

**6. STATUS OF OTHER STUDIES, PROJECTS, AND ACTIVITIES**

## **6. STATUS OF OTHER STUDIES, PROJECTS, AND ACTIVITIES**

Tables 21 and 22 detail mitigation and monitoring of the irrigation projects in the Laws and Big Pine areas, respectively. Table 23 lists the Water Agreement provisions and their respective status. Table 24 lists the MOU provisions and their respective status. Table 25 lists the Cooperative Studies that have been approved by the Los Angeles/Inyo Standing Committee and their respective status. Table 26 lists the 1991 EIR revegetation projects, progress to date, and proposed future work. Section 6.8 provides a report on the Mitigation Monitoring and Reporting Program for the LORP.

### **6.1 Irrigation Project in the Laws Area 2008 Progress Report**

#### ***Seed Collection***

On February 6, 2003, Comstock Seed of Gardnerville, Nevada was contacted regarding the collection of native Owens Valley seeds to be used for the establishment of the seed farm at Laws. On February 10, 2003, a list of 41 species was given to Mr. Ed Kleiner of Comstock Seed in order to determine the level of experience that his company had collecting them and an estimated cost for each. Based on past experience with seed availability, viability, and clean out, the list was reduced to 12 species. The final price quote was received on February 25, 2003.

On March 13, 2003 the purchase request for 12 species was submitted to the LADWP purchasing office. The contract was placed on LADWP's BidNet system on March 22, 2003. The final contract with Comstock Seed was approved on May 19, 2003.

On May 21, 2003 LADWP met Mr. Ed Kleiner, owner of Comstock Seed, regarding possible collection sites for seeds of the requested species. Seed collection began that same week.

On November 21, 2003 Comstock Seed delivered seeds for 12 of the collected species to Bishop.

In May 2004 a new contract was awarded to Comstock Seed for additional seed collection. The species list was expanded. Seed collection was performed from May through the fall 2004. A total of 18 species of plant seed were collected.

Seed collection continued in 2005. Seed was collected in the Owens Valley from a total of 25 species of plants.

Seed collection continued in 2006. Seed was collected in the Owens Valley from a total of 12 species of plants.

In 2007 and 2008 the seed crop in the Owens Valley was extremely low due to a very dry winter. As a consequence, no seed collection occurred.

## **Plant Propagation**

In early September 2003 Mr. Kleiner called in with a progress report on the seed collection. He recommended that the Agriculture Department at Victor Valley Community College be contacted regarding growing out some of the shrub species for transplantation at the seed farm. On September 15, 2003, Mr. Jonathan Cook, the chairman of the Agriculture Department, was contacted. Mr. Cook indicated that there was an interest in working together to grow out the desired species.

On October 2, 2003 LADWP staff met with representatives of Victor Valley College and toured their green house and plant propagation facility. On October 6, 2003 a contract was established with Victor Valley Community College. The contract with the college specifies that they are to grow out and deliver to LADWP 2,500, 2-gallon containerized plants, each year for the next three years.

On November 26, 2003 seeds were delivered to Victor Valley Community College to begin propagation. On September 21, 2004 LADWP took delivery of 2,500 plants. The species propagated included Winterfat (*Krascheninnikovia lanata*), Mormon Tea (*Ephedra nevadensis*), Spiny Hopsage (*Grayia spinosa*), Indigo Beauty (*Psoralea polydenius*), and Indigo bush (*Psoralea arborescens*).

In July 2004 seed was sent to Victor Valley Community College for propagation of additional plants. LADWP took delivery of 1,100 plants on March 22, 2005. LADWP took delivery of approximately 1,900 additional plants in spring 2006. The final delivery of plants from Victor Valley Community College was in the summer 2007 when 600 plants were received and planted in the fall.

In the summer 2006 LADWP initiated the purchase of a greenhouse. The greenhouse became operational in the winter of 2008/2009. LADWP will begin propagating plants for the seed farm and revegetation efforts in 2009.

## **Seed Farm**

Between July 17 and July 19, 2003 the initial weed treatment was applied to Parcel LAW027. An LADWP crew applied 2,4-D to the entire area to control Russian thistle. Treatments resumed in the spring of 2004.

In January 2004 the complete specification to purchase solid set sprinkler systems for the seed farm and the Laws Museum Project were completed. These systems were purchased in the late winter and installed and tested in the spring with the goal of having the system running for the 2004 irrigation season.

During the winter and spring 2004, the seed farm parcel was burned for weed control. The seed farm was irrigated in July 2004 to promote weed growth. This was followed by spraying of an herbicide to eradicate the newly emerged weeds.

On September 7, 2004, 20 acres of the seed farm were seeded with Indian Ricegrass (*Achnatherum hymenoides*) using a range drill. This area was sprinkled using

16 irrigation lines, two lines at a time for 45-minute sets that were run from 4 a.m. to 10 p.m., seven days a week. On September 28, 2004, the water application was reduced to 30-minute sets twice a day, conducted six days a week. This irrigation schedule continued until November 1, 2004. Irrigation was initiated March 21, 2005 for the growing season.

On September 21, 2004, LADWP took delivery of 2,500 plants from Victor Valley Community College. These plants were placed in cold frames to harden them off prior to planting. On October 29 and 30, 2004 a drip irrigation system was installed at the seed farm to accommodate the plants. On November 1-3, 2004, the 2,500 tubelings were planted utilizing 12 to 15 LADWP personnel. Holes were dug and filled with water prior to planting. In addition, all plants received two hours or more of water applied by the drip irrigation system. Very high winds that occurred near the end of November caused significant damage to the above-ground portions of the plants. Irrigation was initiated on March 21, 2005 for the growing season.

In January 2005, ten acres of the seed farm were seeded with Needlegrass (*Achnatherum speciosum*). This seed was planted using the range drill. Irrigation was not provided at the time of planting because of abundant winter precipitation. Irrigation was initiated March 21, 2005 for the growing season.

On March 22, 2005, LADWP took delivery of 1100 plants from Victor Valley College. These plants were placed in cold frames to harden them off prior to planting. On April 5 and 6, 2005, the 1100 tubelings were planted utilizing 12 to 15 LADWP personnel. Holes were dug and filled with water prior to planting. In addition, all plants received 2 hours or more of water applied by the drip irrigation system.

In addition, in 2005 the existing Indian Ricegrass plot and Needlegrass plot were overseeded at a rate of 10 pounds of seed per acre. 10 additional acres were planted with Saltgrass (*Distichlis spicata*) and 2 acres were planted with Squirreltail grass (*Elymus elymoides*).

Maintenance activities conducted in 2005 included repairs to the irrigation system, hand weeding around plants at drip emitters, and mowing between the irrigation layout to control weeds prior to seed set.

In 2006, ten acres of creeping wild rye (*Leymus triticoides*) were planted at the seed farm. Maintenance activities conducted in 2006 included repairs to the irrigation system, hand weeding around plants at drip emitters, and mowing between the irrigation layout to control weeds prior to seed set.

In 2007, rodents caused major damage to the drip irrigation system at the seed farm. These rodents chewed through the irrigation lines searching for water in this very dry year. Repairs were completed on all damaged irrigation lines. In addition, all the planting basins were hand weeded. 10 acres of saltgrass (*Distichlis spicata*) were drill seeded and irrigated at the seed farm.

In 2008, rodents again caused major damage to the drip irrigation system at the seed farm. Repairs were completed and all necessary maintenance was performed on all irrigation lines. All the planting basins were hand weeded. Areas with little success were mowed in preparation for future planting.

### ***Center Pivot Systems***

On April 11, 2003 the bid specifications for the center pivot irrigation systems were posted on LADWP's BidNet system. Bids were closed on April 24 and the contract was awarded to Great Basin Irrigation of Fishlake Valley, Nevada, on June 1, 2003.

Assembly of the irrigation systems began in early September 2003. Assembly was complete in mid-October 2003. During September and October 2003, installation of 12-inch steel pipe mainline and 8-inch plastic lateral pipelines to pivots was completed. During October and November, risers and valves on 8-inch plastic lateral pipelines were installed.

During the late winter and early spring 2004 the final assembly of the pivot systems was checked and all water lines flushed in preparation for the upcoming irrigation season. All necessary bridges required for ditch and canal crossing were installed and the pivots were tested. The areas under the two wiper pivots were seeded in the spring 2004. The north full pivot was fully seeded by mid-summer 2004. The south full pivot was fully seeded by spring 2005 resulting in full implementation of the center pivot systems. All the fields were treated for weeds in the spring 2005, 2006, 2007 and 2008.

### ***Lease RFP***

In February 2003 an RFP was prepared and advertised to solicit proposals for ranch management for the portion of the Laws Ranch north of Silver Canyon Road. The 4-J Cattle Company submitted the successful proposal. Irrigation was initiated by the 4-J Cattle Company on the flood-irrigated pastures in June 2003. These pastures were fully irrigated in 2004 and 2005.

The portion of the Laws Ranch located south of Silver Canyon Road was included in the Cashbaugh Ranch lease. Those areas designated as flood irrigated were irrigated in 2003 with the exception of the portion of parcel LAW118 that was recently added to the lands to be irrigated. The diversion structure off of the Upper McNally Canal that will provide water to this portion of LAW118 was rebuilt in spring 2005. The lessee began a cleanup of this area in the fall 2005 to ready the site for irrigation.

## **6.2 Mitigation Monitoring Report for the Irrigation Project in the Laws Area**

See Table 21 for the Mitigation Monitoring Program for the Irrigation Project in the Laws Area.

### **Mitigation Measure M-1**

Impact: Creation of dust during pipeline installation and ground preparation for planting.

Measure: Ground surfaces will be thoroughly wet prior to and during work to minimize dust.

All seeding work during 2006 was conducted utilizing the Trux No-till drill seeder and water was applied before initiating seeding and as soon as seeding was complete to control dust emissions.

### **Mitigation Measure M-2 and M-3**

Impact: Groundwater pumping to supply water to the project could adversely affect groundwater-dependent vegetation in the vicinity of the project and cause blowing dust.

Measure: Department of Water and Power on a Long-Term Ground Water Management Plan in the Owens Valley and Inyo County (the Water Agreement).

Table A illustrates the vegetation cover in vegetation parcels within the Laws wellfield as determined by the Inyo County Water Department. Data from 2002 and 2003 indicates estimates of vegetation cover in the parcels prior to implementation of the Irrigation Project in the Laws Area. Data since 2004 are estimates of vegetation cover after implementation of the Irrigation Project in the Laws Area.

Table B illustrates the depth to water in the Laws area test holes prior to, and after implementation of the Irrigation Project in the Laws Area.

Table A. Vegetation cover in selected parcels within the Laws wellfield.

Parcel	Percent Perennial Cover						
	2002	2003	2004	2005	2006	2007	2008
LAW030	19.5	nd	20.5	24.2	32.4	36.6	32.7
LAW035	nd	3.1	1.6	4.7	17.9	6.4	6.3
LAW043	nd	3	2.4	Nd	40.8	7.4	7.2
LAW052	2.3	2.9	3.9	5.4	12.5	10.1	7.6
LAW062	2.8	4.7	3.3	7.2	12.8	10.9	10.8
LAW063	3.7	6.3	5.4	9.6	24.0	16.7	15.9
LAW065	3.3	2.9	2.1	5.1	13.9	10.7	12.3
LAW070	nd	1	1.6	Nd	nd	nd	11.1
LAW078	36.2	31.8	27.1	39.0	49.7	50.1	53.7
LAW082	2.1	3	4.4	4.2	12.7	7.1	12.6
LAW085	7.1	9.8	7.7	14.8	28.5	22.3	30.2
LAW107	37.6	43.9	38.2	65.1	59.8	67.2	78.2
LAW112	12.9	25.1	15.8	32.9	33.3	45.0	47.3
LAW120	17.6	24.3	21	27.6	28.8	36.2	38.5
LAW122	59	54.8	47.8	56.6	54.6	62.8	52.7

Table B. Depth to water (in feet) for test holes in the Laws wellfield.

Well	April 2004	April 2005	April 2006	April 2007	April 2008	April 2009
T107	30.1	31.9	18.6	21.1	25.16	27.99
T436	10.1	10.2	4.8	5.3	7.05	8.79
T438	11.6	8.9	3.8	6.3	8.20	9.11
T490	14.6	14.7	13.3	10.2	12.57	13.82
T492	32.1	31.5	24.4	23.0	26.84	29.12

**Mitigation Measure M-4**

Impact: Reducing the irrigation duty from 5 acft per-acre to 3 acft per-acre and of changing from flood irrigation to sprinkler irrigation.

Measure: Water Agreement

LADWP and the Laws Ranch Lease jointly determined irrigated field, pasture, or area vegetation condition using the Natural Resource Conservation Service Pasture Condition Assessment. This protocol, once followed, is designed to optimize plant and livestock productivity while minimizing detrimental effects to soil or water resources.

Pasture condition scoring involves the visual evaluation of 10 indicators each having five environmental conditions (Cosgrove, et al. 1991). Each indicator is rated separately and the scores are combined into an overall score for the pasture. The overall score for a pasture can then be divided by the total possible score to give a percent rating ( $\{\text{overall score} \div \text{total possible score}\} \times 100 = \text{percent rating}$ ). Not all 10 indicators may be appropriate for use in every pasture. In this case, using less than 10 indicators will reduce the possible score, but the percent rating will still be comparable. Irrigated pastures on the Laws Ranch Lease will be evaluated after the area has been seeded and irrigated for at least three growing seasons in order to allow the seeded pasture mix to become fully established. The average pasture score for the Laws Ranch Lease during the 2007 growing season was 88%. The next scheduled evaluation is in 2010.

**Mitigation Measure M-5**

Impact: Altering the flow in a ditch that carries water diverted from Coldwater Canyon.

Measure: Water Agreement

Between October 1994 and June 2004, there were no flow diversions from Cold Water Canyon Ditch. In June 2004, periodic flow reductions in Cold Water Canyon Ditch occurred as the irrigation system for the Laws Seed Farm was being installed. Beginning in July and extending into the first week of November 2004 the irrigation system was fully operational on the Laws Seed Farm. During operation, approximately 1/4 of the total flow remained in the ditch. The entire flow resumed in November 2004 and remained until March 2005. Diversions from Cold Water Canyon Ditch began March 21, 2005 for irrigation of the seed farm. During operation, approximately 1/4 of

the total flow remained in the ditch. As the early season species matured, irrigation was reduced and flows into the ditch were increased. Irrigation was discontinued the first of October and the entire flow was returned to Cold Water Canyon Ditch. Periodic examinations were conducted along the ditch throughout the growing season. These examinations did not indicate any signs of vegetation stress. Photo points have been established along the ditch.

Irrigation from Cold Water Canyon Ditch for the Laws Seed Farm continued in 2007 as described above.

Periodic examinations were conducted along the ditch throughout the 2007 and 2008 growing season. These examinations did not indicate any signs of vegetation stress. Photos points will be replicated during the 2009 growing season.

### ***Mitigation Measure M-6***

Impact: Altering the flow in Silver Canyon Ditch.

Measure: Water Agreement

There were no diversions from Silver Canyon Ditch during the 2005 monitoring period. Photo points have been established along the ditch.

Diversions from Silver Canyon Ditch began in late April 2007 for irrigation of Parcels LAW 90, 94, and 95. Irrigation was delayed because of severe rodent damage to the irrigation system and significant repairs that were needed before irrigation could begin. During operation, approximately 1/4 of the total flow remained in the ditch. Irrigation was discontinued the first of October and the entire flow was returned to Silver Canyon Ditch.

Periodic examinations were conducted along the ditch throughout the growing season. These examinations did not indicate any signs of vegetation stress. Photo points have been established along the ditch and will be replicated during the 2009 growing season.

### ***Mitigation Measure M-7***

Impact: Growth of state listed A or B noxious weeds in the project area.

Measure: LADWP or its lessee or lessees, in conjunction with Inyo County's weed abatement program, will promptly treat or remove the weed

Surveys were conducted on the Irrigation Project in the Laws Area for noxious weeds during the 2005 growing season. No A or B listed noxious weeds were found. Weed control consisting of flaming and herbicide treatments were conducted in the 2005 season. In addition, the lessee treated weeds through a combination of grazing, mowing, and burning.

Surveys were conducted on the Irrigation Project in the Laws Area for noxious weeds during the 2008 growing season. No A or B listed noxious weeds were found. Weed

control was conducted in the 2008 season. The lessee treated weeds through a combination of grazing and burning.

***Mitigation Measure M-8***

Impact: Archaeological investigations identified six previously unrecorded archaeological sites and 11 isolates within the project area.

Measure: Pipeline placement was to avoid identified sites; if new sites are encountered during implementation, work will be halted until an archeologist can be consulted.

No cultural resources were encountered during construction or operation of the Irrigation Project in the Laws Area in 2006.

**TABLE 21**  
**Mitigation and Monitoring Program for Irrigation Project in the Laws Area**

POT. IMPACT Summary of Impact	MM No.	MITIGATION			MONITORING			
		Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
<u>Air Quality</u>								
Creation of dust during pipeline installation and ground preparation for planting	M-1	Ground surfaces will be thoroughly wet prior to and during work to minimize dust	To be implemented throughout the project as needed	LADWP construction staff and/or LADWP lessee.	Water trucks will pre-wet construction areas and water as necessary throughout construction. Ground will be pre-irrigated prior to planting.	As needed throughout construction and/ or prior to planting.	Throughout the construction or agricultural period	LADWP construction staff and/or LADWP lessee.
Groundwater pumping to supply water to the project could adversely affect groundwater dependent vegetation in the vicinity of the project and cause blowing dust	M-2	Section III and Section IV of the Agreement between the County of Inyo and the City of Los Angeles and its Department of Water and Power on a Long Term Groundwater Management Plan for Owens Valley and Inyo County (the Water Agreement)	To be implemented throughout the project as needed	Inyo LA Technical Group	Annual monitoring of the vegetation in the vicinity is being conducted.	During the period when groundwater pumping and water management practices could affect vegetation.	Annually during the growing season	Inyo LA Technical Group
<u>Hydrology and Water Quality</u>								
Groundwater pumping	M-3	Water Agreement	To be implemented throughout the project as needed	Inyo LA Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when groundwater pumping and water management practices could affect such	During the period when groundwater pumping and water management practices could affect vegetation.	Annually during the growing season	Inyo LA Technical Group

POT. IMPACT		MITIGATION			MONITORING			
Summary of Impact	MM No.	Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
					vegetation.			
Reducing the irrigation duty from 5 acre-feet per acre to 3 acre-feet per acre and of changing from flood irrigation to sprinkler irrigation	M-4	Water Agreement	To be implemented throughout the work as needed	Inyo LA Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when groundwater pumping and surface water management practices could affect such vegetation.	During irrigation season	Annually during the growing season	Inyo LA Technical Group
<u>Biological Resources</u>								
Altering the flow in a ditch that carries water diverted from Coldwater Canyon	M-5	Water Agreement	To be implemented throughout the work as needed	Inyo LA Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when surface water management practices could affect such vegetation.	During the period of changes in surface water management practices could affect vegetation	Annually during the growing season	Inyo LA Technical Group
Altering the flow in Silver Canyon Ditch	M-6	Water Agreement	To be implemented throughout the work as needed	Inyo LA Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when surface water management practices could affect such vegetation.	During the period of changes in surface water management practices could affect vegetation	Annually during the growing season	Inyo LA Technical Group
Growth of noxious weeds	M-7	LADWP or its lessee or lessees, in conjunction with Inyo County's weed abatement program, will promptly treat or remove the weed.	To be implemented throughout the work as needed	LADWP Watershed Resources Staff; LADWP Lessee; and/or Inyo County Agricultural Dept.	Monitoring consists of field visits during the growing season	Annually during the growing season	Annually during the growing season	LADWP Watershed Resources Staff; LADWP Lessee; and/or Inyo County Agricultural Dept.

<u>Cultural Resources</u>								
Archaeological investigations identified six previously unrecorded archaeological sites and 11 isolates within the project area	M-8	Pipeline placement was to avoid identified sites; if new sites are encountered during implementation, work will be halted until an archaeologist can be consulted.	To be implemented throughout the work as needed	LADWP Construction Manager	Construction personnel will monitor for unidentified sites during the progression of construction.	During construction activities	Throughout the construction period	LADWP Construction Manager

### **6.3 Mitigation Monitoring Report for the Irrigation Project in the Big Pine Area**

See Table 22 for the Mitigation Monitoring Program for the Irrigation Project in the Big Pine Area.

**TABLE 22  
Mitigation and Monitoring Program for the Irrigation Project in the Big Pine Area**

POT. IMPACT	MM No.	MITIGATION			MONITORING			
		Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
<u>Hydrology and Water Quality</u>								
The cumulative effect of groundwater pumping from well 415, the new Bell Canyon well, as proposed in the project, in combination with the operation of other wells in the Big Pine area could cause significant adverse impacts to groundwater dependent vegetation, other vegetation, or non-LADWP wells in the area.	M-1	Water Agreement	To be implemented throughout the project as needed	Inyo LA Technical Group	A monitoring site will be developed by the Inyo LA Technical Group as called for in the Inyo/LA Long Term Water Agreement to manage operation of each well.	During the period when groundwater pumping is needed for the project.	As decided by the Inyo LA Technical Group, consistent with the Long Term Water Agreement	Inyo LA Technical Group

## **6.4 Water Agreement Provisions**

See Table 23 for the Water Agreement Provisions.

**TABLE 23  
Water Agreement Provisions**

<b>Title</b>	<b>Provision</b>	<b>Status</b>
Groundwater Management	LADWP and Inyo County are to manage water resources within Inyo County to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County	By agreement of the Standing Committee, implementation of groundwater management, pursuant to the Agreement, commenced in 1987.
New Wells & Production Capacity	In order to provide for increased operational flexibility and to facilitate rotational pumping, LADWP may replace existing wells and construct new wells in areas where hydrogeologic conditions are favorable and where operation of such wells will not cause a change in vegetation that would be inconsistent with the agreement. The Water Agreement and 1991 EIR describe 15 new wells that LADWP proposes to construct in the Owens Valley.	LADWP has constructed 6 replacement wells on Bishop Cone and one of the 15 new wells allowed under the Water Agreement. The new well is located in Lone Pine. The Technical Group must establish management for the well before it can be operated. Currently, LADWP is planning to construct 1 new well on the Bishop Cone. LADWP has abandoned or converted to monitoring wells 13 previously replaced wells.
Groundwater Pumping on the Bishop Cone	Before LADWP may increase groundwater pumping on the Bishop Cone, or construct new wells on the Cone, Inyo County and LADWP are to develop an audit procedure for determining the exact amount of water used annually on LA-owned land on the Cone. LADWP pumping on the Cone must be in strict adherence to the provisions of the "Hillside Decree."	The Standing Committee has adopted the Bishop Cone audit procedure. The audit has been conducted since 1996. In 1998, the Superior Court entered a "Memorandum of Judgment" in Matlick v City of Los Angeles which reaffirmed LADWP's pumping practices on the Bishop Cone.
Groundwater Recharge Facilities	LADWP may construct groundwater banking and groundwater recharge facilities in the County. The 1991 EIR describes certain groundwater recharge facilities in Laws, Big Pine, and Rose Valley	LADWP has not proposed re-construction of groundwater recharge facilities in Laws, or Big Pine, or new facilities in Rose Valley.
Cooperative Studies	LADWP may provide funding for the costs of conducting studies related to the effects of groundwater pumping on the environment of the Owens Valley	Studies approved by the Standing Committee are underway. See Table 25, "Cooperative Studies."
Enhancement/Mitigation Projects	All existing E/M projects will be maintained, unless the Standing Committee agrees to modify or discontinue a project, and new projects may be implemented if approved by the Standing Committee. The Water Agreement provides that E/M projects will continue to be supplied by E/M wells unless otherwise agreed.	All E/M projects that have been implemented are being maintained. It is planned to supply approximately 12,000 acre-feet of water to these projects in 2009-2010. Now that the LORP is fully implemented, the water supplied to the project is no longer included within the E/M project account of water uses. Therefore, the amount of water supplied to E/M is much less in 2008-2009 than in previous years.  The Standing Committee eliminated the water commitment to the McNally Ponds Project for the 1991 year because of dry conditions. For most years since then, the Standing

Title	Provision	Status
		<p>Committee has decided annually on water releases to this project. Because of abundant runoff in 2006-2007 the project received its full allotment of water. In 2007 and 2008 the project did not receive water because project supply wells could not be pumped under the Interim Management Plan.</p> <p>The Laws Museum Project is fully implemented. The Laws Museum Project water supply was changed to a well and sprinkler system. All mainline and lateral lines were fully installed during the spring/summer of 2006 and irrigation began in summer/fall 2006.</p> <p>LADWP sent Mitigation Plans for the Independence regreening projects to ICWD in August, 2004, CEQA documents were completed by LADWP for the Independence East Side Regreening Project and Town Water System in September, 2004. The Board of Water and Power Commissioners approved the project in May 2005. Inyo County requested changes to the project after the completion of CEQA including: relocation of the project supply well, change of irrigation type from flood to sprinkler, and addition of corrals/stables Inyo County has agreed to complete additional CEQA if required to address project changes. As determined at the February 13, 2009 Technical Group Meeting these changes must be approved by the Standing Committee.</p> <p>Mitigation Plans for the Big Pine Northeast Regreening were transmitted to the County in 2004. Comments were received from the County in 2005. The County identified a portion of the project area for land release and sale. Note that a portion of the Big Pine Ditch system runs through the project area. This reduced the original project area by less than an acre. A letter was sent to Inyo County in February 2008 asking for concurrence on the acreage change but a response has not been received. An archaeological survey of the site was completed as required by the CEQA process. Cultural resources were identified during the survey. These resources will be avoided during implementation. As a consequence, an amended mitigation plan will be submitted for Technical Group approval and CEQA will be completed for the project</p>

Town Water Systems	LADWP will transfer to Inyo County, or another Owens Valley public entity or entities, ownership of the water systems in the communities of Lone Pine, Independence, and Laws. Prior to transferring the systems, evaluations of each system will be performed by a mutually agreed upon consultant, and if necessary, work will be done to upgrade the systems. LADWP will provide free water, up to specified amounts for each town.	The County contracted with a private company to assume the operation, maintenance and billing for the systems in July 1999. Pursuant to an agreement with LADWP, the County completed upgrades of the systems in December 2002, using \$2.6M in funds provided by LADWP. LADWP completed the transfer of ownership to the County in January 2005.
Lower Owens River	See Table 24, "MOU Provisions."	See Table 24, "MOU Provisions."
Lower Owens River Project (LORP)	Los Angeles will pay the costs of implementing the project. The County will repay Los Angeles one half of the project costs up to maximum of \$3.75 million. Any funds provided for the project from sources other than Los Angeles will be an off-set against the County's repayment obligation. Los Angeles will pay the annual costs of operating the pumpback system. The County and Los Angeles will each pay one half of the other costs of the project.	As part of a negotiated agreement with Inyo County to not pursue funding from the USEPA, LADWP has credited the County \$5.1 million to cover the County's \$3.75 million obligation for LORP implementation with the remaining \$1.35 million to be used by the County towards post implementation costs.
Haiwee Reservoir	Inyo County and LA will develop a recreational plan for South Haiwee. The recreation plan will be implemented and operated by the County or a concessionaire...Any plan must take into account Los Angeles' operating and security needs	A recreational plan has not been developed. A security audit was performed following the September 11, 2001 incident. This audit concluded that due to a potential security threat to a municipal water source, Haiwee Reservoir should be closed to the public. CEQA documentation (Negative Declaration) was filed to close Haiwee Reservoir on December 16, 2004. The facility was officially closed to the public in 2005.
Salt Cedar Control	LADWP is to provide funding to Inyo County to implement a Salt Cedar Control Program: \$750,000 during the first three years of the program; thereafter, \$50,000 per year (adjusted upward or downward in accordance with the consumers' price index).	LADWP initiated payments and ICWD initiated the Salt Cedar Control Program in 1997. In 2008, LADWP paid ICWD \$65,888 for this work. LADWP has paid Inyo County \$1,266,815 since 1997 under this provision of the Water Agreement. In 2004, as part of a Wildlife Conservation Board (WCB) grant, LADWP provided \$56,000 for salt cedar control, and the balance of the program was funded from a WCB grant for \$490,000 obtained by the County working in cooperation with LADWP. Approval for a second grant from the WCB for \$560,000 was received in February 2004. In addition to the monies provided under the Water Agreement for salt cedar control, LADWP committed, as part of the 2004 Stipulation and Order, to match the amount of grant monies the ICWD received up to \$1.5 million for additional salt cedar control in the LORP Project Area. Under Item 6 of the Stipulation and Order, LADWP has paid Inyo

		County a total of \$661,663 as of August 2008 leaving a balance of \$838,336 available to the County per the Stipulation and Order. A third grant for \$600,000 from the WCB was received by ICWD in November 2007.
Park Rehabilitation, Development, & Maintenance	During the 10-year period following entry of the Stipulation and Order, LADWP is to provide up to \$2 million to Inyo County to rehabilitate existing County parks and campgrounds and to develop new recreational facilities. LADWP is to make an annual payment of \$100,000 (Adjusted upward or downward in accordance with the consumer's price index) to Inyo County to maintain existing and new recreational facilities.	The remainder of the money available for parks operation and maintenance is \$168,086. In addition, LADWP has provided annual payments to the County for parks operation and maintenance activities including a payment in 2008 of \$140,655 for a total of \$1,417,390. LADWP has paid Inyo County a total of over \$3,249,304 since 1997 under this provision of the Agreement
Owens River Recreational Use Plan	As part of the parks rehabilitation program, Inyo County may develop a plan for recreational use and management of the Owens River from Pleasant Valley Reservoir to the Owens River delta as one of the programs to be funded by LADWP under the provisions of the Agreement concerning Park Rehabilitation, Development, & Maintenance.	The County formed a collaborative group to generate a Recreational Use Plan for the LORP in 2007. This group is made up of County, City, and local Chamber personnel, as well as interested members of the public. This group was formed to exchange ideas and concerns with regard to recreation, and pursue the development of a Recreational Use Plan for the LORP. From this effort, the County submitted a grant proposal to the Sierra Nevada Conservancy in December 2007 for grant monies to fund two individuals to conduct scoping efforts and write a draft Plan. Award of these funds is pending.  Recreation in the Lower Owens River area was addressed by LADWP in the LORP EIR. Recreation issues discussed in the LORP EIR do not include camping but do include the use of adaptive management for locating facilities, fencing of sensitive areas and maintaining access by providing walkthroughs and parking areas. Recreation issues from Pleasant Valley Reservoir to the aqueduct Intake are being addressed in the Owens Valley Management Plans that are being developed by LADWP.
Financial Assistance for Water-Related Activities	LADWP is to make an annual payment to Inyo County to assist the County in funding water and environmentally-related activities. The annual payment is to be adjusted upward or downward each year in accordance with the consumer's price index	Los Angeles has provided annual payments to Inyo County, and provided \$1,311,075 in July 2008. Funds provided by Los Angeles have been expended to fund the County Water Department. LADWP has paid Inyo County over \$21M since 1988 for this purpose.
General Financial Assistance to the County	LADWP is to make an annual payment to Inyo County to assist the County in providing services to its citizens. The annual payment is to be adjusted upward or downward each year in accordance with a formula in the State Constitution for an assessment of Los Angeles-owned property in Inyo County.	Los Angeles has provided annual payments to Inyo County, and provided \$3,147,991 in 2008. Funds provided by Los Angeles have been deposited into the County General Fund and expended on County services as directed by the Board of Supervisors. LADWP has paid Inyo County more than \$33.2 million since 1991 for this purpose.

Big Pine Ditch System	LADWP is to provide up to \$100,000 for reconstruction and upgrading of the Big Pine ditch system. LADWP is to supply up to 6 cfs to the ditch system from a new well to be constructed west of Big Pine.	The Standing Committee approved procedures and guidelines for implementing the project in 1998. A Mitigated Negative Declaration has been completed. The Water Agreement has been modified to provide a reliable water supply of 300 acre-feet for the project. The Big Pine Irrigation and Improvement Association has implemented Phase 1, 2 and 3 of the project. LADWP has provided \$99,745 of the \$100,000 committed to the project. After test pumping and identification of a monitoring site for well W415 to supply supplemental water for the ditch system, a contract will be considered for the installation of another well in Bell Canyon to provide additional water for the project. Pipe has been purchased and installed from Big Pine Creek via Mendenhall Ditch to the ditch system headgate. The installation of street crossings, ditches, and returns needed for Phase 4 are being completed. In 2008 the Big Pine Ditch System consumed 303 acre-feet of water.
Park & Environmental Assistance to City of Bishop	LADWP is to make an annual payment to the City of Bishop to assist the City in maintaining its park and for other environmentally-related activities. The payment of \$125,000 is to be adjusted upward or downward each year in accordance with the consumer price index. Inyo County shall make an annual payment to the City of Bishop in an amount equal to the payment made by LADWP.	Los Angeles has provided annual payments to the City of Bishop, and provided \$175,820 in 2008. LADWP has paid the City of Bishop \$1,846,589 since 1997 for this purpose. The County has made its required payment under this section of the agreement.
Release of City-Owned Lands	Los Angeles is to sell 26 acres of surplus LA-owned land within the Bishop city limits; and LADWP is to release for sale 75 acres of LA-owned land, in areas noted on Exhibit B of the Water Agreement, for public or private development	LADWP has sold the 26 acres within Bishop city limits. Inyo County and LADWP determined which parcels of the 75 acres were to be sold and set a schedule for the phased release of these lands. An auction occurred on April 28, 2008 for the release of the Phase 1 lands and one parcel out of eighteen sold. A new auction is in the planning process.
Additional Sales of City-owned Lands	LADWP will negotiate in good faith for the sales of additional surplus Los Angeles-owned land in or near valley towns for specific identified needs. Any such sales are to occur subsequent to those described above.	No additional sales of City-owned lands occurred in 2008.
Lands for Public Purposes	Los Angeles will negotiate in good faith for the sale or lease to the County of any Los Angeles-owned land requested by the County for use as a public park or for other public purposes.	In 2008, there were no lands released for public purposes.
Withdrawn Lands	Inyo County will support passage of withdrawn land legislation pertaining to federally-owned lands in the County.	There is no withdrawn land legislation pending.
Legislative Coordination	Except under certain circumstances, LADWP and Inyo County are to refrain from seeking or	The legislative coordination policy has somewhat been followed.

	supporting any legislation, administrative regulation, or litigation that would weaken or strengthen local or state authority to regulate groundwater or that would affect any provision of the agreement.	
Dispute Resolution	The agreement provides a process for resolving disputes between LADWP and Inyo County regarding issues related to the agreement or the Green Book.	Issues concerning annual pumping programs and operation of the McNally Canals have been addressed utilizing the dispute resolution procedures. Inyo County has agreed to not initiate a dispute over groundwater pumping during the term of the Interim Management Plan provided the pumping provisions of the plan are observed.

## **6.5 Provisions of the MOU**

See Table 24 for the Provisions of the MOU.

**TABLE 24**  
**MOU Provisions**

<b>Title</b>	<b>Provision</b>	<b>Status</b>
Lower Owens River Project (LORP)	A project to rewater approximately 60 miles of the Owens River channel below the aqueduct intake, the enhancement of several environmental features along and near the river, and the return of water to the aqueduct by means of a pumpback facility near the Owens River delta. The LORP is also identified in the 1991 EIR as compensatory mitigation for impacts that occurred between 1970 and 1990 that were considered difficult to quantify or mitigate directly. The LORP, as described in the Long Term Water Agreement and the 1991 EIR, is augmented by the provisions of the MOU. The four physical features of the LORP are listed below:	See Section 5, Table 20, "1991 EIR Mitigation Measures" (Impact #10-14), and Table 23, "Agreement Provisions." Phase I releases began on December 6, 2006. Project baseflows of 40 cfs were achieved in February 2007. On February 13, 2008, a 200 cfs flow was initiated as mandated in the Lahontan permit for the project. In 2008, Thibaut Ponds and the Winterton area also received water as provided in the MOU.
LORP, Item 1	1. The Lower Owens River Riverine-Riparian System. A continuous flow will be established and maintained in the river channel from at or near the intake structure which diverts the Owens River into the Los Angeles Aqueduct to a pumpback system located near the river delta that will return water to the L.A. Aqueduct. The baseflow in the river channel will be approximately 40 cfs. In average and above runoff years, there will be "seasonal habitat flows" of approximately 200 cfs, with reductions of the habitat flows in years when runoff is forecast to be less than average.	This component of the project was achieved in February 2007. Work is completed on installing necessary facilities to implement the 40 cfs baseflow and seasonal habitat flow.
LORP, Item 2	2. The Owens River Delta Habitat Area. This feature provides for the enhancement and maintenance of approximately 325 acres of existing habitat and the establishment and maintenance of new habitat consisting of riparian areas and ponds suitable for shorebirds, waterfowl and other animals. An annual average of approximately 6 to 9 cfs will be released below the pumpback system to supply this area.	Releases for the delta occur simultaneously with the 40 cfs baseflow. No construction was necessary for this component of the project other than the completion of the pumpback station.
LORP, Item 3	3. Off-River Lakes and Ponds. Off-river lakes and ponds in the LORP area will be maintained and/or established	This component of the project is ongoing.

Title	Provision	Status
	through flow and land management to provide habitat for fisheries, waterfowl, shorebirds and other animals. These habitats will be as self-sustaining as possible.	
LORP, Item 4	4. The 1500-Acre Blackrock Waterfowl Habitat Area. In average and above runoff years, approximately 500 acres within an overall project area of 1500 acres will be flooded to provide habitat for resident and migratory waterfowl and other native species. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed.	All preliminary construction work identified for implementation of the Blackrock Waterfowl component has been completed. The forecasted runoff for 2008-2009 was 86%. Per Ecosystems Sciences recommendation and consistent with the Blackrock Waterfowl Management Area (BWMA) flooding strategies for drier years, as well as the Standing Committee's BWMA policy approved this year, 430 acres in the BWMA was flooded this year. Acreage was combined between the Winterton & Thibaut units. There are no requirements for each unit and were no plans for allocating a set amount of water to each unit. CDFG consultation occurred prior to Standing Committee approval.
LORP (cont)	see Table 23, Agreement Provisions."	
LORP (cont)	LADWP and the County will direct and assist Ecosystem Sciences, Inc. in the preparation and implementation of a management plan for the LORP area that addresses each of the four physical features of the LORP. The parties to the MOU, government agencies, LADWP ranch lessees, and the public will be consulted as the plan is developed.	Ecosystem Sciences has prepared a draft management plan for the project. These plans are listed as draft as the project is based on adaptive management and adjustments may be made in the future. Thus the term "final plan" is not used.
LORP (cont)	LADWP as the lead agency and the County as responsible agency will jointly prepare an EIR on the LORP. A draft EIR was to be released by June of 2000, but the deadline has been extended by the MOU Group. A final EIR will be completed as soon as possible following release of the draft.	This project required an EIR. The Draft EIR was released November 1, 2002. The public comment period concluded January 14, 2003. The Final EIR was approved by the Board of Water and Power Commissioners in July 2004. The Inyo County Board of Supervisors approved the EIR in November 2005. LADWP received all the necessary permits for implementation by January 9, 2006 and construction began immediately.
LORP (cont)	The baseflow in the river channel will be commenced not later than June 2003 unless circumstances beyond LADWP's control prevent the completion of the pumpback system and/or the commencement of baseflow. Implementation of the other features of	The Draft EIR stated that the baseflow would not commence on June 13, 2003. The Final EIR was completed in June 2004 per the February 13, 2004 Stipulation and Order. Phase I releases started December 6, 2006. Phase II releases of 40 cfs were physically

Title	Provision	Status
	the LORP will commence upon certification of the LORP EIR.	achieved in February 2007 and were certified by the court in July 2007. Additional punitive conditions involving maintaining flows and recording of flows were added to the 2007 Stipulation and Order following certification of the 40 cfs base flows.
Yellow-Billed Cuckoo Habitat	Under the direction of LADWP and the County, Ecosystem Sciences, Inc. will evaluate Yellow-billed Cuckoo habitat in riparian woodland areas of Hogback and Baker Creeks. Based on the evaluation, if deemed warranted, habitat enhancement plans for these areas will be developed by Ecosystem Sciences, Inc. in consultation with LADWP, the lessee for the area and the parties to the MOU. The evaluations were to be completed within 36 months of the discharge of the writ, but the deadline has been extended by the MOU Group. Actions or projects recommended by this evaluation will be presented to the Board of Water and Power Commissioners for approval and implementation. If approved by the Board of Water and Power Commissioners, habitat enhancement plans will be implemented as expeditiously as feasible.	Ecosystem Sciences completed a Yellow-billed Cuckoo (YBC) habitat plan in April 2005. LADWP released a Draft EIR in January, 2006 with the comment period ending March 27, 2006. The MOU Parties and the lessees for the Baker Creek and Hogback Creek areas entered into negotiations with LADWP staff to develop another alternative for the YBC Habitat Plan. When this alternative is completed, it will be added to the Draft EIR and the document will be released again for public comment. Following the public comment period, the EIR will be finalized. It is anticipated that the Final EIR will be presented to the Board of Water and Power Commissioners for their consideration in 2009. If approved, implementation will follow.
Inventories of Plants and Animals at Springs and Seeps (within the LORP Planning Area)	Within 36 months of the discharge of the writ, an inventory of plants and animals at wetlands associated with springs and seeps was to be conducted by Ecosystem Sciences, Inc. The deadline has been extended by the MOU Group.	The deadline for completion of the inventories was extended to December 2000 and then to July 2001 by the MOU parties. No further extensions have been granted. ESI completed and submitted results of its inventory to the MOU parties in June 2001. ESI has completed this work.
Additional Mitigation	A total of 1600 acre feet of water per year will be supplied by LADWP for the implementation of on-site mitigation measure at Hines Springs identified in the 1991 EIR and on-site or off-site mitigation that is in addition to the mitigation measures identified in the 1991 EIR for impacts at Fish Springs, Big and Little Seely Springs and Big and Little Blackrock Springs. Under the direction of LADWP and the County, Ecosystem Sciences, Inc., will recommend reasonable and feasible on-site and/or off-site mitigation measures, including the	This issue was also addressed in the Stipulation and Order of 2004. The Consultants completed draft plans for the 1600 acre-feet water allocation. Comments were submitted by the Parties. Currently there is an ad hoc process which includes MOU and other interested Parties trying to resolve issues regarding the additional sites. Conceptual plans have been completed. When these plans are agreed to by the MOU Parties, CEQA will be completed and submitted for Board approval. The plans will then be implemented.

Title	Provision	Status
	<p>implementation of mitigation at Hines Springs. Projects recommended by these studies and evaluations will be presented to the Board of Water and Power Commissioners for approval and implementation. The mitigation measures are to be implemented by LADWP and maintained by LADWP and/or the County. The measures were to be implemented within 36 months of the discharge of the writ, but the deadline has been extended by the MOU Group.</p>	
Owens Valley Management Plans	<p>LADWP, in consultation with the parties to the MOU and others, is to identify areas of Los Angeles-owned land, which are not included in the LORP planning area, and develop plans for the identified areas to remedy problems caused by livestock grazing and other uses of the land. Priority will be given to riparian areas, irrigated meadows and sensitive plant and animal habitats. The plans will provide for the continuation of sustainable uses (including recreation, livestock grazing, agriculture, and other activities) will promote biodiversity and a healthy ecosystem, and will consider the enhancement of threatened and endangered species habitats. LADWP, working with Ecosystem Sciences, Inc. will commence the planning effort within 5 years, and plans are to be completed within approximately 10 years. Each plan will contain an implementation schedule and will be implemented in compliance with CEQA. As plans become final, they will be presented to the Board of Water and Power Commissioners for approval and implementation.</p>	<p>ESI has completed draft land management plans for Los Angeles land within the LORP area. Ecosystem Sciences and LADWP personnel are currently developing the land management plans for all of LADWP lands in Inyo County. The final draft report has been completed and Corporate Environmental is performing the CEQA review.</p>
Inventories of Plants and Animals at Springs and Seeps (outside the LORP Planning Area)	<p>Within 36 months of the discharge of the writ, an inventory of plants and animals at wetlands associated with springs and seeps was to be conducted jointly by LADWP and the County on lands owned by the City of Los Angeles within the portion of the Owens River watershed located in Inyo County that is not included in the LORP Planning Area.</p>	<p>LADWP has completed data collection for spring and seep discharge. LADWP had Ecosystem Sciences, Inc. complete the inventory of plants and animals.</p>
Type E Vegetation	<p>By December 1999, LADWP and the County are to develop baseline</p>	<p>The inventory of Type E Vegetation was conducted by Resource Concepts,</p>

Title	Provision	Status
	conditions for management of vegetation classified as Type E in the long-term agreement. These conditions will be adopted by the Standing Committee.	Inc. (RCI) under a contract administered by Inyo County and funded by LADWP. The final report on the inventory was completed in December 1999.
Aerial Photo Analysis	By June 2000, LADWP, the County and experts in aerial photography interpretation were to conduct a study analyzing existing air photos of the Owens Valley to evaluate the merits of using air photos in monitoring vegetation in the valley, to determine the feasibility of using air photos to analyze and refine the vegetation map data base, and to provide recommendations on how aerial photography, or other remote sensing techniques, could be used to monitor vegetation conditions and changes. If feasible and cost-effective relative to other field monitoring techniques, recommendations will be implemented.	The deadline was extended by the MOU group. As of January 2002, Ecosat Geobotanical Surveys, Inc., the consultant conducting the study, completed reports addressing the MOU requirements.
Mitigation Plans for Impacts Identified in the 1991 EIR and the Water Agreement	The Technical Group will prepare mitigation plans and implementation schedules for all area for which on-site mitigation measures have been adopted in the 1991 EIR. The plans will be completed by June 1998. In accordance with the EIR, on-site mitigation will be accomplished through revegetation with native Owens Valley species and through establishment of irrigation.	<p>In August 1999, following the receipt of comments from the MOU parties, the Inyo/Los Angeles Technical Group approved the mitigation plans. In January 2002, the County identified four on-site mitigation measures for which plans may have been inadvertently omitted from the mitigation plans. The County prepared draft plans and schedules for these measures. Mitigation plans were submitted by LADWP to ICWD for the Independence Eastside Regreening and Big Pine Northeast Regreening projects and evaluations of East of Shepherd Creek Alfalfa Potential E/M and East of Big Pine Potential E/M projects on August 13, 2004.</p> <p>CEQA documentation was completed for the <u>Independence Eastside Regreening Project</u> and Town Water System on September 23, 2004, with a public comment period from September 23 to October 29, 2004. Responses to comments were completed. The Board of Water and Power Commission approved the project in May 2005. CEQA was completed for the project with the well location on the project site. Inyo County requested changes to the project after the completion of CEQA including: relocation of the</p>

Title	Provision	Status
		<p>project supply well, change of irrigation type from flood to sprinkler, and addition of corrals/stables. These changes were incorporated into a project scoping document amendment that was approved by the Standing Committee on April 23, 2009. Inyo County has agreed to complete additional CEQA if required to address project changes.</p> <p><u>Big Pine Northeast Regreening Project-</u> Mitigation Plans for the project were transmitted to the County in 2004. Comments were received from the County in 2005. The County identified a portion of the project area for land release and sale. Note that a portion of the Big Pine Ditch system runs through the project area. This reduced the original project area by less than an acre. A letter was sent to Inyo County in February 2008 asking for concurrence on the acreage change but a response has not been received. An archaeological survey of the site was completed as required by the CEQA process. Cultural resources were identified during the survey. These resources will be avoided during implementation. As a consequence, an amended mitigation plan will be submitted for Technical Group approval and CEQA will be completed..</p>
Technical Group Meetings	Technical Group meetings are to be open to the public	Scheduled Technical Group meetings were opened to the public beginning October 15, 1997.
Annual Reports	LADWP and the County are to prepare annual reports describing environmental conditions in the Owens Valley, and describing studies, projects and activities conducted under the long-term agreement and the MOU. The report will be released on or about May 1 of each year.	Inyo County has prepared annual reports since 1991. LADWP released annual reports for 2001 through 2008. This report is intended to fulfill the obligation for 2009.
Fish Slough	The MOU acknowledges that LADWP and DFG have reached agreement concerning threatened and endangered species that involves land management and other activities in the Fish Slough area of Mono County. The agreement is to be memorialized in a letter from LADWP to DFG.	A letter agreement was never memorialized; however, LADWP has worked closely with DFG on the Fish Slough Area of Critical Environmental Concern (ACEC).
Dispute Resolution and	The parties to the MOU will maintain	The parties to the MOU, called the

Title	Provision	Status
Litigation	frequent, informal communications to minimize disagreements. In the event of a dispute among the parties over the MOU the parties will meet and confer before any litigation concerning the dispute may be commenced. The parties may elect to retain the services of a mutually acceptable impartial mediator/facilitator to assist in dispute resolution. Any litigation arising out of the MOU is to be commenced in the Inyo County Superior Court.	"MOU Signatory Group," have met regularly on an as needed basis. In addition, the Group and their attorneys met several times during the fall/winter of 2003-04 to develop the 2004 Stipulation and Order. Due to conditions beyond LADWP's control, the 2004 Stipulation and Order schedule for putting water in the LORP could not be met. The MOU parties filed suit in the Inyo County Superior Court on July 25, 2005. The Court ordered limited pumping, required groundwater recharge, no reduction of in-valley uses, a fine, and implementation of LORP base flows by July 25, 2007. The Court also stayed an injunction against the use of the second aqueduct if base flows were not achieved in the LORP. Upon achieving base flows prior to July 25, 2007 the injunction and daily fines were dismissed.
Financial Assistance	The County will pay the sum of \$53,000 to the Sierra Club and the sum of \$30,000 to the Owens Valley Committee for professional services in the development and preparation of the MOU.	The specified amounts have been paid by the County to the identified parties.

## **6.6 Cooperative Studies**

See Table 25 for the details of the Cooperative Studies approved by the Standing Committee.

**TABLE 25**  
**Cooperative Studies**

<b>Title</b>	<b>Provision</b>	<b>Status</b>
<p><b>Development of Hydrological Modeling Tools</b> (Robert Harrington, ICWD; Saeed Jorat, LADWP)</p>	<p>The purpose of this study is to improve hydrological models developed by previous cooperative studies to evaluate the impact of groundwater pumping, weather variations, surface water management, and other hydrologic changes on groundwater levels. Because groundwater modeling is the only method for consistent interpretation of groundwater data and evaluation of management options, this task is a prerequisite to fulfill the monitoring and technical goals of the Water Agreement. Inyo Count and LADWP want to jointly develop a common set of modeling tools so that methods and analyses are understood and accessible to each agency.</p>	<p>The first model to be considered for improvement was the regional groundwater model by USGS. With the assistance from USGS staff, this model has been updated and recalibrated. A draft final report was completed in 2004.</p>
<p><b>Development of a Model for Predicting Phreatophyte Water Use and Soil Water Replenishment</b> (Aaron Steinwand, Robert Harrington, ICWD; Saeed Jorat, Paula Hubbard, LADWP)</p>	<p>The purpose of this study is to combine information from vegetation, groundwater, precipitation, and soil water monitoring into a model to predict depletion and replenishment of stored soil water above a fluctuating water table. This capability will help protect Owens Valley vegetation by predicting how long soil water will support the vegetation after pumping commences. If soil water information is to continue to be used to trigger pumping decisions, this type of models needed by the Technical Group to evaluate the environmental effects of opposed pumping scenarios and to provide reliable forecasts of expected pumping yields.</p>	<p>The study is underway.</p>
<p><b>Evapotranspiration from Groundwater-Dependent Plant Communities: Comparison of Micrometeorological Measurements and Vegetation-based Measurements</b> (Robert Harrington, Aaron Steinwand, ICWD; Paula Hubbard, David Martin, LADWP)</p>	<p>The objective of this study is to provide direct measurements of evapotranspiration (ET), the combination of evaporation from the ground surface and plant water use, using micrometeorological methods to corroborate current estimates of vegetation transpiration. ET estimates are essential to the Green Book methods for managing pumping and may remain an important component of groundwater management strategies in the future. Results from this study will be applied to improve the ET</p>	<p>This project was completed in 2004.</p>

Title	Provision	Status
	component of numerical groundwater models (study #1) and soil water models (study #2).	
<b>Characterization of Confining Layer Hydrologic Conductivity and Storage Properties in the Owens Valley</b> (Randy Jackson, ICWD; Saeed Jorat, LADWP)	The purpose of this study is to determine confining layer hydrologic properties to assist groundwater modeling efforts (study #1) and to improve the management of wells sealed to the deep aquifer. Pumping from deep aquifers potentially could be managed differently than the Green Book methods. Without information to be developed by this study, however, the magnitude and timing of the water table drawdown from pumping deep aquifers is difficult to predict, complicating any assessment of the effects of different pumping scenarios. A stepwise approach is proposed, starting with analysis of existing data and progressing to low and high intensity field projects, if necessary.	The first phase was completed in April 2003. The final report included sections on identification of methods and tool for characterizing confining layer, analysis of existing aquifer pumping test data, and development of GIS layers for confining layer characteristics in the Owens Valley. A work plan was prepared in March 2004 to perform short-term aquifer pumping tests on 11 production wells throughout Owens Valley to further refine distribution of the confining layer and its hydraulic characteristics.
<b>Shallow and Deep Groundwater Geochemistry and the Source of Spring and Seep Water in the Owens Valley</b> (Aaron Steinwand, Randy Jackson, ICWD; Saeed Jorat, Paula Hubbard, LADWP)	Springs and seeps are valuable and sensitive habitats in the Owens Valley. The purposes of this study are to monitor basic water quality indices seasonally for one year to develop a database to be used to assist restoration of spring waters should any impacts occur. Secondly, the geochemical signatures of water from selected springs and seeps will be examined and compared to shallow and deep groundwater samples to identify the source of the water. These results will be used to link spring and seep flows to particular aquifers to improve groundwater models (study#1) used to assess potential effects of pumping on these areas. An expert in geochemical modeling will be selected by the fall of 2000 to assist the principal investigators with this study.	In Spring 2002, sampling and chemical analysis from shallow test holes, springs, deep wells, surface water and seep area from Lone Pine to Big Pine was completed. A second, more limited round of sampling was conducted in Spring of 2003. A final report on the chemical analyses is complete, which includes results of the chemical analysis and the final interpretations on the source of water in each of the springs and seeps.
<b>Application of Canonical Community Ordination (CANOCO) to Assess Owens Valley Vegetation Change</b> (Sally Manning, ICWD; David Martin, LADWP)	Over the past decade, the Technical Group has collected a vegetation data set that contains information on species abundances and several environmental data sets have become available. Multivariate data analysis techniques provide a means to analyze the vegetation data in conjunction with the environmental influences. By applying these analyses, the Technical Group will be better able to understand the	Since 2000, the principal investigators have worked independently on studying factors influencing vegetation change. The results of preliminary County evaluations have been produced for internal County review and were presented by the County at a meeting of the Ecological Society of America.

Title	Provision	Status
	relationship between environmental variables and vegetation change, the rates of change, and the predisposing conditions that are likely to result in significant long-term, adverse conditions.	
<b>Inventory and Classification of Riparian Vegetation in the Owens Valley for Use in Future Monitoring</b> (Consultant)	The objective of this study is to inventory, map, and classify riparian (Type D) vegetation on Los Angeles-Owned land in the Owens Valley to improve monitoring and management of these areas. This study was suggested in the Green Book but has not been completed.	The Inyo/Los Angeles Standing Committee agreed that this work will be conducted by a consultant through an RFP process. During the 2006 growing season Ecosystem Sciences completed an inventory and classification of all riparian areas in Inyo and Mono Counties as part of their preparation of the Habitat Conservation Plan associated with the Owens Valley Land Management Plan. Therefore, this project is complete.
<b>Development of a Demographic Model for Nevada saltbush (<i>Atriplex torreyi</i>)</b> (Sally Manning, ICWD; David Martin, LADWP)	The purpose of this study is to develop a stage-based demographic model for the native, invasive shrub, Nevada Saltbush ( <i>Atriplex lentiformis</i> spp. <i>torreyi</i> ). Development of a demographic model will allow existing data to be used to estimate the probability of populations reaching certain sizes in the future, given various assumptions about environmental factors. Model development will also allow a sensitivity analysis to be performed in which points in the species' life cycle, having the most impact on population growth, would be identified. Identification of such points could be extremely useful to determine the nature and timing of intervention which could be implemented to control Nevada Saltbush in places where its invasion could cause a conversion in vegetation type that is not allowed under the long-term water agreement.	Since 2000, the principal investigators have worked independently on this study.
<b>Owens Lake Groundwater Evaluation</b>	LADWP has proposed pumping groundwater from Owens Lake for use in the abatement of dust on the lake bed. Any pumping by LADWP from the lake is subject to the provisions of the Inyo/Los Angeles Agreement	The Consulting firm of Camp, Dresser & McKee, Inc. (CDM) completed an evaluation of proposed pumping from the lake. In 2000, CDM submitted a report to the Standing Committee presenting the public's views on the objectives and standards that should govern Owens Lake pumping and a work plan for a long term groundwater evaluation. MWH, Inc. was selected by Inyo County and LADWP to implement the implement the recommendations of the CDM work plan.



## **6.7 Revegetation/Regreening Projects, Progress, and Proposed Future Work**

See Table 26 for the details of the Revegetation/Regreening Projects, Progress, and Proposed Future Work.

**TABLE 26**  
**Revegetation/Regreening Projects, Progress, and Proposed Future Work**

Title	Provision	Status
Laws 90	The site has been fenced.	In fall 2005, an irrigation system was installed in a portion of this parcel. In addition, 20 acres of the parcel were drill seeded in 2005. In the spring of 2006, containerized plants were planted in the parcel. Seeds were also planted in basins bringing the total area planted to 50 acres. In 2007, the drip system was run from April 1 to October 1. All basins were weeded and reseeded. Containerized plants were also planted at some of the emitters. In 2008, the drip system ran from April thru October. All basins were weeded and reseeded.
Laws 94	The site has been fenced.	In 2004 an acre of the parcel was seeded with native seeds identified for this parcel. In fall 2005, an irrigation system was installed in a portion of this parcel. In addition, 10 acres of the parcel were drill seeded in 2005. In the spring of 2006, containerized plants were planted in the parcel. Seeds were also planted in basins bringing the total area planted to 20 acres In 2007, the drip system was run from April 1 to October 1. All basins were weeded and reseeded. Containerized plants were also planted at some of the emitters. In 2008, the drip system ran from April thru October. All basins were weeded and reseeded.
Laws 95	The site has been fenced.	In 2004, an acre of the parcel was seeded with native seeds identified for this parcel. In fall 2005, an irrigation system was installed in a portion of this parcel. In addition, 10 acres of the parcel were drill seeded in 2005. In the spring of 2006, containerized plants were planted in the parcel. Seeds were also planted in basins bringing the total planted area to 20 acres. In 2007, the drip system was run from April 1 to October 1. All basins were weeded and reseeded. Containerized plants were also planted at some of the emitters. In 2008, the drip system ran from April thru October. All basins were weeded and reseeded.
Laws 118	The site has been fenced. Permanent	Plan is to convert approximately 32

Title	Provision	Status
	<p>transects have been installed and baseline monitoring has been conducted. Revegetation studies have been implemented by SAIC using seed with sprinklers and plants with drip irrigation. In addition, MWH conducted studies on dryland revegetation techniques using native seed and various treatments.</p>	<p>acres of this parcel to irrigated pasture. Monitoring of the SAIC study was conducted during the 2004 growing season. The results of these studies were utilized to move forward with larger scale revegetation efforts at this site. The drip irrigation system was expanded in 2004 and seed was planted at all emitters. The system was run from late June till the beginning of November. In 2005 the drip irrigation system was moved to the interspaces in the area with well developed plants. After moving the drip system, all areas under the emitters were seeded. In addition, areas that were previously planted were reseeded if plants were not present. The system was run from April till the first predicted freeze in October. Maintenance was performed as needed on the irrigation system. In 2006, the drip system was run from April 1 to October 1. Basins seeded in 2005 were reseeded as needed. In 2007, the drip system was run from April 1 to October 1. All basins were weeded and reseeded. Containerized plants were also planted at some of the emitters. In 2008, the drip system ran from April thru October. All basins were weeded and reseeded.</p>
Laws 129	<p>This site has been fenced.</p>	<p>In fall 2005, an irrigation system was installed in a portion of this parcel. In addition, 10 acres of the parcel were drill seeded in 2005. In the spring of 2006, containerized plants were planted in the parcel. Seeds were also planted in basin bringing the total area planted to 20 acres. In 2007, the drip system was run from April 1 to October 1. All basins were weeded and reseeded. Containerized plants were also planted at some of the emitters. In 2008, the drip system ran from April thru October. All basins were weeded and reseeded.</p>
Five Bridges	<p>Water releases to this area were initiated in 1987. Permanent photo points and transects have been monitored annually. Fences were installed to eliminate grazing in the riparian and meadow areas that water releases flow through. Initial water releases were from Bishop Creek Canal to C-Drain. The Mitigation Plan</p>	<p>In 2006, high runoff and high flows in the Owens River resulted in the Five Bridges area receiving water nearly continuously during the growing season. Therefore, no additional releases were conducted. In 2007, releases from the Bishop Creek Canal via C Drain were conducted three times during the growing season. Permanent</p>

Title	Provision	Status
	<p>stated that releases should be conducted by high flows in the Owens River. These high flows were very difficult to implement. As a consequence, a change was made and water releases originated from Bishop Creek Canal to C-Drain. Water has been released three times a year during the growing season. All water releases are monitored. Weed control is conducted annually. Controlled burns have been conducted to help with weed control. Grass qualitative monitoring has been conducted and the results of this and the monitoring noted above indicate that the area is responding well to the water releases.</p>	<p>photo points and transects were monitored. Grass qualitative monitoring was conducted. Weed control continued. A grazing management plan has been developed and was implemented for this area. In 2008, releases from the Bishop Creek Canal via C Drain were conducted three times during the growing season. Permanent photo points and transects were monitored. Grass qualitative monitoring was conducted. Weed control continued.</p>
Bishop 97	<p>The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. Permanent transects were run in 2003 to document any changes from baseline conditions. MWH conducted studies on dryland revegetation techniques using native seed and various treatments.</p>	<p>Potential water sources are being evaluated and a drip irrigation system is being designed for this site. Implementation at this site will commence one year after the project at Big Pine 160 is fully implemented and operating properly. Once the irrigation system is installed and operational, seed from species identified for this site will be placed at emitters.</p>
Big Pine NE Regreening	<p>A revised scope of work was sent to ICWD that reflected the interests of the citizens of the community of Big Pine. ICWD did not provide comments on this revised scope of work. On August 13, 2004 LADWP submitted a Mitigation Plan that reflected the project as described in the Final Scoping Document that was approved by the Standing Committee in 1988. Comments were received from the County in 2005.</p>	<p>The County identified a portion of the project area for land release and sale.. Note that a portion of the Big Pine Ditch system runs through the project area. This reduced the original project area by less than an acre. A letter was sent to Inyo County in February 2008 asking for concurrence on the acreage change but a response has not been received. An archaeological survey of the site was completed as required by the CEQA process. Cultural resources were identified during the survey. These resources will be avoided during implementation. As a consequence, an amended mitigation plan will be submitted for Technical Group approval and CEQA will be completed for the project described.</p>
Big Pine 160	<p>The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. MWH conducted studies on dryland revegetation techniques using native seed and various treatments.</p>	<p>Potential water sources are being evaluated and a drip irrigation system is being designed for this site. Once the irrigation system is installed and operational, seed from species identified for this site will be placed at emitters. The irrigation system will cover an area of approximately 17</p>

Title	Provision	Status
		acres. During 2009-2010 LADWP will implement 3 of the 17 acres.
East Big Pine	"An area of approximately 20 acres directly to the east of Big Pine that is poorly vegetated as a result of pre-project activities and activities which are not a part of the project will be evaluated as a potential enhancement/mitigation project. If, in planning this project, it is determined that it is not feasible to permanently irrigate this area, a revegetation program will be implemented" (1991 EIR Impact 10-19).The "Revegetation Plan for Impacts Identified in the LADWP, Inyo County EIR for Groundwater Management" that was submitted to the MOU Group in 1999 states that this area is within the same parcel as Big Pine 160 and, therefore, the mitigation will be the same for both sites.	A survey was completed in 2006 for a fence for this site. The area was fenced in 2007 to eliminate disturbances and encourage natural revegetation. If this area does not revegetate naturally, it will be included with LADWP's ongoing revegetation efforts.
Tinemaha 54	The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. Grass plants were planted in 1999. A drip irrigation system was installed in 2001. The grass plants were irrigated during the growing season from the time the system was installed through 2004.	Transects were run in 2004 to assess cover at this site.
Blackrock 16E	The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. A controlled burn was conducted by LADWP in conjunction with California Department of Forestry to remove weed litter. Permanent transects were run in 2002 to document any changes from baseline conditions. Site native perennial cover has increased, so no active revegetation plans will be developed at this time.	Transects were run in 2005 to assess cover at the site.
Hines Springs S	This site will likely be affected by the Hines Springs on-site mitigation. The site goal and revegetation plan for this area will be developed within three years after the work at Hines Springs is completed.	No action until after Hines Springs on-site mitigation is completed.
Independence Regreening	A revised scope of work has been submitted to ICWD that reflects the interests of the citizens of the community of Independence	CEQA was filed for the Independence East Side Regreening Project and Town Water System September 23 with a public comment period from September 23 to October 29, 2004.

Title	Provision	Status
		Responses to comments were completed. The Board of Water and Power Commission approved the project in May 2005. CEQA was completed for the project with the well location on the project site. Inyo County requested changes to the project after the completion of CEQA including: relocation of the project supply well, change of irrigation type from flood to sprinkler, and addition of corrals/stables. These changes were incorporated into a project scoping document amendment that was approved by the Standing Committee on April 23, 2009. Inyo County has agreed to complete additional CEQA if required to address project changes.
Independence 105	The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. Permanent transects were run in 2001 to document any changes from baseline conditions. Site native perennial cover has increased, so no active revegetation plans will be developed at this time.	Transects were be run in 2006 to assess cover at the site. The site has attained the goals for cover and composition delineated in the revegetation plan.
Independence 123	The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted.	Transects were run in 2006 to assess cover at the site. The site has attained the goals for cover and composition delineated in the revegetation plan.
Independence 131	The site has been fenced. Permanent transects have been installed and baseline monitoring has been conducted. Revegetation studies have been implemented by SAIC using seed with sprinklers and plants with drip irrigation. In addition, MWH conducted studies on dryland revegetation techniques using native seed and various treatments.	Monitoring of the SAIC study was conducted during the 2004 growing season. Data indicates that placing seed at emitters produced positive results. Therefore, seed will be used for this portion of the reveg project. Precipitation conditions in the last few years have resulted in recruitment of native species and an increase in vegetation cover in areas not disturbed by the revegetation trials. Permanent transects were run in 2006.

## 6.8 Mitigation Monitoring and Reporting Program for the LORP

This Mitigation Monitoring and Reporting Program (MMRP) was developed to ensure implementation of the mitigation measures outlined in the Final Environmental Impact Report and Environmental Impact Statement (EIR/EIS) for the LORP (State Clearinghouse No. 2000011075). The MMRP was prepared by the City of Los Angeles Department of Water and Power (LADWP), the lead agency for the LORP under the California Environmental Quality Act (CEQA), in conformance with Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097.

**Project Description Summary.** The LORP is a large-scale habitat restoration project in Inyo County, California, is being implemented through a joint effort by LADWP and Inyo County. The LORP was identified in a 1991 Environmental Impact Report as mitigation for impacts related to groundwater pumping by LADWP from 1970 to 1990. The description of the project was augmented in a Memorandum of Understanding (MOU), signed by LADWP, Inyo County, California Department of Fish and Game (CDFG), California State Lands Commission (SLC), Sierra Club, and the Owens Valley Committee. The MOU specifies the goal of the LORP, timeframe for development and implementation, and specific actions. It also provides certain minimum requirements for the LORP related to flows, locations of facilities, and habitat and species to be addressed.

The overall goal of the LORP, as stated in the MOU, is as follows:

*“The goal of the LORP is the establishment of a healthy, functioning Lower Owens River riverine-riparian ecosystem, and the establishment of healthy functioning ecosystems in the other elements of the LORP, for the benefit of biodiversity and threatened and endangered species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities.”*

LORP implementation includes release of water from the Los Angeles Aqueduct to the Lower Owens River, flooding of approximately 500 acres in the Blackrock Waterfowl Habitat Area, maintenance of several off-river lakes and ponds, modifications to grazing practices, construction of minor new facilities (to facilitate the release, monitoring, etc.), and installation of a pump station to capture a portion of the water released to the river.

**Mitigation Monitoring and Reporting Responsibility.** Implementation and monitoring of most of the identified mitigation measures are post-implementation costs to be shared equally between LADWP and Inyo County. Operation and maintenance related to the pump station and monitoring for grazing management is solely the responsibility of LADWP. For other elements of the LORP, LADWP and Inyo County staff shares the responsibility for implementation and monitoring.

**Organization of the MMRP.** The LORP MMRP presents the mitigation measures by geographic area (Riverine-Riparian System, Blackrock Waterfowl Habitat Area, Pump Station and Associated Facilities, Land Management Plan, and other mitigation measures associated with the LORP as a whole). (Note: Some mitigation measures apply to more than one area.)

For each mitigation, the timing of the measure, the party responsible for implementing the measure, the agency responsible for mitigation monitoring, and the monitoring method are identified. A line for documentation of compliance is also provided.

## **Riverine-Riparian System**

### **Air Quality**

#### **Mitigation Measure AQ-1, PM10 (fugitive dust) emissions from ground disturbance during construction of the pump station.**

To minimize dust/ PM10 emissions during construction activity, as necessary, one or more of the following measures have been implemented:

- After clearing, grading, earth moving, or excavation has been completed, the disturbed areas have been treated by watering, or revegetated.
- During construction, water trucks were used to keep areas of vehicle movement, temporary soil stockpiles, and construction disturbance damp enough to prevent dust from leaving the site.
- The amount of disturbed area was minimized and on site vehicle speeds were reduced to 15 miles per hour or less.

### **Biological Resources**

#### **Mitigation Measure F-1, Impacts on game fishery associated with potential water quality degradation during initial flow releases to the river.**

No work has been conducted that would require action for this mitigation measure.

#### **Mitigation Measure RW-1, Impacts on breeding birds during mechanical removal of tules.**

Removal of cattail and bulrush obstructions, mechanical removal of cattail and bulrush stands occurred in winter to avoid conflicts with breeding birds. Work after March 15 was conducted after field surveys determined there would be no affect to nesting birds.

#### **Mitigation Measure R-1, Short-term disturbance of desert sink scrub associated with the establishment of temporary access roads during initial channel clearing.**

Temporary access roads used to clear the river channel were seeded with native or naturalized grasses and shrubs common to the valley after completion of the de-silting operation to facilitate restoration of vegetative cover and species compatible with the surrounding vegetation. The colonization by non-native aggressive or noxious weeds will be inhibited by weed control for 3 years after construction.

**Mitigation Measure RW-2, Impacts on wetland and riparian vegetation during mechanical removal of tules.**

Impacts to wetland and riparian habitats adjacent to the work area were minimized by making use of existing barren areas for staging, operations, and stockpiling; crushing vegetation in the work area rather than clearing or grading it; and mulching areas denuded during operations with vegetative debris to encourage natural revegetation and discourage noxious weeds.

**Cultural Resources**

**Mitigation Measure CRR-1, Potential disturbance of known archaeological and historic sites during establishment and use of construction-related roads and/or use of construction equipment for the channel clearing work.**

LADWP implemented the following management actions to avoid impacts on cultural resources during the channel clearing work:

- LADWP worked with qualified archaeologists to locate the temporary access road for the channel clearing work to avoid the two historic sites identified in the field survey by Far Western (2003).
- Temporary construction fencing was installed along the perimeter of the area where these two historic sites are located to avoid construction equipment, vehicles, or personnel from accidentally entering and disturbing the site.
- Temporary construction fencing was installed between the sediment stockpile area and the adjacent prehistoric site to avoid heavy equipment and or sediment spoil from accidentally entering and disturbing the site.
- Installation of temporary fencing referenced above was conducted under the supervision of a qualified archaeologist.
- LADWP notified representatives of regional Native American Tribes prior to beginning earthwork for the channel clearing work
- No previously unknown prehistoric or historic cultural material was encountered.

**Mitigation Measure CRR-2, Potential impacts on unknown archeological sites or cultural deposits that could be affected by the new flows or earthwork.**

No previously unknown prehistoric or historic cultural material was encountered.

**Hydrology**

**Mitigation Measure H-1, Localized overbank flooding that could affect public roads and lease roads that cross the river if floating debris clogs the culverts and bridges, primarily under the seasonal habitat flows.**

No work has been conducted that would require action for this mitigation measure.

## **Pumpstation and Associated Facilities**

### **Air Quality**

#### **Mitigation Measure AQ-1, PM10 (fugitive dust) emissions from ground disturbance during construction of the pump station.**

To minimize dust/ PM10 emissions during construction activity, as necessary, one or more of the following measures have been implemented:

- After clearing, grading, earth moving, or excavation has been completed, the disturbed areas have been treated by watering, or revegetated.
- During construction, water trucks were used to keep areas of vehicle movement, temporary soil stockpiles, and construction disturbance damp enough to prevent dust from leaving the site.
- The amount of disturbed area was minimized and on site vehicle speeds were reduced to 15 miles per hour or less.

#### **Mitigation Measure AQ-2, PM10 (fugitive dust) emissions from sediment stockpile at the pump station site.**

LADWP stabilized the sediment stockpile at the pump station site as necessary to minimize wind-blown dust from the stockpile. The method to reduce fugitive dust emissions was water application.

### **Biological Resources**

#### **Mitigation Measure P-1, Disturbance to upland vegetation from construction of the pump station and associated facilities.**

Upland areas disturbed during construction at the pump station site were regraded to create natural contours that match adjacent topography. These areas were then seeded with native plant species in mid-February 2007. The species included were based on the species removed, and the availability of seeds or plant materials.

#### **Mitigation Measure P-3, Disturbance of upland vegetation during construction of the power line.**

The area of temporary disturbance associated with construction of the power line was minimized to the extent feasible by using overland travel to reach pole sites, prohibiting construction of new roads, and minimizing soil disturbance such as scraping or excavation, except where necessary to ensure safe passage or to complete construction.

**Mitigation Measure P-4, Potential inadvertent disturbance of a freshwater seep that is located within 100 feet of the proposed power line alignment, about 2000 feet north of Highway 395 on the margins of Owens Lake.**

The small freshwater seep along the power line was avoided during construction by marking its boundary on construction drawings and flagging them in the field prior to construction activities to indicate an environmentally sensitive area to be avoided.

**Mitigation Measure P-5, The potential for increase in predation on plovers and other shorebirds from the increase in power poles.**

Power poles installed for the LORP pump station that are located within 0.25 mile of Owens Lake were equipped with anti-predator perches (aluminum combs or other appropriate devices placed on top of poles or other potential perching sites).

**Cultural Resources**

**Mitigation Measure CRP-1, Potential disturbance of unknown cultural resources during construction of the pump station.**

LADWP implemented the following management actions to avoid impacts on cultural resources during construction of the pump station:

- LADWP notified representatives of regional Native American Tribes prior to beginning earthwork for the pump station. Interested Tribal representatives shall be invited to participate (on a volunteer basis) in the monitoring of the earthwork.
- A qualified archaeologist has been present during earthwork for the pump station to monitor for and avoid cultural resources. Human remains were encountered during work at the Pump Station in June of 2006. Representatives from Far Western Archeological and from the local tribe reinterred the remains at a nearby location.

**Mitigation Measure CRP-2, Potential disturbance of unknown cultural resources during construction of the power line.**

LADWP notified representatives of regional Native American Tribes prior to beginning construction of the power line.

**Water Quality**

**Mitigation Measure P-2, Temporary water quality impacts associated with site disturbance and equipment use during construction of the pump station.**

The Storm Water Pollution Prevention Plan (SWPPP) was prepared under the provisions of the required Construction General Storm Water NPDES Permit and specifically included measures to: (1) prevent erosion from the construction site and from the post-construction

site that could cause sedimentation into the river, with a focus on stabilizing the river banks to prevent sloughing and erosion during the initial river flows and due to water level fluctuations in the forebay; and (2) prevent discharge of construction materials, contaminants, washings, concrete, fuels, and oils into the river from construction equipment and vehicles. These measures included, at a minimum, physical devices to prevent sedimentation and discharges (e.g., silt fencing, hay bales), and routine monitoring of these devices and the conditions of the river downstream of the pump station site.

## **Blackrock Waterfowl Habitat Area**

### **Air Quality**

#### **Mitigation Measure AQ-1, PM10 (fugitive dust) emissions from ground disturbance during construction of the berms and ditches in Blackrock Waterfowl Habitat Area.**

To minimize dust/ PM10 emissions during construction activity, as necessary, one or more of the following measures have been implemented:

- After clearing, grading, earth moving, or excavation has been completed, the disturbed areas have been treated by watering, or revegetated.
- During construction, water trucks were used to keep areas of vehicle movement, temporary soil stockpiles, and construction disturbances damp enough to prevent dust from leaving the site.
- The amount of disturbed area was minimized and on site vehicle speeds were reduced to 15 miles per hour or less.
- Roads throughout the LORP area have been improved and covered with shale to help reduce dust emission.

### **Biological Resources**

#### **Mitigation Measure B-1, Disturbance of upland vegetation during construction of berms and ditches in the Blackrock Waterfowl Habitat Area.**

Temporarily disturbed upland habitats in the Blackrock Waterfowl Habitat Area have been seeded with native grasses and shrubs common to the valley to facilitate restoration of vegetative cover utilizing species compatible with the surrounding vegetation. The colonization by non-native weeds will be inhibited by weed control for 3 years after construction. During the 2008 growing season tamarisk seedlings were treated and removed.

### **Cultural Resources**

#### **Mitigation Measure B-2, Potential disturbance of known archaeological sites during construction of a ditch in the Blackrock Waterfowl Habitat Area.**

LADWP implemented the following management actions to avoid impacts on cultural resources during construction of the proposed ditch to be located in proximity of the two known prehistoric sites:

- LADWP notified representatives of regional Native American Tribes prior to beginning construction of the proposed ditch to be located in proximity of the two known prehistoric sites. Interested Tribal representatives have been invited to be present (on a volunteer basis) during the construction of the ditch.
- LADWP worked with a qualified archaeologist to locate the proposed ditch to avoid the two known prehistoric sites identified in the field survey by Far Western (2001).
- Temporary protective fencing has been placed between the known prehistoric sites and proposed ditch areas. A qualified archaeologist supervised the placement of temporary protective barriers.
- All vehicles have remained on the road in the vicinity of the known prehistoric sites.
- If construction must occur within 25 feet of these sites, an archaeologist will monitor construction activities.

## **Land Management Plan**

### **Rangelands**

#### **Mitigation Measure LM-1, Potential increase in livestock drift onto public lands.**

No work has been conducted that would require action for this mitigation measure.

## **Other Mitigation Measures Associated with the LORP as a Whole**

### **Deleterious Species**

#### **Mitigation Measure V-1, Potential increase in the distribution and abundance of perennial pepperweed, Russian knapweed, saltcedar, and other noxious non-native weeds.**

LADWP has implemented the following actions to minimize infestations of noxious weeds:

- Construction and other disturbance of substrates have been minimized.
- The use of fire for vegetation management has been minimized.
- Construction equipment was maintained “weed free” by washing and inspecting equipment used in weed-infested areas prior to moving to another site.
- On-site fill materials for construction were used to the extent possible. Off-site fill materials were taken from borrow pits located in areas that are free of noxious weeds.

**Mitigation Measure V-2, Potential increase in the distribution and abundance of perennial pepperweed, Russian knapweed, and other noxious non-native weeds (excluding saltcedar).**

LADWP is providing \$50,000 per year to the Agricultural Commissioner to fund the monitoring and control of new infestations of perennial pepperweed and other noxious weeds (excluding saltcedar) in the LORP project area for the first 7 years of LORP implementation. In addition, LADWP is providing \$150,000 per year for the first 7 years to the Agricultural Commissioner to fund the control of existing perennial pepperweed and other noxious weed populations outside of the LORP area that could serve as seed sources for the LORP area. The commitment by LADWP in this effort over the 7-year period is a total of \$1,400,000. As of June 30, 2008, LADWP has provided \$533,336 to the Inyo-Mono County Agricultural Commissioner for this provision.

The Agricultural Commissioner has developed protocols for monitoring and controlling infestations based upon past experience and current literature. Based on the protocols, the Agricultural Commissioner will use the funds to identify and treat new infestations of noxious weeds within the LORP area in a timely manner, with priority given to the riparian areas. Existing infestations outside of the LORP area that could serve as seed sources for the LORP area will also be monitored and treated. A Memorandum of Understanding between the Agricultural Commissioner and LADWP will be entered into, and will outline the responsibilities of each agency under the protocols.

**Mitigation Measure V-3, Potential increase in the distribution and abundance of saltcedar.**

In addition to LADWP's contribution to the existing Inyo County Saltcedar Control Program, LADWP will provide funding to Inyo County in order for the County's Saltcedar Control Program to implement the following measures:

**Monitoring and Treatment of New Saltcedar Infestations**

Protocols for monitoring and treating new saltcedar infestations in the project area will be developed and implemented by the Inyo County Saltcedar Control Program in cooperation with LADWP. Several joint meetings were held in 2007-08 to discuss this issue. The protocols will include, but not be limited to, the following:

- Prioritization for monitoring and treatment of areas that are to undergo a change in hydrologic status and that do not have an established cover of native plants.
- Provisions for treating new saltcedar infestations, including protocols for treating saltcedar near rare plant populations.
- Provisions for annual pedestrian monitoring of project areas potentially subject to saltcedar infestations.
- Provisions for annual follow-up treatments of previously treated saltcedar infestations.

## **Treatment of Saltcedar Seed Sources**

If the ongoing Inyo County Saltcedar Control Program is not able to achieve the priorities for the control of existing saltcedar populations in the LORP area identified in Section 10.4.1.6 of the LORP EIR, the control of existing saltcedar populations will be completed as part of this mitigation measure.

### **Coordination**

In addition to the above, the program will include:

- LADWP will provide to the Saltcedar Control Program reports and data compiled through the LORP monitoring program concerning flows and water levels related to the river baseflow and seasonal habitat flows, releases to the Delta, and water levels at the Off-River Lakes and Ponds and in the Blackrock area.
- LADWP will notify the Saltcedar Control Program of the timing and extent of annual seasonal habitat flows, increased flow releases to Blackrock units, pulse flows to the Delta, and other changes in land management that could cause a new infestation of saltcedar.
- LADWP will provide to the Saltcedar Control Program work products relevant to saltcedar control that are prepared through the LORP monitoring program, such as maps, imagery, etc.

### **Funding**

LADWP will provide matching funds for LORP saltcedar control equal to the amount obtained by the County up to a total of \$1.5 million. The intent of this mitigation measure is to suppress increases in saltcedar resulting from LORP implementation. If continuation of the LORP-focused saltcedar control program is required and the matching funds described above are exhausted, funding for the program will be an ongoing post-implementation cost (EIR/EIS Section 2.2.2.2).

### **Mitigation Measure V-4, Potential increase in the distribution and abundance of noxious weeds and New Zealand mud snails.**

LADWP conducted a training program for LADWP and Inyo County personnel, lessees, and their employees working within the LORP area on identification and reporting of noxious weeds, including saltcedar, and New Zealand mud snails. The training was conducted at all LADWP maintenance facilities in the Owens Valley. The Eastern Sierra Weed Management Area Noxious Weed Identification Handbook was provided to program participants. The instruction detailed how to accurately describe their locations to aid in verification and timely response and identify the agencies to which sightings of the species should be reported. As new personnel are hired or when training is updated, a refresher course will continue to be provided. In addition, photos of relevant deleterious species have been posted in the assembly rooms of appropriate LADWP and Inyo County facilities.

### **Mitigation Measure V-5, Potential increase in the distribution and abundance of New Zealand mud snails.**

Informational materials have been prepared regarding how to identify New Zealand mud snails and notifying recreational users to take precautionary measures to prevent the spread of New Zealand mud snails. The signs are currently being developed and will be posted in 2008 at key access points to the LORP area, such as Mazourka Canyon Road, Manzanar Reward Road, the pump station, and the Delta. The precautionary measures that will be described on the signs include: scrubbing and rinsing waders, boots, watercraft, and equipment before leaving the water (using hot water or drying will enhance this measure); disposing of fish entrails in proper trash receptacles; and reporting to the Non-indigenous Aquatic Species Toll Free Hotline if this species is observed.

### **Mitigation Measure V-6, Potential increase in the distribution and abundance of New Zealand mud snails.**

During project construction and maintenance, LADWP has either completely dried construction equipment between use in water infested with New Zealand mud snails and non-infested water or steam cleaned the equipment before use in non-infested water.

## **Public Health and Safety**

### **Mitigation Measure PS-1, Potential increase in mosquito breeding habitat.**

LADWP has entered into an agreement with Owens Valley Mosquito Abatement Program (OVMAP) to abate the potential increase in mosquitoes resulting from the LORP. Mitigation Measure PS-1 has three components:

- Pre-project and post-implementation surveillance, monitoring, and control (to be performed by OVMAP)
- Agency coordination and LORP management adjustments (to be performed by LADWP)
- Public education, program administration, and reporting (to be performed by OVMAP)

OVMAP estimates that the annual cost to fully implement Mitigation Measure PS-1 could be approximately \$109,000, depending on the severity of the impact (L. Kirk, pers. comm., December 2003). This is considered an ongoing post-implementation cost that will continue for the life of the project. Post-implementation costs are to be shared equally by LADWP and the County as described in EIR/EIS Section 2.2.2.2.

## **Recreation-Related Impacts**

### **Mitigation Measure RC-1, Impacts on biological resources, grazing operations, cultural resources, existing recreational uses, and roadways from future increase in recreational activities.**

LADWP personnel observed and received a complaint regarding access through new LORP related fencing. A field review was conducted on February 22, 2007 by LADWP personnel and concerned citizens. In addition, a public meeting was held on April 4, 2007 in Independence to document public concerns about recreation access. Another field review with LADWP and concerned citizens was conducted on April 19, 2007. Walkthrough access will be improved as a result of these concerns. Additionally, LADWP staff will utilize the information from these meetings to improve recreation access to alleviate the public's concerns.

**Mitigation Measure RC-2, Impacts on cultural resources from future increase in recreational activities.**

Although no work has been conducted that would require action for this mitigation measure, LADWP has conducted a training program for LADWP and Inyo County personnel working within the LORP on identifying and reporting of cultural resources or potential cultural resources at LADWP or Inyo County facilities in the Owens Valley. Training is offered and provided to new employees on an ongoing basis.