively use water, are infeasible alternatives to the Revised Moat and Row Project. Without water, a basic ingredient of shallow flooding and of irrigation for managed vegetation, these alternatives could simply not go forward. This is full disclosure of the ability to implement alternatives to the project.

S2-8 Please refer to response to comments S1-2 and L1-8. As discussed in these responses, the efficacy of the proposed project has been tested and demonstrated.

S2-9 Please see Master Response 2 concerning the discussion of alternatives. Please see 2009 DSEIR pages 2-7 through 2-9 concerning water availability to LADWP. The fact that LADWP is rationing water to its existing customers physically demonstrates a water shortage. LADWP has imposed a Phase III water conservation ordinance on its 680,000 customers, and has been reducing its water use since 2007. On June 1, 2009, the City instituted mandatory conservation program, with penalties. The LADWP has set a reduction target of 15%. In its news release of June 1, 2009, LADWP stated the following:

“Los Angeles, quite famously, has imported most of its water since the advent of the Los Angeles Aqueduct almost 100 years ago. Today, with both a natural drought statewide and a regulatory drought due to restrictions placed on the importation of water from the Delta, our water supplies are significantly reduced. We have no choice but to enact mandatory conservation,” said David Nahai, LADWP Chief Executive Officer and General Manager. (LADWP Website, <http://www.piersystem.com/go/doc/1475/278135/>)

This information (including the information in the 2009 DSEIR) provides substantial evidence pointing to the severity of the water shortage already at hand.

- S2-10 Please see Master Response 2 concerning alternatives and objectives, as well as responses to comments S2-4 through S2-7. It is acknowledged that the project, identified in the 2008 FSEIR, including moat and row elements, is not the environmentally superior alternative. Yet, GBUAPCD rejected all other alternatives in favor of the approved 2008 SIP project, which includes moat and row elements that are re-evaluated in this SEIR. This is discussed in detail in response to comment S2-5.
- S2-11 Please see Master Response 2 and responses to comments S2-5 and S2-10, including all cross-referenced responses. As suggested by the commenter, based on the preparation of an Initial Study (see Appendix A of the 2009 DSEIR) the environmental analysis of the revised moat and row DCMs in 2009 DSEIR focused on biological resources, air quality and visual resources, including mitigation measures and alternatives to reduce significant effects. As documented in the Initial Study, traffic impacts were appropriately addressed in the 2008 FSEIR.
- S2-12 Regarding the managed vegetation alternative, the commenter offers the opinion that they disagree with a conclusion made in the 2009 DSEIR. Please refer to Master Response 1 and response to comment S2-20 below.
- Regarding the shallow flooding alternative, please refer to response to comment L1-2 and Master Response 2.
- S2-13 Please see Master Response 2 regarding a reasonable range of alternatives as well as response to comment S2-5.
- S2-14 This FSEIR document considers each of the comments raised by the California State Lands Commission. Please see responses to comments S2-15 through S2-74.
- S2-15 Please refer to Master Responses 1 and 2.
- S2-16 Please refer to response to comment L1-5 and Master Response 2. Regarding the commenter’s specific suggestion that LADWP use less water for shallow flooding and increase brine applications, no information or evidence is available to make the determination that this is a feasible operational protocol for shallow flooding. Implementation of this suggestion would require additional study and approval by GBUAPCD. Further, this suggestion is similar to the studies that LADWP is currently conducting regarding alternative water supplies and alternative shallow flooding designs (see Master Response 2). The 2009 DSEIR presents the best available information about the current state of water supplies and bases its conclusions on that evidence. The commenter offers no other evidence to dispute the 2009 DSEIR’s conclusions; therefore, no further response can be provided.
- S2-17 The comment is unclear but appears to reference comment S2-15; please refer to that response.

- S2-18 The commenter offers the opinion that they disagree with a conclusion made in the 2009 DSEIR yet they offer no information to support an alternative conclusion. Please refer to Master Response 1 regarding disagreement with the conclusions presented in the 2009 DSEIR.
- S2-19 The commenter makes a statement about the analysis included in the 2009 DSEIR. No specific comments or inadequacies of the 2009 DSEIR are raised; therefore, no further response can be provided.
- S2-20 The commenter suggests that the beneficial impacts of managed vegetation should be discussed in the Managed Vegetation Alternative analysis. Consistent with the requirements of State CEQA Guidelines Section 15126.6(d), the purpose of an alternatives analysis is to provide a comparative evaluation of the alternative in relation to the proposed project. As described on page 5-3 of the 2009 DSEIR, in comparison to the project, the all managed vegetation alternative would affect a greater area of land and potential habitat for biological species of concern because of the extensive construction ground disturbance that would be required. While specific benefits to biological species may be realized over time, there is no supporting evidence that these conclusions can be made. With regard to views of managed vegetation in comparison to the proposed project, the 2009 DSEIR acknowledges that the entire DCA would be transformed from a sandy lake bed surface to planted vegetation. Further, this alternative, like the project, would involve installation of man-made features in an otherwise undeveloped playa. These changes in terms of magnitude, scale, form, line, and shape are comparable to the visual changes that would occur with the project. While some may prefer the visual appearance of managed vegetation compared to moat and rows, the 2009 DSEIR provides an objective evaluation of the visual changes of the managed vegetation alternative and how it would compare to the visual changes of the project. The commenter offers no other evidence to dispute this conclusion; therefore, no further response can be provided.
- S2-21 Please refer to response to comment S2-15.
- S2-22 The commenter summarizes a conclusion made in the in the 2008 SIP SEIR. No further response is necessary because no issue regarding the environmental analysis presented in the 2009 DSEIR was raised.
- S2-23 Please refer to response to comment L1-2.
- S2-24 Please refer to response to comment L1-2.
- S2-25 Please refer to response to comment L1-2.
- S2-26 Please refer to Master Responses 1 and 2.
- S2-27 The commenter offers no evidence to support the contentions that the conclusions made in the 2009 DSEIR regarding the Environmentally Superior Alternative are inadequate; therefore, no further response can be provided.
- S2-28 Please refer to response to comment S2-5.
- S2-29 Please refer to response to comment S1-18 and S2-5.
- S2-30 The text starting on page 5-5 under Section 5.4, "Environmentally Superior Alternative," has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“In addition to the discussion and comparison of impacts of the alternatives to the proposed project, CEQA Section 15126.6 requires that the “environmentally superior” alternative among the alternatives considered be selected and the reasons for such selection disclosed. 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 technologically feasible and proven dust control options to reduce dust emissions from Owens Lake; however, both of the options rely on the availability of water to ensure success. For the reasons described on page 2-7, under “Current State of LADWP Water Supplies,” additional water to expand shallow flooding or managed vegetation dust controls on Owens Lake is not available. So while these alternatives are successful at achieving prescribed dust control efficiencies, they are no longer feasible alternatives to implement on Owens Lake on an expanded basis. The third alternative (i.e., Gravel Application) was determined to result in comparable impacts as the project. No other alternatives are available that could feasibly attain most of the project objectives and have been proven to reduce dust emissions at Owens Lake.

CEQA requires the lead agency to identify an alternative that is feasible and superior to the proposed project. While the shallow flooding alternative would result in less environmental impacts than the project and would be environmentally superior to the project, it is not a feasible dust control option in the face of a shortage of water supplies. Further, ; however, in this case, the proposed project is the environmentally superior alternative. ~~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 in the 2008 FSEIR, including the fact that this alternative was not selected, despite it being environmentally superior to 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. ~~The primary purpose of the proposed project was to improve on a previously approved project because of environmental concerns raised by DFG and CSLC and implement DCMs that require little or no water.~~ As a result, the proposed project is the environmentally superior alternative.”

- S2-31 Please refer to response to comments L1-8, S2-5, S2-7, S2-30 and Master Response 2. In light of current information available regarding statewide water supplies and LADWP’s own actions to conserve water, LADWP made the determination that expansion of shallow flooding on Owens Lake is not a feasible dust control option. While shallow flooding has proven to be effective and feasible at reducing dust emissions, its overall feasibility is dependent on the availability of water, for this purpose, and it is not available. Therefore, the 2009 DSEIR came to the conclusion that this alternative could not be feasibly implemented on an expanded basis.
- S2-32 The comment seeks clarification about extrapolating from an estimated fence-gap value provided by Gary Page to what is recommended in Mitigation Measure 3.1-10 of the 2009 DSEIR. As discussed on page 3.1-40 of the 2009 DSEIR, the minimum size and spacing of fence gaps to

facilitate movement by snowy plovers is not known, and no scientific basis to develop specific fence-gap requirements exists. The 2009 DSEIR uses a reference point provided by Mr. Page to develop a reasonable assumption of spacing that would allow sufficient movement opportunities for plovers. Mr. Page estimated that approximately 1-foot-wide gaps placed every 10 feet along fence rows could potentially allow for snowy plovers to move through fenced areas without movement obstructions. This estimate is not based on empirical data. However, Mr. Page does have extensive knowledge of snowy plover behavior and life history and is considered an expert in this field.

To develop a range of feasible options that avoids a significant level of movement obstruction, Mr. Page's estimate about fence gap size and frequency was extrapolated by qualified biologists as follows: based on 1 foot gap within a 10-foot segment (i.e., a gap occupies 10% of the fence perimeter), all fence gaps would total a minimum of 10% of the total fence perimeter. 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 was assumed that this maximum spacing of gaps would allow for sufficient opportunity for broods to meet their daily movement requirements.

S2-33 The phrase "if necessary" in the measure was intended for the maintenance component of the measure. If the inspection determined that the corvid deterrents were intact, then maintenance would not be necessary.

Mitigation Measure 3.1-11, Paragraph 4, page 3.1-41 (and Executive Summary page 12) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

"Specifically in conjunction with the Moat & Row dust control measure, the corvid management techniques shall be expanded to specify that the sand fencing ~~and~~ (including 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. ~~thereby requiring the utilization of Nixalite or the functional equivalent on top of sand fencing. 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 and maintained at that time, if necessary.~~"

S2-34 The phrase in question was intended to be conditional; if significant entrapment occurs, then identifying compensatory measures would be required.

Mitigation Measure 3.1-12, Paragraph 3, page 3.1-42 (and Executive Summary page 14) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“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) ~~if necessary~~, 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.’”

- S2-35 The monitoring frequency was agreed to verbally by DFG on March 3, 2009, based on what appears reasonable to detect repeated occurrences of entrapment. There are no scientific data available that would suggest that the proposed frequency of monitoring is inadequate and the commenter offers no other evidence to suggest that an alternate monitoring frequency should be used.
- S2-36 Mitigation Measure 3.1-12, third bullet of Paragraph 4, page 3.1-43 (and Executive Summary page 17) of the 2009 DSEIR has been revised as follows, to specify that observations of all species trapped in moats would be reported. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.
- ▶ “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);”
- S2-37 The remedial actions identified in the 2009 DSEIR are expected to be effective and feasible. However, final determination of this would only be realized during implementation of the project. The language in the 2009 DSEIR is intended to provide flexibility and allow LADWP to collaborate with DFG if certain measures are determined infeasible or ineffective.
- S2-38 Mitigation Measure 3.1-12, Paragraph 1, page 3.1-45 (and Executive Summary page 19) of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.
- “If the response threshold is met, LADWP shall notify DFG as soon as possible and within ~~three business days~~ 48 hours of the incident. 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).”
- S2-39 It appears the commenter has misinterpreted the information presented in the 2009 DSEIR. The commenter’s statement about access to breeding sites pertains specifically to snowy plover. However, the 2009 DSEIR section in question (Executive Summary page 21 and Section 3.1.2) focuses specifically on potential effects of project implementation on movements of bird species other than snowy plover. As stated in the section, snowy plover is addressed in a separate discussion. Therefore, no inconsistencies exist.
- S2-40 The comment is focused on the summary table, which does not address projects at the same level of detail as the main body of the 2009 DSEIR. Views from the lake bed were addressed in the 2009 DSEIR; please see page 3.3-20.
- S2-41 The discussion on page 2-10 of the 2009 DSEIR reflects LADWP’s “intent to develop” a less costly dust control measure. If LADWP determines to move ahead with the proposed project, in

spite of significant unavoidable impacts, it will be required to provide overriding considerations, as specified in Section 15091 of the CEQA Guidelines. If the cost of the project is a cited overriding consideration, LADWP will need to include, somewhere in the project's administrative record, evidence in support of such a consideration. CEQA, and CEQA case law (see, particularly, *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco*, 125 Cal.Rptr.2d. 2 Cal. Daily Op. Serv. 10,062, 2002 Daily Journal D.A.R. 11,417), does not require EIRs to include economic data (such as the economic reasons to reject an alternative as infeasible), so long as this information, if relied upon in the project approval process, is included in the administrative record.

S2-42

As described in Section 2.5.1, "Access Roads," of the 2009 DSEIR, the 2008 FSEIR evaluated the impacts associated with the construction of unpaved and gravel-paved, permanent all-year access roads that would be used for the construction, operation and maintenance of the moat and row DCAs. These access roads were previously evaluated and approved in the 2008 FSEIR and no changes to these roads are proposed as part of this project; therefore, no further analysis of the access roads was needed or provided in the 2009 DSEIR.

The volume of gravel needed for the maintenance roads within the moat and row DCAs is estimated to be 190,673 cubic yards (cu yd). The total length of the moat and row elements is estimated to be 333,169 feet (ft) and each row would have a 15-ft wide maintenance road on either side with an estimated depth of gravel of 6 inches (0.5 ft). Therefore, the estimated volume of gravel for the maintenance roads is based on the following:

- 333,169 ft long moat and row x 15 ft wide maintenance road x 2 roads per element x 0.5 ft of gravel deep= 185,094 cu yd.
- In addition, there would be 20,085 ft of sand fence without moat and row with a maintenance road on only one side of the fence: 20,085 ft x 15 ft x 0.5 ft = 5,579 cu yd.

Adding these volumes together (185,094 cu yd + 5,579 cu yd) results in a total volume of gravel of 190, 673 cu yd. As described above, no additional gravel has been assumed for the access roads.

S2-43

As described in Section 2.4.4, "Enhancement Options," of the 2009 DSEIR, construction of the moat and row DCMs may also include the application of a variety of enhancements to gain greater dust control efficiencies in the Owens Lake bed. These enhancements and the determination of which enhancement option to use would be implemented in response to air quality monitoring of PM₁₀ emissions in the moat and row DCAs and in coordination with GBUAPCD. One such enhancement option is managed vegetation, as described in Section 2.4.6, "Managed Vegetation Enhancements." If determined to be necessary and appropriate for implementation, the managed vegetation enhancements may require irrigation and subsurface drainage facilities as described in Section 2.4.6 and on page 2-15 of the 2009 DSEIR (drainage facilities, pipeline, drip irrigation, and irrigation emitter installation). Therefore, the implementation of these underground facilities would be limited to those areas of the moat and row DCAs that are determined to need managed vegetation enhancements to reduce dust control emissions. The shallow flooding enhancement may also need some underground utilities. However, at this time no specific areas of the moat and row DCAs have been identified for the managed vegetation, shallow flooding, or other enhancements.

S2-44

It is expected that construction of the proposed moat and row elements would result in the excavation of approximately 1,059,577 cu yd of material for the moats. This calculation was based on the estimate of the total length of the moat and row elements: 333,169 ft multiplied by

two because each row would have a moat on either side. Therefore, the volume of excavated material is estimated as follows:

- Rows with sand fences: $88,789 \text{ ft long} \times 2 \text{ moats per row} \times 40 \text{ sq ft (area of moat)} = 263,079 \text{ cu yd.}$
- Rows without sand fences: $244,380 \text{ ft long} \times 2 \text{ moats per row} \times 44 \text{ sq ft (area of moat)} = 796,498 \text{ cu yd.}$

Adding these volumes together ($263,079 \text{ cu yd} + 796,498 \text{ cu yd}$) results in a total excavation volume of $1,059,577 \text{ cu yd}$.

As described on page 2-16 of the 2009 DSEIR, moat and row DCMs would be constructed in a manner to result in an “earth balance.” Earth balance would be achieved by using excavated soil from moats for the construction of rows. Soil used for construction of rows would be compacted to 85% (a higher density than existing soils that are excavated from the moats). While the moats would appear larger than the rows, because of the compaction required, all soils excavated would be balanced on-site to construct the rows. Therefore, no excavated materials would be hauled offsite.

S2-45 Please see response to comment S2-42 for the estimated volume of gravel needed for the moat and row maintenance roads.

The volume of gravel needed for row armoring is estimated to be $12,349 \text{ cu yd}$. This estimation is based on the following:

- top of the rows where sand fences are present: $4 \text{ ft wide} \times 0.25 \text{ ft of gravel} \times 88,789 \text{ ft} = 3,288 \text{ cu yd} + 8\% \text{ shrinkage factor}$ results in a total of $3,291 \text{ cu yd}$
- top of rows where sand fences are not present: $2 \text{ ft wide} \times 0.25 \text{ ft of gravel} \times 244,380 \text{ ft} = 9,051 \text{ cu yd} + 8\% \text{ shrinkage factor}$ results in a total of $9,058 \text{ cu yd}$

The specific quantity of gravel to be applied for row armoring enhancements is a maximum estimation; armoring will depend on the need for corrective actions to reduce dust emissions and whether failure (i.e., sloughing) of the row walls is observed. The need for such enhancements would be based on air quality monitoring data of PM_{10} emissions in the moat and row DCAs and coordination with GBUAPCD.

As described in Section 2.4.8, “Row Armoring Enhancements,” of the 2009 DSEIR, application of the rock armoring would involve the use of dump trucks, a scraper, and an excavator. All of these vehicles have been described in the project’s construction plans (see Table 2-4, page 2-37 of the 2009 DSEIR) and evaluated in the 2008 SIP SEIR and 2009 DSEIR.

S2-46 Please refer to response to comment L1-1.

S2-47 A specific estimate of the rate of sand accumulation, the amount of material to be removed during maintenance activities, and the number of truck trips necessary to remove materials is not possible, because it is dependent upon area, wind speed, wind events, and sand transport. As explained in Section 2.7.1, “Moats,” of the 2009 DSEIR, based on the data collected from moat and row demonstration areas (sites T12-1 and T32-1, see Exhibit 2-2 of the 2009 DSEIR), the perimeter moats facing the predominant wind direction and adjacent to open lake playa would accumulate sand at a faster rate and, therefore, require the most frequent maintenance procedures. Perimeter moats adjacent to shallow flood DCAs or managed vegetation areas and moats on the

interior of moat and row DCAs would require less frequent maintenance because these areas have significantly lower levels of sand movement than elements adjacent to open lake playa. The frequency of maintenance of perimeter moats adjacent to open lake playa and facing primary wind directions is estimated to be once per year. Frequency of maintenance of interior DCA moats and perimeter moats surrounded by other DCMs is estimated to be once every 5 years. These are conservative estimates based on the rates of sand accumulation observed in the demonstration moat and row DCAs (T32-1 and T12-1) (Air Sciences 2008). Per the Operation and Maintenance Plan, LADWP will conduct ongoing surveys and monitoring activities to properly maintain the moat and row elements to ensure proper performance of the DCMs.

Furthermore, as explained in Section 2.7.1, “Moats,” of the 2009 DSEIR, the sand and material removed from the moats would be transported to and placed in shallow flood pond areas. Therefore, removal of material from the moats would not involve any truck trips outside of Owens Lake.

S2-48 The amount of fuel consumed to maintain the moats, rows, and sand fencing is unknown and would be dependent upon the amount and frequency of maintenance required. Nonetheless, the consumption of fuel was acknowledged in the 2008 SIP SEIR as a significant irreversible environmental change, but that no substantial impacts would occur (see page 6-1). Moreover, as the commenter is aware, LADWP’s primary natural resource consumption concern is related to water use.

S2-49 Please refer to response to comment L1-8. High-wind events over 71 mph are unlikely and it is further unlikely that all 20.6 miles of sand fencing or a substantial portion thereof would be damaged in one such event; therefore, the specific number of person-hours required to reattach 20.6 miles of fence would be speculative as this condition would not likely occur. The time and fuel consumed to repair fencing would depend on how much fencing was damaged and the location and access to the DCA(s). As explained in response to comment L1-8, LADWP fully understands its obligation to ensure that the sand fencing is operating appropriately even immediately following high wind events. As part of its ongoing monitoring program, LADWP would monitor for the occurrence of high wind events and would dispatch staff immediately to visibly inspect all sand fencing. If broken sand fencing is identified, LADWP would dedicate the needed staff to repair the fencing immediately so as to avoid dust emission exceedances.

Regarding fuel consumption please refer to response to comment S2-48.

S2-50 Please refer to response to comment S2-47.

S2-51 Section 2.7, “Operation and Maintenance Plan,” of the 2009 DSEIR discloses that erosive forces of wind and rain may cause degradation of the side slopes of the rows, which could transport soil materials into the moats. The top of the rows would be armored with crushed rock or gravel, and the rows would be constructed in lifts compacted to 85% to reduce the effects of wind and rain erosion. This compaction rate is greater than the compaction levels used in the demonstration areas (moats referenced by the commenter) and would withstand greater erosive forces. Similarly, the side slopes of the moats would be compacted to the extent feasible to stabilize the wall and to prevent erosion. The side slopes of the existing moats (i.e., demonstration areas) are near 90 degrees were not compacted during their construction. Maintenance to the moats and rows would likely follow a 10-year cycle consistent with the frequency of sand fence replacement.

S2-52 LADWP is coordinating and will continue to coordinate with DFG through the streambed alteration agreement permitting process regarding identification of appropriate mitigation for the loss of snowy plover habitat.

- S2-53 No moat and row elements are proposed for cell T1A-1. Therefore, the probability of snowy plover nesting in cell T1A-1 is higher than in other moat and row cells. However, the 2009 DSEIR appropriately concludes that no snowy plover habitat would be affected at cell T1A-1 because disturbance of habitat through construction of moats and rows would not occur. The installation of sand fencing as proposed would not result in a substantial loss of snowy plover habitat because, as discussed on page 3.1-35 of the 2009 DSEIR, the existing hydrologic and topographic conditions of the cell would remain intact following construction, and large contiguous blocks of suitable nesting habitat would remain following construction due to the low density of sand fencing proposed within this cell relative to other project cells.
- S2-54 The first paragraph under “Moat Entrapment” on page 3.1-37 of the 2009 DSEIR has been revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Moat Entrapment

Approximately ~~59.4~~ 118 linear miles of moats (accounting for moats on either side of each row) would be constructed within the six project cells with moat and row elements. Moats would be 4–5.5 feet deep and up to 20 feet wide, and have side slopes of 1.5:1 (33.7 degrees). During the brooding period when juvenile plovers do not fly (28–33 days after hatching), individuals could encounter moat edges and possibly walk or fall into moats. A moderate to high potential for broods to encounter the perimeter of moat and row cells would occur at T1A-3, T37-1, and T37-2 (Exhibit 3.1-12), due to the proximity of these cells to occupied or high-quality nesting habitat. Any occurrences of plovers within moats are expected to be infrequent and limited to cell perimeters (i.e., the outer-most moats, where plovers from adjacent areas could interface with moat and row cells). (As previously discussed, snowy plovers are not expected to regularly nest in the interiors of moat and row cells, including those potentially augmented with water or other dust control enhancements.) If plovers enter moats, two factors could affect their ability to exit the moat and survive: the steepness of side slopes relative to soil roughness (friction) and the presence of water in the moats.”

- S2-55 The 2009 DSEIR provides detailed and adequate rationale supported by substantial evidence for the assumption that occurrences of plovers within moats are expected to be infrequent and limited to cell perimeters. The substantial evidence includes information on plover behavior and habitat requirements. For example, plovers nesting at Owens Lake have been documented having a strong preference to nest in close proximity to shallow flooding areas, which provide high-quality foraging habitat. The moats, rows, and fencing elements of the project would limit accessibility to shallow flooding habitat. Therefore, it is reasonable to conclude that the moat and row cells would not provide favorable nesting conditions for snowy plovers because if plovers nested in these areas they would not have easy access to shallow flooding or other high-quality foraging areas. Nonetheless, the 2009 DSEIR acknowledges the uncertainty by stating (see page 3.1-38): “Although moat entrapment is expected to be rare, there are no data to accurately predict its likelihood or frequency. Therefore, this analysis takes a very conservative approach and considers the impact to be potentially significant.” The commenter offers no evidence why the conclusion should be different; therefore, no further response can be provided.
- S2-56 The analysis clearly states that occurrences of plovers within moats are expected to be infrequent, particularly the threshold number of plover entrapments (i.e., three or more snowy plover moat entrapments per DCA per calendar year.). There is no substantial evidence that entrapment would be likely. Further, there is no evidence that if entrapment did occur, what the cause of that

entrapment would be (e.g., presence of mud, too steep slopes, predation, or other causes). Still, the analysis takes a very conservative approach and while no evidence of significant entrapment is available, the 2009 DSEIR concludes that the impact would potentially significant due to uncertainty. In light of the information available regarding entrapment potential, it would be perfectly reasonable for LADWP, as CEQA lead agency, to draw the conclusion that a less-than-significant impact would occur. However, it did not. Instead, it chose to come to the conservative conclusion that the impact would be potentially significant.

Mitigation recommended in the 2009 DSEIR is not deferred; consistent with the requirements of State CEQA Guidelines Section 15126.4(B), specific actions to mitigate significant effects are proposed based on identified performance standards. Further, CEQA allows the mitigation (based on performance standards), to be accomplished in more than one way, which is what is proposed in the 2009 DSEIR. In light of the lack of evidence that an entrapment impact would occur, LADWP recommend a mitigation that would monitor and set performance standards to determine if an impact would occur. From there, it adapted the mitigation to respond to specific conditions that would be observed through the monitoring. As described on page 3.1-45, the recommended corrective adaptive management actions include adding escape ramps within problem moats, adding rip-rap to side slopes, and reducing side slopes. If a given action is determined to not be feasible or ineffective upon implementation, then LADWP would 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 would require approval by DFG. The adaptive management approach is one that is generally favored by CDFG and USFWS because it provides a higher degree of likelihood that the goals and objectives of the mitigation will be achieved. Further, the proposed adaptive management strategy was discussed at length with DFG during a March 3, 2009 conference call and no objections to the approach were raised in that call or in a follow up letter to LADWP dated May 15, 2009.

It can be inferred from the comment, that the commenter is suggesting that LADWP should, prior to confirming that an impact would actually occur, implement one or more identified management strategies (e.g., install ramps, decrease the angle of the slopes) to prevent moat entrapment. Again, there is no evidence that an entrapment impact would occur. Further, assuming that entrapment would occur, implementing a management strategy without knowing the cause of the entrapment may not resolve the problem. For example, if the entrapment impact is a result of the presence of mud, designing less steep slopes would not resolve this issue because there is nothing to prevent the plover from getting trapped in mud. Therefore, it is critical to determine what caused the entrapment prior to implementing a strategy to correct it. With regard to ramps, implementation of ramps within some or all of the moats may in fact attract snowy plovers to the moats, which could lead to other significant impacts. This concern was communicated to DFG in a March 3, 2009 conference call and they did not express disagreement with the concern. Finally, it is not feasible to decrease the angles of the slopes of the moats because as is described in the technical memorandum prepared by Air Sciences (August 18, 2008), anything less than 1.5:1 (33.7 degrees) may cause the failure of the moat and row DCM with regard to dust control efficiency. The commenter offers no evidence of why they believe the proposed mitigation is deferred; therefore, no further response can be provided.

S2-57

Regarding the ability of plovers to successfully navigate slope angles for moat or other angled surfaces, scientific studies are lacking for this subject. In the absence of studies that are directly applicable to this project and impacts on snowy plovers, biologists relied on the best available information to substantiate the conclusions presented in the 2009 DSEIR. The slope information presented is from the few anecdotal observations and opinions made by biologists who have studied snowy plover, and in some cases, are recognized experts on the species (namely Gary

Page). The 2009 DSEIR does not (as the commenter suggests) identify a maximum slope navigable by plovers. The statement by Mr. Page that snowy plovers of all ages are expected to be able to navigate slopes of 30 degrees (1.7:1) or less does not indicate a maximum slope; this was a value that Page believed should pose no problems to snowy plovers, but that was reasonable based on his observations of the species. Also, this value was not based on empirical data. The side slopes of moats in the proposed project would be 33.7 degrees, or 3.7 degrees steeper than 30 degrees. Page also indicated that older plover chicks can navigate steeper slopes (possibly as steep as 60 degrees). It is reasonable to conclude, in the absence of data to suggest otherwise, that if snowy plover chicks can negotiate a 30 degree slope (and older chicks may be able to navigate slopes up to 60 degrees) it is likely that a 33.7 degree slope would not preclude them from being able to exit the moats. Nonetheless, the analysis took a conservative approach and considered the impact to be potentially significant due to uncertainty and lack of empirical data.

Regarding the issue of potential mud entrapment, please see response to comment S2-59.

- S2-58 The conclusion that entrapment is expected to be rare is supported by best available information and professional opinion, which are documented in the 2009 DSEIR (see response to comment S2-56). The commenter provides no evidence that would suggest that entrapment should be expected to occur more frequently than described in the 2009 DSEIR; therefore, no changes to the analysis have been made.
- S2-59 Regarding the fatal entrapment of two plover chicks in a dewatering trench, as stated in the 2009 DSEIR (see page 3.1-38), the degree to which moat side-slope, presence of mud, or other soil conditions contributed to this incident is unknown. The dewatering trench had vertical sides (90 degrees), whereas side slopes of DCA moats would be 33.7 degrees. Although the incident provides potential evidence that construction and operation of the moats could result in mud entrapment, it does not provide evidence that frequent entrapment should be anticipated. Nonetheless, the 2009 DSEIR acknowledges that fatal entrapment of snowy plovers could result from implementation of the project and as a result a comprehensive adaptive management strategy to prevent significant losses of plovers has been proposed (see mitigation measure 3.1-12).
- S2-60 Please refer to response to comment S2-32.
- S2-61 Please refer to response to comment S2-33.
- S2-62 Please refer to response to comment S2-37.
- S2-63 Please refer to response to comment S2-56.
- S2-64 The comment that the reported observation of a plover walking up a 20 degree slope contradicts the 2009 DSEIR's assumption that plovers are expected to be able to walk up a 33.7 degree (1.5:1) slope is not accurate. There are no inconsistencies in the analysis language. The analysis included a summary of all prior documented occurrences of plover movements on slopes. Therefore, the observation of a plover walking on a 20 degree slope was reported. This observation does not suggest that snowy plovers cannot move up slopes steeper than 20 degrees. There were no reported occurrences of plovers failing to navigate particular slope angles.
- S2-65 The comment includes one sentence of an entire paragraph, and this one sentence does not provide the full context. As stated on page 3.3-13 of the 2009 DSEIR:

“The dry, desert character of the historic Owens Lake bed, combined with further expanses of desert landscape immediately surrounding Owens Lake, creates a relatively unique and dramatic visual landscape. The lake bed primarily consists of dry, desert grayish to light brown sand with pockets of dry vegetation primarily located along the western, outer edge of the lake bed. Views of the lake bed from publicly accessible areas transition from a rough to smooth texture looking toward the center of the lake bed. Areas of the lake bed have a glassy appearance where standing water is present. There are no major landform features or rock outcroppings in the lake bed. Because of the relatively homogenous landscape of Owens Lake and the similar landscape features surrounding the lake, the lake bed itself is not easily distinguishable from the surrounding landscape, especially when in the background.”

Taken in the full context of the 2009 DSEIR text, rather than the one sentence, the DSEIR assigned a “scarcity” value of 3 to all viewsheds. The commenter did not express disagreement with this full description.

The Bureau of Land Management (BLM)’s Visual Resource Management Program (VRMP) was used to numerically evaluate the scenic quality of the project site and to assess impacts. The VRMP is based on a variety of factors, including scenic elements. The elements are landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Possible scores are listed for each element. For scarcity, the possible scores are 1, 3, and 5+ (a rating higher than 5 can be given if substantiated). BLM’s scarcity scores are based on the following descriptors:

- 1 Interesting within its setting, but fairly common within the region.
- 3 Distinctive, though somewhat similar to others within the region.
- 5+ One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.

Given the choices, and the relative indistinctiveness of Owens Lake in the viewshed and the relatively indistinctiveness of the moat and row DCAs in relation to other areas of the lake bed, a rating of 3 appears to be the most appropriate rating for the issue of scarcity.

S2-66

The comment agrees with the management class assigned in the 2009 DSEIR, but disagrees with the 2009 DSEIR findings. The visual objective is that “management activities may attract attention but should not dominate the view of the casual observer.” The 2009 DSEIR includes visual simulations to mimic what the moat and row elements will look like from each of the key viewsheds. The view of cell T37-1 is shown in Exhibit 3.3-2. Moat and row elements can be seen, but are barely noticeable in the viewshed. The view of cell T37-2 is simulated in Exhibit 3.3-3. The moat and row elements are more visible than the view of cell T37-1, but it is difficult to argue that they dominate the viewshed. The view is clearly dominated by the expansive vista, the variation of color, and the mountains in the background. Moats and rows can be seen, but they are a minor element of the viewshed. The view toward cell T1A-1 (Exhibit 3.3-4) is closer to the view of cell T37-1 in terms of visual change: barely noticeable. Each of these views also provide views from SR 395.

Visual resource evaluation is a difficult issue. Different people can see the same visual change and disagree on its significance. This issue is especially important in the project area, where the overall views are grandiose. Thus, the use of tools, such as the VRMP, is particularly useful in reducing the subjective nature of this type of evaluation to a more objective scale. Based on the VRMP, and as discussed above, the visual resources changes from these listed view sheds are less than significant.

Regarding the referenced statement in Section 4.2.2 of the 2009 DSEIR (Significant and Unavoidable Impacts), it is an error. Page 4-4, Section 4.2.2, first paragraph is hereby revised to read as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Implementation of DCMs on the Owens Lake bed would result in significant and unavoidable impacts as analyzed in the 2008 FSEIR and this draft SEIR. The proposed project would result in significant and unavoidable adverse impacts on air quality ~~and visual resources~~, as described below.”

- S2-67 The comment is critical that the 2009 DSEIR did not include simulations of moat and row elements from within the lake bed. This is not necessary. First, the 2009 DSEIR contains photos of the existing moat and row elements (demonstration areas) at Owens Lake; please see Exhibits 3.3-7a as well as Exhibits 3.1-4 and 3.1-5. The proposed project would look similar to these photos, although the sand fence would be a more neutral color. As described on page 3.3-20, the lake bed is accessible to pedestrians. There is no question that the moat and row elements, from close-up locations (10–400 feet approximately), would substantially alter views of certain portions of the lake bed. Three important factors determine significance: 1) these close-in views are not located in common viewing areas, and frequent visitation by large numbers of people to these close-in views is not expected, 2) views would only be affected when looking directly at the moat and row element: views in other directions from the same view point would be of other open areas of the lake bed or other constructed features that are not part of this project, and 3) the lake bed is already modified by manmade facilities in a number of locations, including mining activities and other dust control facilities. Please see Exhibits 3.1-3, 3.1-4, 3.1-5, 3.1-7, 3.3-7, and 3.3-8. This combination—the relatively low visitation expected and the fact that the lake bed is already modified in many locations, it is not pristine and unaltered—resulted in the conclusion that the close-in view changes would not be substantial. They would not be seen by many people, and the close-in views are already modified in a number of locations of the lake bed. CEQA defines a significant impact as a substantial and adverse change in the physical environment. See State CEQA Guidelines Section 15382. Therefore, the close-in view impact was determined to be less-than-significant.
- S2-68 The comment requests that the text of the 2009 DSEIR be modified to note that that the project is intended to be permanent, whereas mining activities are temporary. This change is unnecessary. The 2009 DSEIR does not suggest that the project is temporary. Regarding mining activities, these are not the subject of this 2009 DSEIR. Mining activities at Owens Lake have occurred, off and on, since the late 1800’s. As stated in the 2008 FSEIR (also see Figure 2.4.1-4 of the 2008 SEIR), U.S. Borax has a 16,120-acre lease (currently in the renewal process) on Owens Lake with the California State Lands Commission Mining may eventually cease at Owens Lake, as it will no longer be economical. However, mining has been ongoing for over a century and is expected to continue indefinitely. While this may be considered “temporary”, it is a visible element on the lake and will be into the foreseeable future.
- S2-69 This statement in the 2009 DSEIR is an error. Please refer to Response S2-66.
- S2-70 Please refer to response to comment S2-4 and Master Response 2.
- S2-71 Please refer to response to comment S1-2 and Master Response 2.
- S2-72 The commenter makes a statement that an objective was added after the NOP was released. This comment is acknowledged. Please refer to response to comments S2-3 and S2-4 and Master Response 2.

S2-73 Please refer to response to comments S2-3 and S2-4 and Master Response 2.

S2-74 Please refer to response to comment S2-48.



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

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June 23, 2009

Mr. Tom Dailor
Environmental Supervisor
Los Angeles Department of Water & Power
111 North Hope Street, Room 1044
Los Angeles, California 90012

Subject: Comments on Draft Supplemental Environmental Impact Report for
Owens Lake Revised Moat & Row Dust Control Measures (SCH #2008121074)

Dear Mr. Dailor:

The Great Basin Unified Air Pollution Control District (District) appreciates the opportunity to review and comment on the Draft Supplemental Environmental Impact Report (DSEIR) prepared by the City of Los Angeles Department of Water and Power (City) for the revised Owens Lake Moat & Row (M&R) dust control measures project. Although there are a number of important issues and concerns caused by the City's revised and delayed M&R project that are in addition to the project's environmental impacts, the District restricts its comments at this time to those directly associated with the current DSEIR. The District offers the following comments:

1. Project schedule: In a number of places the document states that the proposed M&R project will be completed by April 1, 2010 (see pages ES-1, 2-9, 2-35, 3.3-18, 3.2-19, and 4-2). This date should be revised to indicate the City's latest schedule for the project. The District understands that the project may be completed well after this date. Will there be additional impacts if the project is completed after April 2010?
2. Changes to the M&R project: The Project Description is quite unclear as to the reasons the original M&R design was modified (see pages ES-2¶7, ES-5¶1, ES-5 ¶5, and 2-5¶3). The Draft SEIR gives the impression that wildlife concerns and operation and maintenance issues caused the M&R project to change. The changes were primarily caused by significant revisions made by the City to the basic design of the M&R dust control measure. The original project description provided by the City to the District in early 2007 for use in preparation of the 2008 EIR called for a much more natural-looking M&R design. The 2006 Settlement Agreement between the District and the City described M&R as having a "serpentine layout" with spacings between 250 and 1000

feet. This was the M&R concept analyzed by the District in the 2008 EIR. However, as a result of the City's modeling and field testing, the City revised the M&R design to be much less natural in appearance and more grid-like. The design changes occurred because, as a result of the modeling and testing, the City believed the originally proposed M&R design would not sufficiently control PM₁₀ emissions. The District believes it was the significant design changes initiated by the City that caused the need for a supplemental environmental document. This could be made clearer in both the project description and air quality impacts (comment 16, below) sections of the SEIR. See the October 24, 2008 letter from the District (Schade) to the City (Nahai) for a detailed explanation of this issue.

3. Managed Vegetation alternatives and enhancements: The discussions of the All Managed Vegetation Alternative (pages ES-3 and 5-3) and the Managed Vegetation Enhancements (page 2-22) should note that some significant portion of the 3.5 square-mile M&R areas may be unsuitable for vegetation due to soil types, soil salinity and/or hydrologic conditions.
4. Gravel quantities: Pages ES-4¶3 and 5-4¶3 should correctly identify the amount of gravel necessary to implement the Gravel Application Alternative. The document states "7,000 cubic yards per square [?]." A 4-inch thick blanket of gravel over the entire 3.5 square-mile (2,240-acre) dust control area would require 537 cubic yards of gravel per acre or a total of 1,200,000 cubic yards of gravel.
5. Water Supplies: On page 2-9¶4, the document states "all water supplies for dust control or other environmental restoration benefits must be supplemented through additional purchases from MWD." This is not necessarily true. Current water control efficiency improvement efforts on the existing and proposed water-based dust control areas should result in significant water savings. In addition, the City is currently conducting a large groundwater resource investigation in the Owens Lake area to determine if local water supplies could supplement aqueduct deliveries. These efforts should be discussed as they will likely have an impact on the amount of Los Angeles Aqueduct water used on the Owens Lake dust controls.
6. Moat & Row Characteristics: Exhibit 2-5 on page 2-12 is incorrect. An 89-foot disturbed width adjacent to a 267-foot undisturbed width is only 25 percent disturbance (89' disturbed/356' total). A 33 percent disturbed distance with 89 feet of disturbance would have 178 feet of undisturbed distance.

The document states that "minimum spacing of moat and row elements would be approximately 100 feet from center of the row to the center of the next row." With an 89-foot disturbed area, this would make the undisturbed area only 11 feet. Is this correct, or is the undisturbed area between moats a minimum of 100 feet (189-foot minimum between rows)?

7. High winds and sand fences: On pages 2-15¶5 and 2-39¶1, the project description states that the sand fence material will be designed to break off at the bottom when winds

exceed 71 miles per hour. The same paragraph on page 2-15 also states that “it is likely that gusts in excess of 70 mph have occurred.” Although a 70 mile per hour wind on Owens Lake could be considered to be an unusual wind event, the District warns the City that dust emissions that occur after the fences detach will be considered a failure of the M&R dust control measure. If the City cannot reattach what could be many miles of sand fencing quickly enough after the extreme event, even moderate winds could cause Standard exceedances at the shoreline. Because of the “two strikes and it’s out” provision for M&R in the 2008 SIP (Section 5.5.1 and Chapter 8, Attachment B) and 2006 Settlement Agreement (§19), this may require the offending M&R areas to be removed and replaced with Best Available Control Measures (BACM – Shallow Flooding, Managed Vegetation and/or Gravel Blanket).

8. **Enhancement Options:** In Section 2.4.4 (page 2-16¶3), the enhancement options discussion states that “LADWP monitors air emissions” and “LADWP determines whether the dust emission objectives from the 2008 SIP are being met.” This is incorrect. The District conducts all air quality compliance monitoring and determines if the dust controls are working.

As discussed in Comment 7, above, the Enhancement Options section should discuss the fact that if M&R areas fail twice, it must be replaced with BACM.

9. **Brine Enhancements:** Section 2.4.9 on page 2-34 should be revised to indicate that brine **temporarily** stabilizes surface soils. It is important to note that certain weather conditions (rain with cold temperatures) can cause brine-stabilized surfaces to become emissive (this is why Owens Lake is so emissive). In addition, all brine-stabilized surfaces break down over time. Additional brine would need to be added as required to maintain non-emissive surfaces.
10. **Construction Schedule:** Section 2.6 (page 2-35¶4) discusses the 50-foot construction area buffer around the outer boundary of the Dust Control Areas. It is important to note that the 2008 SIP EIR requires dust control areas adjacent to sensitive resources, such as wetlands and stream channels, to have no construction area buffers. This requirement is correctly portrayed on Exhibit 2-20 (page 2-36), but is not mentioned in the text.
11. **Air Quality – Environmental Setting:** On page 3.2-2¶2, the final sentence should read: “Most of the persistent, low-wind conditions visibility degradation can be attributed to interbasin transport of air pollutants.” Owens Lake emissions cause severe visibility degradation during high-wind conditions.
12. **Ozone:** The ozone discussion (page 3.2-2) should be revised to reflect the recent proposed “non-attainment” designation of Southern Inyo County (not including the Owens Lake area) for the new federal 8-hour ozone NAAQS based on exceedance data from a National park Service monitor in Death Valley. See: <http://www.arb.ca.gov/desig/8-houroz/8-houroz.htm> for more information.

13. Particulate Matter: On page 3.2-4¶3, two errors should be corrected. The Owens Valley PM₁₀ Planning Area (not GBVAB) is designated non-attainment for PM₁₀, but not for PM_{2.5}. It remains unclassified for PM_{2.5}. Great Basin adopted Attainment Plans for the Owens Valley PM₁₀ Planning Area in 1997, 1998, 2003 and 2008. The Draft SEIR only mentions the 1998 plan. Table 2-1 on page 2-6 correctly summarizes the Plans.
14. Air Quality Plans: This section on page 3.2-12 needs a number of minor corrections in order to be correct:
- Paragraph 3: The final phrase “it is currently enforced by GBUAPCD” is incorrect. The 2008 SIP (not the 2003 SIP) is the SIP currently enforced by the District.
 - Paragraph 4: “GBUAPCD agreed to revise the 2003 SIP” (not the LADWP).
 - Paragraph 4: The word “additional” should be removed twice from before the term “moat and row features.”
 - Paragraph 4: The sentence near the end of the paragraph should read: “All other additional DCMs, beyond the 29.8 square miles completed by December 2006, do not have this requirement...”
 - Paragraph 4: The final date in the paragraph should be October 1, 2009 (not October 10, 2009).
15. Air Quality – Project Impacts: The following comments are provided on the Project Impacts section beginning on page 3.2-18:
- Impact 3.2-1 states toward the end: “*Thus, implementation of the proposed project, as proposed, would technically conflict with the applicable air quality plan, resulting in a slight potential for an increase in the number of days when violations of the NAAQS and exposure of sensitive receptors would occur.*” [emphasis added] In the District’s January 9, 2009 comment letter on the Initial Study, we asked the City to review the air quality modeling to determine the likely level of air quality impact the project’s delay would cause. This would allow for some quantification of the impacts. There is no indication that the model was reviewed, therefore it is not appropriate for the impact level to be characterized as a “slight potential.” Unless the model is reviewed, the impact should simply be characterized as “a potential for an increase.”
 - As mentioned in comment 1, the April 1, 2010 project completion date should be updated with the latest project schedule information.
 - Page 3.2-19¶3: “the project would **technically** conflict with the implementation of the applicable air quality plan. It is not a “technical” violation—it is an “actual” violation. Please remove the word “technically.”
16. Mitigation Measure(s) for Impact 3.2-1: The mitigation measure wording should be revised to read as follows (with additions and deletions indicated):
- The ~~technical~~ conflict with the 2008 SIP (i.e., delay in implementation of 3.5 square miles of DCMs by 6 months or more) is caused by the need for project changes made by the LADWP in order to address moat and row design modifications necessary to address PM₁₀ control efficiency concerns, as well as wildlife impact concerns. LADWP is committed to

implement all the proposed required DCMs, if approved as quickly as feasible. No other measures are reasonably available to reduce the potential impacts resulting from this conflict. The LADWP will continue to investigate the implementation of additional and/or accelerated air pollution control measures to reduce or eliminate these impacts.

The requested mitigation measure wording incorporates a number of the District's comments and concerns expressed above:

- a. The word "technically" should be removed from the mitigation measure.
- b. The project completion date should be updated, if necessary.
- c. The fact that the project modifications were mainly driven by the need to increase PM₁₀ control efficiency (as opposed to wildlife impact concerns) should be clearly stated.
- d. It should be noted that by missing the October 1, 2009 M&R project completion deadline, the City will be in violation of a District Board order. Unless the City secures a variance, which would presumably include measures to reduce excess air pollution emissions, the City will be subject to fines of up to \$10,000 per day of delay.

17. Air Quality – Significance after Mitigation: On page 3.2-19¶5, at the bottom, it states: "There are no other measures or actions LADWP can take to implement the moat and row DCMs on a faster timetable." This is true. However, there are actions the LADWP can take to reduce or eliminate present or future air pollution emissions elsewhere in the District (including the Owens Lake area) that could offset the emissions from the delayed M&R project. Although these actions have yet to be developed, the District anticipates some additional mitigation will be required. The alternative is significant fines for violating a District Board order.
18. Significant and Unavoidable Impacts: On page 4-2¶4, the sentence reads: "The proposed project would result in significant and unavoidable adverse impacts on air quality **and visual resources**, as described below. [emphasis added] "And visual resources" should be removed.
19. Significant and Unavoidable Impacts: On page 4-3¶1: "No feasible mitigation measure is available to accelerate construction and implementation of the moat and row features by October 1, 2009." As discussed in comment 17, above, this is true. However, it neglects the fact that the LADWP could take additional actions to offset the increased emissions caused by the project delay. This should be noted.
20. Summary of Environmental Constraints: On page 5-2¶4, the document once again states: "No feasible mitigation measure is available to accelerate construction and implementation of the moat and row features by October 1, 2009." See comment 19, above.
21. No-Project Alternative: On page 5-5¶5, it states: "...the project's considerable contribution to a significant accumulative visual impact." This appears to be incorrect

and at odds with the statement on page 3.3-25¶1: "Further, the project's cumulative visual impacts would not be considerable.

Typographic changes

1. The local air basin is known as the "Great Basin Valleys Air Basin" (plural valley).
2. Page 3.2-19¶2: The 2008 total DCM area is about 43 square miles, not 48.

Please contact me if you have any questions regarding the District's comments.

Sincerely,



Theodore D. Schade, P.E.
Air Pollution Control Officer

Cc (via e-mail): William Van Wagoner, LADWP
David Christensen, LADWP
Amanda Olekszulín, EDAW
Judy Brown, California State Lands Commission
Brad Henderson, CDFG, Eastern Sierra
Justin Raglin, Lone Pine Paiute Shoshone Reservation

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L1-1

The construction of moat and row dust control measures on 3.5 square miles of the Owens Lake bed would require approximately 12 months to complete: construction would begin upon receipt of all required permits and approvals. LADWP anticipates that it would be able to implement the project by October 2010 if there are no substantial delays in obtaining required permits from responsible and trustee agencies.

The first paragraph of Section 2.6, Construction Schedule,” on page 2-35 of the 2009 DSEIR is revised as shown below. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Construction of the seven moat and row DCAs would require approximately ~~7 to~~ 12 months to complete and would begin ~~in the spring of 2009~~ upon receipt of all required permits and approvals. ~~All DCMs are anticipated to be implemented by the spring of 2010.~~ It is anticipated that construction would be completed by October 2010.”

Impact 3.2-1 on pages 3.2-18 and 3.2-19 of the 2009 DSEIR are revised as shown below. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

IMPACT 3.2-1 Project-Generated Emissions of Criteria Air Pollutants and Precursors. *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. Thus, implementation of the proposed project, as proposed, would technically conflict with the applicable air quality plan, resulting in a slight 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.*

As discussed in the 2008 FSEIR, short-term emissions of criteria air pollutants (e.g., PM₁₀) and precursors (e.g., ROG, NO_x) would occur as a result of project-related construction activities. These emissions were modeled for the 2008 FSEIR using ARB- and GBUAPCD-approved OFFROAD2007, EMFAC2007, and URBEMIS 2007 models. Changes made to the project ~~since the certification of the 2008 FSEIR include a delaying in project~~ construction of the moat and row DCMs; ~~6 months, creating a new completion date of April 1, 2010, for moat and row implementation;~~ changing the configuration of the moat and rows to a gridded pattern instead of the previously proposed curved pattern; and, as a result of the proposed grid pattern, locating the moat and row features possibly as close as 100 feet apart in some areas rather than 250 feet apart, as evaluated in the 2008 FSEIR.

Because the overall size and location of ground disturbance, construction duration and phasing, and required heavy-duty construction equipment and number of

construction personnel would fall within the ranges identified in the 2008 FSEIR, construction of the proposed project would be anticipated to result in the same amount of emissions calculated for the 3.5 square miles of moat and row features presented Chapter 3.2, "Air Quality," in the 2008 FSEIR. 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, these measures are incorporated into the project as Mitigation Measures Air-1 through Air-6 (see pages 3.2-25 and 3.2-26 of the 2008 FSEIR). However, because DCM operations would be delayed by the new construction schedule beyond the date specified in the 2008 SIP, daily PM₁₀ emissions would likely continue to violate the PM₁₀ NAAQS for 6 months or more, ~~for an additional 6 months~~. The 2008 SIP requires that all moat and row features be implemented by October 1, 2009. ~~Currently, the moat and row features are proposed to be completed by April 1, 2010.~~ Construction of the moat and row features would begin upon receipt of all required permits and approvals and would take approximately 12 months to complete. The 2008 FSEIR evaluated the implementation of the moat and row DCMs in addition to shallow flooding, managed vegetation, and rock armoring DCMs. The moat and row DCMs would make up 3.5 square miles of the total 15.1 square miles of DCMs that would be implemented under the 2008 SIP. Although the moat and row DCMs would need to be implemented by October 1, 2009, the other DCMs would need to be implemented by April 1, 2010, as identified in the 2008 SIP. LADWP has constructed or is currently constructing other DCMs (e.g., shallow flooding, managed vegetation) to meet the April 1, 2010, deadline. Therefore, although implementation of the moat and row DCMs would be delayed, LADWP has and would continue to make substantial progress toward reducing dust emissions from the lake bed before and during the 6-month (or more) period over which implementation of the moat and row elements has been extended.

Although the operational delay caused by the revised construction schedule would result in a conflict with an existing adopted air quality planning effort (i.e., the 2008 SIP) and could potentially lead to more days when violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations would occur, two important considerations must be recognized: (1) because most of the DCMs would be in place (the project delays implementation of only 3.5 square miles of the total 48-square-mile DCM project included in the 2008 FSEIR, PM₁₀ emissions would be less than the current baseline, and (2) emissions would continue to decrease over the ~~6~~12-month construction period as moat and row DCMs are constructed and completed. However, some parts of the project site would continue to create unabated dust emissions over some or all of the additional 6 months (or more), until the DCMs are completed. Because the affected area is confined to 3.5 square miles, it is unknown whether the delay in implementation of the moat and row elements would lead to an increase in the number of days when violation of the NAAQS and additional exposure of sensitive receptors to substantial pollutant concentrations above NAAQS standards would occur.

Because the moat and rows would not be operational in the timeframe required by the 2008 SIP, the project would ~~technically~~ conflict with implementation of the applicable air quality plan. It could contribute to the potential for additional violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations. Therefore, this impact is considered significant.

The first paragraph under “Significant and Unavoidable Impacts Identified in the SEIR” in Section 4.2.2, “Significant and Unavoidable Impacts of the Proposed Project,” on pages 4-2 and 4-3 of the 2009 DSEIR is revised as shown below. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR. Significant and Unavoidable Impacts Identified in the SEIR.

As analyzed in Section 3.2, “Air Quality,” the proposed project would contribute to project and cumulative conflicts with implementation of an adopted air quality control plan. The project would require approximately 12 months to complete and construction would begin upon receipt of all required permits and approvals~~would be implemented by April 2010, which is an approximate 6-month delay (for moat and row elements only) from the schedule outlined in the 2008 SIP.~~ Construction of the proposed project (i.e., additional moat and row elements) would cause DCM operations to be delayed beyond the time frame specified in the 2008 SIP. Thus, implementation of the proposed project would conflict with the applicable air quality plan, resulting in a potential increase in the number of days for which violations of the national ambient air quality standards (NAAQS) are likely, along with the related exposure of sensitive receptors that would occur. No feasible mitigation is available to accelerate construction and implementation of the moat and row features by October 1, 2009. Therefore, this project-specific impact is considered significant and unavoidable.

Regarding the commenter’s question whether the further delay of the project would result in any additional impacts, the change in schedule and the potential further delay in implementation of the moat and row project would result in the continuation of a significant and unavoidable impact related to conflict with an adopted air quality planning effort (i.e., 2008 SIP) (Impact 3.2-1). The delay in project implementation would not result in any new or substantially more severe environmental impacts, rather it would result in the continuation of an existing adverse air quality impact for a longer period of time. However, once the project is implemented, this impact would be reduced to a less-than-significant level. The impact would remain the same: a short-term significant and unavoidable effect.

L1-2

The first paragraph under “Elements of the Project,” on page ES-2 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

Before its proposed revision, the project was evaluated and adopted as part of the *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (2008 FSEIR) (adopted by the Great Basin Unified Air Pollution Control District [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, 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. Since the 2008 FSEIR was published, LADWP revised the design of the moat and row dust control measures because modeling and field testing indicated that the originally proposed serpentine layout and spacing (250–100 feet) may not sufficiently control PM₁₀ emissions. In addition, DFG and the California State Land Commission (CSLC) raised concerns over specific features of the moat and row DCM and its impact on wildlife. Furthermore,

LADWP developed additional details regarding the changes to the design and operation and maintenance plan for the moat and row DCMs have been proposed.”

The first paragraph on page ES-5 under “No-Project Alternative – Continuation of Existing Conditions” in the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Under the No-Project Alternative, moat and row DCMs would be constructed, operated, and maintained on the historic Owens Lake in accordance with the 2008 SIP, which designed the 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 FSEIR, LADWP modeling and field testing indicated that the originally proposed moat and row design may not sufficiently control PM₁₀. In addition, the moat and row DCM likely would not be implemented because LADWP probably would not be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC). DFG and CLSC raised concerns over specific features of the previously approved moat and row DCMs related to potential impacts on wildlife and other issues. These concerns resulted in revisions to the design of the DCMs, as discussed and analyzed in this draft SEIR. Without the changes proposed for the moat and row DCMs, PM₁₀ 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. As described in State CEQA Guidelines Section 15126.6(a), lead agencies are not required to evaluate alternatives that are infeasible. In the case of the previously approved moat and row design, LADWP has determined that this design may not attain adopted dust control efficiency standards. Therefore, the analysis in this DSEIR assumes that if the No Project Alternative were implemented, no development would occur within the moat and row DCAs. 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.”

The fifth (last) paragraph on page ES-5 under “Environmentally Superior Alternative” in the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“CEQA requires the lead agency to identify an alternative that is feasible and superior to the proposed project; however, in this case, the proposed project is the environmentally superior alternative. The All Shallow Flooding Alternative would have been identified as the environmentally superior alternative, but it had already been considered and rejected in the 2008 FSEIR. No other environmentally superior alternatives are available that would attain most of the proposed project’s basic objectives. The primary purpose of the proposed project was to improve on a previously approved project to address PM₁₀ control efficiency concerns as well as ~~because of~~ environmental concerns raised by DFG and CSLC and implement DCMs that require little or no water. As a result, the proposed project is the environmentally superior alternative.”

The third and fourth paragraphs on page 2-5 of the 2009 DSEIR are revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“The 2003 Revised SIP contains provisions requiring the GBUAPCD to continue monitoring dust emissions from the lake bed and to identify any additional areas beyond the 29.8 square miles of dust control areas (DCAs) that may require DCMs in order to meet NAAQS for PM₁₀. As a result of the continued monitoring, the GBUAPCD identified up to 15.1 additional square miles of DCAs, of which 9.2 square miles would be constructed with shallow flooding DCMs, 3.5 square miles would be constructed with moat and row DCMs, 1.9 square miles would be reserved for future study areas, and 0.5 square mile would be channel areas (Table 2-2). The study areas and the channel areas may or may not require dust mitigation (i.e., implementation of approved DCMs). These additional DCAs were outlined in the 2008 SIP. The environmental impacts were evaluated as part of the 2008 FSEIR (Table 2-1 LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner. In addition Furthermore, specific details regarding the refined operation and maintenance of the moats and rows were not available at the time the 2008 FSEIR was certified, and thus could not be evaluated at a project level of detail. ~~A more refined operations and maintenance plan is proposed as part of this revised moat and row DCM project. Therefore, since the 2008 FSEIR was certified and new, significant environmental impacts or an increase in the severity of already identified significant effects may occur due to changes in the design, operation, and maintenance of the moat and row elements, an analysis of these environmental effects is required under CEQA (CEQA Guidelines Section 15162). These changes were not known when the 2008 FSEIR was prepared; therefore, an analysis of their environmental effects is required under CEQA.~~ However, these changes affect only the moat and row dust control areas (DCAs), not the larger dust control program evaluated in the 2008 FSEIR.”

In response to comments received, LADWP proceeded with addressing DFG’s concerns regarding wildlife impacts, and provided a more detailed analysis of the operation and maintenance plan. These refinements are the subject of the 2009 DSEIR.

L1-3

The commenter states that some or all areas of the moat and row dust control areas (DCAs) may be unsuitable for the support of a managed vegetation DCM. The commenter is correct, LADWP has investigated the feasibility of implementing managed vegetation within the proposed moat and row DCAs in a report entitled *CDM Final Technical Memorandum, LADWP Owens Lake Dust Mitigation Program Phase 7–Design, Moat and Row Conversion Conceptual Design (July 2009)*. The report identified certain portions of moat and row DCAs as suitable for managed vegetation based on desirable conditions such as a high sand content in the soil and existing vegetation. However, not all areas of the moat and row DCAs have these conditions and,

therefore, are not suitable for managed vegetation. Further, specific site conditions for potential managed vegetation within the moat and row DCAs would need to be field verified. The report also indicated that it would take an estimated 5.9 years to implement managed vegetation within the moat and row areas. Therefore, it would not be feasible to implement managed vegetation and meet, or come close to meeting, the dust control timeline outlined in the 2008 SIP.

L1-4 As stated in Section 4.4.1 of the 2008 SIP DSEIR (dated September 16, 2007), operation of the gravel alternative would require an average ongoing maintenance amount of 7,000 cubic yards of gravel per square mile per year (this allows for complete gravel replacement once every 50 years).

The first paragraph under “Gravel Application Alternative” on page ES-4 and the first paragraph under “Gravel Application Alternative” on page 5-4 of the 2009 DSEIR are revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“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 DCAs. 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 of this alternative would require an average ongoing gravel application amounting to 7,000 cubic yards per square mile per year (this allows for complete gravel replacement once every 50 years).~~ Operation of this alternative would require an average ongoing maintenance amount of 7,000 cubic yards of gravel per square mile per year (this allows for complete gravel replacement once every 50 years). 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).”

L1-5 As explained in Section 2.2, “Project Background, Current State of LADWP Water Supplies,” in the 2009 DSEIR, all water supplies used for dust control or other environmental restoration benefits on Owens Lake must be supplemented through additional purchases from Metropolitan Water District (MWD). LADWP water supplies come from two primary sources: the Los Angeles Aqueduct (LAA) and MWD. Water used for dust control on Owens Lake that would otherwise be delivered to LADWP’s service area is replaced through supplemental deliveries from MWD. The commenter suggests that there are other feasible water supply options currently available to LADWP. This is not the case. No other water supplies are currently available and could meet

LADWP's dust control needs on Owens Lake. However, LADWP is pursuing an investigation into the availability of local groundwater to supplement or replace water used from the LAA for dust control activities on Owens Lake. This investigation is expected to be complete in September 2010. In the future, groundwater supplies may be available to meet some or all water demands for dust control activities; however, it is too speculative to make that determination at this time. Therefore, as was assumed in the 2009 DSEIR, no additional water supplies are available to meet dust control demands on Owens Lake.

- L1-6 The 33% disturbed area represents the maximum amount of ground surface that can be disturbed within the combined total of all dust control areas. With an 89-foot wide moat and row element footprint, there would be approximately 180-feet of undisturbed ground between element borders. However, the spacing of moat and row elements would be variable depending on the dust control needs of the DCAs. Some elements may be spaced closer together (greater than 33% disturbance) and some farther apart (less than 33% disturbance). Overall, disturbance within the seven DCAs would not exceed 33%. As currently proposed (see Exhibits 2-6 through 2-16 of the 2009 DSEIR), the total amount of undisturbed ground, when all dust control measures are combined is approximately 25%. With regard to Exhibit 2-5 on page 2-12 of the 2009 DSEIR, this exhibit is only meant to provide a visual representation of the orientation and potential spacing of a moat and row element. As described above, the spacing between the moat and row will vary depending on the specific dust control needs of the specific DCA. Please also refer to response to comment S1-4.
- L1-7 Please refer to response to comment L1-6 regarding the total area of disturbed and undisturbed ground within the moat and row DCAs. In a few cases, there may be some moat and row elements where there is only 100 feet between moat and row element centers. These cases occur where moat and row elements would come together at an angle, and at their closest they would be only 100 feet apart, center-to-center. This is consistent with the overall pattern of development envisioned for the seven moat and row DCAs and for the overall disturbance area of 33% or less.
- L1-8 As the commenter notes, wind gusts in excess of 70 miles per hour (mph) are rare in the project area. No sustained wind events in excess of 58 mph have occurred on the lake bed from June 2000 to June 2008. However, it is possible that gusts exceeding 70 mph could occur and destroy the fences; therefore, the clips attaching the bottom of the sand fence fabric to the bottom cable would be designed to break off to prevent the destruction of the fence during such wind events. LADWP fully understands its obligation to ensure that the sand fencing is operating appropriately, even immediately following high wind events. As such, as part of its ongoing monitoring program, LADWP would monitor for the occurrence of high wind events and would dispatch staff immediately to visibly inspect all sand fencing. If broken sand fencing is identified, LADWP would dedicate the needed staff to repair the fencing immediately so as to avoid dust emission exceedances. LADWP understands that if the moat and row DCM is not performing as expected in controlling dust, other best available control measures (BACM) would need to be implemented to correct the deficiencies consistent with the requirements of the 2008 SIP and 2006 Settlement Agreement.
- L1-9 Section 2.4.4 (the third paragraph on page 2-16) of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Construction of the moat and row DCMs may also include the application of a variety of enhancements to gain greater dust control efficiencies in the Owens Lake bed. These enhancements would be implemented in response to air quality monitoring of PM₁₀ emissions in the moat and row DCAs. In general, LADWP

monitors air emissions from the lake bed via visual observations, field measurements, and detailed modeling that can help identify where the emissions originate. GBUAPCD conducts all air quality compliance monitoring and determines if the dust controls are working and if the objectives of the 2008 SIP are being met. ~~From the data collected, LADWP determines whether the dust emission objectives from the 2008 SIP are being met.~~ If exceedances occur, LADWP may take corrective actions to reduce dust emissions including notifying GBUAPCD. Prior to any enhancement options being implemented on the lake bed, LADWP would coordinate with GBUAPCD to receive direction on what the most effective enhancement that should be implemented. Five enhancement options would be considered and are evaluated as part of this draft SEIR, as described below. These enhancements would ensure that if significant dust sources (i.e., hot spots) develop in the moat and row DCAs, they would be promptly addressed. Any single method or combination of the enhancements could be implemented for both primary and secondary wind direction elements, where demonstrated to be in substantial conformance with the performance standards for the moat and row DCM. Many factors would influence the determination of which enhancement method would be selected, with a preference for non-water or low-water consumption methods. These factors include, but are not limited to, soil type, crust condition, nearest water source, material availability, existing vegetation, if any, and time frame for implementing the enhancement.”

L1-10 Please refer to Response to Comment L1-8.

L1-11 The first paragraph in Section 2.4.9. “Applicatoin of Brine Enhancements,” on page 2-34 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“This enhancement would apply brine to the moat and row side slopes and to access roads in the moat and row DCAs. Brine is water with a heavy concentration of salt. Brine is produced in shallow flooding DCAs on Owens Lake. Within the shallow flooding areas, brine would be collected via a vacuum/pump truck and delivered to moat and row DCAs. The brine would temporarily stabilize surface soils by creating a hardened salt crust (through the evaporation of water) on top of the emissive soils, which would substantially reduce dust emissions. Certain weather conditions (rain with cold temperatures) can cause brine-stabilized surfaces to become emissive and all brine-stabilized surfaces break down over time. Therefore, additional brine would need to be re-applied to maintain non-emissive surfaces.”

L1-12 The third paragraph in Section 2.6, “Construction Schedule,” on page 2-35 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Supporting activities include material and equipment delivery, fence installation, and transportation of construction crews to and from moat and row DCAs. ~~All~~ The moat and row DCAs would have a 50-foot construction area buffer around the outer boundary of the DCA, except in areas where the DCA is adjacent to sensitive resources, such as wetlands or stream channels. As required by the 2008 SEIR, in these sensitive locations, there would be no construction area buffer. In total, 0.1 square mile would be temporarily affected by construction activities, in addition to the 3.5 square miles of DCAs. Exhibit 2-20 shows where the 50-foot construction buffer areas would be established. In some locations, a construction buffer would not be established on one or more sides of the moat and row DCA because the moat and

row DCA would be located adjacent to an existing DCA where construction is on-going or complete and access roads have been established. The temporary construction buffer would be necessary to allow the transport of heavy, wide-tracked equipment to the construction site. Wide-tracked equipment would be necessary because of the varying soil conditions and high water tables present on the lake bed.”

- L1-13 Section 3.2.2, “Environmental Settings,” second paragraph on page 3.2-2 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Visibility in the OVPA generally ranges from 37 to 93 miles, with best visibility during winter. When Owens Lake dust storms occur, typically from September through May, visibility is limited, and these dust storms can reduce visibility to zero near Owens Lake and obscure visibility up to 150 miles away. The primary cause of visibility degradation in the OVPA is fine particulates in the atmosphere. In addition to dust created by Owens Lake dust storms, visibility degradation at Owens Lake results from transport of air pollutants from the San Joaquin Valley Air Basin, located to the west, and the South Coast Air Basin, located to the south. Most of the persistent, low-wind conditions visibility degradation can be attributed to interbasin transport of air pollutants.”

- L1-14 The adopted attainment status for Inyo County, which includes the project area, is provided in Table 3.2-2 on pages 3.2-6 and 3.2-7 of the 2009 DSEIR. Although all of Inyo County is proposed to be in non-attainment for 8-hour ozone by the EPA, it has not been adopted at this time. Furthermore, GBUAPCD has proposed to EPA that only Southern Inyo County be designated non-attainment because the pollution there is a result of pollution being pushed in from the South Coast Air Basin and San Joaquin Valley. However, the project site and Owens Valley are not in the GBUAPCD-proposed Southern Inyo County nonattainment area. Including proposed attainment statuses for areas not included in the Owens Valley Planning Area (OVPA) may lead to confusion; therefore, such information was not included in the 2009 DSEIR. No text changes have been made.

- L1-15 Section 3.2.2, “Particulate Matter,” the third paragraph on page 3.2-4 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“PM₁₀ consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources; construction operations; fires and natural windblown dust; and particulate matter formed in the atmosphere by condensation or transformation of SO₂ and ROG (EPA 2009a). PM_{2.5} is a subgroup of PM₁₀, consisting of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less.

The adverse health effects associated with PM₁₀ depend on the specific composition of the particulate matter. For example, health effects may be associated with metals, polycyclic aromatic hydrocarbons, and other toxic substances adsorbed onto fine particulate matter (referred to as the “piggybacking effect”) or with fine dust particles of silica or asbestos. Generally, effects may result from both short-term and long-term exposure to elevated concentrations of PM₁₀ and may include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death (EPA 2009a). PM_{2.5} poses an increased health risk because the particles can deposit

deep in the lungs and may contain substances that are particularly harmful to human health. In 1995, the GBVAB was classified as a serious nonattainment area for direct emissions of PM₁₀ and PM_{2.5}. GBUAPCD adopted the PM₁₀ Attainment Plan in 1998 2008 to work toward reducing PM in the GBVAB. The attainment plan is still in effect, and the GBVAB is still classified as a nonattainment area for these pollutants (GBUAPCD 2008). The GBVAB is designated an unclassified area for PM_{2.5}.”

L1-16 Section 3.2.3, Regulatory Setting, the “Air Quality Plans” Section on page 3.2-12 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“On August 7, 1987, the OVPA was designated by EPA as a nonattainment area for the PM₁₀ NAAQS. As a result of the nonattainment status, GBUAPCD was tasked to prepare and implement a SIP that would demonstrate how PM₁₀ emissions would be decreased in the OVPA. In accordance with Section 189(b) of the CAAA, an attainment SIP that demonstrates conformance with the NAAQS through the implementation of a program of control measures was required to be submitted to EPA by February 8, 1997. GBUAPCD adopted the original OVPA PM₁₀ SIP in November 1998. EPA approved the 1998 SIP in August 1999. The 1998 SIP included a 5-year extension for attainment and for a SIP update in 2003. The 2003 SIP update was required to include the final control strategies necessary to achieve attainment of the NAAQS by December 2006 (GBUAPCD 2008).

In November 2003, the 2003 Revised SIP (2003 SIP) was adopted by GBUAPCD and later approved by ARB. The purpose of the 2003 SIP was to establish a control program for PM₁₀ emissions blown from the exposed playa at Owens Lake. The 2003 SIP’s deadline to demonstrate attainment with the PM₁₀ NAAQS was December 31, 2006. The 2003 SIP proposed 3 years of control measure implementation before December 2006. However, after the adoption of the 2003 SIP, EPA enacted a new policy that changed the interpretation of the attainment demonstration deadline. EPA’s new policy on attainment demonstrations now required 3 years of ambient air monitoring before the attainment date (December 31, 2006, for the OVPA) to show that there have been no violations of the NAAQS. Because many of the DCMs were not completed until the end of 2006, numerous NAAQS violations occurred during the 3-year attainment demonstration period. Consequently, EPA did not take action on the approval or disapproval of the 2003 SIP; ~~the 2008 SIP~~ the 2008 SIP is currently enforced by GBUAPCD (GBUAPCD 2008).

By December 31, 2006, LADWP met its deadline and had implemented DCMs on 29.8 square miles of the lake bed, as anticipated in the 2003 SIP. In 2006, a dispute arose between GBUAPCD and LADWP regarding requirements to control dust from additional areas at Owens Lake beyond the 29.8 square miles identified in the 2003 SIP. On December 4, 2006, a settlement agreement was approved by both parties to resolve this dispute. Under the major provisions of this agreement, LADWP agreed to implement DCMs on a total of 43 square miles of the lake bed, including the 29.8 square miles of lake bed identified in the 2003 SIP, by April 1, 2010, and ~~LADWP~~ GBUAPCD agreed to revise the 2003 SIP before March 1, 2008, to incorporate the provisions of the settlement agreement. The 2008 SIP was adopted in February 2008, and the resulting implementation program is the project that was approved in the 2008 FSEIR, with the modifications for the 3.5-square-mile-area being evaluated in this analysis (GBUAPCD 2008). In the 2008 SIP, there were provisions for LADWP to include ~~additional~~ 3.5 square miles of moat and row features at LADWP’s

discretion under the restriction that if LADWP chose to use ~~additional~~ moat and row features, they would need to be implemented by October 1, 2009. All other additional DCMs, as described in the 2008 FSEIR beyond the 29.8 square miles completed by December 2006, do not have this requirement and would need to be implemented by April 1, 2010. Only the additional moat and row features are required to be implemented by ~~October 10, 2009~~ October 1, 2009.”

L1-17 The summary statement for Impact 3.2-1 on page 3.2-18 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“IMPACT 3.2-1 Project-Generated Emissions of Criteria Air Pollutants and Precursors. *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. Thus, implementation of the proposed project, as proposed, would ~~technically~~ conflict with the applicable air quality plan, resulting in a slight 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**.”*

L1-18 Please refer to Response to Comment L1-1.

L1-19 The term “technically” is meant to disclose that emissions would not increase as a result of the project; rather, emissions would continue at existing levels. However, it appears from the comment that “technically” implies that the violation may be in question, which it is not. Because the moat and rows would not be operational in the timeframe required by the 2008 SIP, the project would conflict with implementation of the applicable air quality plan.

Paragraph three on page 3.2-19 under Impact 3.2-1 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Because the moat and rows would not be operational in the timeframe required by the 2008 SIP, the project would ~~technically~~ conflict with implementation of the applicable air quality plan. It could contribute to the potential for additional violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations. Therefore, this impact is considered significant.”

L1-20 Mitigation Measure for Impact 3.2-1 on page 3.2-19 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“The ~~technical~~ conflict with the 2008 SIP (i.e., delay in implementation of 3.5 square miles of DCMs by 6 months or more) is caused by the need for project changes made by the LADWP in order to address moat and row design modifications necessary to address PM₁₀ control efficiency concerns, as well as wildlife impact concerns. LADWP is committed to implement all the proposed required DCMs, if approved, as quickly as feasible. ~~No other measures are reasonably available to reduce the potential impacts resulting from this conflict.~~ The LADWP will continue to

investigate the implementation of additional and/or accelerated air pollution control measures to reduce or eliminate these impacts.”

- L1-21 Please refer to Response to Comment L1-2.
- L1-22 LADWP recognizes that by missing the October 1, 2009 implementation order, LADWP would be in violation of a GBUAPCD Board order. LADWP further recognizes that unless the City secures a variance, it might be subject to fines. LADWP is working with GBUAPCD to obtain a variance and implement feasible mitigation measures to reduce excess emissions.
- L1-23 Regarding feasible off-lake measures that could be implemented to reduce dust emissions from Owens Lake between September 1, 2010 and October 1, 2010 (the additional time needed to permit and construct the moat and row DCMs), LADWP is working cooperatively with GBUAPCD to identify appropriate measures that could serve this purpose. However, at this time, there are no known feasible measures to further offset the emissions related to the delayed moat and row project. If such measures are identified, LADWP will append or otherwise supplement the 2009 FSEIR and MMRP to include the mitigation measures consistent with the requirements of CEQA.
- L1-24 The commenter has correctly pointed out an error in the 2009 DSEIR. The first paragraph in Section 4.2.2, “Significant and Unavoidable Impacts of the Proposed Project,” on page 4-2 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.
- “Implementation of DCMs on the Owens Lake bed would result in significant and unavoidable impacts as analyzed in the 2008 FSEIR and this draft SEIR. The proposed project would result in significant and unavoidable adverse impacts on air quality ~~and visual resources~~, as described below.”
- L1-25 Please refer to Response to Comment L1-23.
- L1-26 The commenter has correctly pointed out an error in the DSEIR. The fifth paragraph on page 5-5 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.
- “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 (see the discussion of Impact 3.2-1). Further, because the lake bed would not be altered with any human-made features, the visual impacts of the proposed project (although determined to be less than significant, see the discussion of Impact 3.3-2) 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. *[Environmental tradeoffs]*”
- L1-27 As Section 3.2.2, on page 3.2-1 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“As described in the 2008 FSEIR (see Section 3.2.2, “Existing Conditions,” starting on page 3.2-9), the OVPA is located in the Great Basin Valleys Air Basin (GBVAB) and is bounded by the Inyo Mountains to the east and the Sierra Nevada to the west. Because the historic Owens Lake bed is located in the rain shadow of the Sierra Nevada, annual rainfall is low, and opportunities to reduce dust through natural rainfall are limited. High winds in the OVPA can exceed average speeds of 40 miles per hour (mph). High southerly winds typically result from a storm front approaching Owens Valley, and strong northerly winds result from the passing of the storm. These general wind directions are sometimes complicated by local eddy effects that can cause 180-degree differences in the wind direction from the west to east side of Owens Valley.”

L1-28

The second paragraph on page 3.2-19, under Impact 3.2-1 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“Although the operational delay caused by the revised construction schedule would result in a conflict with an existing adopted air quality planning effort (i.e., the 2008 SIP) and could potentially lead to more days when violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations would occur, two important considerations must be recognized: (1) because most of the DCMs would be in place (the project delays implementation of only 3.5 square miles of the total ~~48~~43-square-mile DCM project included in the 2008 FSEIR, PM₁₀ emissions would be less than the current baseline, and (2) emissions would continue to decrease over the 6-month construction period as moat and row DCMs are constructed and completed. However, some parts of the project site would continue to create unabated dust emissions over some or all of the additional 6 months, until the DCMs are completed. Because the affected area is confined to 3.5 square miles, it is unknown whether the delay in implementation of the moat and row elements would lead to an increase in the number of days when violation of the NAAQS and additional exposure of sensitive receptors to substantial pollutant concentrations above NAAQS standards would occur.”



Lone Pine Paiute-Shoshone Reservation

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June 29, 2009

Mr. Tomas Dailor
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, Ca 90012

RE: Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measure Plan

Mr. Thomas Dailor:

The Lone Pine Paiute-Shoshone Reservation (LPPSR) appreciates the opportunity the Los Angeles Department of Water and Power (LADWP) has given to comment and provide input on the Supplemental Environmental Impact Report (SEIR) for the Owens Lake Revised Moat and Row (M&R) Dust Control Measure (DCM) Plan.

On June 10th, 2009 LPPSR received a copy of the SEIR. LPPSR would first like to thank LADWP for its continued commitment to bring Owens Valley Planning Area into attainment for the National Ambient Air Quality Standards (NAAQS) for PM10. After thorough review of the SEIR, LPPSR has several comments regarding the SEIR .

1. Changes to the Moat and Row project: The Project Description is quite unclear as to the reasons the original M&R design was modified. The Draft SEIR gives the impression that wildlife concerns and operation and maintenance issues caused the M&R project to change. LPPSR believes significant revisions made by the LADWP to the basic design of the M&R DCM are what caused the project to change. These design changes were made by LADWP after the M&R DCM testing and modeling indicated that the original M&R DCM design would not sufficiently control PM10 emissions. The reason for the design changes should be made clearer in the SEIR.

2. Moat and Row Project Schedule: LPPSR is concerned that the SEIR for M&R indicates the project will not meet the time requirements agreed upon in the 2008 SIP. The 2008 SIP requires all M&R features be implemented by October 1, 2009. The SEIR

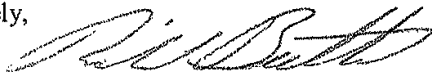
states, "However, because DCM operations would be delayed by the new construction schedule beyond the date specified in the 2008 SIP, daily PM10 emissions would likely continue to violate the PM10 NAAQS for an additional 6 months." These 6 months are significant; instead of the M&R DCM being implemented before the start of the 2009-2010 dust season; the 3.5 square miles of emissive lakebed will be allowed to contribute to NAAQS violations throughout the 2009-2010 dust season. Furthermore, LPPSR understands that the most recent project schedule has a much later completion date. Will there be additional impacts from the later completion date? The SEIR should refer to the most up to date project completion date.

The SEIR states that, "There are no other measures or actions LADWP can take to implement the M&R 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." While LPPSR agrees with this statement, LADWP can take action on other emissive areas within the Owens Valley Planning Area in order to offset emissions from the delayed M&R project.

LADWP knew when the 2008 SIP was approved, in February of 2008, that if it chose to use M&R as a DCM it would need to be completed by October 1, 2009. LADWP was also aware that if the M&R project was changed additional CEQA assessment would be required. LPPSR believes LADWP had several alternative options; that if implemented, could have met the 2008 SIP deadline. The 2008 SIP does not require LADWP to implement M&R on any portion of the lakebed. After realizing the inadequacies of M&R during 2007-2008 testing period, LADWP could have implemented a Best Available Control Measure (BACM) on the 3.5 square miles. If BACM were used, the 3.5 square miles would not have to be completed until April 1, 2010. LADWP could have also followed through with the M&R design described in the 2008 SIP and used the approved enhancements to mitigate any PM10 hotspots within the M&R.

Once again, LPPSR would like to thank LADWP for the opportunity to comment on the Supplemental Environmental Impact Report for the Owens Lake Revised Moat and Row Dust Control Measure Plan. LPPSR commends LADWP for its continued work to bring the Owens Valley Planning area into attainment by 2010.

Sincerely,



Richard Button, Tribal Chairman
Lone Pine Paiute-Shoshone Reservation

Cc: Mr. Larry Biland, U.S. EPA Region IX

- O1-1 Please refer to Response to Comment L1-2.
- O1-2 Please refer to Response to Comment L1-1.
- O1-3 Please refer to Response to Comment L1-23.
- O1-4 The commenter asserts that there were other feasible dust control options (in lieu of moat and row) that could have been implemented to meet the 2008 SIP deadline. While other best available control technologies (BACMs) have been identified to control dust on Owens Lake (managed vegetation, shallow flooding, gravel application), none of these control technologies were studied for their feasibility of application in the seven moat and row DCAs as part of the 2008 SIP or the 2008 FSEIR. As a result, additional environmental review would have been required to implement these BACMs just as it has been required for the revised moat and row DCM. While the commenter suggests that implementation of these other BACMs would have allowed LADWP to implement all DCMs in accordance with the time requirements of the 2008 SIP, this is simply not the case. It is unknown and unlikely that the additional environmental review required for these BACMs would have been completed any faster or at the very least on the same schedule as the revised moat and row DCM project because additional environmental information would have been required to be evaluated including, but not limited to: source and conveyance of water and its effect on LADWP supplies, habitat impacts from shallow flooding and managed vegetation, and source of gravel used for gravel application and the traffic impacts associated with hauling gravel to the site. Further, it has been determined that both shallow flooding and managed vegetation would likely take longer to construct and achieve prescribed dust control efficiency standards outlined in the 2008 SIP: shallow flooding requires greater construction activities compared to moat and row (approximately 1.9 years to implement) and managed vegetation would take longer to establish the vegetation to achieve dust control (approximately 5.9 years to implement) (*CDM July 2009*) (also see response to comment L1-3). In light of this information, LADWP pursued the revised moat and row project because it achieved dust control efficiencies prescribed in the 2008 SIP and it was the most timely option that would allow LADWP to implement DCMs on Owens Lake.

Mr. Thomas Dailor
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 95825-8202

Comments on Draft Supplemental Environmental Impact Report, Owens Lake
Revised Moat and Row Dust Control Measures

Dear Mr. Dailor,

The Inyo Mono Alpine Cattlemen's Association supports the use of Moat and Row dust control measures on Owens Lake. The possibility of saving 6,000 to 9,000 acre feet of water each year on the 3.5 square mile area, makes this a worthwhile alternative to shallow flooding for dust control.

This water can be put to beneficial use, whether in Los Angeles or the Owens Valley.

Sincerely,



Thomas R. Noland
President
PO Box 835
Lone Pine, CA 93545

(760) 876-4266

**Letter
O2
Response**

Inyo Mono Alpine Cattlemen's Association
Thomas R. Noland, President
N.D.

O2-1

LADWP acknowledges the Inyo Mono Alpine Cattlemen's Association support for the use of moat and row dust control measures on Owens Lake. This comment does not raise any issues related to the environmental analysis presented in the 2009 DSEIR. No further response is required.



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July 20, 2009

Mr. H. David Nahai
Chief Executive Officer and General Manager
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Re: **Request for extension of the public comment period for LADWP Supplemental EIR for Dust Control at Owens Lake**

Dear Mr. Nahai:

On behalf of Audubon California and our more than 100,000 members and supporters and 48 chapters we respectfully request a thirty (30) day extension to the public comment period regarding your agency's supplemental environmental impact report pertaining to dust control measures at Owens Lake.

We understand the comment period is due to end July 22, 2009. Unfortunately the public notice of the availability of the document was not brought to the attention of our staff or members until late last week and we have not yet been able to adequately review the document.

As you know, Audubon both at the local and statewide level has been participating in a multi-party conservation action planning initiative at Owens Lake. LADWP has been an active and constructive participant in that effort along with the State Lands Commission, CA Department of Fish and Game and other state and federal agencies. Decisions that pertain to dust control at Owens Lake are central to implementing a conservation vision for the lake that can be embraced and supported by a broad range of interests, both local and statewide. Granting our request for a comment extension would be consistent with the constructive dialogue now underway at Owens Lake.

Thank you very much for your effective leadership at LADWP. I appreciate your consideration of our request. If I may provide any additional information to you or your staff on this issue please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Daniel Taylor".

Daniel Taylor
Director of Public Policy

Cc: Mr. Thomas Dailor, LADWP

O3-1

LADWP respectfully declined the request for a 30-day extension of the public comment period for the 2009 DSEIR. The Notice of Availability of the 2009 DSEIR was sent to two individuals in the Eastern Sierra Audubon Chapter (Mike Prather and James Wilson); therefore Audubon received sufficient notice regarding the public comment period for the 2009 DSEIR. LADWP is under a strict timeline to implement the moat and row DCMs on Owens Lake and will face severe financial penalties for each day implementation of the moat and row DCMs is delayed beyond September 1, 2009. Therefore, it is critical that LADWP continue to pursue completion of the DSEIR on an expeditious schedule as is feasible, while still complying with the requirements of CEQA pertaining to public review periods (i.e., 45-day review period). The commenter has subsequently provided comments on the project in a letter dated July 22, 2009. These comments have been incorporated into this 2009 FSEIR. Please refer to responses to letter O4.



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July 22, 2009

Mr. Thomas Dailor, Environmental Supervisor
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Dear Mr. Dailor,

RE: SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (SEIR) FOR THE OWENS LAKE REVISED
MOAT AND ROW DUST CONTROL MEASURES PLAN (SCH# 2008121074)

On behalf of our more than 100,000 members and 48 chapters in California we offer the following comments on the above-referenced Supplemental Environmental Impact Report in the context of ongoing conservation processes at Owens Lake.

Ecological Importance of Owens Lake:

Audubon California has a deep appreciation and commitment to the protection of birds throughout our state including the Eastern Sierra region that includes Owens Lake. Clear proof of the ecological value of Owens Lake is that it is a key element in our listing of 145 Important Bird Areas in California. Part of an international effort, these sites were nominated ornithological experts and selected according to strict criteria:

- Support over 1% of the global or 10% of the state population of one or more sensitive species
- Support more than nine sensitive bird species
- 10,000 or more observable shorebirds in one day
- 5,000 or more observable waterfowl in one day

The lake was designated as an Important Bird Area by the National Audubon Society due to the thousands of shorebirds that migrate through each fall and spring between the Arctic and Central and South America and also because of the large numbers of snowy plovers that nest there. In addition, several thousand snow geese and ducks winter at the lake.

In spring, thousands of migrating shorebirds move north from wintering areas as far south as Argentina (Patagonia) and Tierra del Fuego. These masses of birds migrate through North America to in Alaska and Canada. Along the routes, migrants stop at rich feeding sites such as coastal wetlands and estuaries as well as inland lakes in the Great Basin such as Mono Lake, Great Salt Lake, and--once again--Owens Lake. Feeding stopovers are few and far between, even for these marathoner bird

species. Necessary fat reserves must be put on to enable the migrants to reach the next stop, which may be hundreds or even thousands of miles away.

The water-based dust control methods have re-created an Owens Lake food web for birds. It is likely that with continued presence of surface water on Owens Lake and the recovery of the wetland and meadow habitat, the avifauna will rebound dramatically. Thus, Owens Lake may be thought of as a globally-important habitat in the making.

Current conservation processes underway at Owens Lake relevant to dust control issues:

Audubon California, The Nature Conservancy, and our local chapter Eastern Sierra Audubon Society are coordinating an effort to develop a comprehensive lake-wide management plan for Owens Lake with the cooperation and participation of LADWP, the California Department of Fish and Game, Great Basin Air Pollution Control District, Owens Valley Committee and Eastern Sierra Land Trust. The plan will examine the dust control project as well as springs and wetlands around the shoreline of the lake and is intended to help managers and conservation groups preserve the lake's rich wildlife resources.

A number of the key players in the Owens Lake basin recognize that there is no comprehensive management plan across the entire historic lake bed that addresses 1) how dust mitigation measures, primarily application of water on the lake bed, can be best managed over time to ensure benefits to birds and other wildlife; 2) protections of native springs, seeps and associated natural fresh and saline wetlands along the lake shore due to the lack of a management plan; 3) how best to manage public access for wildlife viewing in order to expand the constituency supporting Owens Lake restoration; and 4) how to ensure that mitigation measures implemented in the past several years will be transformed into long-term protection for Owens Lake.

The conservation partners engaged in the CAP process believe that the conservation of Owens Lake's wildlife resources can be accomplished in a way that is compatible with LADWP's dust control and water delivery obligations. Achieving solutions which deliver positive benefits to both the DWP and the lake's habitats will be significantly aided by all key stakeholders working together from the basis of trust, commitment and understanding. A successful collaboration will allow us to:

- Create a comprehensive lake-wide resource management plan (CAP) with a mix of projects that optimize the balance of ecosystem needs and water deliveries.
- Determine what reasonable portion of the returning migratory birds (waterfowl and shorebirds) can be protected through coordinated efforts including dust mitigation.

- Provide for reasonable and safe public access for wildlife viewing.
- Identify funding sources that could help offset the cost of implementing recommendations suggested in the CAP including a future statewide resources or water bond.

As we are discovering within the CAP process there are means within the existing shallow flood areas to reduce the amount of standing water on the lake bed while maintaining the habitat value for brine flies and thus resident and migratory birds which will provide a cost and water savings to DWP and its constituents. For example this could be accomplished simply through a reduced volume of standing water (most of the shorebirds prefer very shallow water with exposed mud) or by creating more vegetated wetlands that could fringe portions of the lakebed (as has been successfully demonstrated in an experimental area on the eastern shore) and provide additional benefits to other bird species.

Comments on the SEIR itself:

We disagree in the inclusion among the projects objectives to: *“Provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service.”* While this is a fine mission statement for the agency we fail to understand why it should be included as an objective for this project which exists to mitigate air pollution issues largely created by the diversion of Owens River water for the purposes of water supply development for the City of Los Angeles.

The SEIR’s alternatives analysis section goes well beyond what is allowed under CEQA for inclusion in a supplemental document. New information is included in this section that would otherwise require a new environmental document and additional public noticing. We note that in the EIR prepared for the Great Basin Air Pollution Control District water supply was not listed as an issue nor disclosed in the analysis. In the SEIR we now see that the shallow-flood strategy is considered not feasible due to water supply concerns. This is a critically important departure from the mitigation strategy contained in the original EIR and it deserves greater discussion here, before it is considered not feasible.

We are also concerned with the known loss of existing Snowy Plover habitat within the proposed moat and row project. While the SEIR suggests that that loss is a small percentage of total available Snowy Plover habitat (4.3%) there are not assurances in place to ensure that most of the other 96% of suitable plover habitat will remain the same as it does now, aside from the current shallow flood habitat

set aside areas. We are concerned that any changes to the rest of the shallow flood dust control area could alter that percentage. We have continued concerns that the slopes and snow fences could cause entrapment of adults and/or chick, and fences could increase the numbers of predators such as corvids. The impacts of the moat and row system and the mitigation measures seem speculative in terms of how plovers and particularly chicks will be impacted should they attempt to nest in the moat and row system.

Thank you for your consideration of our views. We look forward to continuing to work with LADWP to resolve the dust mitigation issue in a way that maximizes benefits for wildlife and for the public.

Sincerely,

A handwritten signature in black ink that reads "Daniel Taylor". The signature is written in a cursive style with a large initial "D" and a stylized "T".

Daniel Taylor
Director of Public Policy

- O4-1 The commenter provides information relating to the ecological importance of Owens Lake and the benefits of water-based dust control methods to birds. No further response is required because no comments on the environmental analysis presented in the 2009 DSEIR were provided.
- O4-2 The commenter discusses a coordinated effort to develop a comprehensive lake-wide resource management plan (CAP) and believes that it can be created with a mix of projects that optimize the balance of ecosystem needs and water deliveries.
- As noted in the comment, LADWP is involved in the CAP process and LADWP's revised moat and row project planning is being done in coordination with GBUAPCD, Department of Fish and Game and the California State Lands Commission. No further response is required because no comments on the environmental analysis presented in the 2009 DSEIR were provided.
- O4-3 Please refer to Master Response 2, "Adequacy of the Alternatives Analysis Presented in the EIR, subsection 'Relationship Between Project Objectives and Alternatives'" for a detail response on why additional project objectives related to water supply were included in the 2009 DSEIR.
- O4-4 Please refer to response to comment S2-2 and Master Response 2. It is unclear what additional public noticing would be required. LADWP prepared a notice of preparation, subject to a 30-day review period, conducted a scoping meeting, released the Draft EIR for a 45-day public review period, and advertised the Draft EIR availability in a manner CEQA requires for all EIRs, and conducted a Draft EIR hearing. Specifically, the Notice of Availability of the 2009 DSEIR was sent to two individuals in the Eastern Sierra Audubon Chapter (Mike Prather and James Wilson); therefore, Audubon received sufficient notice regarding the public comment period for the 2009 DSEIR. This is the type of public noticing and involvement reserved for all EIRs, whether a supplement or a new project EIR. CEQA does not require any other public noticing or involvement, regardless of the EIR type.
- O4-5 The commenter appears to be concerned that other dust control activities on Owens Lake (i.e., shallow flooding), may at some time in the future change such that the habitat benefits for snowy plover associated with these activities would go away. The GBUAPD adopted the 2008 SIP and certified the 2008 SIP SEIR in February 2008. That project included a set program of dust control activities (i.e., shallow flooding, managed vegetation, moat and row, and gravel application) that would be implemented on Owens Lake. These are the only approved dust control activities allowed on Owens Lake. If changes to the existing dust control activities or new measures are proposed these new options would need to be reviewed and approved by GBUAPCD for their appropriateness in meeting dust control objectives and additional environmental analysis would likely be required to evaluate the changed or new environmental effects of the proposed activities consistent with the requirements of CEQA. Further, additional permits and leases would be required from agencies such as DFG and the CSLC for these changed activities. While LADWP has no immediate plans to change the existing program of dust control activities on Owens Lake, LADWP, consistent with its mission to use water efficiently, is investigating whether there are other water supplies available (i.e., groundwater) and design options for shallow flooding that would reduce the amount of water required for dust control while at least maintaining existing habitat values for biological species on Owens Lake. Please also refer to Master Response 2.

- O4-6 The commenter expresses concerns regarding the design of the moat and row project. This concern is noted. No further response is required because no comments on the environmental analysis presented in the 2009 DSEIR were provided.
- O4-7 The commenter states that the impacts of the moat and row project seem speculative. The commenter offers no other clarification or evidence on how the analysis is speculative; therefore, no further response can be provided.

Date: July 22, 2009

From: Mark Bagley
Sierra Club Owens Valley MOU Representative
and OVC Legal and Policy Liaison
P.O. Box 1431
Bishop, CA 93515

To: Thomas Dailor
Environmental Supervisor
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Subject: Draft Supplemental EIR for the Owens Lake Revised Moat
and Row Dust Control Measures Plan (SCH #2008121074)

The Owens Valley Committee and the Sierra Club Range of Light Group respectfully submit our comments, below, on the draft Supplemental EIR for the Owens Lake Revised Moat and Row Dust Control Measures Plan.

CURRENT STATE OF LADWP WATER SUPPLIES

Page 2-9, paragraph 4: *“With regard to dust control activities on Owens Lake, all water supplies uses (sic) for dust control or other environmental restoration benefits must be supplemented through additional purchases from MWD. As described above, additional water is simply not available from MWD. Based on future projections of growth within LADWP’s service area, plans for increased recycling, conservation, and groundwater cleanup activities, adequate water supplies will not be available to meet existing and projected future demand plus expanded water intensive dust control measures at Owens Lake. In light of the current state of water supplies and based upon what is known about future demands, staff of LADWP has determined that future use of water intensive dust control measures are not a feasible strategy and other non-water using controls should be implemented (Appendix D).”*

Does the statement that *“future use of water intensive dust control measures are not a feasible strategy and other non-water using controls should be implemented”* imply that LADWP is planning to replace some or all of the water intensive dust control methods currently employed on Owens Lake? One can read the above statement and statements in Appendix D that way. Is that goal part of the current project? (See our further comments on project goals, below.)

The statement that *“all water supplies uses (sic) for dust control or other environmental restoration benefits must be supplemented through additional purchases from MWD”* does not take into account the possibility that groundwater resources under the lake may be available to supply a portion of the need (this is being investigated in LADWP’s Owens Lake Groundwater Evaluation Project) or that management of the water intensive dust control areas might be done in a more efficient manner that could potentially result in significantly less water use. These two factors could likely reduce the amount of LA Aqueduct water used for dust control and should be discussed in the SEIR.

2.3 PROJECT GOALS AND OBJECTIVES

We understand that the LADWP water supply situation, and the large amount of water that it was already using for dust control, is what motivated LADWP to propose the moat and row dust control measure back in 2006. As stated in section 2.4.1 (p. 2-10): *“In 2006, during settlement negotiations regarding dust control strategies between the GBUAPCD and LADWP, LADWP proposed a new Owens Lake PM10 control measure known as moat and row. It was LADWP’s intent to develop a control measure that costs less to implement and uses significantly less water than previously approved DCMs (e.g., shallow flooding, managed vegetation). The Settlement Agreement that resulted from the 2006 negotiations contains provisions for the implementation of up to 3.5 square miles of moat and row DCMs.”*

Page 2-9, second bulleted project objective: *“provide clean, reliable water in a safe, environmentally responsible and cost-effective manner with excellent customer service”*. This does not actually appear to be a project objective, rather it is a objective for the LADWP as a whole, and as such is part of the reason that it was *“LADWP’s intent to develop a control measure that costs less to implement and uses significantly less water than previously approved DCMs.”*

We realize that moat and row is not a proven dust control measure and that its implementation in the current project is experimental. However, these facts and the *“intent to develop a control measure that costs less to implement”* are not clearly expressed in the project goals and objectives as they should be. The intent to develop a control measure that *“uses significantly less water than previously approved DCMs”* is clearly expressed.

Page 2-9, first paragraph in Section 2.3: *“The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM10 NAAQS by the implementation of moat and row DCMs on the bed of Owens Lake by 2010.”* Unless the goal of the project is to replace some or all of the water intensive dust control methods currently employed, we suggest that this statement be modified by adding in that the project is implementation of 3.5 square miles of moat and row DCM’s.

Page 2-9, first bulleted project objective: *“implement moat and row DCMs by April 1, 2010, pursuant to the 2008 SIP to achieve the NAAQS”*. This should also be clarified by stating that the objective of the current project is to implement 3.5 square miles of moat and row DCM’s.

In the Executive Summary it is stated that one of the primary project purposes is to “*implement DCMs that require little or no water*” (p. ES-6, first line). To that end, two project objectives are stated on page 2-10; the third bulleted project objective: “*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;*” and seventh bulleted project objective: “*minimize the long-term consumption of natural resources (e.g., water)*”. The question again comes up, are these project objectives that go beyond the 3.5 square miles of moat and row that are contemplated to be implemented in the SEIR. Or would that be too speculative since one of the objectives of the project (unstated) is to demonstrate that moat and row is an effective dust control method? It may in fact not work.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Page 3.1-46, paragraph 1: “*Mitigation measure 3.1-9 (Long-term Habitat Management Plan) requires LADWP to manage 1,000 acres of shorebird and snowy plover habitat located in Zone 2 (in the northeast portion of study area), and maintain an additional 523 or more acres of habitat specifically for snowy plover, in perpetuity. It is expected that these protected habitats would consistently provide higher-quality conditions overall for snowy plover than the existing suitable habitat within proposed moat and row cells. This long-term commitment and habitat benefit would compensate for the anticipated loss of 1,503.8 acres of snowy plover habitat due to moat and row implementation.*”

As stated on page 3.1-39, mitigation measure 3.1-9 is the same as mitigation measure Biology-14 in the 2008 FSEIR. The text of that is presented in the SEIR in Appendix C (pages 3.2-43 and -44). After reading the details in Appendix C, it is not clear if the 1,523 acres that are to be managed for wildlife habitat in perpetuity are in addition to the mitigation that was required for earlier phases of the dust control project. We read it that it is not in addition and that LADWP is trying to get credit for a mitigation measure that has already been implemented to compensate for other previous impacts. If that is the case, we believe that is inappropriate and would NOT “*compensate for the anticipated loss of 1,503.8 acres of snowy plover habitat due to moat and row implementation.*”

Please don't hesitate to contact me if you have any questions about our comments.

Thank you,

Mark Bagley
Sierra Club Owens Valley MOU Representative
and Owens Valley Committee Legal and Policy Liaison

O5-1 LADWP is implementing, and will continue to implement, shallow flooding as approved in the 2008 SIP and FSEIR because it has an obligation to meet dust control requirements and shallow flooding is an approved dust control measure. LADWP also has an obligation to meet its mission as a retail water agency to efficiently use its water resources. LADWP provides water to over four million residents within a 465 square-mile service area, and LADWP is facing existing and projected future shortfalls in water supplies. Therefore, LADWP is investigating whether alternative water supplies (e.g., groundwater) are available for use in water-related dust control measures and whether new designs for shallow flooding areas can be implemented to conserve water. Please refer to response to comment O4-5 and Master Response 2 for additional details.

O5-2 Please refer to response to comments L1-5, O5-1, and Master Response 2.

O5-3 Regarding LADWP's reasoning for including additional project objectives related to the efficient use of water supplies, please refer to Master Response 2.

O5-4 Please refer to response to comment S1-2.

The commenter also suggests that an additional project objective be included in the 2009 DSEIR, relating to the intent to develop a dust control measure that costs less to implement. This comment will be considered by LADWP.

O5-5 The first paragraph "Objectives of the Project," on page ES-1 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

"The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ 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 and operated in trust for the people of California by CSLC. Therefore, the project must also be consistent with the State of California's obligation of land and resource stewardship. 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 NAAQS;"

The first paragraph in Section 2.3, "Project Goals and Objectives," on page 2-9 of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

"The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ 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 and operated in trust for the people of California by CSLC. Therefore, the project must also be consistent with the State of California's obligation of land and resource stewardship. 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 NAAQS;”

The second paragraph in Section 5.1, “Introduction,” on page 5-1 is of the 2009 DSEIR is revised as follows. This change is also presented in Chapter 3 of this FSEIR. This change does not alter the conclusions presented in the EIR.

“The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ National Ambient Air Quality Standards (NAAQS) by the implementation of 3.5 square miles of moat and row dust control measures (DCMs) on the bed of Owens Lake by 2010. The dry Owens Lake bed is primarily owned and operated in trust for the people of California by California State Lands Commission (CSLC). Therefore, the project must also be consistent with the State of California’s obligation of land and resource stewardship. 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 State Implementation Plan (SIP) to achieve the NAAQS;”

O5-6 Please refer to response to comment O5-5.

O5-7 As clarified in response to comments O5-5 and O5-6, the project objectives apply to the implementation of 3.5 square miles of moat and row DCMs on the bed of Owens Lake, pursuant to the 2008 SIP to achieve the NAAQS. Please also refer to response to comments O4-5, O5-1, and Master Response 2.

O5-8 Please refer to Master Response 3.

Mr. Thomas Dailor
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 95825-8202

Comments on Draft Supplemental Environmental Impact Report, Owens Lake Revised Moat and Row
Dust Control Measures [SEIR]

Dear Mr. Dailor;

I am pleased to be able to submit comments on the Draft Supplemental Environmental Impact Report on the Owens Lake Revised Moat and Row Dust Control Measures. The potential to be able to save up to 8000 acre feet of water per year by the implementation of Moat and Row on 3.5 square miles of the 110 square mile Owens Lake lakebed is an issue of major importance. All residents of California and the Western United States understand the value of water to the great state of California and also understand the challenge of providing water to meet the needs of residents, environmental needs, as well as agricultural needs.

Not only has our state been faced with severe drought for the past three years but recent court rulings in the Sacramento-San Joaquin Delta to protect the Delta Smelt have further reduced the amount of available water for all the needs in California. Because of continued increases in the population, there is no doubt in my mind that the demand for water in California will continue to grow.

Because pilot testing of Moat and Row on Owens Lake has shown promising results in the control of dust, it seems to me that full-scale implementation on 3.5 square miles of the 110 square mile lakebed is a necessity. We can no longer afford to use water as the only means of dust control on Owens Lake when viable alternatives are available.

As a lifelong resident, businessman, and rancher in the Owens Valley I am committed to projects which have the potential to improve the health and well being of our valley as well as our state. Conserving 8000 acre feet of water by the use of alternative methods of dust control is one such project. Water that is spared from entering Owens Lake will be used wisely whether it be in other locations in the Owens Valley, in Los Angeles or to relieve stress from other locations in California. I strongly encourage your support of the Supplemental Environmental Impact Report.

Sincerely,


Thomas J. Talbot D.V.M.

2236 Sunrise Drive
Bishop, CA 93514
760-873-5801
tjtalbot@cebridge.net

**Letter
I1
Response**

Thomas J. Talbot, D.V.M.
N.D.

I1-1

LADWP acknowledges the commenter's support for the use of moat and row dust control measures on Owens Lake and the associated water conservation. No further response is needed as no issues on the environmental analysis in the DSEIR were raised.

SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT REPORT
Public Hearing for the Draft EIR for the Owens Lake Dust Mitigation Plan Project

Bruce Pischel
P.O. Box 957
Lone Pine, CA 93545
760-876-4541
760-614-0018 cell

I attended your NOP meeting on the moat & rows 1/8/09. I was surprised by the turnout. There was the usual environmental / bird / visual people.

You should be prepared to face the people who:

Lost the water for their farm

Lost the pasture water for their stock

The people that have been trained to conserve water then find out where it is going

A drought year will multiply the pressure.

I invented the Moat & Row as a cost effective waterless dust abatement method for Owens Lake. You addressed the sand and gravel the Moat & Rows will stop from grinding on the playa.

Another benefit is to break the capillary action of the brine and salts. On the flat playa when it rains or the right moisture occurs it wicks saltes to the surface, at cold temperatures a decahydrate forms. When these decahydrates dry out they are like light ash. The Moat & Rows are deisined to break the capillary action and leach the saltes into the moat.

Sincerely


Bruce Pischel

**Letter
I2
Response**

Bruce Pischel
N.D.

- I2-1 LADWP acknowledges the commenter's opinion that various people are concerned about water consumption and conservation. Moat and row is a waterless dust control measure. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.
- I2-2 LADWP acknowledges the commenter's opinion that moat and row is a cost effective waterless dust control measure. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.
- I2-3 LADWP acknowledges the commenter's opinion regarding moat and row elements breaking the capillary action of the brine and salts on the playa. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.

1 SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT REPORT
 2 FOR THE OWENS LAKE REVISED MOAT AND ROW DUST CONTROL
 3 MEASURES PLAN
 4 PUBLIC MEETING

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Inyo County Administrative Office

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224 North Edwards Street

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Independence, California

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THURSDAY, JUNE 25, 2009 - 6:00 P.M.

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20 KRISTY R. KEENER, CSR NO. 6422

21

22

JAN BROWN & ASSOCIATES

23

CERTIFIED SHORTHAND REPORTERS

24

701 BATTERY STREET, 3RD FLOOR, SAN FRANCISCO, CA 94111

25

(415) 981-3498

□

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PUBLIC SPEAKERS

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4 BILL TALBOT
5 TED SCHADE
6 SAM WASSON
7 GEORGE MILOVICH
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1 JUNE 25, 2009 - THURSDAY 6:00P.M. 17:42:06

2 ----000----

3 WILLIAM VAN WAGONER: I guess we'll get started.

4 I'm Bill Van Wagoner with the Department of Water &

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5 Power, and I'm the manager of our Owens Lake dust
6 mitigation program. I want to thank you for coming this
7 evening. This is very exciting to have you here, and
8 we're really looking forward to getting your input on our
9 project as we go into preparing the final EIR.

10 And with that I'll turn it over to Amanda, who
11 is with EDAW, the consulting firm that has done all the
12 environmental analysis for us. Make sure you get some
13 cookies too.

14 AMANDA OLEKSZULIN: Like Bill said, my name is
15 Amanda Olekszulin, EDAW project manager for the
16 environmental impact report. I'm also accompanied here
17 tonight by Gary Jakobs, who is the principal in charge of
18 the project.

19 And maybe before we get started, we'll do a few
20 housekeeping items. Hopefully all of you have had a
21 chance to sign the sign-in sheet so we have a record of
22 who is attending tonight. If you intend on providing
23 public comments, please fill out a speaker card so we
24 have a record of how you properly spell your name in our
25 record. We have a court reporter here. Kristy is here

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4

1 tonight to record any comments that are provided here
2 tonight. You can either provide them at the public
3 comment period, or if you're a shy speaker, you can
4 approach her directly after the meeting.

5 we also have some comment cards in the back if
6 you prefer to provide written comments. Those are
7 acceptable as well. So any and all avenues for public

Page 3

8 comments are welcome.

9 So this is the overall agenda. The purpose
10 tonight is kind of to present the CEQA process, a summary
11 of the impacts in the EIR as well as mainly to solicit
12 input and feedback and comments on the environmental
13 analysis provided in the EIR.

14 So where are we in the CEQA process? The
15 California Environmental Quality Act prescribes a
16 mandated process for evaluating the environmental impacts
17 of a project. Back in December we prepared a notice of
18 preparation and initial study, which essentially notified
19 the public that we are beginning with our presentation --
20 or our environmental analysis, and we conducted a
21 preliminary environmental analysis of the impact of the
22 proposed moat and row project.

23 we held a scoping meeting in January, which is
24 similar to this evening's activities, and then we
25 embarked upon preparing the draft EIR. We are currently

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5

1 in the public review period for the draft EIR which
2 closes July 22, 2009.

3 After the close of the public review period for
4 the draft EIR, we will prepare what's known as a final
5 environmental impact report, and what that is is a
6 summary of all the written and oral comments received on
7 the EIR. We will provide written responses to those
8 comments. That's anticipated for August 2009, and then
9 the project will go before LADWP in and around September
10 2009.

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11 So tonight the purpose of tonight's meeting is
12 really to solicit your feedback. We're here to listen to
13 you and receive your comments on the environmental issues
14 raised in the draft EIR.

15 So I want to take a few minutes and provide a
16 little background for those of you who are not familiar
17 with the project. Owens Lake has a long historical
18 record of water diversions for LADWP, agricultural
19 diversions, as well as periods of drought conditions that
20 have resulted in the drying of the lake bed. The drying
21 of the lake bed exposed soils that are highly unstable
22 and become highly emissive in the atmosphere. As a
23 result of that, during wind events, it creates adverse
24 air quality conditions that exceed national ambient air
25 quality standards.

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6

1 So in compliance with the requirements of the
2 U.S. Environmental Protection Agency, the California Air
3 Resources Board, and the Great Basin Unified Air
4 Pollution Control District, it's mandated that a plan be
5 prepared to address these adverse air conditions, and
6 that plan is called a state implementation plan.

7 Now, several state implementation plans have
8 been prepared, the most recent of which is the 2008 State
9 Implementation Plan which was adopted in February 2008
10 with a corresponding EIR that was certified at that same
11 time.

12 In that state implementation plan, a program of
13 dust control measures were identified to directly address

14 the emissive property of soils on the lake bed, and that
15 program of dust control measures included things such as
16 shallow flooding, flooding a shallow layer of water over
17 a large plot of land on the lake bed, implementing
18 managed vegetation, planting plants so that they keep the
19 soils down, do other augmentations or enhancements
20 including application of brine or application of gravel
21 to keep the soils down, and also, what is the subject of
22 tonight's meeting, the implementation of what is called a
23 moat and row dust control measure.

24 So this is a lake-wide view of Owens Lake bed.
25 The project evaluates the construction of moat and row

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7

1 dust control measures in seven areas, and hopefully all
2 of you can see it. Maybe I'll just point it out. There
3 are seven areas located around the lake bed. These areas
4 were identified based on the soil properties and the
5 desired dust efficiency levels that want to be achieved
6 through controlling dust in these areas, and so those
7 areas total approximately three and a half square miles
8 of Owens Lake bed.

9 And like I said earlier, the moat and row dust
10 control measure was considered a component of the overall
11 2008 State Implementation Plan. However, since adoption
12 of that plan, the design of the moat and row elements
13 themselves have changed a bit, and in consultation with a
14 variety of agencies, it was decided to prepare a
15 supplemental EIR to the previously certified subsequent
16 EIR.

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17 So what are moat and rows? Well, they are just
18 like they sound. They're an excavated linear feature,
19 and the soil excavated from that linear feature is placed
20 approximately 15 feet adjacent to it to create a mound or
21 a row. And so you can see in here, this is the moat, a
22 linear feature, and then the row. On top of that there's
23 also the option of including what is a sand fence, and
24 that's about five feet high. The row itself is about
25 five feet high, and the moat is about five feet deep by

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8

1 four and a half feet wide.

2 The moats and rows will be constructed in a
3 grid-like pattern in the specified seven areas, and the
4 purpose of which is to capture sand as it moves across
5 the lake bed so it doesn't become emissive in the air,
6 and so as it travels across the lake bed, sand would drop
7 into the moat and be captured against the row and the
8 sand fence.

9 The proposed project includes implementing moat
10 and row in the seven areas, but it should be noted that
11 two of the areas currently have moats and row features
12 already constructed to some degree as part of a pilot
13 study to determine their effectiveness in reducing dust
14 emissions.

15 Part of the project involves monitoring through
16 sand movement monitors and air quality monitors to see
17 how effective they are being in reducing dust emissions
18 and whether they're achieving target emission levels.
19 And based on a review of those results, if it's

Page 7

20 determined that an area isn't achieving the specified
21 control efficiency, then other adaptive measures can be
22 implemented such as applying shallow flooding in
23 combination with the moat and row, managed vegetation in
24 combination, maybe applying some brine on the roadways so
25 they aren't emissive, or applying gravel in the moat and

□

9

1 row features as well.

2 So I'm just going to kind of screen through.
3 Hopefully you guys can see this, but there are seven
4 areas.

5 So this is the grid-like pattern that you'll see
6 for the moat and row features. The green areas are just
7 the moat and row. The brown shaded elements are moat and
8 row with a sand fence on top of the row.

9 So I'll just kind of scroll through these. This
10 is T37-1, 2. This is Moat and Row Dust Control Area
11 T1A-1, and this is the moat and row area that will have
12 sand fence only. So no moats and no rows, but they'll
13 just actually put the sand fence in this area.

14 T1A-3, 4. This is T12-1, is one of the areas
15 where existing moat and row features are currently
16 located. The smooth lines are where existing features
17 are. These areas will be reconstructed according to the
18 new design standards, and then the thicker lines are
19 where the additional moat and row feature will be
20 constructed.

21 And the last one, same thing as the previous one
22 where we have existing features, and the red lines and

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23 the proposed.

24 So the EIR, as I mentioned earlier, we prepared
25 an initial study which gave a preliminary evaluation of

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10

1 the impacts of the project. Based on that evaluation, it
2 was determined that three issue areas needed to be
3 evaluated at a greater level of detail, and these issue
4 areas are biological resources, construction-related air
5 emissions, and the visual resources impact to the
6 project.

7 All other issue areas were scoped out or
8 determined that they would not result in significant
9 impacts.

10 So the less significant environmental effects,
11 the impacts that would not require mitigation included
12 effects on wildlife movements, corridors and access to
13 breeding sites; and it included the visual resources
14 impacts of the project, including construction-related
15 impact, impact on scenic vistas and the visual character
16 of Owens Lake.

17 So I want to talk a little bit more about the
18 visual impacts. Hopefully all of you have had a chance
19 to look at the poster boards behind you. Those are
20 existing photos of where some of the moat and row dust
21 control areas would be located, followed by a simulated
22 version of what the moat and row would look like from
23 that viewpoint.

24 Our visual analysis evaluated visual impacts
25 based on U.S. Forest Service methodology. We also did

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11

1 detailed photo simulations which modeled the design
2 characteristics of the moat and row feature in relation
3 to the landscape, distance, and even shadowing that
4 occurs out on the lake bed.

5 we looked at six sites overall, three sites on
6 U.S. 395, one along State Route 190, one on State
7 Route 136, and then we also assessed the visual impacts
8 from within the lake bed interior itself. These are all
9 publicly accessible areas where people can view different
10 portions of the lake bed.

11 So the EIR determined that overall the project
12 wouldn't result in a significant visual impact. The two
13 moat and row areas that were most visible in comparison
14 to the other areas were T37-1 and T37-2 because of the
15 proximity of the location to the viewing point. However,
16 even at those viewer locations, it was determined that
17 less-than-significant impacts would occur, primarily
18 because the moat and row features would either be barely
19 perceptible, they were either indistinguishable from the
20 overall background. They wouldn't change the dramatic
21 backdrop that you see as the mountain range surrounding
22 Owens Lake or the natural feel of the overall landscape.

23 The EIR did identify a significant environmental
24 effect, and this is an effect on a bird species known as
25 the western snowy plover. The EIR determined that the

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1 project would result in the loss of approximately 1,508,
 2 plus minus, acres of suitable habitat for western snowy
 3 plover, potential loss of individuals as a result of
 4 construction and maintenance activities, moat entrapment
 5 of individuals, as well as increased predation by other
 6 bird species or corvid species on the lake bed.

7 However, it was determined that this impact
 8 would be reduced to a less than significant level
 9 through the implementation of mitigation, and that
 10 mitigation involves a program of mitigation strategies to
 11 address each of the impacts that I just identified.

12 Some of those mitigation strategies include
 13 providing a variety of options for sand fence gaps,
 14 either along the bottom of the fence or at specified
 15 intervals along the linear feature; providing a corvid or
 16 predatory management plan to prevent predation by other
 17 bird species, including limiting the amount of
 18 above-ground features or using monofilament line along
 19 the sand fences or installing Nixalite, which is the
 20 spokes-type deterrent on any features that are out on the
 21 lake bed; as well as implementing the monitoring and the
 22 adaptive management strategy that sets a threshold for if
 23 individuals become trapped in the moats, a threshold at
 24 which that triggers a significant impact and any
 25 corrective adaptive measures on the lake bed.

□

13

1 It's also important to know that as part of the
 2 biological resources study, the 2008 subsequent EIR
 3 identified a whole host of mitigation strategies, and

Page 11

4 those strategies except as amended in this EIR would be
5 implemented as well.

6 So there were two significant and unavoidable
7 impacts identified in the EIR, and those related to air
8 quality and the project construction emissions and the
9 cumulative greenhouse gas emissions that would occur from
10 the project.

11 The project itself would not change the
12 duration, the amount of construction, the amount of
13 emissions that would occur compared to what was evaluated
14 in the previous EIR. However, because the time it's
15 taken to prepare the EIR and the time at ultimately which
16 the construction of the moat and rows will occur, it will
17 cause a delay in the implementation of a portion of the
18 2008 State Implementation Program, resulting in an
19 increase in the number of days when violations of the air
20 quality standards could occur. Because of that, it was
21 determined to be a significant impact, and no feasible
22 mitigation measures were identified.

23 Also, the project on a cumulative basis would
24 result in greenhouse gas emissions. Similar to the
25 construction-related emissions, these greenhouse gas

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1 emissions wouldn't be any higher than what was previously
2 evaluated. Mitigation was previously adopted, but it's
3 unknown at what level that mitigation would reduce those
4 greenhouse gas emissions. So it's unknown whether it
5 will get to a less than significant level. Therefore,
6 the EIR concluded that it would be a significant and

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7 unavoidable impact.

8 So this is the overall schedule for the EIR and
9 the construction schedule as presented in the EIR. We're
10 accepting comments through July 22. You can provide
11 comments here tonight. You can provide written comments
12 to Tom Dailor via mail, e-mail, or fax if you like. We
13 anticipate completing the final EIR in August and the
14 project going before the Board for decision in September.
15 And the overall construction schedule would be
16 implemented by April 2010.

17 So we're on to the fun part of the evening
18 because I don't have to speak anymore. We're going to
19 take public comments. We have some speaker cards here.
20 If anyone wants to provide comments and hasn't done so,
21 please provide a speaker card. We are only asking for
22 that because we want to get the correct spelling of your
23 name.

24 And how many do we have?

25 GARY JAKOBS: We have four.

□

15

1 AMANDA OLEKSZULIN: Our general protocol is to
2 limit it to three minutes, but since we have so few, if
3 you want to go a little over, that would probably be
4 fine. Make sure to come up to the stand and state your
5 name so that our court reporter can record it for the
6 record, and we'll get going.

7 GARY JAKOBS: This gentleman had a question.

8 BILL TALBOT: Yeah, before comments or how about
9 questions? Is that part of your comment if you have a

Page 13

10 question?

11 AMANDA OLEKSZULIN: If we can clarify issues
12 regarding the project and what's proposed, we can
13 certainly try to answer your questions. If it's
14 questions about the environmental analysis, what we're
15 doing is we're going to gather all comments and then
16 provide written responses to those questions.

17 BILL TALBOT: well, my question -- and you don't
18 have to answer -- would be once, if this is approved by
19 LADWP, the final report you talk about in September of
20 2009, does that mean this project goes ahead? Or my
21 understanding is you would still have to have approval
22 from the State Lands Commission, or is that an incorrect
23 assumption?

24 AMANDA OLEKSZULIN: The CEQA process is
25 anticipated -- the EIR needs to be certified. Once the

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1 EIR is certified, then the Board can consider whether to
2 approve or deny the project or approve with
3 modifications.

4 BILL TALBOT: which board are you talking about?

5 AMANDA OLEKSZULIN: LADWP.

6 And then after that the CEQA process has
7 completed. Now there might be other regulatory approvals
8 or permits that are required, and so those processes are
9 either ongoing or would be going at the time that -- if
10 the project is approved and carried forward.

11 GARY JAKOBS: And then, sir, could you state
12 your name so that the court reporter can --

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13 BILL TALBOT: Bill Talbot.
 14 GARY JAKOBS: We do anticipate State Lands
 15 Commission would be involved in permitting as well as
 16 Department of Fish and Game.
 17 AMANDA OLEKSZULIN: Any other project-related
 18 questions?
 19 SAM WASSON: Sam Wasson. Reading the little
 20 flyer I got probably from the DWP, it mentioned in there
 21 on the moat and row measures an application of a variety
 22 of enhancements in the moat and row areas in case the
 23 sand fence or whatever else don't work.
 24 what would those other enhancements possibly be?
 25 AMANDA OLEKSZULIN: They would be maybe using

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17

1 moat and row in combination with shallow flooding in
 2 between the playa area, use of managed vegetation. Maybe
 3 we only need to apply brine to the side slopes or
 4 roadways or rock to those areas to control dust in those
 5 areas. So it would be a combination of those factors,
 6 but before any of that is implemented, coordination with
 7 the air district and other regulatory agencies as
 8 necessary would be implemented.
 9 SAM WASSON: Thank you.
 10 AMANDA OLEKSZULIN: So we'll probably go on to
 11 our formal public comments.
 12 Oh, I have Bill Talbot. Did you have any other
 13 questions?
 14 BILL TALBOT: Yes.
 15 AMANDA OLEKSZULIN: Please come on up.

Page 15

16 BILL TALBOT: Bill Talbot. On page 2-9, Project
17 Goals and Objectives, actually at the top of 2-10, it
18 states: Allow for the sparing use of water that would
19 otherwise be delivered for municipal and industrial use.

20 I would also like to see in there something
21 regarding agriculture use, and by that directly would be
22 to see some of the water used that would not go on the
23 lake to be used to recharge the underground water area in
24 the northern part of Inyo County, which I believe has
25 suffered some because of the amount of water that's

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1 coming to Owens Lake, and indirectly is that the water
2 that is going out on the lake that would go to municipal
3 use may enhance water uses for agriculture in the state,
4 specifically the San Joaquin Valley.

5 Thank you.

6 AMANDA OLEKSZULIN: Thank you very much.

7 Ted Schade.

8 TED SCHADE: I think I'll keep it under my three
9 minutes. Ted Schade. I'm the air pollution control
10 officer for the Great Basin Air Pollution Control
11 District.

12 I just want to thank EDAW and the City for the
13 preparation of the EIR. I think you guys have all done a
14 very good job here. We this week submitted about five
15 pages of comments from my detailed comments that you've
16 received and assume you will be responding to.

17 I think the only sort of critical comment is the
18 fact that the only impact that remains significant after

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19 mitigation is the air quality impacts, the impact of the
20 delay of the project, and the EIR states that there are
21 no measures or actions DWP can take to implement the moat
22 and row on a faster timeline. That's absolutely true. I
23 mean you're working as quickly as you can, but I think
24 there are measures that could be taken to offset the
25 impacts caused by that delay, and although we may not

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1 have those measures developed by the time the EIR ends up
2 being certified or the final EIR comes out, I think it
3 should be acknowledged in here that the District and the
4 Department are going to be working together to minimize
5 the air pollution caused by the delay of the project, and
6 there are ways other than speeding up the moat and row
7 project that we can come up with that would minimize air
8 pollution in the Owens valley.

9 So that is my most significant and I think
10 important comment. Other than that it's all in my
11 written. Thank you.

12 AMANDA OLEKSZULIN: Thank you.

13 Sam Wasson?

14 SAM WASSON: Sam Wasson. Spent a lot of time in
15 Keeler, a lot of time around the Owens valley and dealing
16 with the dust issues and Keeler fog for the last 60
17 years. And one positive comment, we're almost there.
18 The City's done a great job. I just want to come out in
19 favor of using moat and row as a method of eliminating
20 the dust. I know there might be a little time setback on
21 reaching overall attainment, but this moat and row will

Page 17

22 allow the saving of water and the use of water more
23 productively for the ranches and other folks. I am
24 completely in favor of it.

25 As far as the visual impact of moat and row, I

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1 don't see a problem. Sand fences, dikes, berms, not an
2 issue. The lake has had construction processes going on
3 there for the last hundred-plus years. Natural Soda
4 Products Company where the City has their current main
5 headquarters on the lake has all kinds of vats and earth
6 berms and almost moats, and really it all visually from
7 the highway, you can't even tell the difference. It all
8 looks the same.

9 Now we have reflective water, and the reflective
10 water is fine, but there is lots and lots of ponding out
11 there on the lake, and it's great. But I think the moat
12 and row is a good way for the City of L.A. to try to
13 reduce the amount of water that's needed to mitigate the
14 dust issues.

15 And those are my comments. Thank you.

16 AMANDA OLEKSZULIN: Thank you very much.

17 George Milorich. Did I pronounce that
18 correctly?

19 GEORGE MILOVICH: George Milovich, Ag
20 Commissioner Inyo-Mono County. Two quick comments I'll
21 try and get into three minutes here.

22 AMANDA OLEKSZULIN: I think we're doing okay on
23 time.

24 GARY JAKOBS: Take your time.
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25 GEORGE MILOVICH: You know, as we face this new

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21

1 century, agriculture is facing stressful times in general
2 and in this state. Water issues such as the delta smelt
3 and urban water needs compete for this valuable resource
4 to the point that we're starting to reach, you know,
5 critical stages in which land is being dried up and crops
6 are being lost.

7 I have applied for both Inyo and Mono county for
8 this current year as for primary drought designated
9 counties and received that designation last week for both
10 Inyo and Mono. So these considerations all come into
11 play as we look at these new projects that are coming
12 about for this lake.

13 I as an agriculture commissioner and every ag
14 commissioner in the state is the delivery system for the
15 Department of Food and Agriculture, so we look at the
16 broad sense, not just the region, but the entire state,
17 which is the biggest agriculture entity in the world, and
18 this production of agriculture is an industry, but it's
19 more. It's more than that. It's the very food and
20 cultural and resource thing that the state has.

21 So it's an important thing, and the local region
22 must be considered when we look at it from this
23 standpoint. As previously stated, the use of water in
24 this valley is important for the water that stays here
25 remains for not just the agricultural use in the Owens

□

1 valley and in Mono County, but also for the native
2 habitat, the native species that exist all the way
3 through the Owens Valley. And as we impact and put
4 pressure on the northern part by taking more water and
5 using it here, we need to have a balance. And so this is
6 the picture that we have taking a broader look.

7 And so, because of that, it's very important
8 that we utilize several methods on the Owens Lake to try
9 to mitigate the dust which the dust needs to be
10 mitigated, but it needs to look at other sources. The
11 grass, the salt grass, the shallow flooding, the gravel,
12 and this moat and row process. So a multiple use of
13 these things that we could do the best we can to mitigate
14 the amount of water used. The waterfowl habitat is also
15 a valuable source and I think should remain to a certain
16 extent.

17 So all these factors play into it, but the fact
18 that I refer to when I mention the amount of water and
19 the agricultural in a state-wide sense is that the less
20 water that goes to the City of Los Angeles from this
21 region means they go to the state water projects on the
22 other side and take that water, and that impacts the
23 agriculture of the state. So those things are important
24 on a state-wide basis.

25 And so that really is my point, and the other

□

1 point directly referring to the EIR is the -- and I

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2 forgot what you exactly call it -- the combination use
3 where you mitigated with moat and row in combination with
4 the shallow flooding looked like one of the most
5 promising aspects for both visual and for a combination
6 of dust mitigation. So I thought that was a very
7 outstanding point that I've never seen referred to before
8 until I saw the EIR.

9 So thank you very much.

10 AMANDA OLEKSZULIN: Thank you.

11 Is there anyone else who would like to speak?

12 If for some reason you would like to provide
13 comments but not in a public setting, please feel free to
14 approach Kristy, and she'll be here for a little while
15 longer. But other than that, I want to thank everyone
16 for attending, and with that we'll be accepting comments
17 until July the 22nd. Please feel free to e-mail, fax, or
18 mail your comments in to Tom Dailor at LADWP. The
19 information is in the EIR, and with that we'll conclude
20 the meeting.

21 (Proceedings concluded.)

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1 State of California).

2) ss.
3 County of Inyo)

4 I, Kristy R. Keener, a Certified Shorthand

5 Reporter of the State of California, do hereby certify
6 that the foregoing proceedings were reported by me, a
7 disinterested person, and thereafter transcribed under my
8 direction into typewriting and is a true and correct
9 transcription of said proceedings. I further certify
10 that I am not of counsel or attorney for either or any of
11 the parties in the foregoing proceedings and caption
12 named, nor in any way interested in the outcome of the
13 cause named in said caption.

14 Dated the 2nd day of July, 2009.

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KRISTY R. KEENER, CSR NO. 6422

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- PH-1 The commenter is correct that subsequent to LADWP's certification of the EIR and approval of the project, additional project approvals/permits may be required from other responsible and trustee agencies. The California State Lands Commission (CSLC) has authority over the lake bed as the primary land owner and as such LADWP would need a lease permit from CSLC to construct and operate the moat and row DCMs.
- PH-2 As identified in the 2008 SIP and based on coordination with the GBUAPCD and other regulatory agencies, a combination of dust control measures could be implemented, using moat and row elements (including rock armoring and application of brine on roads and rows) in combination with shallow flooding and managed vegetation.
- Furthermore, Measure Air-1 from the 2008 FSEIR, Construction Activities Fugitive Dust Emissions Control and Minimization requires that fugitive dust emissions during construction 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.
- PH-3 The commenter suggests that the project objectives include a statement about the sparing use of water that would otherwise recharge groundwater and support agricultural uses in the state. This request will be considered by LADWP during its review of the EIR and project merits.
- PH-4 Please refer to response to comment L1-23.
- PH-5 LADWP acknowledges the commenter's support for the use of moat and row DCM on Owens Lake. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.
- PH-6 LADWP acknowledges the commenter's support for the use of moat and row and opinion that this type of DCM would not result in a negative visual impact. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.
- PH-7 LADWP acknowledges the Inyo-Mono County Agricultural Commissioner's support for the use of moat and row DCMs on Owens Lake and the associated water conservation and its potential to benefit agriculture in the state. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.
- PH-8 LADWP acknowledges the Inyo-Mono County Agricultural Commissioner's support for the use of a combination of dust control measures (moat and row, shallow flooding, and vegetation) on Owens Lake to control dust emissions. No further response is needed as no issues on the environmental analysis presented in the 2009 DSEIR were raised.

3 REVISIONS TO THE DRAFT SEIR

This chapter presents specific text changes made to the 2009 DSEIR since its publication and public review. The changes are presented in the order in which they appear in the original 2009 DSEIR and are identified by the 2009 DSEIR page number. Changes to the text of the Draft SEIR are shown with a line through the text that has been deleted (~~strikeout~~) or underline where new text has been added.

3.1 REVISIONS TO CHAPTER ES, “EXECUTIVE SUMMARY”

ES-3 SUMMARY OF THE PROJECT DESCRIPTION

The first paragraph under “Objectives of the Project,” on page ES-1 is of the 2009 DSEIR, also repeated as the first paragraph of Section 2.3, “Project Goals and Objectives,” on page 2-9 of the 2009 DSEIR and page 5-1, second paragraph in Section, 5.1, “Introduction” is revised as follows:

“The primary goal of the project is to prevent emissions from the lake bed that cause or contribute to violations of the PM₁₀ 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 and operated in trust for the people of California by CSLC. Therefore, the project must also be consistent with the State of California’s obligation of land and resource stewardship. 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 NAAQS;”

The first and second paragraphs under “Elements of the Project,” on page ES-2 of the 2009 DSEIR are revised as follows:

“Before its proposed revision, the project was evaluated and adopted as part of the *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Final Subsequent Environmental Impact Report* (2008 FSEIR) (adopted by the Great Basin Unified Air Pollution Control District [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, 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. ~~Since the 2008 FSEIR was published,~~ LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner. ~~changes to the design and operation and maintenance plan for the moat and row DCMs have been proposed. Implementing the proposed project would result in changes to the design of the moat and row elements, and a more robust operations and maintenance plan is proposed. These changes were not known when the 2008 FSEIR was~~

~~prepared; therefore, an analysis of their environmental effects is required under CEQA.~~ However, these changes affect only the moat and row dust control areas, not the larger dust control program evaluated in the 2008 FSEIR. 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 Section 15163 allows the preparation of a supplement to a previous certified EIR if any of the conditions that require the preparation of an SEIR are present. Further, CEQA states that the SEIR need contain only the information necessary to make the previous EIR adequate.”

The first paragraph under “Gravel Application Alternative” on page ES-4 of the 2009 DSEIR, repeated on page 5-4, first paragraph under “Gravel Application Alternative,” of the 2009 DSEIR is revised as follows:

“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 of this alternative would require an average ongoing gravel application amounting to 7,000 cubic yards per square.~~ Operation of this alternative would require an average ongoing maintenance amount of 7,000 cubic yards of gravel per square mile per year (this allows for complete gravel replacement once every 50 years). 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).”

The first paragraph under “No-Project Alternative – Continuation of Existing Conditions” on page ES-5 of the 2009 DSEIR, is revised as follows:

NO-PROJECT ALTERNATIVE – CONTINUATION OF EXISTING CONDITIONS 2008 FSEIR

Under the No-Project Alternative, moat and row DCMs would be constructed, operated, and maintained on the historic Owens Lake in accordance with the 2008 SIP, which designed the 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 FSEIR, LADWP modeling and field testing indicated that the originally proposed moat and row design may not sufficiently control PM₁₀. In addition, the moat and row DCM likely would not be implemented because LADWP has determined the previously approved design would not feasibly attain dust control efficiency standards approved in the 2008 SOP and it probably would not be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC). DFG and CLSC raised concerns over specific features of the previously approved moat and row DCMs related to potential impacts on wildlife and other issues. These concerns resulted in revisions to the design of the DCMs, as discussed and analyzed in this draft SEIR. Without the changes proposed for the moat and row DCMs, PM₁₀ 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. As described in State CEQA Guidelines Section 15126.6(a), lead agencies are not required to evaluate alternatives that are infeasible. In the case of the previously approved moat and row design, LADWP has determined that this design is infeasible because it would not attain adopted dust control efficiency standards. Therefore, the analysis in this DSEIR assumes that if the No Project Alternative were implemented, no development would occur within the moat and row DCAs. 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.

The text on page ES-5 under “Environmentally Superior Alternative” in the 2009 DSEIR, repeated starting on page 5-5 under the “Environmentally Superior Alternative,” section is revised as follows:

In addition to the discussion and comparison of impacts of the alternatives to the proposed project, CEQA Section 15126.6 requires that the “environmentally superior” alternative among the alternatives considered be selected and the reasons for such selection disclosed. 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 technologically feasible and proven dust control options to reduce dust emissions from Owens Lake; however, both of the options rely on the availability of water to ensure success. For the reasons described on page 2-7, under “Current State of LADWP Water Supplies,” additional water to expand shallow flooding or managed vegetation dust controls on Owens Lake is not available. So while these alternatives are successful at achieving prescribed dust control efficiencies, they are no longer feasible alternatives to implement on Owens Lake on an expanded basis. The third alternative (i.e., Gravel Application) was determined to result in comparable impacts as the project. No other alternatives are available that could feasibly attain most of the project objectives and have been proven to reduce dust emissions at Owens Lake.

CEQA requires the lead agency to identify an alternative that is feasible and superior to the proposed project. While the shallow flooding alternative would result in less environmental impacts than the project and would be environmentally superior to the project, it is not a feasible dust control option in the face of a shortage of water supplies. Further, ; however, in this case, the proposed project is the environmentally superior alternative. ~~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 in the 2008 FSEIR, including the fact that this alternative was not selected, despite it being environmentally superior to 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. ~~The primary purpose of the proposed project was to improve on a previously approved project because of environmental concerns raised by DFG and CSLC and implement DCMs that require little or no water.~~ As a result, the proposed project is the environmentally superior alternative.

Impact summaries and mitigation Measures amended in this FSEIR are presented in individual impact sections below. Any changes made to the impact summaries and mitigation measures presented in the 2009 DSEIR are hereby changed in the Executive Summary as described below.

3.2 REVISIONS TO CHAPTER 1 “INTRODUCTION”

The first paragraph under Section 1.2, “Relationship to the 2008 FSEIR,” on page 1-1 of the 2009 DSEIR is revised as follows:

“The GBUAPCD prepared and adopted the 2008 FSEIR on February 1, 2008. The 2008 FSEIR evaluated the implementation of 15.1 square miles of dust control measures (DCMs) within the Owens Lake Planning Area. DCMs evaluated and approved included shallow flooding, moat and row elements, and application of gravel as riprap (a loose assemblage of broken stones) on berms within 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. ~~Since the time the 2008 FSEIR was published, changes to the design and operation and maintenance plan for the moat and row DCMs have been proposed.~~ LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner. ~~publication and certification of the 2008 FSEIR, DFG and the California State Land Commission (CSLC) raised concerns over specific features of the moat and row DCM and its impact on wildlife, as well as other issues. Specific details regarding the refined operation and maintenance of the moats and rows were not available at the time the 2008 FSEIR was certified, and thus could not be evaluated at a project level of detail.”~~

The first full paragraph on 1-2 of the 2009 DSEIR is revised as follows:

“Implementing the proposed project would result in changes to the design of the moat and row elements, and a more refined operations and maintenance plan is proposed. ~~These changes were not known when the 2008 FSEIR was prepared; therefore, an analysis of their environmental effects is required under CEQA.~~ These changes were proposed by LADWP in December 2007/January 2008 and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. However, subsequent to the 2008 FSEIR certification, CSLC and DFG raised concerns that additional analysis of the revised moat and row elements was needed. These changes affect only the moat and row dust control areas (DCAs), not the larger dust control program evaluated in the 2008 FSEIR. 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 Section 15163 allows the preparation of a supplement to a previous certified EIR if any of the conditions that require the preparation of a SEIR are present. Further, CEQA states that the SEIR need contain only the information necessary to make the previous EIR adequate.”

3.3 REVISIONS TO CHAPTER 2, “PROJECT DESCRIPTION”

The third and fourth paragraphs on page 2-5 of the 2009 DSEIR are revised as follows:

“The 2003 Revised SIP contains provisions requiring the GBUAPCD to continue monitoring dust emissions from the lake bed and to identify any additional areas beyond the 29.8 square miles of dust control areas (DCAs) that may require DCMs in order to meet NAAQS for PM₁₀. As a result of the

continued monitoring, the GBUAPCD identified up to 15.1 additional square miles of DCAs, of which 9.2 square miles would be constructed with shallow flooding DCMs, 3.5 square miles would be constructed with moat and row DCMs, 1.9 square miles would be reserved for future study areas, and 0.5 square mile would be channel areas (Table 2-2). The study areas and the channel areas may or may not require dust mitigation (i.e., implementation of approved DCMs). These additional DCAs were outlined in the 2008 SIP. The environmental impacts were evaluated as part of the 2008 FSEIR (Table 2-1 LADWP had concerns regarding the ability of the approved moat and row design to meet adopted dust control efficiency standards outlined in the 2008 SIP. As a result, in December 2007/January 2008 LADWP proposed changes to the design and operation and maintenance plan for the moat and row DCMs that would better achieve dust control efficiency standards. These changes were made known to GBUAPCD and were discussed in the 2008 SIP FSEIR Supplemental Information Reports to GBUAPCD Governing Board. GBUAPCD determined that these changes were appropriately addressed in the 2008 SIP FSEIR and, on that basis, the GBUAPCD certified the 2008 SIP FSEIR in February 2008 and approved the 2008 SIP project. However, subsequent to the 2008 FSEIR certification and SIP approval, CSLC and DFG raised concerns that additional analysis of the revised moat and row component of the SIP may be required. While GBUAPCD determined that no new significant impacts would result from those proposed moat and row design and operation changes through the certification of the 2008 SIP FSEIR, it was agreed to by LADWP, GBUAPCD, CSLC, and DFG that a supplemental EIR would be prepared to address these changes in a more detailed manner. In addition- Furthermore, specific details regarding the refined operation and maintenance of the moats and rows were not available at the time the 2008 FSEIR was certified, and thus could not be evaluated at a project level of detail. A more refined operations and maintenance plan is proposed as part of this revised moat and row DCM project. Therefore, since the 2008 FSEIR was certified and new, significant environmental impacts or an increase in the severity of already identified significant effects may occur due to changes in the design, operation, and maintenance of the moat and row elements, an analysis of these environmental effects is required under CEQA (CEQA Guidelines Section 15162). These changes were not known when the 2008 FSEIR was prepared; therefore, an analysis of their environmental effects is required under CEQA. However, these changes affect only the moat and row dust control areas (DCAs), not the larger dust control program evaluated in the 2008 FSEIR.”

The first paragraph in Section 2.3, “Project Goals and Objectives,” on page 2-9 is of the 2009 DSEIR is revised as shown above under “3.1 Revisions to Chapter ES, ‘Executive summary’”

The second paragraph on page 2-15 of the 2009 DSEIR is revised as follows:

“The ground disturbance for the moat and row elements, including enhancements (see description below), would vary within each DCA. Nonetheless, moat and row features within the 3.5 square miles of the moat and row DCAs would not exceed a maximum of 33% of the total ground surface area (refer to Exhibit 2-5). ~~For example, if a DCA is 100 acres in size, then ground disturbance would not exceed 33.3 acres.~~ For the 3.5 square miles of dust control, no more than 1.16 square miles of the project area would be constructed with permanent moat and row features including small grading berms, access roads, moats, rows, rock armoring on rows, application of brine on roads and rows, and sand fences. These features would generally be above the surface of the lake bed.”

The first paragraph under Section 2.4.4, “Enhancement Options,” on page 2-16 of the 2009 DSEIR is revised as follows:

“Construction of the moat and row DCMs may also include the application of a variety of enhancements to gain greater dust control efficiencies in the Owens Lake bed. These enhancements would be implemented in response to air quality monitoring of PM₁₀ emissions in the moat and row DCAs. In general, LADWP monitors air emissions from the lake bed via visual observations, field measurements,

and detailed modeling that can help identify where the emissions originate. GBUAPCD conducts all air quality compliance monitoring and determines if the dust controls are working and if the objectives of the 2008 SIP are being met. From the data collected, LADWP determines whether the dust emission objectives from the 2008 SIP are being met. If exceedances occur, LADWP may take corrective actions to reduce dust emissions including notifying GBUAPCD. Prior to any enhancement options being implemented on the lake bed, LADWP would coordinate with GBUAPCD to receive direction on what the most effective enhancement that should be implemented. Five enhancement options would be considered and are evaluated as part of this draft SEIR, as described below. These enhancements would ensure that if significant dust sources (i.e., hot spots) develop in the moat and row DCAs, they would be promptly addressed. Any single method or combination of the enhancements could be implemented for both primary and secondary wind direction elements, where demonstrated to be in substantial conformance with the performance standards for the moat and row DCM. Many factors would influence the determination of which enhancement method would be selected, with a preference for non-water or low-water consumption methods. These factors include, but are not limited to, soil type, crust condition, nearest water source, material availability, existing vegetation, if any, and time frame for implementing the enhancement.”

The first paragraph in Section 2.4.9, Application of Brine Enhancements,” on page 2-34 of the 2009 DSEIR is revised as follows:

This enhancement would apply brine to the moat and row side slopes and to access roads in the moat and row DCAs. Brine is water with a heavy concentration of salt. Brine is produced in shallow flooding DCAs on Owens Lake. Within the shallow flooding areas, brine would be collected via a vacuum/pump truck and delivered to moat and row DCAs. The brine would temporarily stabilize surface soils by creating a hardened salt crust (through the evaporation of water) on top of the emissive soils, which would substantially reduce dust emissions. Certain weather conditions (rain with cold temperatures) can cause brine-stabilized surfaces to become emissive and all brine-stabilized surfaces break down over time. Therefore, additional brine would be needed as required to maintain non-emissive surfaces.

The text of Section 2.6, “Construction Schedule,” on page 2-35 of the 2009 DSEIR is revised as follows:

“Construction of the seven moat and row DCAs would require approximately ~~7 to~~ 12 months to complete and would begin ~~in the spring of 2009 upon receipt of all required permits and approvals. All DCMs are anticipated to be implemented by the spring of 2010.~~ It is anticipated that construction would be completed by October 2010.

Construction of the moat and row DCMs would generally involve site preparation (surface grading and earthmoving) and berm construction and access road grading. Moat and row DCM enhancements, if needed, would generally involve dewatering where necessary; mainline water delivery pipeline extension (trenching, pipeline installation, trench backfilling); water distribution system installation (e.g., drip or surface irrigation facilities for shallow flood enhancements); and power line and DCM controls installation.

Supporting activities include material and equipment delivery, fence installation, and transportation of construction crews to and from moat and row DCAs. ~~All~~ The moat and row DCAs would have a 50-foot construction area buffer around the outer boundary of the DCA, except in areas where the DCA is adjacent to sensitive resources, such as wetlands or stream channels. As required by the 2008 SEIR, in these sensitive locations, there would be no construction area buffer. In total, 0.1 square mile would be temporarily affected by construction activities, in addition to the 3.5 square miles of DCAs. Exhibit 2-20 shows where the 50-foot construction buffer areas would be established. In some locations, a construction buffer would not be established on one or more sides of the moat and row DCA because the moat and row DCA would be located adjacent to an existing DCA where construction is on-going or complete and

access roads have been established. The temporary construction buffer would be necessary to allow the transport of heavy, wide-tracked equipment to the construction site. Wide-tracked equipment would be necessary because of the varying soil conditions and high water tables present on the lake bed.”

3.4 REVISIONS TO CHAPTER 3, “ENVIRONMENTAL SETTING”

SECTION 3.1, “BIOLOGICAL RESOURCES”

The third paragraph on page 3.1-37 of the 2009 DSEIR has been revised as follows:

“Approximately ~~59.4~~ 118 linear miles of moats (accounting for moats on either side of each row) would be constructed within the six project cells with moat and row elements. Moats would be 4–5.5 feet deep and up to 20 feet wide, and have side slopes of 1.5:1 (33.7 degrees). During the brooding period when juvenile plovers do not fly (28–33 days after hatching), individuals could encounter moat edges and possibly walk or fall into moats. A moderate to high potential for broods to encounter the perimeter of moat and row cells would occur at T1A-3, T37-1, and T37-2 (Exhibit 3.1-12), due to the proximity of these cells to occupied or high-quality nesting habitat. Any occurrences of plovers within moats are expected to be infrequent and limited to cell perimeters (i.e., the outer-most moats, where plovers from adjacent areas could interface with moat and row cells). (As previously discussed, snowy plovers are not expected to regularly nest in the interiors of moat and row cells, including those potentially augmented with water or other dust control enhancements.) If plovers enter moats, two factors could affect their ability to exit the moat and survive: the steepness of side slopes relative to soil roughness (friction) and the presence of water in the moats.”

The second paragraph under “Mitigation Approach and Incorporation of Measures from the 2008 FSEIR” on page 3.1-39 of the 2009 DSEIR has been revised as follows:

“The following nine measures from the 2008 FSEIR (as revised by 2008 FSEIR Clarification Sheet for the GBUAPCD Governing Board, dated January 23, 2008), which address potential effects on western snowy plover, have been incorporated by reference with no revisions.”

Options 1 and 2 of Mitigation Measure 3.1-10 on page 3.1-39 through 3.1-41 of the 2009 DSEIR have been modified as follows:

“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 make all reasonable attempts 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.”

The fourth paragraph on page 3.1-4, Mitigation Measure 3.1-11 (Revises Measures Biology-11 in the 2008 FSEIR): Corvid Management Plan), of the 2009 DSEIR has been revised as follows:

“Specifically in conjunction with the Moat & Row dust control measure, the corvid management techniques shall be expanded to specify that the sand fencing ~~fabric and (including 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. ~~thereby requiring the utilization of Nixalite or the functional equivalent on top of sand fencing.~~ 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 and maintained at that time, if necessary.”

Mitigation Measure 3.1-12, “on page 3.1-42 through 3.1-45 of the 2009 DSEIR has been modified as follows:

“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) ~~if necessary~~, 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 ~~three business days~~ 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)."

SECTION 3.2, "AIR QUALITY"

The text under "Climate, Meteorology, and Topography" on page 3.2-1 of the 2009 DSEIR is revised as follows:

"As described in the 2008 FSEIR (see Section 3.2.2, "Existing Conditions," starting on page 3.2-9), the OVPA is located in the Great Basin Valleys Air Basin (GBVAB) and is bounded by the Inyo Mountains to the east and the Sierra Nevada to the west. Because the historic Owens Lake bed is located in the rain shadow of the Sierra Nevada, annual rainfall is low, and opportunities to reduce dust through natural rainfall are limited. High winds in the OVPA can exceed average speeds of 40 miles per hour (mph). High southerly winds typically result from a storm front approaching Owens Valley, and strong northerly winds result from the passing of the storm. These general wind directions are sometimes complicated by local eddy effects that can cause 180-degree differences in the wind direction from the west to east side of Owens Valley."

The second paragraph on page 3.2-2 of the 2009 DSEIR is revised as follows:

"Visibility in the OVPA generally ranges from 37 to 93 miles, with best visibility during winter. When Owens Lake dust storms occur, typically from September through May, visibility is limited, and these dust storms can reduce visibility to zero near Owens Lake and obscure visibility up to 150 miles away. The primary cause of visibility degradation in the OVPA is fine particulates in the atmosphere. In addition to dust created by Owens Lake dust storms, visibility degradation at Owens Lake results from transport of air pollutants from the San Joaquin Valley Air Basin, located to the west, and the South Coast

Air Basin, located to the south. Most of the persistent, low-wind conditions visibility degradation can be attributed to interbasin transport of air pollutants.”

Section 3.2.2, “Particulate Matter,” the third paragraph on page 3.2-4 of the 2009 DSEIR is revised as follows:

“The adverse health effects associated with PM₁₀ depend on the specific composition of the particulate matter. For example, health effects may be associated with metals, polycyclic aromatic hydrocarbons, and other toxic substances adsorbed onto fine particulate matter (referred to as the “piggybacking effect”) or with fine dust particles of silica or asbestos. Generally, effects may result from both short-term and long-term exposure to elevated concentrations of PM₁₀ and may include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death (EPA 2009a). PM_{2.5} poses an increased health risk because the particles can deposit deep in the lungs and may contain substances that are particularly harmful to human health. In 1995, the GBVAB was classified as a serious nonattainment area for direct emissions of PM₁₀ and PM_{2.5}. GBUAPCD adopted the PM₁₀ Attainment Plan in ~~1998~~ 2008 to work toward reducing PM in the GBVAB. The attainment plan is still in effect, and the GBVAB is still classified as a nonattainment area for these pollutants (GBUAPCD 2008). The GBVAB is designated an unclassified area for PM_{2.5}.”

The third and fourth paragraphs on page 3.2-12 of the 2009 DSEIR is revised as follows:

“In November 2003, the 2003 Revised SIP (2003 SIP) was adopted by GBUAPCD and later approved by ARB. The purpose of the 2003 SIP was to establish a control program for PM₁₀ emissions blown from the exposed playa at Owens Lake. The 2003 SIP’s deadline to demonstrate attainment with the PM₁₀ NAAQS was December 31, 2006. The 2003 SIP proposed 3 years of control measure implementation before December 2006. However, after the adoption of the 2003 SIP, EPA enacted a new policy that changed the interpretation of the attainment demonstration deadline. EPA’s new policy on attainment demonstrations now required 3 years of ambient air monitoring before the attainment date (December 31, 2006, for the OVPA) to show that there have been no violations of the NAAQS. Because many of the DCMs were not completed until the end of 2006, numerous NAAQS violations occurred during the 3-year attainment demonstration period. Consequently, EPA did not take action on the approval or disapproval of the 2003 SIP; ~~the 2008 SIP~~ the 2008 SIP is currently enforced by GBUAPCD (GBUAPCD 2008).

By December 31, 2006, LADWP met its deadline and had implemented DCMs on 29.8 square miles of the lake bed, as anticipated in the 2003 SIP. In 2006, a dispute arose between GBUAPCD and LADWP regarding requirements to control dust from additional areas at Owens Lake beyond the 29.8 square miles identified in the 2003 SIP. On December 4, 2006, a settlement agreement was approved by both parties to resolve this dispute. Under the major provisions of this agreement, LADWP agreed to implement DCMs on a total of 43 square miles of the lake bed, including the 29.8 square miles of lake bed identified in the 2003 SIP, by April 1, 2010, and ~~LADWP~~ GBUAPCD agreed to revise the 2003 SIP before March 1, 2008, to incorporate the provisions of the settlement agreement. The 2008 SIP was adopted in February 2008, and the resulting implementation program is the project that was approved in the 2008 FSEIR, with the modifications for the 3.5-square-mile-area being evaluated in this analysis (GBUAPCD 2008). In the 2008 SIP, there were provisions for LADWP to include ~~additional 3.5 square miles of moat and row features at LADWP’s discretion under the restriction that if LADWP chose to use additional~~ additional moat and row features, they would need to be implemented by October 1, 2009. All other additional DCMs, ~~as described in the 2008 FSEIR beyond the 29.8 square miles completed by December 2006,~~ do not have this requirement and would need to be implemented by April 1, 2010. Only the additional moat and row features are required to be implemented by ~~October 10, 2009~~ October 1, 2009.”

The text of Impact 3.2-1 on pages 3.2-18 and 3.2-19 of the 2009 DSEIR is revised as follows:

“IMPACT 3.2-1 **Project-Generated Emissions of Criteria Air Pollutants and Precursors.** *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. Thus, implementation of the proposed project, as proposed, would technically conflict with the applicable air quality plan, resulting in a slight 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.*

As discussed in the 2008 FSEIR, short-term emissions of criteria air pollutants (e.g., PM₁₀) and precursors (e.g., ROG, NO_x) would occur as a result of project-related construction activities. These emissions were modeled for the 2008 FSEIR using ARB- and GBUAPCD-approved OFFROAD2007, EMFAC2007, and URBEMIS 2007 models. Changes made to the project since the certification of the 2008 FSEIR include a delaying in project construction of the moat and row DCMs; 6 months, creating a new completion date of April 1, 2010, for moat and row implementation; changing the configuration of the moat and rows to a gridded pattern instead of the previously proposed curved pattern; and, as a result of the proposed grid pattern, locating the moat and row features possibly as close as 100 feet apart in some areas rather than 250 feet apart, as evaluated in the 2008 FSEIR.

Because the overall size and location of ground disturbance, construction duration and phasing, and required heavy-duty construction equipment and number of construction personnel would fall within the ranges identified in the 2008 FSEIR, construction of the proposed project would be anticipated to result in the same amount of emissions calculated for the 3.5 square miles of moat and row features presented Chapter 3.2, “Air Quality,” in the 2008 FSEIR. 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, these measures are incorporated into the project as Mitigation Measures Air-1 through Air-6 (see pages 3.2-25 and 3.2-26 of the 2008 FSEIR). However, because DCM operations would be delayed by the new construction schedule beyond the date specified in the 2008 SIP, daily PM₁₀ emissions would likely continue to violate the PM₁₀ NAAQS for 6 months or more. for an additional 6 months. The 2008 SIP requires that all moat and row features be implemented by October 1, 2009. ~~Currently, the moat and row features are proposed to be completed by April 1, 2010.~~ Construction of the moat and row features would begin upon receipt of all required permits and approvals and would take approximately 12 months to complete. The 2008 FSEIR evaluated the implementation of the moat and row DCMs in addition to shallow flooding, managed vegetation, and rock armoring DCMs. The moat and row DCMs would make up 3.5 square miles of the total 15.1 square miles of DCMs that would be implemented under the 2008 SIP. Although the moat and row DCMs would need to be implemented by October 1, 2009, the other DCMs would need to be implemented by April 1, 2010, as identified in the 2008 SIP. LADWP has constructed or is currently constructing other DCMs (e.g., shallow flooding, managed vegetation) to meet the April 1, 2010, deadline. Therefore, although implementation of the moat and row DCMs would be delayed, LADWP has and would continue to make substantial progress toward reducing dust emissions from the lake bed before and during the 6-month (or more) period over which implementation of the moat and row elements has been extended.

Although the operational delay caused by the revised construction schedule would result in a conflict with an existing adopted air quality planning effort (i.e., the 2008 SIP) and could potentially lead to more days when violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations would occur, two important considerations must be recognized: (1) because most of the DCMs would be in place (the project delays implementation of only 3.5 square miles of the total 4843-square-mile DCM project included in the 2008 FSEIR, PM₁₀ emissions would be less than the current baseline, and (2) emissions would continue to decrease over the 612-month construction period as moat and row DCMs are constructed and completed. However, some parts of the project site would continue to create unabated dust emissions over some or all of the additional 6 months (or more), until the DCMs are completed. Because the affected area is confined to 3.5 square miles, it is unknown whether the delay in implementation of the moat and row elements would lead to an increase in the number of days when violation of the NAAQS and additional exposure of sensitive receptors to substantial pollutant concentrations above NAAQS standards would occur.

Because the moat and rows would not be operational in the timeframe required by the 2008 SIP, the project would ~~technically~~ conflict with implementation of the applicable air quality plan. It could contribute to the potential for additional violations of the NAAQS and exposure of sensitive receptors to substantial pollutant concentrations. Therefore, this impact is considered significant.”

The first paragraph under Mitigation Measure(s) for Impact 3.2-1 on page 3.2-19 of the 2009 DSEIR is revised as follows:

“The ~~technical~~ conflict with the 2008 SIP (i.e., delay in implementation of 3.5 square miles of DCMs by 6 months or more) is caused by the need for project changes made by the LADWP in order to address moat and row design modifications necessary to address PM₁₀ control efficiency concerns, as well as wildlife impact concerns. LADWP is committed to implement all the proposed required DCMs, if approved, as quickly as feasible. No other measures are reasonably available to reduce the potential impacts resulting from this conflict. The LADWP will continue to investigate the implementation of additional and/or accelerated air pollution control measures to reduce or eliminate these impacts.”

3.5 REVISIONS TO CHAPTER 4, “OTHER CEQA-MANDATED SECTIONS”

The text under Section 4.2.2, “Significant and Unavoidable Impacts of the Proposed Project,” on page 4-2 and 4-3 of the 2009 DSEIR is revised as follows:

“Implementation of DCMs on the Owens Lake bed would result in significant and unavoidable impacts as analyzed in the 2008 FSEIR and this draft SEIR. The proposed project would result in significant and unavoidable adverse impacts on air quality ~~and visual resources~~, as described below.

SIGNIFICANT AND UNAVOIDABLE IMPACTS IDENTIFIED IN THE SEIR

As analyzed in Section 3.2, “Air Quality,” the proposed project would contribute to project and cumulative conflicts with implementation of an adopted air quality control plan. The project would require approximately 12 months to complete and construction would begin upon receipt of all required permits and approvals ~~would be implemented by April 2010, which is an approximate 6-month delay (for moat and row elements only) from the schedule outlined in the 2008 SIP.~~ Construction of the proposed project (i.e., additional moat and row elements) would cause DCM operations to be delayed beyond the time frame specified in the 2008 SIP. Thus, implementation of the proposed project would conflict with the applicable air quality plan, resulting in a potential increase in the number of days for which violations of the national ambient air quality standards (NAAQS) are likely, along with the related exposure of sensitive receptors that would occur. No feasible mitigation is available to accelerate construction and

implementation of the moat and row features by October 1, 2009. Therefore, this project-specific impact is considered significant and unavoidable.”

3.6 REVISIONS TO CHAPTER 5, “ALTERNATIVES TO THE PROPOSED PROJECT”

The second paragraph in Section 5.1, “Introduction,” on page 5-1 of the 2009 DSEIR is revised as shown above under Section 3.1, “Revisions to Chapter ES, ‘Executive Summary.’”

The first paragraph under “Gravel Application Alternative” on page 5-4 of the 2009 DSEIR is revised as shown above under Section 3.1, “Revisions to Chapter ES, ‘Executive Summary.’”

The text under the “No-Project Alternative – Continuation of 2008 FSEIR” section on page 5-5 of the 2009 DSEIR is revised as shown below.

NO-PROJECT ALTERNATIVE – CONTINUATION OF 2008 FSEIR

Under the No-Project Alternative, moat and row DCMs would be constructed, operated, and maintained on Owens Lake in accordance with the 208 SIP, which involves construction, operation, and maintenance of moat and rows along with the application of DCM enhancements (e.g., shallow flooding, managed vegetation, row armoring) on the 3.5-square-mile project site.

Although moat and row DCMs were approved, as outlined in the 2008 SIP, the previously approved moat and row DCM likely would not be implemented ~~because City of Los Angeles Department of Water and Power (LADWP) because LADWP has determined the previously approved design would not feasibly attain dust control efficiency standards approved in the 2008 SIP and it would not be able to secure and acquire necessary environmental permits from regulatory agencies (e.g., DFG and CSLC). As described in State CEQA Guidelines Section 15126.6 (a), lead agencies are not required to evaluate alternatives that are infeasible. In the case of the previously approved moat and row design, LADWP has determined that this design may not attain adopted dust control efficiency standards. Therefore, the analysis that follows assumes that if the No Project Alternative were implemented, no development would occur within the moat and row DCAs.~~

As described in Chapter 2, “Project Description,” DFG and CLSC raised concerns over specific features of the moat and row DCMs previously approved design and the proposed new design related to potential impacts on wildlife and other issues. This SEIR is intended to address those issues of concern. Without the changes proposed for the moat and row DCMs (see Chapter 2, “Project Description”) and the supplemental analysis provided in this SEIR, there would not be a feasible moat and row design 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. 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. ~~Although the discussion of Impact 3.2-1, Project-Generated Emissions of Criteria Air Pollutants and Precursors, (see Chapter 3.2, “Air Quality”) states that implementing the proposed project would result in a conflict with implementation of an adopted air quality control plan, the conflict is a delay in implementation of the plan rather than the inability of the plan to be fully implemented, which is the case under this alternative. Implementing this alternative would not meet an important objective of the 2008 SIP and would not achieve prescribed dust control efficiencies for the 3.5 square miles of the lake bed where moat and row DCMs are proposed.~~

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 (see the discussion of Impact 3.2-1). Further, because the lake bed would not be altered with any human-made features, the visual impacts of the proposed project (although determined to be less than significant, see the discussion of Impact 3.3-2) 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. *[Environmental tradeoffs]*

In response to comment S2-30, the text to, “Environmentally Superior Alternative,” on pages 5-5 and 5-6 has been revised as shown above under Section 3.1, “Revisions to Chapter ES, ‘Executive Summary.’”

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