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	event that an emergency repair must be performed on a Shallow Flooding panel during the snowy plover breeding season, a qualified biological monitor shall be present on site during the duration of the repair activity to document any impacts to western snowy plover adults, juveniles, or active nests. The GBUAPCD and the DFG shall be notified within 24 hours of the start of all emergency repair activities. A copy of the biological monitor's written report shall be provided to the GBUAPCD and the DFG within 48 hours of completion of the emergency repair activity. Any appropriate mitigation that may be required from impacts to western snowy plovers shall be negotiated between LADWP and the DFG based on the report provided by the biological monitor. A copy of the resultant mitigation that is negotiated between LADWP and the DFG shall be provided to the GBUAPCD and CSLC						
3.1-7	**Measure Biology-10 in 2008 FSEIR: Long-Term Monitoring Program for Western Snowy Plover (2008 SIP MMP, Table III-1)** To minimize potential direct, indirect, and cumulative impacts resulting from operation and maintenance of DCMs to western snowy plover, the LADWP shall implement a long-term snowy plover population monitoring program for the entire Owens Lake bed. Long-term monitoring is required due to long-term implementation of the proposed project. Long-term population monitoring allows for the distinction between natural population fluctuations and human-induced population changes. Postconstruction surveys implemented under the 2003 SIP shall be continued under the 2008 SIP 1, 2, 3, 4, 5, 7, 9, and 14 years after project implementation. The final western snowy plover monitoring schedule for all DCMs on Owens Lake bed shall be coordinated so that long-term monitoring for all DCMs covered within this document, as well as for preceding environmental documents, are conducted simultaneously. The long term monitoring shall begin in 2010 or at such time that full build-out is completed. The goals of the monitoring are to confirm that overall numbers of snowy plovers within the dust control areas do not decrease due to implementation of the 2008 SIP relative to baseline plover population numbers prior to implementation of the 2003 SIP as shown by the 2002 plover report for Owens Lake, which found the population to be 272 plovers. Monitoring shall be conducted during the months of May and June by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin. The qualifications of the biological monitor shall be submitted to the DFG for review. The monitoring methodology shall be consistent with the methodology used for the Owens Lake 2002 plover surveys. Annual summary reports for the monitoring efforts shall be filed with the GBUAPCD, the CSLC, and the DFG by December 31 of each monitoring year. The GBUAPCD shall require adaptive management changes to operation and maintenance of DCMs if it determines that a decline in snowy plover numbers is occurring that is directly attributable to operation or maintenance procedures of the Owens Lake Dust Mitigation Program. The GBUAPCD shall consult with the LADWP, CSLC, and the DFG prior to requiring adaptive management changes. Monitoring shall continue for a minimum of five years after implementation of adaptive management procedures to ensure that the procedures are having the desired effect on the lake-wide snowy plover population. If after the Year 5 monitoring event it is determined that no adverse impacts to the western snowy plover population at Owens Lake are occurring as a result of the project, then the long-term monitoring program and subsequent reporting may be discontinued. Specified calendar years for conducting lake-wide plover population surveys are provided in Table 3.2.5-2, Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule. Lake-wide surveys in 2008 and 2009 shall be conducted per the 2003 SIP. Beginning in 2010, lake-wide surveys shall conform to the 2008 SIP schedule. Proof of compliance with this mitigation measure shall be through issuance of a written monitoring summary report for each monitoring year specified in Table 3.2.5-2. Reports shall be submitted to the GBUAPCD by December 31 of each monitoring year. The report shall document survey locations and dates, the number of plovers observed, and an estimate of the total plover population. A copy of the yearly summary reports shall be provided to the DFG and the CSLC. **Table 3.2.5-2** **Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule** Year 1 Monitoring Event | Year 2 Monitoring Event | Year 3 Monitoring Event | Year 4 Monitoring Event	LADWP	Operation and Maintenance	GBUAPCD	GBUAPCD DFG CSLC	Annual Monitoring Summary Reports (for years 1 to 5, 7, 9, 14, and thereafter until determined to be unnecessary by the GBUAPCD)	(Signature/Date of Monitoring Agency

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	2010 / Year 5 Monitoring Event / 2014 2011 / Year 7 Monitoring Event / 2016 2012 / Year 9 Monitoring Event / 2018 2013 / Year 14 Monitoring Event / 2023						
3.1-8	**Measure Biology-12 in 2008 FSEIR: Habitat Management Program for Nesting Snowy Plovers (2008 SIP MMP, Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008)** To minimize potential direct and cumulative impacts to nesting western snowy plover from shutdown of all Shallow Flooding panels on June 30, a habitat management program shall be implemented by the LADWP on all Owens Lake bed Shallow Flooding areas to mimic the natural summer drying of seeps and springs in the area. Each year Shallow Flooding shall be slowly turned off from July 1 to July 21 to allow snowy plover broods to complete their nesting cycle. Consult Figure 3.2.5-1, Conceptual Owens Lake Operational Calendar, and Figure 3.2.5-2, Shallow Flooding Management for the Month of July, for a conceptual picture of Shallow Flooding panel operation. The schedule for decreasing the percentage of wetness in Shallow Flooding areas shall follow Table 3.2.5-3, Biology-12, Schedule of Percent Surface Area Wetted Required to Achieve Level of Control Efficiency After June 30. The LADWP has the option of surveying within 0.5 mile of Shallow Flooding areas for snowy plovers, and if active snowy plover nests or young are not present on or within a 0.5-mile radius of Shallow Flooding areas, then the habitat flows described above would not be needed in those areas and those Shallow Flooding panels may be shut down as the LADWP determines necessary. Surveying shall be conducted by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin and must be conducted within seven calendar days of planned shut down. The qualifications of the biologist who conducts the snowy plover surveys shall be submitted to the DFG for review. A final operations plan detailing the drying operations shall be submitted to the GBUAPCD for approval, and a copy shall be provided to the DFG prior to startup of new Shallow Flooding operations. Any changes made to the operations plan related to the drying of Shallow Flooding areas at the end of the dust season must be submitted in writing to the GBUAPCD for approval one week prior to implementation, and a copy of the changes shall be provided to the DFG **Table 3.2.5-3** **Biology-12, Schedule of Percent Surface Area Wetted Required to Achieve Level of Control Efficiency After June 30** July 1–7: ~ 50% wetted area July 8–14: ~ 20% wetted area July 15–21: ~ 15% wetted area July 22: Off	LADWP	Operation	GBUAPCD	GBUAPCD DFG	Final Operations Plan / Habitat Management Program	(Signature/Date of Monitoring Agency

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3.1-9	**Measure Biology-14 in 2008 FSEIR: Long-Term Habitat Management Plan (2008 FSEIR Clarification Sheet, dated January 23, 2008)** To avoid direct and cumulative impacts to native wildlife communities that may result from the proposed project, a Long-term Habitat Management Plan shall be prepared, pursuant to the DFG requirements, by a qualified biologist familiar with the habitats and species present at Owens Lake and knowledgeable of wildlife management techniques. The qualifications of the biologist shall be submitted to the DFG for review. The Long-term Habitat Management Plan shall be submitted to both the DFG and the CSLC for comment, with final approval by the DFG. The Long-term Habitat Management Plan shall have final approval and be fully implemented by April 1, 2010. The Long-term Habitat Management Plan area shall encompass all emissive areas subject to dust control measures on lands owned by the CSLC and lands owned by the LADWP. In recognition of the public trust values related to resident and migratory wildlife resources at Owens dry lake, DFG and CSLC have acknowledged the benefit of a Long-term Habitat Management Plan as a tool for ensuring compatibility between the construction, maintenance, and operation of the State Implementation Plan and the protection of public trust values. The plan shall include, at a minimum, the following objectives: ► Within the Environmental Impact Report analysis areas for 2008 State Implementation Plan dust controls (Figure 2.1-3), achieve no net loss of riparian or aquatic baseline habitat functions and values or total acres of these habitats (refer to Table 3.2.2-1 for type and amount plant communities) ► Manage 1,000 acres in perpetuity for shorebirds and snowy plovers in Zone II, in consultation with DFG ► Pursuant to Condition No. 16 of the 2001 Streambed Alteration Agreement (Agreement No. R6-2001-060, Page 5), the project was expected to adversely impact 63 acres of shorebird foraging habitat at Dirty Socks Spring. Therefore, LADWP was required to create 145 acres of Habitat Shallow Flood suitable for shorebird foraging. LADWP has currently created 152 acres. If LADWP proposes to discontinue using the 145 acres or any portion thereof the Habitat Shallow Flood for shorebird foraging habitat, the LADWP shall provide shorebird foraging habitat of equivalent quality at a ratio of 1:1 to 2:1 as determined through coordination between the DFG and LADWP. ► In consultation with DFG, develop a specification for an appropriate amount of deep-water habitat and then develop and manage that deepwater habitat in perpetuity in order to support focal migratory water birds determined to be present during 1995–1997 baseline surveys in support of the 1998 State Implementation Plan. This shall include a variety of water birds that use Owens Lake as a temporary stopover habitat during spring and autumn migration; water birds that are adapted to saline conditions such as eared grebe (*Podiceps nigricollis*), Wilson's phalarope (*Phalaropus tricolor*), and California gull (*Larus californicus*); and other water birds including waterfowl that can tolerate saline or brackish conditions such as gadwall (*Anas strepera*) and lesser scaup (*Aythya affinis*), among other species. ► Maintain a baseline population of 272 snowy plovers. ► In addition to the 1,000 acres of shorebird and snowy plover habitat in Zone II, LADWP shall maintain a minimum of 523 acres of habitat specifically for snowy plovers in perpetuity at Owens Lake in consultation with the DFG. Suitability of Shallow Flooding habitat for western snowy plover consists of a mix of exposed sandy or gravelly substrate suitable for nesting in close proximity to standing water equal to or less than 12 inches in depth. ► Ensure that the approximately 17.5 acres of proposed dust control measures that are within DFG Cartago Springs Wildlife Area is compatible with the designated land use. DFG has determined that Habitat Shallow Flood or habitat restoration would be compatible with the Cartago Springs Wildlife Area's designated use (Figure 3.2.5-3, Cartago Springs Wildlife Area).	LADWP	Operation and Maintenance	DFG	GBUAPCD DFG California State Lands	Habitat Management Plan and Annual Monitoring Summary Reports	_____ (Signature/Date of Monitoring Agency

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	fence perimeter length. Gaps shall be maintained throughout the snowy plover breeding season (March 15–August 15). The same fence-gap inspection and maintenance procedures (conducted before and during the core breeding season [March 15-August 15]) described for Option 1 shall be implemented under Option 2. Although the minimum size and spacing of fence gaps to facilitate movement by snowy plovers is not known, Page (pers. comm., 2008) estimated that approximately 1-foot-wide gaps placed every 10 feet along fence rows could potentially allow for unimpeded movements. For developing a range of feasible options to meet this mitigation measure, it is assumed that these guidelines for gap size and frequency can generally be extrapolated as follows: based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence perimeter), all fence gaps shall total a minimum of 10% of the total fence perimeter (e.g., over a 500-foot fence perimeter, a minimum total of 50 feet within a gap condition would be required). Therefore, based on 1 foot of gap within a 10-foot segment (i.e., a gap occupies 10% of the fence length), all fence gaps shall total a minimum of 10% of the total fence perimeter length (e.g., over a 500-foot fence perimeter, a total of 50 feet within a gap condition shall be required). The ability of broods to visually locate horizontal gaps is probably affected by the relationship between gap frequency and size; as the spacing between gaps increases (and distance from a plover at a given location to a gap increases), the size of individual gaps required for visual detection from a given location increases. Therefore, in addition to maintaining a minimum of 10% of total fence perimeter within a gap condition, gaps shall be spaced regularly and no more than 100 feet apart. It is assumed that this maximum spacing of gaps would allow for sufficient opportunity for broods to meet their daily movement requirements.						
3.1-11	**Revised Measure Biology-11 in 2008 FSEIR: Corvid Management Plan (2008 SIP MMP, Table III-1, as revised by 2008 FSEIR Clarification Sheet, dated January 23, 2008)** To reduce potential direct and cumulative impacts to western snowy plover and other migratory shorebirds within the project area due to increased predation on shorebird young and eggs from potential corvid population increases on Owens Lake resulting from construction of DCMs, the LADWP shall continue to implement the corvid management plan resulting from the 2003 SIP with an extension of one year within the project area, or comparable corvid control measures, to the satisfaction of the DFG, that are capable of achieving the same performance standard of no substantial net increase in corvid predation of native nesting shorebirds (including eggs). The corvid management plan was implemented in 2005 and may conclude in 2011 depending on success. Components of the corvid management plan include lake bed trash management procedures associated with DCMs, utilization of Nixalite or the functional equivalent on all structures greater than 72 inches in height (increased from the original 60 inches in height) to minimize perching of corvids and raptor species on dust control equipment where they can easily observe shorebirds during the nesting season, burial of power and communication lines on all lake bed areas below the elevation of 3,600 feet, and use of harassment techniques for corvids in specific instances where corvids are proving to be particularly harmful to nesting shorebirds. Specifically in conjunction with the Moat & Row dust control measure, the corvid management techniques shall be expanded to specify that the sand fence fabric and fence posts shall be designed to prevent perching by corvids, within 0.25 mile of occupied nesting shorebird habitat. Occupied nesting shorebird habitat will be evaluated on an annual basis, in collaboration with DFG, to identify areas requiring perch deterrents. The annual habitat evaluation will attempt to identify potential shifts in occupied nesting habitat over time. The use of sand fencing on top of rows within the Moat & Row areas will be considered under this mitigation measure as exceeding the height of 72 inches. Sand fence design to deter perching by corvids shall include the installation of: (1) Nixalite or the functional equivalent on the tops of fence posts; and (2) monofilament line or the functional equivalent along and above the sand fence fabric. To avoid a potential avian collision hazard, monofilament or other line shall be installed no greater than two inches above the top of sand fence fabric. Within 30 days prior to the breeding season (March 15–August 15) each year, the perch deterrent structures shall be inspected. If a structure has been damaged or otherwise needs maintenance, it shall be repaired at that time. The corvid management plan shall be implemented by a wildlife biologist familiar with the sensitive shorebird populations within the project area and familiar with corvid management techniques. The qualifications of the wildlife	LADWP	Operation	GBUAPCD DFG	GBUAPCD DFG	Corvid Management Plan and Annual Monitoring Summary Reports (for five years and thereafter until deemed unnecessary by the GBUAPCD)	(Signature/Date of Monitoring Agency

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	biologist shall be submitted to the DFG for review. Lethal methods of corvid control such as shooting or poisoning shall not be implemented initially due to public and government agency concerns in the project region for such control methods and to prevent putting workers at risk from such control measures. If it is later determined that corvids are having a significant impact on shorebird populations within the project area and direct removal of corvids is a viable alternative, proposed control methods would be presented to the GBUAPCD and the DFG for approval prior to implementation of the additional control measures. The corvid management plan includes a yearly written report estimating the lake bed nesting and foraging corvid population size, documenting the results of the corvid management techniques, documenting the observed effectiveness of the techniques in minimizing corvid impacts on shorebirds within the lake bed, and suggesting improvements for corvid management within the lake bed. Effectiveness may be determined based on the corvid population size on the lake bed. Copies of the yearly reports shall be submitted to the GBUAPCD and the DFG no later than December 31 of each corvid management year. If after the sixth year of reporting in 2011, the GBUAPCD determines that the corvid management program is effective and that corvids are not impacting snowy plover populations, then the reporting schedule shall phase out in the same time frame as shown in Table 3.2.5-1 (of the 2008 FSEIR). However, the corvid management practices shall be continuously implemented						
3.1-12	**Mitigation Measure 3.1-12: Monitoring and Adaptive Management for Moat Entrapment of Snowy Plover** To minimize or avoid potential moat entrapment of western snowy plovers, LADWP shall develop and implement a moat monitoring and adaptive management strategy. Although entrapment of snowy plovers within moats is assumed to be infrequent, in the absence of empirical data or other observations, there is reasonable uncertainty about this assumption. Therefore, this monitoring and adaptive monitoring approach is recommended to address this uncertainty, identify specific incidences of plover entrapment or mortality, and mitigate for significant effects **Monitoring and Adaptive Management Purpose and Guidelines** The purpose of the monitoring and adaptive management strategy is to (1) determine whether moat entrapment or loss of plovers occurs due to moat design or other elements (e.g., side slope angle, presence of water), (2) identify and implement site-specific corrective actions that would minimize or avoid any additional impact; and (3) identify whether compensatory measures for significant losses or entrapment are required. This analysis assumes that repeated and regular observations of plover entrapment or mortality would indicate a potentially significant adverse effect. Specific adaptive management response thresholds are discussed below under "4. Response Triggers." The moat monitoring and adaptive management strategy shall: ▸ be developed in consultation with DFG, CSLC, and GBUAPCD, and will be subject to the approval of DFG; ▸ be completed prior to initiating moat construction; and ▸ where appropriate, maintain consistency with and tier from existing monitoring programs, such as the Toxicity Monitoring Program (2008 FSEIR Measure Biology-7), and the Long-Term Monitoring Program for Western Snowy Plover (2008 FSEIR Measure Biology-10) **Monitoring and Adaptive Management Components** The moat monitoring and adaptive management strategy shall include the following components: ▸ a monitoring schedule, including the timing and frequency of monitoring; ▸ a description of monitoring locations and procedures; ▸ 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.	LADWP	Operation and Maintenance	DFG	GBUAPCD DFG CSLC	Final Monitoring and Adaptive Management Strategy. Summary monitoring reports within 60 days of completing each monitoring season. After completing the second year of monitoring, annual reports summarizing the cumulative results of monitoring efforts.	(Signature/Date of Monitoring Agency

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	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						

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	year. (The maximum number of observed entrapments per year that could occur without requiring corrective actions under this measure would range from two birds at any one DCA to six birds across the three monitored DCAs [T37-1, T37-2, and T1A-3].) If three or more entrapments at any DCA are observed, corrective adaptive management actions shall be required within the moat(s) where entrapments were detected It is assumed that a loss of plovers up to this threshold would not significantly increase juvenile or adult mortality rates above existing levels or substantially affect the overall snowy plover population size, due to the following factors: ▸ The threshold number is small relative to the overall snowy plover population size and productivity. In 2008, 478 adults and 39 broods were counted over a portion of Owens Lake; during the period of 2003–2008, the number of broods counted annually ranged from 18 to 52 (PRBO 2008). These counts include only the broods and adults observed during one-week lake-wide surveys conducted in late May to early June. Because adults often initiate multiple nesting attempts (sometimes up to three) and produce multiple broods during a breeding season, these numbers represent only a proportion of the broods produced at Owens Lake during a breeding season. Also, not all areas of suitable habitat were included in all years of the lake-wide surveys. ▸ The Owens Lake population appears viable, based on reproductive success metrics and an increasing population trend. Although juvenile or adult survival rates for the Owens Lake population have not been estimated, the number of nests and nest success rates have been relatively high. The most complete lake-wide nesting data are from 2002 and 2003. In 2002, when 272 adults were counted, 128 nests were located; and the average nest hatching rate was 82.5%. In 2003, when 401 adults were counted, 199 nests were located; and the average hatching rate was 80%. ▸ Multiple nesting attempts, particularly those initiated by a pair after a nest or brood has failed, would compensate for some loss during the breeding season. 5. *Corrective Adaptive Management Actions* If the response threshold is met, LADWP shall notify DFG as soon as possible and within 48 hours of the incident. Notification shall be sent to the designated personnel at DFG. In coordination with DFG, CSLC, and GBUAPCD, LADWP shall implement corrective management actions as appropriate depending on the cause of moat entrapment (e.g., slope, presence of water, or other). Appropriate corrective actions for entrapment due to moat side-slopes could include one or more of the following: ▸ add escape ramps every 100 feet within the identified problem moat; ▸ add rip-rap to side-slopes, and ▸ reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness. Appropriate corrective actions for entrapment due to the presence of water in moats could include one or more of the following: ▸ add rip-rap to bottoms of moats, so that the top of rip-rap exceeds the maximum water and mud level observed in moats during the breeding season; and ▸ reduce side slopes within the identified problem moat, to the maximum extent feasible without substantially compromising overall dust control effectiveness. If the monitoring and adaptive management process indicates that corrective actions are not effective, or if actions are determined to not be feasible, then LADWP shall work collaboratively with DFG, CSLC, and GBUAPCD to develop a revised action or provide on- or off-site habitat enhancement and protection as compensation. Revised corrective actions or habitat enhancement shall require approval by DFG 6. *Reporting Requirements* LADWP shall provide summaries of monitoring methods and results to DFG, CSLC, and GBUACD within 60 days of						

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	completing each monitoring season. Reports shall include summaries of all detections of snowy plover or other shorebirds in and around moats; their behavior, state or condition when detected, side-slopes and water depths measured in association with each detection; and whether any mortalities or other entrapments were observed. After completing the second year of monitoring, annual reports that summarize the cumulative results of monitoring efforts shall also be submitted to DFG, CSLC, and GBUACD. **Integration with Existing Snowy Plover Monitoring and Management** The specific monitoring and adaptive management program for moat entrapment could be incorporated directly into existing plover monitoring and management commitments as appropriate, including as an element of the Long-term Monitoring Program for Western Snowy Plover (Mitigation Measure 3.1-8; Measure Biology-10 in the 2008 FSEIR) or the Long-term Habitat Management Plan (Mitigation Measure 3.1-9, Measure Biology-14 in the 2008 FSEIR)						
3.2 Air Quality							
3.2-1	**Measure Air-1 in 2008 FSEIR: Construction Activities Fugitive Dust Emissions Control and Minimization (2008 SIP MMP, Table III-1)** Fugitive dust emissions during construction shall be controlled and minimized, to comply with GBUAPCD Rules 400 and 401 (EPA 1992), through the LADWP's application of best available control measures during construction activities from unpaved roads and areas affected by the construction work specified in this 2008 Revised SIP, or related transportation and staging of equipment and materials. This may include, but would not be limited to, the use of, surface coverings, windbreaks, water trucks, and water sprays twice a day, or comparable measures that prevent visible dust from occurring. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation. The LADWP shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by the LADWP and approved by the GBUAPCD prior to the start of construction and the submission of weekly monitoring reports to the GBUAPCD and the CSLC. The GBUAPCD shall monitor the application of best available control measures at least once a week on an ongoing basis during the construction phase of the proposed project, and maintain a monitoring log on file	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring Reports	(Signature/Date of Monitoring Agency
	Measure Air-2 in 2008 FSEIR: Construction Equipment Low-emissions Tune-ups Schedule (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP shall develop a schedule of low-emissions tune-ups for all equipment operating on site for more than 10 working days, and maintain a log of required tune-ups and submit a monthly copy to the GBUAPCD during the project's construction phase. Prior to implementation of the schedule, the LADWP shall submit the schedule to the GBUAPCD and the CSLC. The GBUAPCD shall ensure conformance of the equipment operation with the approved schedule.	LADWP	Preconstruction and Construction	GBUAPCD	GBUAPCD	Final Plans and Specifications	(Signature/Date of Monitoring Agency
	Measure Air-3 in 2008 FSEIR: Low-emission Construction Equipment Utilization (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless the LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. The GBUAPCD should monitor the application of low-emission equipment/mobile construction equipment, or other approved equipment at least once a week on an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase.	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring Reports	(Signature/Date of Monitoring Agency
	Measure Air-4 in 2008 FSEIR: Low-sulfur Fuel Utilization during Construction (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, the LADWP shall apply best available control measures during construction by utilizing low-sulfur and/or alternative fuels for on-site stationary equipment.	LADWP	Construction	GBUAPCD	GBUAPCD	Weekly Monitoring	

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	Stationary sources of air emissions, such as pumps, compressors, and generators shall be line-powered, unless the LADWP submits documentation and consults with the GBUAPCD and the CSLC that the use of such equipment is not practical, feasible, or available. The GBUAPCD should monitor the application of low-sulfur and/or alternative fuels for on-site stationary equipment, or other approved on-site stationary equipment at least once a week on an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase					Reports	(Signature/Date of Monitoring Agency
	Measure Air-5 in 2008 FSEIR: Low-emission Mobile Vehicle Utilization during Construction (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions, low-emission or alternative-fueled mobile vehicles during the proposed project's construction shall be utilized for the proposed project site, unless the LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by the LADWP to reduce vehicular emissions.	LADWP	Construction	GBUAPCD	GBUAPCD CSLC	Final Plans and Specifications	(Signature/Date of Monitoring Agency
	Measure Air-6 in 2008 FSEIR: Low-emission Mobile Vehicle Utilization during Operation (2008 SIP MMP, Table III-1) To mitigate the air quality impact related to greenhouse gas emissions during the proposed project's operation, hybrid, low-emission (CA LEV II; PZEV, SULEV; or ULEV) or alternative-fueled mobile vehicles, such as electric or fuel cells, shall be utilized for the proposed project site, unless the LADWP submits documentation and consults with the GBUAPCD and the CSLC that use of such equipment is not practical, feasible, or available. The LADWP shall provide the GBUAPCD with its purchasing policy procedures that shall provide provisions that encourage the use of low-emission or alternative-fueled mobile vehicles before operation of the project. In addition, carpooling of operations and maintenance workers should be considered and encouraged by the LADWP to reduce vehicular greenhouse gas emissions.	LADWP	Operation	GBUAPCD	GBUAPCD CSLC	Final Plans and Specifications	(Signature/Date of Monitoring Agency

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Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
Cultural Resources							
	Measure Cultural-1 in 2008 FSEIR: Paleontological Resources Construction Monitoring (2008 SIP MMP, Table III-1) The impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource that has the potential to be present in older Pleistocene and late Holocene portions of geological units in the eastern and southern Owens Lake playa shall be reduced to below the level of significance through construction monitoring of ground-disturbing activities and salvage of paleontological resources. Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. Where any such activity is anticipated in older Pleistocene and late Holocene portions of geological units in the eastern and southern Owens Lake playa in conjunction with the construction of DCMs, the GBUAPCD shall require construction monitoring. The GBUAPCD shall require that construction monitoring, salvage, and recovery of unique paleontological resources be consistent with standards for such recovery established by the Society of Vertebrate Paleontology: ▸ A qualified paleontologist shall be retained to provide professional paleontological services. The paleontologist shall be responsible for implementation of the mitigation plan and maintenance of professional standards of work. ▸ Shallow Flooding without any excavation does not require mitigation. However, planned grading, trenching, and excavation activities associated with Moat & Row (or flooding areas associated with older Pleistocene and Late Holocene portions of geological units in the eastern and southern Owens Lake playa) shall be monitored. Sediments located near the surface are recent and are not anticipated to be paleontologically sensitive. However, those sediments located approximately 4 feet or more below the surface may contain paleontological resources and shall be monitored. This measure may be modified by the qualified paleontologist for specific locations as the depth of recent sediments varies across the project area. In conjunction with the subsurface work, the monitor shall inspect exposed sediments, including microscopic examination of matrix, to determine if fossils are present. In addition, the qualified paleontologist shall be available on call to respond to unanticipated discoveries. ▸ The monitor may be a qualified paleontological monitor or a cross-trained archaeologist, biologist, or geologist working under the supervision of a qualified principal paleontologist. The function of the monitor is to identify potential resources and recover them with appropriate scientific data. ▸ Paleontological Resources Sensitivity Training is required for all project personnel if the monitor will not be present full-time. This 15 minute field training reviews what fossils are, what fossils might potentially be found, and the appropriate procedures to follow if fossils are found. Discovery of fossil-producing localities shall require that stratigraphic columns be measured and that geologic samples be taken for analysis. ▸ If fossil localities are discovered, the paleontologist shall collect controlled samples for processing. All fossils recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the lead agency. The qualified paleontologist shall be required to secure a written agreement with a recognized repository, regarding the final disposition, permanent storage, and maintenance of any significant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e., preparation, identification, curation, cataloguing, etc.) required before the fossil collection would be accepted for storage. In addition, a technical report shall be completed. The final disposition of paleontological resources recovered on State lands must be approved by the CSLC. ▸ Within 90 days of the completion of the paleontological monitoring, the qualified paleontologist shall prepare a final mitigation report to be submitted to the GBUAPCD and the CSLC with an appended, itemized inventory of the specimens. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered, and any technical or specialist's reports as appendices. The report and inventory, when submitted to the GBUAPCD, shall signify the completion of the program to mitigate impacts to	LADWP GBUAPCD	Construction	GBUAPCD CSLC	GBUAPCD CSLC	Monitoring Reports and Recovered Fossils Technical Report (submitted to the GBUAPCD within 90 days of completion of paleontological monitoring	(Signature/Date of Monitoring Agency

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						Source	Signature/Date
	paleontological resources.						
	Measure Cultural-2 in 2008 FSEIR: Cultural Resources Investigations (2008 SIP MMP, Table III-1) ▸ The GBUAPCD shall ensure that potentially impacted prehistoric and historic archaeological sites be assessed for significance, as defined by Public Resources Code Section 21083.2 or State of California Environmental Quality Act Guidelines Section 15064.5(a), through the implementation of Phase II investigations. Impacts to those sites found to be significant shall be mitigated to below the level of significance through a Phase III data recovery program. Resources found to be not significant shall not require mitigation. Coordination with the CSLC shall be undertaken to mitigate impacts consistent with CSLC practices for the mitigation of archaeological sites that occur on lands under their jurisdiction. This coordination shall include the issuance of permits for Phase II testing and Phase III data recovery programs, and reviews and comments, when appropriate. The GBUAPCD shall consult with the State Historic Preservation Officer as required by 15064.5 (b)(5) of the State of California Environmental Quality Act Guidelines for state owned historical resources. Construction shall not occur on state property until concurrence from the State Historic Preservation Officer is obtained concerning determinations of eligibility and that mitigation has reduced the impact to cultural resources to below the level of significance. In addition, coordination with interested Native American tribes identified by the Native American Heritage Commission shall be undertaken. Local tribes shall be contacted by the qualified archaeologist specified for the project, and a Native American monitor(s) shall be retained to be present on site during all ground-disturbing activities, including but not limited to archaeological evaluation, excavation, Phase II investigations and Phase III data recovery (if needed), and construction activities. The Native American monitor(s) shall coordinate with the qualified project archaeologist, the GBUAPCD, and the LADWP to ensure responsible remediation of Native American sites and sacred materials. Should human remains be discovered, the Inyo County Coroner shall be notified within 24 hours. *Phase II* A total of 12 newly recorded prehistoric archaeological sites (OL Sites 1, 2, 5, 6, 7, 12, 14, 15, 16, 17, 20, and 21), one previously recorded prehistoric site (CA-INY-6375), 12 newly recorded historic archaeological sites (OL Sites 3H, 4H, 8H, 10H, 11H, 18H, 19H, 22H, 23H, 24H, 25H, and 26H), 2 previously recorded historic sites (P14-8141 and CA-INY-6375H), and any additional prehistoric or historic archaeological sites located on the 9,684-acre proposed project site, including those sites recorded by Jones & Stokes (JS Site 1 and 2), shall be assessed for significance as defined by the California Environmental Quality Act prior to the initiation of construction activities in those areas where the sites are located. This requires the following measures: ▸ Development of a research design that guides assessments of site significance and scientific potential. This design shall be an update, expansion, and refinement of research designs that have guided previous Phase II evaluations in the Study Area. ▸ Mapping and systematic collection of a representative sample of surface artifacts ▸ Subsurface investigation through shovel test pits, surface scrapes, or 1 by 1 meter excavation units; a combination of such methods; or equivalent methods ▸ Analysis of recovered material to determine significance pursuant to the State of California Environmental Quality Act ▸ Preparation of a report, including evaluation of site significance and recommendations for mitigation if appropriate ▸ Transmittal of report to the Eastern Information Center at the University of California, Riverside Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the CSLC. *Phase III* A Phase III data recovery effort, in accordance with the State of California Environmental Quality Act [Section	LADWP GBUAPCD	Construction	GBUAPCD	CSLC GBUAPCD Native American Heritage Commission	Permits for Phase II and Phase III, comprehensive research designs for Phase II and Phase III, and final reports	(Signature/Date of Monitoring Agency

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	21083.2 (d)], shall be implemented by the GBUAPCD for those sites determined to be significant, pursuant to the State of California Environmental Quality Act, through Phase II testing and evaluation. The GBUAPCD shall ensure that data recovery has been completed prior to the issuance of a construction permit for any area containing a site determined to be significant and for which it can be demonstrated that consequential scientific information can be recovered. The Phase III data recovery program shall include ▸ Development of a comprehensive research design to answer questions addressed during the Phase II on a broader regional level and to provide a procedural framework for the collection of data at sites determined to be significant ▸ Mapping and systematic collection of surface artifacts, possibly complete data recovered depending on site size ▸ Subsurface investigation through methods, such as controlled hand excavation units, machine excavations, deep testing, or a combination of methods. When applicable, other techniques, such as geophysical testing methods may also be used ▸ Analysis of recovered material through visual inspection, and chemical analysis when applicable. ▸ Preparation of a report. ▸ Transmittal of report to involved parties and Eastern Information Center at the University of California, Riverside ▸ Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the CSLC.						
	Measure Cultural-3 in 2008 FSEIR: Cultural Resources Monitoring Program (2008 SIP MMP, Table III-1) Impacts to surface and subsurface cultural resources not identified during the Phase I (survey), Phase II (testing and evaluation), or Phase III (data recovery) shall be mitigated through the implementation of a monitoring program during construction or any ground-disturbing activities. Native American consultation shall be undertaken as part of this mitigation measure. Previous monitoring efforts have demonstrated that there is a high potential for the unanticipated discovery of cultural resources during construction on the Owens Lake bed, even in those areas that have been previously surveyed. This is a consequence of the movement of sediment by wind and/or water across the lake bed, which results in the exposure and covering of cultural materials on the surface of the lake bed on a regular basis. Monitoring shall be required only during initial grading and earthmoving activities. The GBUAPCD shall require that the following program be implemented and that the requirement be duly noted in the plans and specifications. ▸ Retain a Qualified Archaeologist. A qualified archaeologist shall be retained to implement a monitoring and recovery program in any area identified as having the potential to contain unique archaeological resources as defined by Public Resources Code Section 21083.2 or historical resources as defined by the State of California Environmental Quality Act Guidelines Section 15064.5(a). ▸ Agreement for Disposition of Recovered Artifacts. The selected archaeologist shall be required to secure a written agreement with a recognized museum repository, such as the University of California, Davis and the San Bernardino County Museum, regarding the final disposition and permanent storage and maintenance of any unique archaeological resources or historical resources recovered as a result of the archaeological monitoring, as well as corresponding geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e., preparation, identification, curation, cataloging, etc.) required before the collection would be accepted for storage. The ultimate decision regarding the disposition of artifacts collected during Phase I (survey), Phase II (testing and evaluation), Phase III (data recovery), or monitoring efforts on lands administered by the CSLC shall be made by the CSLC. Artifacts collected during past efforts on CSLC lands have been sent to the University of California, Davis, if they had been recovered from a site that was eligible for the National Register of Historic Places or the California Register of Historical Resources. The CSLC has indicated that those artifacts collected from sites that were not eligible for the National Register of Historic Places or the California Register of Historical Resources will be returned to the tribes. The final disposition of artifacts recovered from lands administered by other agencies (e.g., BLM) shall be	LADWP	Preconstruction and Construction	GBUAPCD	CSLC GBUAPCD Native American Heritage Commission	Daily Monitoring Logs, Quarterly Monitoring Reports, and Final Monitoring Report	(Signature/Date of Monitoring Agency

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	determined in accordance with the policies of those agencies. ▸ Preconstruction Briefing. The selected archaeologist, or an equally qualified designee, shall attend a preconstruction briefing to provide information regarding regulatory requirements for the protection of unique archaeological resources, historical resources, and human remains. Construction personnel shall be briefed on procedures to be followed in the event that a unique archaeological resource, historical resource, or human remains are encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing. The archaeologist(s) shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary. ▸ Unanticipated Discovery of Human Remains on State Lands (Public Resources Code 5097). The archaeologists shall ensure that all construction personnel shall be informed of the requirement to notify the coroner of the County within 24 hours of the discovery of human remains on state lands. Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any that are reasonably suspected to overlie adjacent human remains until the following conditions are met: • The Inyo County Coroner has been informed and has determined that no investigation of the cause of death is required, and if the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. ▸ **Unanticipated Discovery of Human Remains on Federal Lands** (Native American Graves Protection and Repatriation Act). Whenever any person inadvertently discovers human remains on public lands, including lands administered by the Bureau of Land Management, 43 Code of Federal Regulations 10.4 requires the individual to notify the land manager in writing of such discovery. If the discovery occurs in connection with an authorized use, the activity that caused the discovery is to cease and the materials are to be protected until the land manager can respond to the situation. Upon receipt of written confirmation of the discovery, 43 Code of Federal Regulations 10.4 requires the manager to do the following: (1) certify receipt of the notification; (2) take immediate steps, if necessary to further protect the materials; (3) notify by telephone, with written confirmation, the tribes likely to be culturally affiliated with the materials, and (4) initiate consultation with such tribes. If, after consultation with tribes, the manager determines that the material will be adequately protected in situ, without the need to excavate or remove the material from the area of discovery, then the requirements under the Native American Graves Protection and Repatriation Act have been completed. The materials remain in federal ownership, adequately protected by the manager as provided for in the law. If, after consultation with tribes, the manager determines that the circumstances warrant intentional excavation or removal of the materials from the area of discovery, then 43 Code of Federal Regulations 10.3 applies, and the manager must complete the steps outlined therein for intentional excavations. ▸ **Construction Monitoring**. A qualified archaeologist shall monitor earthmoving activities in areas that are likely to contain unique archaeological resources or historical resources. The archaeologist shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered. Prior to the resumption of grading activities in the immediate vicinity of the cultural remains, the project proponent shall provide the archaeologist with the necessary resources to identify and implement a program for the appropriate disposition (as specified by Section 15064.5 (e) of the State of California Environmental Quality Act Guidelines). ▸ **Monitoring Report**. The monitor shall maintain daily monitoring logs that shall be submitted quarterly to the GBUAPCD. A complete set of the daily monitoring logs shall be kept on site throughout the earthmoving activities and be available for inspection. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, assigned personnel, and the results of monitoring, including the recovery of archaeological material, sketches of recovered materials, and associated geographic site data. Within 90 days of the completion of the archaeological monitoring, a monitoring report shall be submitted to the GBUAPCD, the LADWP, the CSLC, and to the Eastern Information Center at the University of California, Riverside. The report,						

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						Source	Signature/Date
	when submitted to the GBUAPCD, shall signify the completion of the program to mitigate impacts to unique archaeological resources or historical resources.						
Hazards and Hazardous Materials							
	Measure Hazards-1 in 2008 FSEIR: Hazardous Materials Transport (2008 SIP MMP, Table III-1) To minimize impacts related to the unauthorized release of hazardous materials during routine transport, use, or disposal of hazardous materials, prior to construction work specified in the Revised 2008 SIP, the LADWP shall ensure through its construction permitting process, or through enforcement of contractual obligations for its own projects, that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines established by the California Code of Regulations (Title 13, Division 2, Chapter 6); the California Department of Transportation; and the California Regional Water Quality Control Board, Lahontan Region, prior to construction. The LADWP shall submit proof of incorporation of this requirement in all construction contracts related to work specified in the Revised 2003 SIP to the GBUAPCD and Inyo County. The LADWP shall submit an Operation Plan for the routine transport, use, storage, handling, and disposal of hazardous materials to the GBUAPCD and Inyo County prior to the operation of DCMs specified in the Revised 2003 SIP. The LADWP shall provide to the GBUAPCD and Inyo County an annual update as required for the transport, use, storage, handling, and disposal of hazardous materials.	LADWP	Construction	Inyo County	CSLC GBUAPCD Inyo County	Operations Plan Report and Annual Updates	_____ (Signature/Date of Monitoring Agency
	Measure Hazards-2 in 2008 FSEIR: Spill Prevention Control and Countermeasure Program (2008 SIP MMP, Table III-1) To minimize impacts related to the unauthorized release of hazardous materials into the environment, the LADWP shall prepare a Spill Prevention Control and Countermeasure program applicable to all statutes and regulations. The LADWP shall submit a Spill Prevention Control and Countermeasure to Inyo County for review and approval. The LADWP shall demonstrate approval of the Spill Prevention Control and Countermeasure by Inyo County to the GBUAPCD prior to the use, storage, and handling of hazardous materials in conjunction with construction or operation of work specified in the Revised 2008 SIP. The Spill Prevention Control and Countermeasure shall address all above-ground storage tanks within the fertilizer injection and water treatment systems in accordance with all federal, state, and local laws and regulations. The LADWP shall enclose all the fertilizer injection and water treatment systems with a minimum 6-foot-high, barb-wiretopped, chain-link fence or equivalent enclosure and locked gate to prevent unauthorized access. The LADWP shall amend its existing lease with the State Lands Commission to allow for the improvement specified in this measure. The Spill Prevention Control and Countermeasure shall be in place throughout construction, operation, and maintenance of work specified in the Revised 2008 SIP.	LADWP	Construction, Operation, and Maintenance	CSLC	CSLC GBUAPCD Inyo County	Spill Prevention Control and Countermeasure Program	_____ (Signature/Date of Monitoring Agency
	Measure Hazards-3 in 2008 FSEIR: Emergency Response Business Plan (2008 SIP MMP, Table III-1) To minimize impacts related to the unauthorized release of hazardous materials into the environment, the LADWP shall develop a business plan for emergency response for the routine transport, use, storage, handling, and disposal of hazardous materials. The business plan for emergency response shall address preparation for possible emergencies involving hazardous materials. The LADWP shall provide copies of the approved business plan for emergency response to the GBUAPCD and Inyo County. The LADWP shall provide to the GBUAPCD and Inyo County an annual update to the approved business plan as required for the transport, use, storage, handling, and disposal of hazardous materials.	LADWP	Construction and Operation	CSLC	CSLC GBUAPCD Inyo County	Business Plan for Emergency Response and Annual Updates	_____ (Signature/Date of Monitoring Agency

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Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
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	Measure Hazards-4 in 2008 FSEIR: Fire Protection Services (2008 SIP MMP, Table III-1) To minimize the direct, indirect, and cumulative impacts related to the occurrence of wildland fires during construction and operation of work specified in the Revised 2008 SIP, the LADWP shall provide for fire protection services for all dust control areas to the satisfaction of Inyo County. Fire protection services shall be provided prior to any further construction on the lake bed. Fire protection services shall include provision of adequate equipment and personnel as determined by Inyo County. Proof of compliance with this mitigation measure shall be submitted by the City of Los Angeles to Inyo County and the GBUAPCD prior to construction of any additional DCMs.	LADWP	Construction	Inyo County	GBUAPCD Inyo County	Fire Protection Services Compliance Report	(Signature/Date of Monitoring Agency
Hydrology and Water Quality							
	Measure Hydrology-1 in 2008 FSEIR: Acquire and Adhere to National Pollution Discharge Elimination System General Permit (2008 SIP MMP, Table III-1) To mitigate for direct, indirect, and cumulative surface water quality impacts caused by construction pollutants contacting storm water, products of erosion moving off site into receiving waters, and unauthorized non-storm water discharges, the LADWP shall obtain and adhere to the requirements of the National Pollution Discharge Elimination System General Permit for the 15.1 square miles of new work area specified in the 2008 SIP. This includes the development and implementation of a Storm Water Pollution Prevention Plan, which specifies best management practices that shall prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters, the elimination or reduction of unauthorized non-storm water discharges, and inspections of best management practices. The Storm Water Pollution Prevention Plan shall also identify best management practices for controlling temporary construction dewatering discharges and may include temporary sediment control measures such as the addition of low-flow dispersal methods for minimizing erosion. The LADWP shall also be required to comply with the Guidelines for Erosion Control as listed in the Water Quality Control Plan for the Lahontan Region. The LADWP shall submit the final Storm Water Pollution Prevention Plan to the GBUAPCD and the CSLC after its approval by the Regional Water Quality Control Board for the Lahontan Region.	LADWP	Construction	GBUAPCD	CSLC GBUAPCD RWQCB	Storm Water Pollution Prevention Plan and National Pollution Discharge Elimination System General Permit	(Signature/Date of Monitoring Agency
	Measure Hydrology-2 in 2008 FSEIR: Water Quality Monitoring and Reporting Program (2008 SIP MMP, Table III-1) The LADWP, prior to issuing any Notices to Proceed for construction of work in the areas specified in the 2008 SIP, shall implement a Water Quality Monitoring and Reporting Program to ensure that there is no substantial degradation of water quality and to mitigate direct, indirect, and cumulative impacts to surface and groundwater quality and off-site groundwater levels. The Water Quality Monitoring and Reporting Program shall monitor operational water volumes and flows, and analyze the quality of project surface waters and groundwater. This shall also include the existing but newly exposed groundwater in Moat & Row areas. The Water Quality Monitoring and Reporting Program shall include a monitoring plan of surface water and groundwater, along with an evaluation of the monitoring data and a plan for corrective actions should impacts be observed to ensure that the proposed project is operating within the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B140000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake. The monitoring program shall be submitted to the GBUAPCD and the CSLC prior to the start of construction in the areas designated for dust control in the 2008 SIP. All chemical analyses shall be performed by a laboratory with National Environmental Laboratory Accreditation Program certification. Monitoring reports shall be completed and submitted to the GBUAPCD, the CSLC, and the Regional Water Quality Control Board within 60 days of the end of the monitoring period as described in Table 3.5.5-1, *Hydrology Monitoring and Reporting Schedule*. The reports shall include a summary of monitoring results and any corrective actions proposed or undertaken for any observed violations of water quality limitations or impacts to off-site groundwater levels. The water quality limitations are defined as a substantial (statistically significant based on a statistical analysis of current and baseline data) variation from the long-term baseline water data collected by the GBUAPCD for surface and groundwater quality and groundwater levels. The GBUAPCD shall continue to collect this	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Water Quality Monitoring Reports (submitted to the GBUAPCD and RWQCB within 60 days of end of monitoring period, and monitoring and reporting continued until monitoring completion in 2023 unless deemed unnecessary by the GBUAPCD)	(Signature/Date of Monitoring Agency

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	baseline water data during project construction and operation. Periodic reductions in monitoring and reporting requirements, when justified by a documented review and evaluation of monitoring results, shall be implemented as authorized by the Regional Water Quality Control Board. Until monitoring results justify a reduction in monitoring requirements, monitoring shall be completed as follows: ▸ Flow rates and total volumes of flow to all DCM areas shall be monitored for each day and month for the first five years of work specified in the 2008 SIP and thereafter as specified in Table 3.5.5-1 ▸ Surface water monitoring of Shallow Flood, Moat & Row, and Managed Vegetation areas and groundwater monitoring of perimeter project observation wells shall be completed as described in Table 3.5.5-1 for total dissolved solids (TDS), chloride, chlorine, dissolved oxygen (DO), pH, electrical conductivity (EC), ammonia, aluminum, arsenic, barium, boron, cadmium, calcium, iron, lead, magnesium, manganese, nitrate, potassium, selenium, sodium, carbonate, bicarbonate, phosphate, sulfate, vanadium, total alkalinity, total organic carbon (TOC), copper, chromium, zinc, bromide, Treflan (or Trifluralin), and sulfur.						

Table 3.5.5-1
Hydrology Monitoring and Reporting Schedule

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

	Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood Potential (2008 SIP MMP, Table III-1) LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB.	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Final Plans and Specifications	(Signature/Date of Monitoring Agency

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Land Use and Planning							
	Measure Land Use and Planning–1 in 2008 FSEIR: Resident Insect Control Program (2008 FSEIR Clarification Sheet, dated January 23, 2008) Due to increased areas of potential standing water, to minimize potential impacts to local residents from a potential increase in mosquitoes and other biting insects as a result of dust control measure construction and operation from the proposed project, the LADWP shall institute a program for existing nearby residents whereby windows of existing residences in the potentially impacted communities of Swansea, Keeler, Cartago, and Olancha that are within three (3) miles of a water-based dust control measure shall be screened or other insect control devices shall be provided to residents to reduce nuisance insect populations in the vicinity of their residence. Residents shall provide proof of residence in identified, potentially affected areas prior to the issuance of screening or insect control devices. In addition, the LADWP shall make arrangements for vector control treatments on the dust control measure areas and within the above-mentioned impacted communities as required to control mosquitoes and other biting insects. A study shall be required to evaluate the cause of insects in the adjacent communities and to require continued support of treatment methods, or by other means, if the dust control measures are found to cause insect pest problems. This study shall be conducted by the LADWP, approved by Inyo County, and implemented before April 1, 2010.	LADWP	Operation	Inyo County	Inyo County GBUAPCD	Insect Control Program, Final Study Report, and Final Plans and Specifications	(Signature/Date of Monitoring Agency
Minerals							
	Measures Minerals – 1 in 2008 FSEIR: U.S. Borax Lease Area Approval and Compensation (2008 FSEIR Clarification Sheet, dated January 23, 2008) The LADWP shall be required to obtain approval from the CSLC prior to working in the areas that overlap areas leased to U.S. Borax. This includes areas requiring rerouting of access roads under mineral leases PRC 5464.1 and PRC 3511.10.	LADWP	Operation	CSLC	CSLC	Final Plans and Specifications	(Signature/Date of Monitoring Agency
	Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood and Alluvial Sediment Damage Potential (2008 SIP MMP, Table III-1) The LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB.	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Final Plans and Specifications	
Transportation and Traffic							
	Measure Traffic-1 in 2008 FSEIR: Traffic Work Safety Plan (2008 SIP MMP, Table III-1) The LADWP shall work with the State of California Department of Transportation to determine the necessity for traffic safety equipment to be installed and maintained on U.S. Highway 395, State Route 136, and State Route 190 in order to ensure traffic safety during construction of the proposed project by developing a Traffic Work Safety Plan. The Traffic Work Safety Plan shall specify the measures to be implemented and maintained by the LADWP for each location on U.S. Highway 395, State Route 136, and State Route 190 that would be affected by the construction phase of the project to ensure traffic safety. The plan should include measures such as signage to warn oncoming motorists of large slow-moving trucks ahead and flag persons to warn motorists of large slow-moving trucks ahead during peak periods and times of large load deliveries. The LADWP shall document to the GBUAPCD and CSLC that State of California Department of Transportation has approved the Traffic Work Safety Plan prior to the initiation of construction work specified by the 2008 Revised SIP, or related transportation and staging of equipment and materials. Operation and maintenance of the approach known as Willow Dip from U.S. Highway 395 to the lake bed is subject to a permit issued by the California Department of Transportation to U.S. Borax. Should the LADWP wish to share the	LADWP	Construction and Operation	GBUAPCD	CSLC GBUAPCD Caltrans	Final Traffic Work Safety Plan	(Signature/Date of Monitoring Agency

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

Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	Willow Dip access with U.S. Borax, the California Department of Transportation would require that a new permit be issued for the road connection/maintenance in both names. Use of the paved access at U.S. Highway 395, Post Miles 50.52 and 53.27 and any required improvements by the LADWP would be subject to an encroachment permit from the California Department of Transportation. Use of the paved access at State Route 190, Post Mile 14.58, Dirty Socks Springs Road requires the assignment of a county road number if it is not a county road, and use of the road and any required improvements by the LADWP would be subject to an encroachment permit from the California Department of Transportation.						
	Measure Traffic-2 in 2008 FSEIR: Traffic Work Safety Plan Conformance (2008 SIP MMP, Table III-1) The LADWP shall be responsible for funding, installing, and conforming to the measures specified in the approved Traffic Work Safety Plan prior to the use of U.S. Highway 395, State Route 136, and State Route 190 for gravel hauling or other heavy truck trips such as the delivery of materials, heavy equipment, and construction vehicles to the proposed project site to ensure traffic safety during the construction operations. The LADWP shall demonstrate conformance with the measures specified in the approved Traffic Work Safety Plan by submitting quarterly compliance reports to the GBUAPCD, CSLC, and State of California Department of Transportation throughout the duration of the construction work specified by the 2008 Revised SIP, and related transportation and staging.	LADWP	Construction	GBUAPCD	CSLC GBUAPCD Caltrans	Final Traffic Work Safety Plan and Quarterly Compliance Reports (submitted until construction is complete)	
	Measure Traffic-3 in 2008 FSEIR: Regional Transportation Network Damage Repair (2008 SIP MMP, Table III-1) The LADWP shall be required to repair damage to the regional transportation network (U.S. Highway 395, State Route 136, and State Route 190) from construction activities required for the 2008 Revised SIP to pre-project conditions. Prior to initiating construction of work specified by the 2008 Revised SIP, or related transportation and staging of equipment and materials, the LADWP shall retain a qualified pavement consultant engineer to document the existing condition of all regional transportation network roadways used for access, egress, and haul routes by the construction activities required for the 2008 Revised SIP. A California Department of Transportation representative shall participate with the qualified pavement consultant engineer. The LADWP or its contractor must be on-call to revisit the documented roadway sections and delineate physical damages that are directly attributed to construction activities required for the 2008 Revised SIP and repair any damage immediately or in short term, or as specified by California Department of Transportation. The LADWP shall provide in-lieu fees for remediation of construction-generated impacts on the regional transportation network, or a comparable measure to the mutual satisfaction of the LADWP, Inyo County, and the California Department of Transportation, demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired. Within 12 months after construction activities for the 2008 Revised SIP is completed, the LADWP shall provide written documentation to the GBUAPCD, CSLC and State of California Department of Transportation demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired. The California Department of Transportation has specified the requirement that construction monitoring be undertaken at six intersections within the regional roadway system. ▸ U.S. Highway 395, Post Mile 39.7, Willow Dip ▸ U.S. Highway 395, Post Mile 48.94, Bartlett Road ▸ U.S. Highway 395, Post Mile 50.52 ▸ U.S. Highway 395, Post Mile 53.27, Boulder Creek RV Park ▸ State Route 136, Post Mile 14.44 ▸ State Route 190, Post Mile 14.58, Dirty Socks Springs Road	LADWP	Construction	GBUAPCD	CSLC GBUAPCD Caltrans	Final Plans and Specifications and Final Compliance Report (within 12 months of completing construction)	(Signature/Date of Monitoring Agency
Utilities and Service Systems							
	Measure Hydrology-4 in 2008 FSEIR: Reduction of Flash Flood and Alluvial Sediment Damage Potential						

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Mitigation Number	Mitigation Measure	Responsible Implementation Party	Monitoring Period	Enforcement Agency	Monitoring Agency	Documentation of Compliance	
						Source	Signature/Date
	(2008 SIP MMP, Table III-1) The LADWP shall require the use of sediment traps, road/berms with clay core, or parallel alignment of the Moats and rows to the mineral lease for the Moat & Row DCM, to reduce the increased flash flood potential from the channelization of water and sediment toward the mineral lease. The Moat & Row design should ensure that there is no increase in terms of rate, quantity, or quality of storm water flows to the brine pool area or mineral lease area. Design of Moat & Row to avoid potential increase in flash flood impacts to the mineral lease is subject to approval by the CSLC, the GBUAPCD, and the RWQCB	LADWP	Operation	GBUAPCD	CSLC GBUAPCD RWQCB	Final Plans and Specifications	(Signature/Date of Monitoring Agency