Mitigation Project Report

The 1991 EIR requires that LADWP submit an annual report to the Los Angeles Board of Water and Power Commissioners containing the description of each mitigation effort, its goals, strategies, and actions; its status (completed activities, ongoing activities); the overall effectiveness of each mitigation effort; and the status of each mitigation plan for the following year.

Progress on Mitigation Projects

Over the past year, there has been continued progress on several Water Agreement mitigation projects. The Lower Owens River Project (LORP) continues to progress into a functioning riverine-riparian ecosystem jointly implemented by LADWP and Inyo County. The Yellow-billed Cuckoo habitat enhancement project is well underway. The Independence Eastside Regreening Project is moving into the construction phase. The Big Pine Ditch System runs from one end of Big Pine to the other and should be fully completed by the spring of 2011. A water supply for the Big Pine, Northeast Regreening project (30-acres), has been identified and the project is a step closer to implementation. The Klondike South Shoreline Habitat Area has not met objectives and project alternative sites are now being identified and studied.

Lower Owens River Project (LORP). Overall**,** the goals of the LORP, to establish a healthy, functioning ecosystem for the benefit of biodiversity and Threatened and Endangered species, are being met. The initial environmental effects of supplying water were dramatic–especially the recruitment of vegetation and the return of wildlife. However, after three years of supplying the river with water, the rapid recruitment of willows and cottonwoods has slowed. Few willow seedlings, and no cottonwood sprouts were found in the river-riparian corridor during the 2010 annual assessment of the LORP project area. This could be due to encroaching river-bank aquatic vegetation, primarily dense tules that are preventing water-dispersed seeds from reaching bank soils suitable for germination. It appears that tules are becoming a key and limiting factor in the future development and expansion of the riparian ecosystem.

LORP Seasonal Habitat Flow. Water has been in the LORP since December 2006, and Seasonal Habitat Flows, which are released to replicate natural snow melt spring floods, have been released in February 2008, May 2009, and June 2010. The objective of the weeklong release of higher flows is to provide significant out-of-bank flooding to stimulate germination of riparian vegetation and recharge local water tables. The amount of water released in the flow is linked to water runoff projections. In a normal year, when runoff is projected at 100% of normal, a maximum of 200 cubic per second is released at the river intake. The flow is released in incremental stages over the course of 14 days peaking at day 7 and returning to baseline on day 14. This year, the snowpack was 95% of normal; close enough to 100% that managers agreed to release the maximum 200 cfs

flow. The effects of the 2010 SHF will be documented in the 2010 LORP Annual Report, which will be available in early 2011.

LORP Annual Report

The 2009-2010 LORP annual report will provide information on recent monitoring activities including:

- Water quality,
- Seasonal Habitat Flow,
- River gains and losses,
- Habitat observations,
- Hydrologic monitoring and reporting,
- Land use,
- Creel census,
- Weed and Saltcedar control,
- Grazing management, and
- Adaptive management recommendations.

The County of Inyo and LADWP finalized a joint funding agreement for the LORP, which will help guide future development of the work plans and budgets for joint implementation of the LORP (see 2009-10 Work Plan and Budget).

LORP Recreational Use Plan

It is anticipated that the LORP area will be a high-use recreation area that will appeal to recreationists who enjoy bird watching, wildlife viewing, hunting and fishing, and many other outdoor activities in a natural and unique ecosystem (LORP MAMRP, 3-75). With increased use, unauthorized roads, waste and litter, vandalism, wildfires, artifact gathering, vegetation clearing and soil disturbances are likely, and managing these problems can be costly for the County and conflict with the goals of the LORP.

Developing a RUP will provide a mechanism to comprehensively identify resource-appropriate recreational opportunities and challenges, and evaluate these in relation to: environmental objectives to protect the river and other LORP related resources; community concerns that cultural resources and working landscapes be protected; and feasibility of implementation and maintenance of new programs and uses. A recreational use plan is described in the Lower Owens River Project, Post Implementation Agreement (PIA) Section II, C. (1&2):

The County of Inyo has hired Recreational Planners at MIG Inc. to develop a draft RUP by the summer of 2011. The plan will identify possible recreational uses and evaluate these in relation to:

Additional Mitigation Projects Developed by the Ad Hoc Group

CEQA has been completed and a Mitigated Negative Declaration was filed in June 2010. MOU section III identifies several commitments to mitigation projects in addition to the LORP. Among these commitments is the development of a habitat improvement plan for the Yellow-billed Cuckoo, and projects using 1,600 acre-feet of water each year to

mitigate for impacts to springs. A portion of the 1,600 acre-feet per year will go to on-site mitigation at Hines Spring, with the remaining water going to other projects including:

Yellow-billed Cuckoo habitat at Baker and Hogback Creeks.
The Yellow-billed Cuckoo project plans for habitat enhancement at Baker and Hogback Creeks were finalized in May 2009. LADWP performed CEQA analysis and issued a Mitigated Negative Declaration in late 2009. Fencing has been constructed to exclude cattle from the area during the time when birds are expected to be nesting. Planting of trees began in 2010.

Hines Springs Well 355 (240 af), and Aberdeen Ditch Hines Springs (145 af)
The project involved running water from Well 355 and Aberdeen Ditch through a pipeline into a portion of the historic spring vent channel. A ten-acre enclosure will be built around the project. The project will create and enhance riparian, aquatic and spring habitat types. In addition, subirrigation of pasture/meadow will enhance livestock grazing opportunities. A fish barrier will separate the ditch water and spring water areas so that spring dependant species can be isolated.

Freeman Creek (215 af)
The project involves the diversion of Freeman Creek into ancestral washes to create a diverse riparian corridor.

North of Mazourka Canyon Road (300 af)
This project involves the utilization of the water provided by flowing well V008 and the installation and utilization of water from a new flowing well. The water from the flowing wells will be piped to an outflow channel and will follow existing natural drainage features, flowing through two ponds and terminating west of the Owens River. The project will create spring and riparian habitat.

Homestead Well (300 af)
This project involves water from a new flowing well to be piped to an existing channel towards an approximately one-acre pond. The project will create riparian, wetland and spring habitats and improve the existing alkali meadow. Riparian dependent bird and mammal species will benefit from the one-acre pond. In addition, a stock watering location will be provided as part of this project.

Well 368 (150 af)
This project involves augmenting the flow at F368, which currently supports a native fish population. A new flowing well will be drilled to augment W368 and combined these will create and maintain riparian, aquatic and spring habitats.

Diaz Lake (250 af)
This project involves supplying water from the Los Angeles Aqueduct to a 75-acre lake that is an Inyo County recreation facility. The project will provide a secure water supply for Diaz Lake and reduce the dependence on pumping conducted by Inyo County to

supply the lake. This project will reduce pumping by Inyo County in the Bairs-Georges Wellfield.

Warren Lake (to be determined annually)
This project will consist of releasing water from the Big Pine Canal into an existing ditch that will carry water to the Warren Lake playa. This project will not receive water every year but will serve to balance the annual 1600 acre-foot water commitment.

Independence Eastside Regreening. The Independence East Side Regreening Project consists of constructing a new water supply well in the town of Independence and irrigating an approximately 30 acre parcel immediately north of Market St. and east of Clay St. The final scoping document for this enhancement mitigation project that was approved by the Standing Committee in 1988 describes that:

- Water will be supplied from a new well, to be drilled and equipped on the parcel northerly of the old Robinson House parcel. Output from the well will be supplied through buried pipelines and riser valves to allow flood irrigation of the parcel. By connecting these pipelines into other existing pipelines, water supply to the woodlot, pastureland, and spring field will be augmented. Connection may also be made from the well discharge into the Independence town distribution system to allow supplemental emergency fire flow capability. The Department would select a lessee to flood irrigate the 30-acre area, establishing irrigated pasture.

From 2002 to 2008, the project underwent several rounds of review and reconsideration by the public, the Board of Supervisors, the Water Commission, the Technical Group, and the Standing Committee. In April 2009, the Standing Committee revised the scope of the project to allow sprinkler irrigation, to relocate the well to reduce noise at neighboring residences, and to allow for a stable and corral being included in the project. The next steps toward implementing the project are for the LADWP to drill a new well at the site, and develop a request for proposals to identify a lessee for the acreage.

Klondike Lake – South Shoreline Habitat Area. Among the objectives of the 1986 Klondike Lake Enhancement/Mitigation Project was to release lake water to a native habitat area on the south shore of the lake with the goal of providing nesting and feeding areas for waterfowl. No specific water allocation was projected for the habitat area, but when available, water was released.

Water use for the Klondike Lake Enhancement/Mitigation Project was initially estimated at 2,200 acre-feet of water a year (AFY), but modifications made to the supply ditch in 1994-1995 dropped the average release to 1,500 AFY. As a result, the project was modified in 2003 and Klondike's water allotment was permanently reduced to approximately 1,700 AFY (in 2009-2010 1,169 AF was supplied). The 500 acre-foot imbalance was reallocated, with 300 of water a year was allocated to the Big Pine Ditch System Project and 200 AFY committed as a source of habitat water (from May 15 to September 30) for the newly designated, South Shoreline Habitat Area Project (SSHA).

Designated water releases were made to the SSHA beginning in 2005. At the outset, it was recognized that the general lack of relief in the project area--0.7 foot gradient between the lake edge and project area—could limit the success of the project, and indeed it has. Each year, the amount of water able to make it to the site has decreased. In 2009, conveyance problems permitted delivery of only 80 AFY. In addition, emergent aquatic vegetation, primarily [cattails], have intruded into areas of usable habitat; open water has decreased and shorebird habitat is largely gone.

Alternative waterfowl and shorebird habitat areas are being discussed and studied by County of Inyo and LADWP staffs, but a replacement site has not yet been identified. Two sites with suitable depressed landforms were found to the north and northeast of the lake, both of which might have been supplied by abandoned flowing wells, but both sites proved impractical. Two other potential wetlands were found along Lyman Ditch where impoundments could be constructed to flood adjacent low-lying alkali meadows or pasture. LADWP proposed supplying reliable water to the existing SSHA site by drilling a flowing well in the vicinity. Discussed also, was the possibility of designating two habitat sites, this for purposes of controlling aquatic vegetation. Flooded areas could be rotated, alternatively flooded then dried on an annual or biannual basis, with tules and other aquatic vegetation burned or otherwise removed at the dry site.

Big Pine Ditch System. Largely through volunteer efforts, the Big Pine Ditch system is nearing completion. All of the ditches have been dug and pipes installed under streets and yards. Water now flows throughout the town. The project should be finished by spring 2011.

Big Pine Regreening (30 acres). The Inyo County/ LADWP Technical Group approved an amended mitigation plan in the spring of 2010. Modifications include a change in water source. The Big Pine Canal was added to the Big Pine and Mendenhall ditches as a source of project water. Replacement water, (equal to or less than 150 AFY) will be supplied by Well 375. The effect of pumping Well 375 to supply this project is predicted to be negligible. The Water Department modeled the effects of pumping Well 375 continuously for ten years. The model took into consideration pumping effects at three locations and if Well 375 was pumped at 150 AFY the water table at these sites will decline less than 0.2 feet. The new project scope also allows sprinkler irrigation as well as flood irrigation. The original project description anticipated flood irrigation. It is estimated that sprinklers will reduce the project's water use from 150 AFY to 90 AFY.