

3.9 UTILITIES AND SERVICE SYSTEMS

As a result of the Initial Study, the Great Basin Unified Air Pollution Control District (District) determined that the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (proposed project) had the potential to result in impacts to utilities and service systems, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).¹ Therefore, this issue has been carried forward for detailed analysis in this Subsequent Environmental Impact Report (EIR). This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potential significant impacts to utilities and service systems and to identify potential alternatives.

The analysis of utilities and service systems consists of a summary of the regulatory framework that guides the decision-making process, a description of the existing conditions at the proposed project area, thresholds for determining if the proposed project would result in significant impacts, anticipated impacts (direct, indirect, and cumulative), mitigation measures, and level of significance after mitigation. The potential for impacts to utilities and service systems has been analyzed in accordance with the methodologies and information provided by the Inyo County General Plan², 1997 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (SIP) Final EIR,³ 2003 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Final EIR,⁴ the North Sand Sheet Shallow Flooding Project Initial Study,⁵ and the Southern Zones Dust Control Project Mitigated Negative Declaration.⁶

¹ Great Basin Unified Air Pollution Control District. 27 February 2007. *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Initial Study*. State Clearinghouse Number 2007021127. Bishop, CA.

² Inyo County Planning Department. July 2002. *Inyo County General Plan Update, Goals and Policies Report, Land Use Element*. Prepared by: Jones and Stokes, Sacramento, CA.

³ Great Basin Unified Air Pollution Control District. 2 July 1997. *Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Final Environmental Impact Report*. State Clearinghouse Number 96122077. Bishop, CA.

⁴ Great Basin Unified Air Pollution Control District. February 2004. *2003 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Environmental Impact Report*. State Clearinghouse House Number 2002111020. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

⁵ City of Los Angeles Department of Water and Power. February 2000. *Initial Study for North Sand Sheet Shallow Flooding Project; Owens Lake Dust Mitigation Program, Owens Lake, California*. Prepared by: CH2M HILL, Santa Ana, CA.

⁶ City of Los Angeles Department of Water and Power. August 2001. *Mitigated Negative Declaration Southern Zones Dust Control Project, Owens Lake Dust Mitigation Program, Owens Lake, California*. Prepared by CH2M HILL, Santa Ana, CA.

3.9.1 Regulatory Framework

Federal

National Environmental Policy Act

The National Environmental Policy Act (NEPA) and its supporting federal regulations establish certain requirements that must be adhered to for any project "...financed, assisted, conducted or approved by a federal agency...." In making a decision on the issuance of federal grant monies or a permit to conduct work on federal lands for components of the proposed project, the federally designated lead agency pursuant to NEPA is required to "...determine whether the proposed action may significantly affect the quality of the human environment." Only those portions of the proposed project conducted of Bureau of Land Management (BLM) may require compliance with this regulation.

State

California Urban Water Management Planning Act

The California Urban Water Management Planning Act requires urban water suppliers to initiate planning strategies that make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry-water years. The City of Los Angeles Department of Water and Power (LADWP) would be the water supplier, and as such the proposed project would be under the jurisdiction of the LADWP Urban Water Management Plan, prepared pursuant to the California Urban Water Management Planning Act.⁷

California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act of 1991 requires each jurisdiction to adopt an ordinance by September 1, 1994, requiring any "development project" for which an application for a building permit is submitted after the effective date of this ordinance to provide an adequate storage area for collection and removal of recyclable materials. Development and operation of the proposed project would not be subject to the requirements of this act because there would be no building permits required. However, as described below, the County General Plan includes policies related to solid waste reduction and recycling.

Regional

Water Quality Control Plan for the Lahontan Region

The proposed project is regulated by the Lahontan Regional Water Quality Control Board (RWQCB). The Lahontan RWQCB has prepared a Water Quality Control Plan that identifies water-quality objectives (subject to approval by the U.S. Environmental Protection Agency) intended to protect designated beneficial uses for surface and groundwater. These water-quality objectives apply to both storm water runoff and municipal wastewater treatment effluent. The analysis of utilities and service systems focuses on the potential impacts to the applicable wastewater treatment provider and the

⁷ City of Los Angeles Department of Water and Power. 2002. *City of Los Angeles Department of Water and Power Urban Water Management Plan, Fiscal Year 2001–2002 Annual Update*. Los Angeles, CA.

effluent generated from that facility. Wastewater produced from the periodic disposal of sanitary waste at the applicable wastewater treatment facility would be subject to the treatment requirements of the RWQCB. The RWQCB is also responsible for the enforcement of the Clean Water Act, Section 401 Permits, Army Corps of Engineers Section 404 Permits, and National Pollution Discharge Elimination System (NPDES) Permits.

Local

Inyo County General Plan

The Inyo County General Plan provides the goals “to ensure adequate wastewater collection, treatment, and disposal, “to collect and dispose of stormwater in a manner that minimizes inconvenience to the public, minimizes potential water-related damage, and enhances the environment,” “to provide an adequate and high quality water supply to all users within the County,” and “to ensure the safe and efficient disposal or recycling of solid waste generated in Inyo County.”

These goals are supported by the following policies relevant to the proposed project:

Policy PSU-4.4.

The County shall permit individual on-site sewage disposal systems on parcels that have characteristics that permit installation of such disposal facilities with threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be reasonably provided.

Policy PSU-5.5.

New development may have surface drainage disposal accommodated through the retention of drainage onsite within the development.

Policy PSU-6.1.

The County shall promote maximum use of solid waste reduction, recycling, composting, and environmentally safe transformation of wastes.

County policies related to these utilities and service systems generally apply to urban and suburban development that utilizes municipal stormwater drainage and sewer systems. The proposed project would not utilize these existing municipal service systems; therefore, many of the County policies would not be applicable.

Inyo County Integrated Waste Management Plan

The California Integrated Waste Management Act of 1989 (AB 939) requires that the responsibility for solid waste management be shared between state and local governments, and the State has directed the Inyo County to prepare and implement a local integrated waste management plan in accordance with AB 939.

3.9.2 Existing Conditions

Wastewater Treatment

Sources of wastewater associated with the proposed project area include portable toilets and a septic system at LADWP support offices and the District’s office in the community of Keeler. In addition, the

LADWP operates an Operation and Maintenance facility located adjacent to Highway 136 on Sulfate Road, which treats wastewater through a septic system. Construction and maintenance crews on site use portable toilets that are periodically emptied and transported to the wastewater treatment facility. Likewise, the septic system in the community of Keeler, which includes a septic tank and leach lines, is periodically cleaned and transported to the Lone Pine facility. These sources represent a nominal amount of wastewater.

Wastewater from the proposed project area that is collected from portable toilets or pumped from septic systems is treated by the Lone Pine Community Services District. The Lone Pine facility has a remaining capacity of 989,912 cubic yards and is estimated to close in the year 2073.⁸ The Lone Pine facility is regulated by the Lahontan RWQCB, and wastewater treatment requirements are outlined in the Water Quality Control Plan for the Lahontan Region, North and South Basins.⁹

Storm Drain System

The proposed project area does not utilize the storm drain infrastructure in the adjoining communities, nor does it use an on-site storm drain system that conveys storm water off site to a water treatment facility. In order to protect existing dust control measures (DCMs) from flood damage in response to infrequent high magnitude storm events, earthen storm water control berms were constructed to direct storm water flows from adjacent off-site alluvial fans.

Water Supply

Water service is provided for the existing DCMs by the LADWP via the Los Angeles Aqueduct. The City of Los Angeles historical demand for water peaked in 1989 at more than 700,000 acre-feet per year (ac-ft/yr). Since that time, the population of the City of Los Angeles has grown by 750,000 individuals and water demand is currently at the same rate it was approximately 20 years ago, due to implementation of conservation strategies. In 2004, LADWP supplied 696,000 ac-ft of water to the City, including 200,000 ac-ft via the Los Angeles Aqueduct. According to the most recent Urban Water Management Plan, current sources of water were sufficient to meet the demand in 2004 and are projected to be available in the future from either dedicated sources of the LADWP such as the Los Angeles Aqueduct or from purchased supplies from The Metropolitan Water District.¹⁰

The Shallow Flooding DCM uses 4 ac-ft/yr and the Managed Vegetation DCM uses 2.5 ac-ft/yr. The project annually utilizes approximately 55,120 ac-ft for dust control measures on the 29.8 square miles of dust control areas. Approximately 7.9 percent of the 2004 total annual demand.

⁸ California Waste Management District. 2007. "Lone Pine Landfill Facility/Site Summary Details, Lone Pine, CA." Sacramento, CA. Available at: <http://www.ciwmb.ca.gov/swis/Detail.asp?PG=DET&SITESCH=14-AA-0003&OUT=HTML>

⁹ California Regional Water Quality Control Board. 2007. Lahontan Regional Map. Available at: http://www.swrcb.ca.gov/rwqcb6/docs/lahontan_maps.pdf

¹⁰ City of Los Angeles Department of Water and Power. 2005. *City of Los Angeles Department of Water and Power 2005 Urban Water Management Plan*. Los Angeles, CA.

Solid Waste

The proposed project area is served by the Lone Pine Landfill, the nearest permitted solid waste disposal facility. Based on previous documentation, the Lone Pine Landfill has a remaining site life of approximately 15 years.¹¹ Solid waste generated at the site would be disposed of at a permitted landfill with sufficient capacity.

3.9.3 Significance Threshold

The potential for the proposed project to result in impacts related to utilities and service systems was analyzed in relation to the questions contained in Appendix G of the State CEQA Guidelines. A project would normally be considered to have a significant impact to utilities and service systems when the potential for any one of the following seven thresholds occurs:

- Exceed wastewater treatment requirements of the applicable RWQCB
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Lack sufficient water supplies available to serve the project from existing entitlements and resources or will require new or expanded entitlements
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Is not served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs
- Does not comply with federal, state, and local statutes and regulations related to solid waste

3.9.4 Impact Analysis

Wastewater Treatment

The proposed project would not result in significant impacts (1) to the wastewater treatment requirements of the Lahontan RWQCB,¹² (2) to utilities related to environmental effects from the expansion or construction of new water or wastewater treatment facilities, or (3) to utilities related to

¹¹ City of Los Angeles Department of Water and Power. 2007. *Urban Water Management Plan*. Los Angeles, CA. Available at: www.ladwp.com/water/supply/uwmplan/index.htm.

¹² Lahontan Regional Water Quality Control Board. 1994. *Water Quality Control Plan for the Lahontan Region*. Available at: http://www.epa.gov/waterscience/standards/wqslibrary/ca/ca_9_north_south.pdf

the projected capacity of the wastewater treatment provider. The proposed project's wastewater would not be discharged to the municipal sewer system. Sources of wastewater associated with the proposed project area include portable toilets and a septic system, which are periodically emptied and transported to the Lone Pine wastewater treatment facility. These sources represent a nominal amount of wastewater. Therefore, the proposed project would not be expected to result in significant impacts to utilities related to wastewater treatment requirements, to utilities related to environmental effects from the expansion or construction of new water or wastewater treatment facilities, or to utilities related to the projected capacity of the wastewater treatment provider.

Storm Drain System

The proposed project would result in less than significant impacts with the incorporation of mitigation measures related to the need for a new or expanded storm water drainage system. The proposed project requires the construction of expanding existing storm water drainage facilities to protect the proposed DCMs. The playa (lake bed) is subject to flood damage from flash flood in response to infrequent high magnitude storm events. The continued effectiveness of DCMs requires treated areas to be protected from flooding. The proposed project would include the expansion of storm water control berms to convert channeled storm water flows from adjacent off-site alluvial fans into sheet flows. Mitigation measures would be implemented in order to reduce impacts to the DCMs from flash flood conditions. These measures would include the construction of soil berms around Shallow Flood areas. These berms would be constructed along the down-gradient and side boundaries of each Shallow Flood irrigation block to prevent leakage. These berms will be keyed into the core of the lake bed and will be used to collect excess surface water along the downslope borders of each irrigation block. Mitigation measure Hydrology-3 reduces these impacts below the level of significance and are listed in Section 3.9.5, *Mitigation Measures*.

The proposed project's Moat & Row DCM may channel storm water flows resulting in an increase of flash flood potential by directing water and sediment loads toward the mineral lease, causing either erosion, deposition of sediment, or loss of ore material to brine pool. Possible mitigating solutions to this issue include use of sediment traps, road/berms with clay core, or parallel alignment of Moat & Row DCMs. Mitigation measure Hydrology-4 reduces these impacts below the level of significance and are listed in Section 3.9.5, *Mitigation Measures*.

The berms and other storm water drainage facilities would be required to be constructed in a manner that does not adversely affect the western snowy plover (*Charadrius alexandrinus nivosus*) breeding season, movement of the tule elk (*Cervus elaphus nannoides*), or movement of livestock. Section 3.2, *Biological Resources*, discusses the proposed projects impacts to biological resources and includes appropriate mitigation measures for these impacts. The stormwater control system is confined to the proposed project site and does not connect with any municipal storm drain systems. Therefore, impacts to utilities and service systems in relation to the need for new or expanded storm drain facilities would be expected to be reduced to below the level of significance through incorporation of mitigation measures.

Water Supply

The proposed project would not result in significant impacts related to sufficiency of water supply to the proposed project. The proposed project is expected to utilize an additional 20,000 ac-ft/yr of water and may use up to 28,000 ac-ft/yr if the entire project utilizes the Shallow Flood DCM. This would bring the total water utilized for controlling dust on Owens Lake up to 75,120 ac-ft/yr or 83,120 ac-ft/yr, respectively.

The proposed project's projected water supply can be served by existing entitlements and supplies via the Los Angeles Aqueduct. The proposed project's water source is the Los Angeles Aqueduct, which has allotted for the water demands of the project. Furthermore, the proposed project is compliant with the Urban Water Management Plan of the City of Los Angeles, which specifies the current and future demands and sources of water for the City of Los Angeles. Therefore, the proposed project would not be expected to result in significant impacts to utilities related to water supplies.

Solid Waste

The proposed project would not result in significant impacts to landfill capacity related to solid waste regulations. The proposed project would not generate a significant amount of solid waste due to the nature of the DCM operations. Further, any solid waste generated at the site during construction would be disposed of at a permitted landfill with sufficient capacity. Based on previous documentation, the Lone Pine Landfill, which serves the area has a remaining site life of approximately 66 years.¹³ Therefore, the proposed project would not be expected to result in significant impacts related to solid waste.

Cumulative Impacts

The incremental impact of the proposed project, when added to the related past, present, or reasonably foreseeable, probable future projects listed in Section 2.9, *Related Projects*, would not result in cumulative impacts related to utilities and service systems. Based on existing capacities, cumulative impacts from storm drain systems, water supply, and wastewater treatment would not be expected to occur.

3.9.5 Mitigation Measures

The utility impacts as identified in this section (specifically, impacts to the storm drain system on the lake) may be reduced to below the level of significance through the adoption of mitigation measures Hydrology-3 and Hydrology-4.

Measure Hydrology-3, Soil Berm Construction

The City of Los Angeles Department of Water and Power shall require soil berms to be constructed along the down-gradient and side boundaries of each Shallow Flood irrigation block to prevent leakage and any increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. These berms will be keyed into the core of the lake bed and will be used to collect excess surface water along the downslope borders of each irrigation block. Design of flood protection berms is subject to approval by the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.

Measure Hydrology-4, Reduction of Flash Flood Potential

The City of Los Angeles Department of Water and Power shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the moats and rows to the mineral lease for Moat & Row dust control measures, to reduce the increased flash flood potential from the channelization of

¹³ California Waste Management District. 2007. "Lone Pine Landfill Facility/Site Summary Details, Lone Pine, CA." Sacramento, CA. Available at: <http://www.ciwmb.ca.gov/swis/Detail.asp?PG=DET&SITESCH=14-AA-0003&OUT=HTML>

water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of the Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.

3.9.6 Level of Significance after Mitigation

Implementation of mitigation measure Hydrology-3 and Hydrology-4 would reduce significant impacts related to utilities and service systems to below the level of significance.