MINUTE ITEM
This Calendar Item No. C18
was approved as Minute Item
No. 18 by the State Lands
Commission by a vote of 3
to Ø at its 11-26-01
meeting.

CALENDAR ITEM
C18

A 17

S 34

PRC8079.9

11/26/01
WP 8079
B. Dugal

AMENDMENT OF LEASE

LESSEE:

City of Los Angeles
Department of Water and Power
PO Box 51111
Los Angeles, California 90051-0100

AREA, LAND TYPE, AND LOCATION:

Sovereign land located in the dry lakebed of Owens Lake, Inyo County.

AUTHORIZED USE:

Research and monitoring at the South Sand Sheet and the implementation of a shallow flooding project at the North Sand Sheet.

LEASE TERM:

20 years, beginning May 1, 1999.

CONSIDERATION:

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

PROPOSED AMENDMENT:

Amend the authorized use, improvements and lease description. All other terms and conditions of the lease shall remain in effect without amendment.

BACKGROUND INFORMATION:

The United States Environmental Protection Agency (EPA) has designated the southern part of the Owens Valley as a Serious Non-Attainment Area for PM_{10}. PM_{10} is an abbreviated reference for suspended particulate (dust) less than or equal to ten microns in mean aerodynamic diameter (approximately 1/10 the

diameter of a human hair). The Great Basin Unified Air Pollution Control District (District) has subsequently designated the Non-Attainment area as the "Owens Valley PM_{10} Planning Area."

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

On July 28, 1998, the District and the City entered into a Memorandum of Agreement (MOA) for the control of the dust from the lakebed of Owens Lake which requires the City to implement specified dust control measures (DCMs), which includes shallow flooding, managed vegetation and gravel, to control dust emissions at Owens Lake.

On June 14, 1999, the California State Lands Commission (Commission) authorized the issuance of Lease No. PRC 8079 to the City for the installation of the Owens Lake South Sand Sheet Air Quality and Sand Fence Monitoring System. The City's research and monitoring project is being conducted to provide data for the design and implementation of dust control measures as required by the Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (SIP) dated November 16, 1998.

On June 27, 2000, the Commission amended Lease No. PRC 8079 so that the City could construct and operate a shallow flooding project located on 13.5 square miles on the North Sand Sheet area of the dry lakebed of Owens Lake. The City is in the final stages of completing the installation of the improvements associated with the North Sand Sheet. These improvements include a water conveyance pipeline system, access roads, pipeline corridors, and buried and overhead electrical power distribution lines.

OTHER PERTINENT INFORMATION:

1. The City owns and/or has the right to use the lands adjoining the lease premises.

2. In order to comply with the SIP, the City proposes to implement DCMs on the south portion of Owens Lake. The City has designated this area as the South Zone Dust Control Project (Project). The entire Project area is

approximately 19 square miles. The City has submitted an application to amend their existing lease in order to implement the Project. However, the City intends to implement the Project in various phases. The first phase (Phase 1) involves approximately nine square miles of State land and includes the construction and operation of the following Project elements: DCMs (shallow flooding, managed vegetation and gravel), geotechnical investigations, irrigation and drainage systems, access roads, power supply and control facilities, auxiliary facilities and activities and air monitoring facilities. The DCMs will consist of the following:

Managed Vegetation – 4,068 acres (6.4 square miles) - The central design concept of Managed Vegetation is that the majority of the dust control area (DCA) within the Project site will be divided into numerous irrigation fields, approximately 160 acres in size. Each irrigation field will consist of four blocks, approximately 40 acres in size, where plant species that are locally adapted native species, or species approved by the District and the Commission staff will be grown with subsurface drip irrigation.

Shallow Flooding and Ponds – 1,111 acres (1.7 square miles) Approximately one-fourth of the DCA will consist of shallow flooding, habitat shallow flooding, and ponds. These dust control measures will maintain a minimum of 75 percent of the area with standing water or surface saturated during the September 15 to June 15 dust control period.

Gravel – Approximately 40 acres of gravel will be placed on the lease premises.

The criteria for the placement and the planned location of these facilities, as proposed, was determined by relative dust emission rate and frequency, suitability of areas for each specific DCM, avoiding and/or minimizing impacts on biological and cultural resources, operational needs of specific DCMs, and compliance with the implementation schedule that is defined in the MOA and SIP.

3. US Borax is the Commission's Lessee under Mineral Extraction Lease No. PRC 5464, Industrial Lease No. PRC 2976 and Right of Way Lease No. PRC 3511. The City has entered into an agreement with US Borax providing for the City's proposed Project. Pursuant to the proposed lease amendment, the City will be required to maintain the written consent from

US Borax throughout the lease term. It is not anticipated that the construction or operation of the Project will conflict with Borax's operations. In the event a conflict develops, the City will compensate Borax for any impact to the brine pool or other extraction activities.

4. Pre-construction site preparation is expected to take place during fall 2001. Site preparation will include both surface grading and earth moving activities. The City also proposes to grade several dunes in the southern margin of Zone 4 to allow for proper surface drainage and operation of shallow flooding in this area. The estimated combined volume of material of these dunes is approximately 296,000 cubic yards (cy). The material within these dunes will be used to provide a source of drain envelope material, and road and berm construction materials. Since the graded material will be used by the City's contractor for construction purposes, Commission staff recommends that the City pay $0.55 per cy of dune material that is graded and used for construction purposes. Additionally, in order to create an optimum environment prior to planting the Managed Vegetation areas, the areas will be tilled.

5. The City has committed to setting aside and managing, in perpetuity, an area on Owens Lake that will be dedicated as snowy plover and shorebird nesting and foraging habitat. The City, Department of Fish and Game (DFG) and Commission staff agrees that Zone 2 may be appropriate for snowy plover and shorebird nesting and foraging habitat. The City will be preparing a Habitat Management Plan (HMP) for Zone 2 by December 1, 2002. If Zone 2 is determined to be appropriate, the City will be required to amend Lease No. PRC 8223 to allow for the new use. However, if Zone 2 is found to be unsuitable, then the City must provide an alternate location that will be reviewed and approved by the DFG and Commission staff. If the alternate site is located on State land, the City must submit an application to the Commission for the alternate site.

6. Effectiveness monitoring of the DCMs is an essential component of developing a successful dust control strategy for PM_{10} at Owens Lake. The City will be monitoring shallow groundwater, vegetation, soils, surface drip irrigation system, shallow flooding, gravel, drainage system, weather station, effectiveness, and performance. The City proposes installing air-monitoring systems in the North Sand Sheet and in the Project area. 18 – three meter tall aluminum towers are proposed to be installed in the North Sand Sheet area (Zone 2) and 30 – three-meter tall aluminum towers and

two ten-meter tall aluminum towers in the Project area. Each tower will have supporting infrastructure (solar power, guy wires, and gin pole), and will be equipped with specialized monitoring and meteorological instrumentation. The towers will also have a data logger that controls the operation of all the sensors, and collects and stores sensor data for later retrieval. Additionally, 13 of the previously approved existing air monitoring towers located in Zone 4 will be decommissioned prior to construction in the area. The towers, bases, and surrounding grids will be removed using excavators or loaders and dump trucks. Pursuant to the Lease terms, the area will be restored as nearly as possible to the conditions existing prior to their installation or construction.

7. Prior to the implementation of additional DCMs or other activities not included in Phase 1 of the City's Project, the City will be required to submit an application to the Commission in order to amend Lease No. PRC 8079 to include the additional DCM activities/uses.

8. A Mitigated Negative Declaration was prepared and adopted for this project by the City of Los Angeles, Department of Water and Power. The Commission's staff has reviewed such document.

9. A Mitigation Monitoring Program was adopted by the City of Los Angeles, Department of Water and Power.

APPROVALS OBTAINED:

United States Bureau of Land Management
United States Army Corps of Engineers
California Department of Transportation
California Regional Water Quality Control Board
U. S. Borax, Inc.

FURTHER APPROVALS REQUIRED:

California Department of Fish and Game

EXHIBITS:

A. Location Map
B. Site Map
C. Mitigation Monitoring Program

PERMIT STREAMLINING ACT DEADLINE:
March 17, 2002

RECOMMENDED ACTION:
IT IS RECOMMENDED THAT THE COMMISSION:

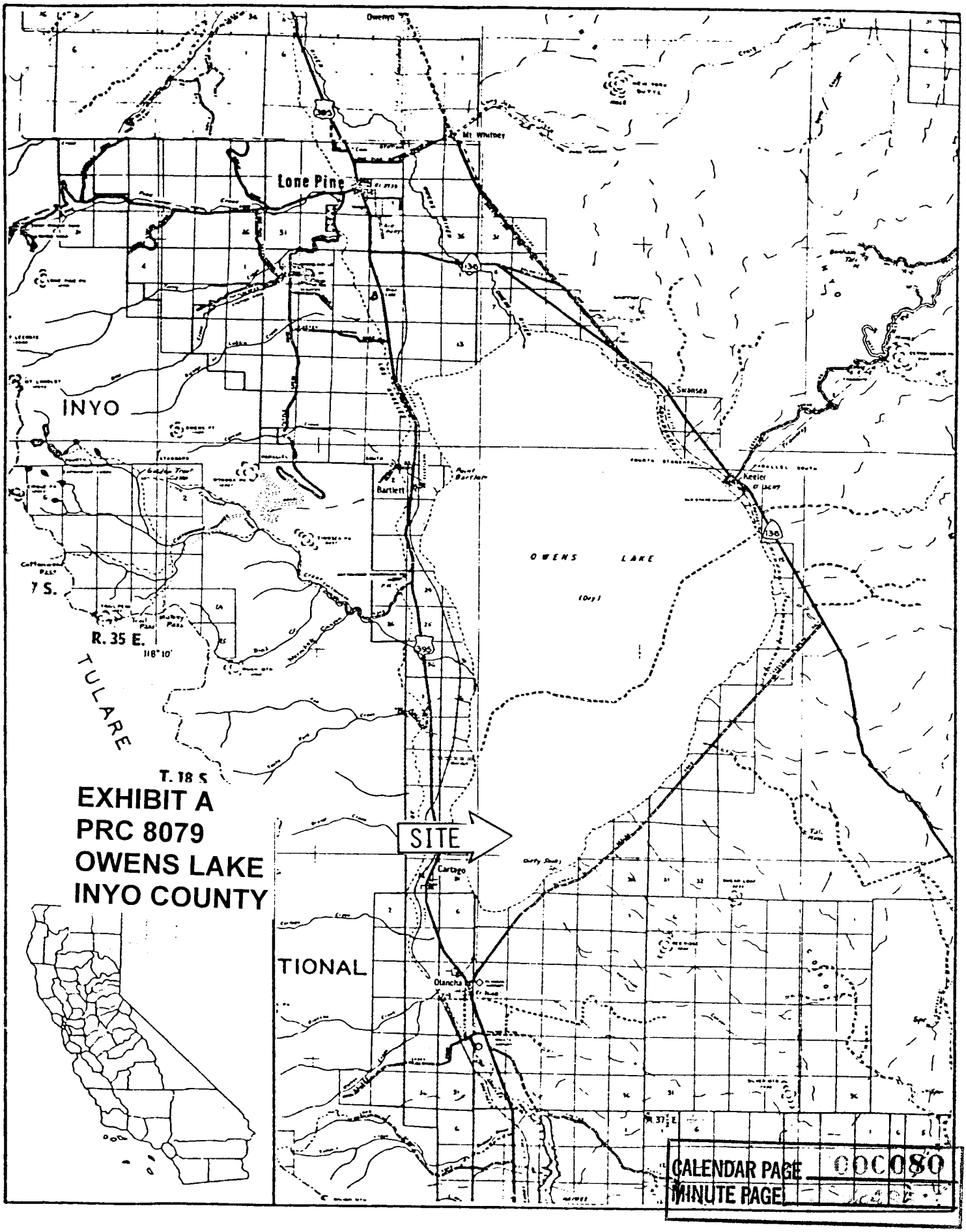
CEQA FINDING:

FIND THAT A MITIGATED NEGATIVE DECLARATION WAS PREPARED AND ADOPTED FOR THIS PROJECT BY THE CITY OF LOS ANGELES, DEPARTMENT OF WATER AND POWER AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

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

AUTHORIZATION:

AUTHORIZE THE AMENDMENT OF LEASE NO. PRC 8079.9, A GENERAL LEASE - PUBLIC AGENCY USE, OF LANDS SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF, EFFECTIVE NOVEMBER 5, 2001, TO AMEND THE LEASE TO AUTHORIZE THE SOUTHERN ZONE DUST CONTROL PROJECT AND AMEND THE AUTHORIZED USE, IMPROVEMENTS, AND LEASE DESCRIPTION; CONSIDERATION BEING THE PUBLIC USE AND BENEFIT AND $0.55 PER CUBIC YARD OF DUNE MATERIAL THAT IS GRADED AND USED FOR CONSTRUCTION PURPOSES, ALL OTHER TERMS AND CONDITIONS OF THE LEASE WILL REMAIN IN EFFECT WITHOUT AMENDMENT.



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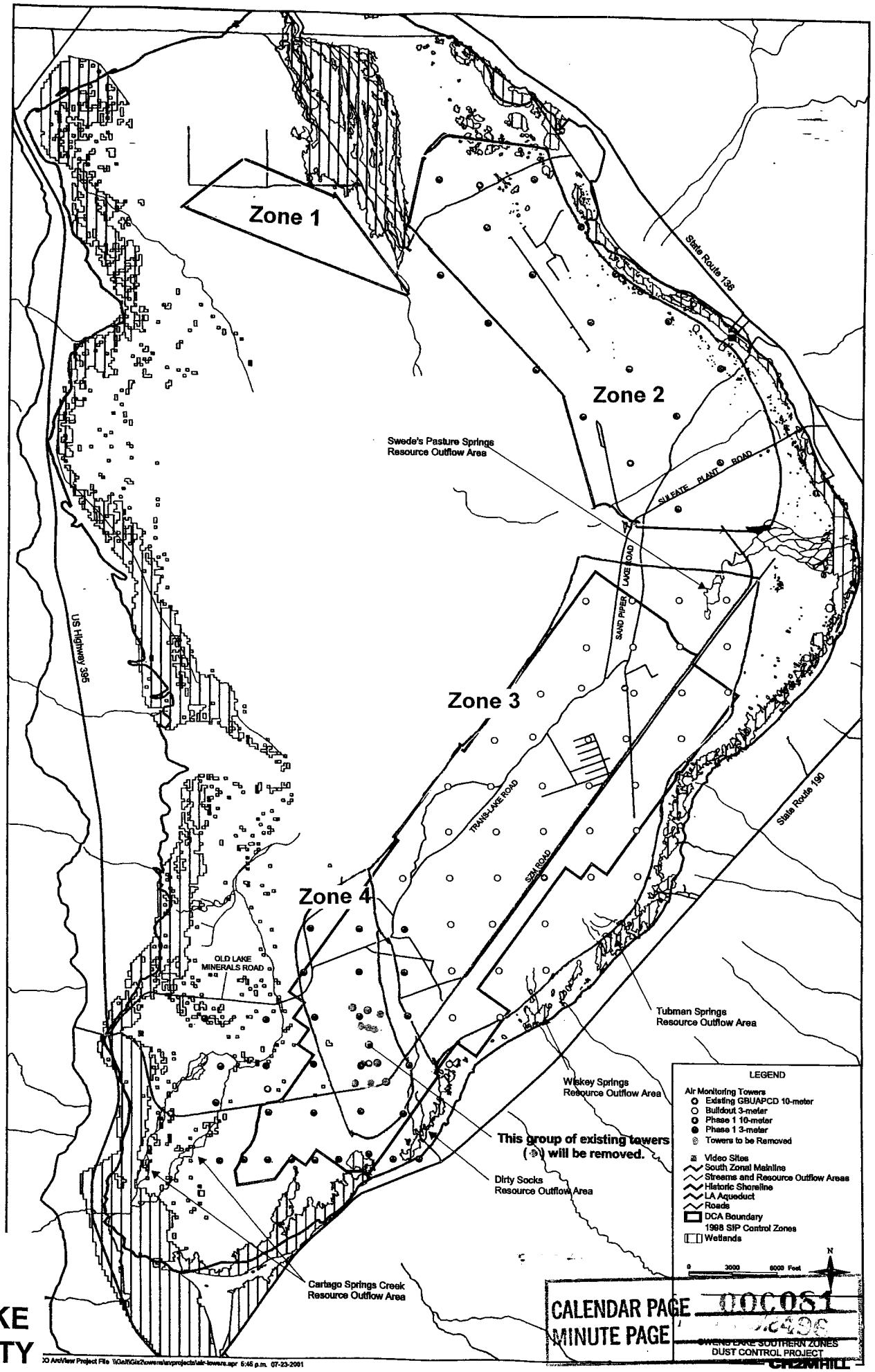

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EXHIBIT B
PRC 8079
OWENS LAKE
INYO COUNTY

EXHIBIT C
PRC 8079
OWENS LAKE
INYO COUNTY

Table 1

Mitigation Monitoring and Reporting Program (MMRP)
Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
AIR QUALITY				
MM 5-3.1 and 5-3.2: Fugitive dust emissions shall be controlled through the application of Best Available Control Measures (BACM) for fugitive dust emissions from unpaved roads, and construction activities will comply with District Rules 400 and 401 (EPA, 1992). This may include, but would not be limited to, use of chemical soil stabilizers, surface coverings, water trucks, and water sprays.	Dust Control	The Monitor must observe all construction activities and areas of the construction site on a daily basis including, spoil piles, access roads and haul roads, to verify that dust emissions are kept to a minimum. If site watering is not effective, the Monitor will notify the Resident Engineer (RE) and Mitigation Monitoring Program Coordinator (MMPC).	Submit dust control plans to GBUAPCD prior to construction. Monitor dust daily during construction.	**Monitoring Agency:** Department **Enforcement Agency:** District
BIOLOGICAL RESOURCES				
B-1: No impacts to rare plants will occur during Phase I of construction. Results of rare plant surveys will be valid for one year. For future phases of construction, or for work conducted within the Phase I area after the current surveys have expired, focused field surveys for special-status plants shall be conducted between April and June of the year preceding construction. Special-status species surveys will follow established survey protocols and seasonal requirements for conducting surveys. If construction operations are to occur within the blooming season for rare plants, a resource agency approved construction monitor will be present at all times. If special status species are discovered within the Project site, the following salvage operations will be implemented. A resource agency approved construction monitor will be present during salvage operations. Annual plants. The extent of the population will marked in the field and soils within the rare plant population will be salvaged after the plants have set seed. The topsoil layer (approximately 3 inches) will be placed in a nearby location outside the construction zone and covered with a durable material that will	Reduce impacts to special status plant species.	The Monitor will field verify that the Contractor implements topsoil salvage and/or revegetation mitigation for all identified special status plant locations within the construction limits.	During initial site grading activities (salvage) and following construction of project facilities (revegetation).	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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Mitigation Monitoring and Reporting Program (MMRP)
Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
prevent wind erosion of the soil and associated seed bank. After construction is complete, the stored topsoil will be returned either to the original rare plant location or to another area of suitable habitat, and will be respread over the area. Monitoring of the rare plant population will be conducted for two years following installation. Annual reports will be submitted to the resource agencies. **Perennial Plants.** The location of the rare plant population will be marked in the field, and individual plants will be staked. The perennial plants will be removed by hand, with a shovel or other appropriate tool. The root mass of the salvaged plant will be 6 inches by 6 inches at a minimum. The plant and associated root mass will be placed into a 6-inch diameter or larger pot, tamped down, and watered. Salvage operations will be conducted by a biologist or a native plant nursery contractor that is familiar with native plant salvage, contract growing, and restoration. The salvaged container plant will be stored outside of the construction zone in partial shade and in an area protected from wind. The plant will be watered on a schedule determined appropriate by the contract native plant nursery or biologist. After construction, the perennial rare plant will be replanted either in the original location or in an alternate location with suitable habitat. Plants will be watered after installation, as determined appropriate by the biologist or native plant nursery staff. Monitoring of the installed rare plants will be conducted for two years following installation. Annual monitoring reports will be submitted to the resource agencies for review.				
B: The measures to protect western snowy plover outlined in Appendix G, Snowy Plover Impact Avoidance and Minimization Procedures, shall be implemented.	Reduce impacts to western snowy plover.	The Monitor must field verify that construction avoidance measures are implemented if ground disturbing activities occur between March 15 and August 31. Post-construction surveys shall be undertaken in the 1st, 2nd, 3rd, 5th, 10th, 15th, and	During construction activities that occur between March 15 and August 31.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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Mitigation Monitoring and Reporting Program (MMRP)
Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
		25th years following implementation of water-based control measures.		
B-3: **Northern Harrier.** This mitigation measure was developed based on MM 5-5.3 in the EIR (1997). Potential impacts to the nesting northern harriers in the TAM shall be avoided or minimized below a level of significance by scheduling clearing of the construction zone for the buried water transmission pipeline (i.e., SZM) outside the breeding season of the northern harrier (mid-March to mid-September), in accordance with a schedule approved by the CDFG. If the breeding season cannot be avoided, surveys shall be conducted within and adjacent to the 2 acres of TAM prior to construction. If northern harriers are observed nesting within the area that would be impacted, construction shall be sited to avoid nesting individuals of this species.	Reduce impacts to shorebird species.	The Department will commission avian surveys prior to construction of dust control measures. Data collected during the surveys will be incorporated into the design of managed vegetation areas. Performance monitoring will be conducted periodically following construction for up to 3 years.	Survey prior to construction and performance monitoring after construction.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
B-4: **American Badger.** Preconstruction surveys of Shadscale scrub habitat shall be conducted within and adjacent to construction areas to determine the presence of American badger or other signs. A qualified wildlife biologist shall conduct surveys within 3 months of construction. If active American badger burrows or other signs (tracks, scat) are detected in areas where construction is planned, construction shall be avoided during the breeding season (mid-March to mid-September). Where possible, construction shall be scheduled to clear and remove Shadscale scrub habitat within the construction area during periods outside the breeding season (i.e., mid-September 2001 to mid-March 2002).	Reduce impacts to American badger.	The monitor must verify that American badger habitat is avoided during the breeding season and that all vegetation clearing occurs outside of the breeding season. If this can not be accomplished, the Monitor (biological) must coordinate with the RE to describe the project areas that are American badger breeding habitat. If appropriate, the Monitor will indicate areas to be staked by the Contractor to facilitate avoidance of critical badger breeding habitat.	Initial survey within 3 months of construction. Construction avoidance from mid-March to mid-September.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
B-5: **Mohave Ground Squirrel.** Preconstruction surveys of	Reduce impacts to	The monitor must verify that	Initial survey within 3	**Monitoring Agency:**

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Mitigation Monitoring and Reporting Program (MMRP)
Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
Shadscale scrub and desert greasewood scrub habitat shall be conducted within and adjacent to construction areas to determine presence of Mohave ground squirrels or signs. A qualified wildlife biologist shall conduct surveys within 3 months of construction. If active Mohave ground squirrel burrows or other signs (track, scat) are detected in areas where construction is planned, construction shall avoid the breeding season (mid-March to mid-September). Where possible, construction shall be scheduled to clear and remove Shadscale scrub habitat within the construction area during periods outside the breeding season (i.e., mid-September 2001 to mid-March 2002).	Mojave ground squirrel.	Mojave ground squirrel habitat is avoided during the breeding season and that all vegetation clearing occurs outside of the breeding season. If this can not be accomplished, the Monitor (biological) must coordinate with the RE to describe the project areas that are Mojave ground squirrel breeding habitat. If appropriate, the Monitor will indicate areas to be staked by the Contractor to facilitate avoidance of critical ground squirrel breeding habitat.	months of construction. Construction avoidance from mid-March to mid-September.	Department **Enforcement Agency:** CDFG
B-6: **Owens Valley Vole.** Preconstruction surveys of TAM habitat shall be conducted within and adjacent to construction areas to determine the presence of Owens Valley vole or signs. A qualified wildlife biologist shall conduct surveys within 3 months of construction. If active Owens Valley vole burrows or other signs (tracks, scat) are detected in areas where construction is planned, construction shall avoid the breeding season (mid-March to mid-September). Where possible, construction shall be scheduled to clear and remove TAM within the construction area during periods outside the breeding season (i.e., mid-September 2001 to mid-March 2002).	Reduce impacts to Owens Valley vole.	The monitor must verify that Owens Valley vole habitat is avoided during the breeding season and that all vegetation clearing occurs outside of the breeding season. If this can not be accomplished, the Monitor (biological) must coordinate with the RE to describe the project areas that are vole breeding habitat. If appropriate, the Monitor will indicate areas to be staked by the Contractor to facilitate avoidance of critical vole breeding habitat.	Initial survey within 3 months of construction. Construction avoidance from mid-March to mid-September.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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Mitigation Monitoring and Reporting Program (MMRP)
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Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
B-7: Direct the beams of flood lights toward work areas and away from the wetland and upland areas surrounding the playa. Minimize work at the periphery of the lakebed playa during the night to reduce disturbance of wildlife using the adjacent wetland and uplands. Where feasible, reduce the access areas to only one access road during the night work hours to minimize traffic impacts to wildlife in adjacent areas and to reduce the potential for collision and loss of wildlife along the access roads. Avoid working in areas with snowy plover nests during the night when detection of plovers would be difficult to assess and nest areas would be difficult to detect. Maintain a 0.25-mile buffer around plover nest sites and concentrations of plovers that are detected during the plover monitoring program (mitigation measure B-2).	Reduce impacts to western snowy plover.	The Monitor must field verify the placement of flood lights to ensure that they are directed toward the construction zone and away from surrounding areas. The Monitor will verify that the Contractor minimizes the number of access routes to and from the site during nighttime construction activities. The Monitor will field verify that nighttime construction activities are avoided in active plover nesting areas and that a 0.25 mile buffer is maintained between construction and known nest sites during nighttime activities.	During construction activities that occur between March 15 and August 31.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
B-8: The Department shall mitigate for the loss of 131.4acres of wetland habitat by setting aside a separate area within the managed vegetation network as mitigation for 121 acres of wetlands impact associated with the NSS and for 10.4 acres of wetlands impact due to DCMs within the Southern Zones. Figure 2-9 shows the location of wetlands mitigation, and a Wetlands Mitigation Plan is provided in Appendix C3. The wetlands mitigation area will be created and maintained during the construction and operation of the Project. Calculations of wetlands impact have been generated using a worst case scenario. A running tally of wetlands losses will be maintained during the Project. If impacts are less than the	Reduce impacts to wetlands.	The Monitor will verify that the Department develops and implements a wetlands mitigation plan that follows USACE guidelines for habitat mitigation plans. The created wetlands will be monitored by the Department for a minimum of 5 years. If target success criteria are achieved at the end of the	Following construction of project facilities.	**Monitoring Agency:** Department **Enforcement Agency:** ACOE and CDFG

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Southern Zones Dust Control Project

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amount of mitigation area created, credit for excess wetlands mitigation potentially could be assigned to the Department. In order to obtain credit for excess mitigation, the wetlands mitigation would need to be determined successful by the resource agencies, and they would need to approve this banking concept. In addition to wetlands mitigation located with the Managed Vegetation network, DCMs may be implemented within an irrigated wetland during a future phase of construction. It is estimated that up to 14.6 acres of wetlands would be created over the long-term through implementation of DCMs within the irrigated wetland. Contingent upon resource agency approval, credit for DCMs installed at the irrigated wetland potentially could also be obtained. The wetlands mitigation plan includes the creation of 160 acres of wetlands located within four managed vegetation blocks. Thirteen 40-acre managed vegetation blocks have been identified as areas potentially suitable fore wetlands mitigation. These managed vegetation blocks are Blocks C16N, C16S, C18N, C18S, C22S C21N, C21S, C25N, C25S, C29N, C29S, C33N, and C33S (refer to Figure 2-9). The total number of blocks selected is larger than the area required for mitigation in order to maintain some flexibility to site the wetlands mitigation in the area that has the most suitable soils and is determined to be the most favorable for supporting plant species diversity comparable to existing wetlands that would be impacted by the Project. Vegetation transects were established in wetlands that would be directly or indirectly impacted by the Proposed project in order to determine the baseline wetland conditions and success criteria against which the created wetlands would be gauged. Appendix C3 contains the Wetland Mitigation Plan and it includes the following information: habitat mitigation requirements, mitigation technical approach, planting plan, irrigation and fertilizer requirements, success criteria, monitoring plan, and remedial measures. The wetlands mitigation plan will be submitted to the USACE and CDFG for review. The Department proposes to implement		monitoring period no further monitoring will be required.		

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the wetland mitigation plan concurrently with Managed Vegetation efforts. The created wetlands will be monitored for a minimum of 5 years. If target success criteria are achieved at the end of the monitoring period, the mitigation would be determined successful; and monitoring				
B-9: Revegetation will be conducted on Desert Scrub habitat, including greasewood scrub, saltbush scrub, and creosote bush scrub habitats, that are located on lands owned by the Bureau of Land Management (BLM) and the Department, after construction is complete. These upland areas are not sensitive habitats and therefore do not require mitigation for impacts. However, revegetation measures will be implemented for aesthetic and erosion control purposes. Revegetation will occur on temporary Contractor Staging Areas, Access Road construction corridors, and Utility Corridors. A conceptual revegetation plan is provided below that will be used for all BLM lands. A combination of natural recruitment and revegetation measures outlined in this plan will be applied to lands owned by the Department. Construction activities may last for several years, and it is anticipated that soils may be severely compacted when revegetation activities are implemented (up to 10 years in the future). Prior to construction, topsoil shall be placed in a nearby location outside the construction zone and covered with a durable material that will prevent wind erosion of the soil and associated seed bank. After construction activities are complete, soils shall be deep cross-ripped to a depth to 24 inches in order to alleviate compaction, and stockpiled topsoil shall be respread over the area. A detailed planting plan will be developed that will be suitable for site conditions at the time of planting; all species listed in the planting plan will be native plant species that occur in the habitat type impacted. Table 2-4 provides a list of plant species that would be potentially suitable for use in revegetated areas. The planting plan must be prepared prior to implementation of revegetation and approved by the appropriate resource agencies, including BLM and	Reduce impacts to desert scrub habitat.	The Monitor will verify that the Department develops and implements a topsoil salvage and revegetation plan. Performance monitoring will be conducted for a period of up to five years to ensure an 80 percent survival rate.	Following construction of project facilities.	**Monitoring Agency:** Department **Enforcement Agency:** BLM and CDFG

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Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
CDFG. A combination of native seed and live container plants will be used for revegetation. Natural recruitment will also be used in areas that support very sparse vegetation prior to impact. Seeds should be broadcast and then mixed into the top 0.5 inch of the soil by either raking or a suitable mechanized method, such as drilling. Plants shall be installed in densities that are comparable to the impacted habitat (ranging from roughly one plant every 5 to 25 feet on center). Supplemental watering will be needed for both seeds and live plants, and could consist of drip irrigation, watering tubes, or another suitable method. Planting and seeding will occur in the fall, and watering will be required once a week for two months following installation and seeding, and then bi-monthly throughout the spring (March) and summer (end of September). Noxious weeds will be removed from the mitigation area throughout the five-year monitoring period. Success criteria will be 80-percent plant survivorship at the end of the five-year monitoring period. If the survivorship is less than 80 percent, dead plants will be replaced. In addition, other success criteria may also be applied to the project, as required by the BLM in their right-of way approval. Monitoring of revegetation will be required for five years following construction. Monitoring will consist of visual assessments and recording of reclamation progress, including photographs and quantitative assessments of species composition, density and cover. Annual reports will be prepared and will be submitted to the resource agencies. Plant Species Potentially Suitable For Upland Revegetation Shadscale (*Atriplex confertifolia*), rubber rabbitbrush (*Chrysothamnus nauseosus*), burro bush (*Ambrosia dumosa*), Allscale (*Atriplex polycarpa*), desert needlegrass (*Achnatherum speciosum*), Shadscale (*Atriplex parryi*), Saccaton (*Sporobolus airoides*), Greasewood (*Sarcobatus vermiculatus*)				

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Southern Zones Dust Control Project

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MM 5-4.1: Wetland habitat functions and values equivalent to the existing 121 acres of TAM that would be lost shall be maintained. The creation of 32 acres of TAM habitat, in association with shallow flooding control measures, would provide the same habitat functions and values as areas expected to be lost directly or indirectly through construction, operation, and maintenance of the Project. In addition, 5,593 acres of managed saltgrass would be produced as a result of implementing Managed Vegetation control measures compensating for the balance of lost acreage (89 acres) at a ratio of approximately 63:1. However, managed saltgrass would continue to be subject to a variety of agricultural techniques including ploughing, controlled dieback, and periodic fallow that would result in lower habitat values than that provided by native habitat. Therefore, a minimum of 89 acres of the managed vegetation will be set aside as a habitat restoration area for TAM. Alternatively, if the Department designs and implements the shallow flooding in those control areas in a way that either does not establish TAM, or does not maintain TAM that is established, it shall add to the TAM habitat restoration areas in the Managed Vegetation control area. This additional habitat shall be added on an acre-for-acre basis to achieve a total of 121 acres of TAM established and maintained by the proposed Project. The habitat restoration area will be vegetated to achieve species diversity and percent cover comparable to TAM lost as a result of direct or indirect impacts. Creation of TAM associated with shallow flooding areas and managed saltgrass from the Managed Vegetation areas in concert with implementation this mitigation measure would reduce impacts on vegetation below the level of significance.	Reduce impacts to wetlands.	This measure will be implemented following construction of Project facilities. The Department will coordinate implementation of wetland mitigation and habitat restoration with CDFG.	Following construction of project facilities.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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Mitigation Monitoring and Reporting Program (MMRP)
Southern Zones Dust Control Project

Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
MM 5-4.2: Areas subject to Shallow Flood control measures shall be surveyed annually after implementation to identify locations where exotic pest plants have encroached into the Project area. Where exotic pest plants such as salt cedar, puncture weed, Russian olive, perennial pepperweed *(Lepidium latifolium)*, and noxious grasses such as *Cenchrus* are identified as a result of annual monitoring, an exotic pest plant control program shall be developed and implemented to eradicate exotic pest plants and noxious weeds. The exotic pest program shall focus on early removal of plants and shall be coordinated with other control programs undertaken by Inyo County to ensure moist effective utilization of resources.	Control exotic pest plant growth.	The Monitor will periodically inspect for exotic pest plant species and field verify that measures identified in the control program are being implemented. The Monitor will coordinate with the RE to confirm the status of plant removal.	Annually following implementation of shallow flood.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
MM 5-4.3: Prior to final siting of proposed infrastructure in Shadscale scrub and TAM, a focused preconstruction survey shall be conducted during the optimal flowering period for Owens Valley checkerbloom, Inyo County mariposa lily, Booth's evening primrose, Kern County evening primrose, Ripley's cymopterus, Mono buckwheat, sand linanthus, and Nevada oryctes. Final alignments shall be reconfigured as necessary and feasible to avoid populations of sensitive plant species if they are detected as a result of directed surveys.	Reduce impacts to sensitive plant species.	No specific monitoring activity.	Design prior to construction.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
MM 5-5.2: Eighty-nine aces of the dry TAM subcommunity will be vegetated within areas designated for the Managed Vegetation control measure. The 89 acres shall be designated specifically as habitat for the alkali skipper and Owens Valley tiger beetle and managed as such. The Department has the option of either maintaining the established TAM created at the shallow flooding control areas by continuing application of water throughout the year, as necessary to sustain such vegetation, or creating and maintaining additional TAM. This additional dry meadow will be located in the Managed Vegetation control areas so that a total of 12[illegible] acres of TAM is established and managed by the Project. Both areas are known to occur adjacent to Area D; therefore, the 89 acres shall be located on the eastern portions of Area D. Revegetation will achieve the assemblage of native plants species characteristic of areas that would be lost as a	Reduce impacts to wetlands.	Monitor revegetation areas to ensure successful colonization of target plant species.	Following construction of project facilities.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
result of implementation of the proposed Project. Surface water hydrology will replicate the existing conditions in areas lost as a result of Project implementation. The revegetation areas will be monitored until successful colonization of these species is demonstrated.				
MM 5-5.3 Potential impacts to the nesting northern harriers in the TAM shall be avoided or minimized below a level of significance by scheduling construction of buried water transmission pipeline outside the breeding season of the northern harrier (mid-March to mid-September), in accordance with a schedule approved by the CDFG. If the breeding season cannot be avoided, surveys shall be conducted within and adjacent to the 2 acres of TAM prior to construction. If northern harriers are observed nesting within the area that would be impacted, construction shall be sited to avoid nesting individuals of this species.	Reduce impacts to nesting northern harrier.	The Monitor must field verify that no construction activity in the TAM occurs between March 15 and September 15. If construction must occur during the breeding season, the Monitor must field verify that suitable TAM habitat has been removed or significantly disturbed sometime between September 16 and March 14 before construction is allowed during the northern harrier breeding season. The Monitor will field verify periodically during construction between mid-March and mid-September that nest buffer zones are staked and avoided during construction to prevent disturbance to nesting northern harrier.	Implement design prior to construction and avoidance from mid-March to mid-September.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG
MM 5-5.4: Potential impacts on breeding Le Conte's thrasher and loggerhead shrike shall be avoided or minimized below a level of significance by scheduling construction of all improvements in Shadscale scrub habitat in the vicinity of suitable nesting habitat outside the breeding season (mid-January to late July), in accordance with a schedule approved by CDFG. If the	Reduce impacts to Le Conte's thrasher.	The Monitor must field verify that no construction activity takes place in Shadscale scrub habitat between January 15 and July 31.	Implement design prior to construction and avoidance from mid-January to late-July.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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breeding season cannot be avoided, surveys in the areas in which construction would take place shall be conducted; and areas containing breeding shall be avoided.		If construction activities must occur during the breeding season, the Monitor must field verify removal or significant disturbance of Shadscale scrub habitat outside of the January 15 to July 31 breeding season. The Monitor will field verify periodically during construction between January 15 and July 31 that nest buffer zones are staked and avoided during construction to prevent disturbance to nesting northern harrier.		
MM 5-5.5: A snowy plover breeding habitat restoration program shall be prepared. The restoration program shall include the following actions: a. A preconstruction-directed survey for breeding snowy plovers at Owens Lake shall be undertaken during the breeding season in the year preceding implementation of the proposed Project. The directed survey shall be undertaken in accordance with protocol established in the 1996 survey Great Basin Unified Air Pollution Control District (District). The preconstruction survey shall include all known or expected nesting areas within areas that will be disturbed during construction and operation of the proposed Project. The purpose of the survey is to census: number and location of adults, number and location of juveniles, number and location of chicks, and locations of nests or expected nests. b. A preconstruction survey to delineate the distribution of suitable foraging habitat in and adjacent to the Project shall be undertaken in the year immediately preceding Project implementation. Suitable foraging habitat shall include all areas supporting ephydrids. Density of March 10, 1995, ephyrdids	Reduce impacts to western snowy plover.	The Monitor must field verify that construction avoidance measure are implemented if ground disturbing activities must occur between March 15 and August 31. Post-construction surveys shall be undertaken in the 1st, 2nd, 3rd, 5th, 10th, 15th, and 25th years following implementation of water-based control measures. The results of the post-construction surveys shall be analyzed in relation to preconstruction surveys, and results for control sites will be established as a part of the monitoring program for the Project. Where the	Survey during breeding season of year preceding construction. Construction avoidance measures implemented between March 15 and August 31. Post-construction surveys undertaken in the 1st, 2nd, 3rd, 5th, 10th, 15th, 20th, and 25th years following implementation of water-based control measures.	**Monitoring Agency:** Department **Enforcement Agency:** CDFG

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can be used as a measure of the quality of the habitat. The results of directed surveys shall be issued as a measure for performance criteria in evaluating the quality of foraging habitat created as a result of Project implementation. Ground-disturbing activities associated with the implementation of the proposed Project shall not be undertaken in known or expected western snowy plover nesting areas identified as a result of the preconstruction surveys for breeding snowy plover during the breeding season, between March 15 and August 31. Construction avoidance measures to protect nesting and foraging habitat for western snowy plovers shall be exercised when ground-disturbing activities associated with construction of the proposed Project shall be undertaken between March 15 and August 31. A qualified wildlife biologist shall survey work areas that approach known or expected nesting areas identified during the preconstruction survey. A 500-foot-radius buffer area shall be established to protect all known or expected nesting sites and the associated foraging areas. The wildlife biologist shall delineate those areas with survey flags (or other comparable measure) to ensure that they are avoided during construction. Post-construction surveys shall be undertaken in the 1st, 2nd, 3rd, 5th, 10th, 15th, 20th, and 25th years following implementation of water-based control measures. The results of the post-construction surveys shall be analyzed in relation to preconstruction surveys, and results for control sites will be established as a part of the monitoring program for the Project. Where the monitoring program indicates that western snowy plover population numbers are declining as a result of implementation and maintenance of the proposed Project, habitat restoration shall be undertaken to compensate for reduced numbers of potential nesting sites that occur as a result of the Project that displaces nesting sites. Sufficient breeding habitat restoration shall be undertaken to maintain population numbers established as a result of the 1996 and 1997 directed surveys.		monitoring program indicates that western snowy plover population numbers are declining as a result of implementation and maintenance of the proposed Project, habitat restoration shall be undertaken to compensate for reduced numbers of potential nesting sites that occur as a result of the Project that displaces nesting sites. Sufficient breeding habitat restoration shall be undertaken to maintain population numbers established as a result of the 1996 and 1997 directed surveys.		
CULTURAL RESOURCES				

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Mitigation Measures	Mitigation Compliance Purpose	Monitoring and Reporting Actions	Monitoring Phase (Schedule)	Monitoring Agency/ Enforcement Agency
CR-1: The Project site will be systematically surveyed by a team of qualified archaeologists and Native Americans to ensure that all previously uninspected ground surfaces are examined to detect and then record cultural resource sites that may be present. A qualified archaeologist will conduct additional research or test excavations, where appropriate, to determine whether the resource(s) meet significance criteria set forth in Chapter 4 of the EIR [State Clearinghouse No. 9611207] for assessing cultural resources. A data recovery plan shall be prepared prior to construction to address significant resources discovered during surveys and construction monitoring that cannot be avoided. Archaeological excavation shall be conducted at the discretion of the qualified archaeologist to retrieve the important data from the site. If cultural resources are located in areas under the jurisdiction of the BLM or other federal agencies, this inventory, evaluation, and treatment process shall be coordinated with these agencies to ensure that the work conducted will also comply with Section 106 of the National Historical Preservation Act (NHPA).	Reduce impacts to cultural resources.	The archaeological Monitor will observe construction activities for evidence of sensitive cultural resources. The Department will be responsible for taking appropriate action under state and/or federal guidelines for protection and/or recovery of significant cultural resources.	Prior to construction and during ground disturbing activities.	**Monitoring Agency:** Department **Enforcement Agency:** ACOE, BLM, SLC, and State Historic Preservation Office (SHPO)
CR-2: A qualified archaeologist and Native American shall be present to monitor earthmoving activities associated with Project construction at the discretion of the qualified archeologist. If any archeological, paleontologic, or historic deposits are identified during activities, all construction in that area will cease; and a determination of resource significance will be made. Significant resource sites would be subject to appropriate measures (data recovery, impact avoidance, recordation) that would reduce Project effects to below a level of significance.	Reduce impacts to cultural resources.	An archaeological Monitor and Native American Monitor will observe all grading activities that may affect cultural resources. Grading in historic lake shore areas will be monitored on a daily basis, and grading on the lake bed will be monitored periodically. The Monitor shall coordinate with the Contractor to ensure that all earthmoving activities are supervised by a qualified archaeologist and Native American monitor. If archaeological resources	During ground disturbing activities.	**Monitoring Agency:** Department **Enforcement Agency:** California State Lands Commission

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		are discovered during project grading, the Resident Engineer shall instruct the Contractor to direct work around the resources until appropriate action can be taken.		
• CR-3: All construction personnel shall be trained regarding the possibility of encountering buried cultural remains, including prehistoric and historic resources during construction. Prior to the initiation of construction or ground-disturbing activities, the project proponent shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials including Native American burials. The Department shall contact the Lone Pine Paiute-Shoshone Tribal office to solicit Native American participation in the training program. The following issues shall be addressed in training or in preparation for construction. • Upon discovery of buried cultural materials, work in the immediate area of the find shall be halted and the project proponent's archaeologist notified. Once the find has been identified, the project proponent's archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be important according to CEQA. • The project proponent shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the locations of potential sensitive areas and anticipated procedures to treat unexpected discoveries. Any excavation contract (or contacts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological	Reduce impacts to cultural resources.	The Department shall implement a cultural resources awareness and sensitivity training for the purpose of mitigating impacts to cultural resources. All workers shall receive awareness training prior to beginning work on the project site. The local Native American Tribal office will be consulted on the content of the awareness training program.	Prior to construction and during ground disturbing activities.	**Monitoring Agency** Department **Enforcement Agency** California State Lands Commission

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deposits.				
CR-4: After completion of preliminary field inventory of the Project site, the project proponent shall develop a general Cultural Resources Mitigation and Monitoring Plan for the project including procedures for the evaluation and treatment of the unexpected discovery of cultural resources including Native American burials; detail any reporting requirements by the Project Archaeologist; discuss the curation of any cultural materials collected during the project; and, specify that archaeologists and other discipline specialists meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation.	Reduce impacts to cultural resources.	The Department shall prepare a general Cultural Resources Mitigation and Monitoring Plan as indicated by this measure.	Prior to construction and during ground disturbing activities.	**Monitoring Agency** Department **Enforcement Agency** California State Lands Commission
CR-5: If buried human remains are encountered during construction, work in that area must be halted, and both LADWP's archaeologist and the coroner must be immediately notified. If the remains are determined to be Native American, then the Native American Heritage Commission will be notified within 24 hours as required by Public Resources Code 5097. The Native American Heritage Commission will notify designated Most Likely Descendants, who will provide recommendations for the treatment of the remains within 24 hours. The Native American Heritage Commission will mediate any disputes regarding treatment of remains.	Reduce impacts to cultural resources.	The Department shall follow the prescribed protocol for notification following discovery of human remains.	During construction.	**Monitoring Agency** Department **Enforcement Agency** California State Lands Commission
HYDROLOGY/WATER QUALITY				
WQ-1: The Department shall comply with the Clean Water Act and shall obtain and implement all permits required by the Regional Water Quality Control Board (RWQCB) for the proposed Project.	Compliance with RWQCB standards.	The Monitor will observe Project construction activities to verify compliance with the conditions of the 401 water quality certification.	During construction.	**Monitoring Agency:** Department **Enforcement Agency:** RWQCB (Lahontan)

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WQ-2: If conditions of pollution be observed during construction, activities shall cease until the problems have been corrected. The Basin Plan prohibits the discharge of waste (including waste earthen materials) which causes violation of any numeric or narrative water quality objective contained in the Basin plan. Increases in turbidity shall not exceed natural levels by more than ten (10%) percent.	Compliance with RWQCB standards.	The Monitor will observe Project construction activities to verify compliance with the conditions of the 401 water quality certification.	During construction.	**Monitoring Agency:** Department **Enforcement Agency:** RWQCB (Lahontan)
NOISE				
N-1: Construction activities within 500 feet of existing noise-sensitive uses shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No construction shall occur on Sunday or federal holidays without a special permit from Inyo County of unusual circumstances. Project activities shall comply with Inyo County noise standards.	Reduce noise impacts to sensitive receptors.	The Monitor will verify that construction activities within 500 feet of sensitive receptors occurs only between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. The Monitor will also verify that the Contractor secures the appropriate authorization from Inyo County prior to construction on Sundays and federal holidays.	During construction.	**Monitoring Agency:** Department **Enforcement Agency:** Inyo County
TRANSPORTATION/TRAFFIC				
T-1: California Department of Transportation (Caltrans) shall determine the appropriate traffic safety equipment to be installed and maintained on U.S. 395, State Route (SR) 136, and SR 190 to ensure traffic safety during the construction of the proposed Project. Some examples of typical traffic safety equipment include warning lights, signs, traffic cones, and signals. Caltrans shall install the required traffic safety equipment, which will warn oncoming motorists that there may be large, slow-moving trucks ahead. Caltrans may also require flag persons during peak-traffic periods. Traffic safety equipment shall be installed prior to use of the U.S. 395, SR	Traffic safety.	The Monitor will field verify that the Contractor has installed traffic safety equipment as required by Caltrans.	During construction.	**Monitoring Agency:** Department **Enforcement Agency:** Caltrans

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136, and SR 190 for gravel hauling or other heavy truck trips such as the delivery of heavy equipment and construction vehicles to the Project site and shall be funded by the Department.				
T-2: If the cut-and-cover construction method is used for the construction of the SZM pipeline across U.S. 395, then the Department shall prepare and implement a traffic detour plan for the construction of the SZM crossing of U.S. 395, as required by Caltrans.	Traffic safety.	The Monitor will verify that the Department prepares and implements a traffic detour plan for construction of the SZM crossing of U.S. 395, as required by Caltrans. The Monitor will field verify implementation of this plan.	Prior to construction.	**Monitoring Agency:** Department **Enforcement Agency:** Caltrans
T-3: The Department shall repair any roads that are damaged by Project construction activities and shall return to these damaged roads to pre-project conditions. All road repairs will be scheduled and conducted to ensure that safe operating conditions are maintained.	Minimization of impacts to public and private roads	The Monitor will verify that the Contractor restores all roads used for construction to pre-project conditions.	Following construction of project facilities.	**Monitoring Agency:** Department **Enforcement Agency:** Caltrans