Independence East Side Regreening Project
and Town Water System

Project Description

1. Project Scope
   The project consists of constructing a new water supply well in the town of Independence in the Owens Valley. The new well will be used to supply the Independence East Side Regreening Enhancement/Mitigation (E/M) Project and as supplemental supply for the Independence Town Water System. Output from the well will be supplied through buried or aboveground pipelines and riser valves to allow flood irrigation to the approximately 30 acre parcel. A lessee will be selected to establish the approximately 30 acre area as irrigated pastureland.

2. Background

   In the 1991 EIR, environmental impact number 10-11 was identified as “Fluctuations in water tables due to groundwater pumping has caused approximately 655 acres of groundwater dependent vegetation to die-off. Loss of vegetation cover has occurred on these lands.” One of the mitigation measures prescribed is “In the near future, two enhancement/mitigation projects will be initiated to mitigate areas affected by groundwater pumping adjacent to the towns of Independence (east side regreening project) and Big Pine (northeast regreening project). Each project will be approximately 30 acres and will be converted to irrigated pasture.” See Figure 1.

   The 1991 EIR and 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 (Agreement), adopted in 1991, states that the City of Los Angeles-Department of Water and Power (LADWP) shall develop and implement E/M projects ranging in scope from the revegetation and irrigation of certain areas to enhancement of wildlife habitats and recreation areas.

   A Final EIR prepared August 1991 incorporated public comments and identified the mitigation alternative for this project as “Manage groundwater pumping in accordance with the goals of the Agreement and establish an irrigated crop (i.e., pasture, alfalfa, or other crop) supplied with surface water and/or pumped groundwater”.
On September 28, 1988 the Standing Committee, based on a recommendation from the Technical Group, approved the Independence East Side Regreening Project Final Scoping Document. The Scoping Document, prepared by the Technical Group, defined the need to enhance the aesthetics of abandoned land adjacent to the residential area east of Independence. The document states “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 [LADWP] would select a lessee to flood irrigate the [approximately] 30-acre area, establishing irrigated pasture.”

Ensuring that this project meets the terms of the Agreement will be the responsibility of the Standing Committee and Technical Group. The Standing Committee representatives from LADWP consist of a member of the Los Angeles City Council, two members of the Board of Water and Power Commissioners, and three staff members. The Inyo County Standing Committee representatives consist of one member of the Inyo County Board of Supervisors, two Inyo County Water Commissioners and three staff members.

Prior to installing a new well the Agreement states guidelines for a joint evaluation by the Technical Group. The Technical Group is comprised of not more than five representatives selected by Inyo County and five by the LADWP. The Technical Group shall evaluate the potential impact of the new well operation on the Owens Valley vegetation and environment. Additional monitoring of groundwater tables and vegetation shall be implemented as necessary outside of existing management areas and monitoring requirements shall be altered or created as necessary. The Technical Group shall designate a management area and monitoring site requirements for each new well. A determination of what is a significant decrease or change in vegetation and of what is a significant effect on the environment will be made by a case by case analysis.

The 1991 Agreement includes the transfer of the water systems owned by LADWP to Inyo County (or another public entity) in the towns of Independence, Lone Pine, Big Pine and Laws as an element to be implemented. As part of the transfer, LADWP will permanently supply untreated groundwater to each town system. Prior to the transfer of the water systems, Inyo County and LADWP will jointly select and will have an independent engineering firm inspect each of the systems for compliance with all applicable requirements. The evaluation was performed by Boyle Engineering. Inyo County expressed concerns that the fire flows used by Boyle Engineering were inadequate, the LADWP indicated that the new well planned for the regreening project can provide an additional source of supply for fire protection. The Independence Town Water System is currently supplied by primary well W357 and backup well W384. The water
system has a 257,000 gallon reservoir storage facility located on the west side of town, north of Onion Valley Road. The proposed well will connect directly into the water distribution system at Clay Street which has an 8 inch diameter water main. The Inyo County Public Works Department has requested that the proposed well be available to operate as a backup domestic supply for the town system. Inyo County will install a chlorination facility adjacent to the well site.

The Independence Town Water System is being transferred from LADWP ownership to ownership, operation and maintenance by Inyo County. Inyo County will own all the water distribution facilities, except the supply wells. The proposed well will be owned and operated by LADWP. Inyo County will connect the well outlet to the water distribution system to provide a backup domestic supply and supplemental emergency fire flow capability to the town water system.

With the combination of three well supplies and the reservoir storage, the fire protection capacity in the town of Independence shall be greatly improved. An added benefit would be operational flexibility.

3. **Project Location**

The location of the proposed new well is north of Market Street and east of Clay Street, within the regreening project area and adjacent to the Independence Woodlot. (See enclosed Figure 1). The shape of the parcel for the Independence East Side Regreening Project is irregular. The Independence Little League ball field lies just inside the southeast corner of the parcel. Residential housing is located to the south, west and north of the regreening project. The Owens Valley Unified School District has a school located on the south side of Market Street, south of the regreening project. A historic structure known as The Robinson House is located on the east side of Clay Street. The Robinson House is a privately owned residential lot and the Independence East Side Regreening Project will surround the lot.

The area of the Independence East Side Regreening Project is owned by LADWP. A pipeline will be extended from the new well to the west to connect to the existing Independence Town Water System, which currently has an eight inch diameter water main in Clay Street. A flood irrigation system will be installed by the lessee(s) to irrigate the regreening project area. Water conveyance facilities and irrigation ditches will be installed in the regreening project area to allow for operational flexibility.

4. **Public Input**

Public input is provided through meetings of the Inyo County/Los Angeles Technical Group and Standing Committee, the Inyo County Water Commission and the Inyo County Board of Supervisors.
At the Inyo County Board of Supervisors meeting on February 4, 2003 a request by residents of Independence to modify the use of the approximately 30 acre regreening project site to allow a developed sports complex and a stables/corral area was considered. The Inyo County Board of Supervisors then requested LADWP to proceed with installing the new well for the Independence East Side Regreening Project, develop the westerly two-thirds of the regreening project as originally proposed and postpone irrigation on the remaining one-third to allow for possible development of a community supported sports complex.

Inyo County staff were assigned to develop a list of necessary information required for the ball field proponents’ project description to satisfy the needs of a potential CEQA finding regarding equal mitigation. A sports complex located within the area of the Independence East Side Regreening Project should continue the uses of the land that are compatible with the Water Agreement’s definition of Type E lands; and that the proposed sports complex (a modification of the original mitigation measure and an implementation of a substitute mitigation measure) will provide mitigation at a level equal to the level of mitigation described in the 1991 EIR. Adoption of this CEQA documentation would allow construction of a community supported sports complex on the easterly one-third of the regreening project acreage. The Inyo County Board of Supervisors requested this information by June 1, 2003, if the information was not provided by that date LADWP would be requested to proceed with implementing the project as originally proposed on the remaining easterly one-third of the site. As of September 2004 LADWP has not received any further requests from the Inyo County Board of Supervisors on alternatives for this project.

5. Water Supply
The original project strategy for irrigated pasture called for a new well to provide water to the E/M project site via flood irrigation. The E/M project will be supplied directly from the new well with a metered connection. The E/M project will require water supply during the irrigation season, approximately April through September. Pasture establishment after seeding may require a longer irrigation season the first year. Output from the well will be distributed to the regreening area by ditches and/or buried or aboveground pipelines and riser valves. By connecting these pipelines into other existing pipelines to the east, some of the water produced by this well could be used to augment the demands of the woodlot, pastureland, and spring field areas. The new well will also be used as supplemental supply for the Independence Town Water System. The supply to the town water system will be metered. Inyo County will install a chlorination facility to treat the water for domestic usage. The E/M project will use up to 3 acre-feet per year per acre.

The Independence Town Water System is allowed an annual allotment of 450 acre feet of water per the Inyo/LA Agreement. If an amount is used above the
allotment the County of Inyo or a responsible public entity will pay an incremental cost for the additional water and power.

The proposed well will be drilled to a depth of approximately 600 feet. Following the drilling process an electronic log will be performed to determine the hydrogeologic characteristics of the new well. This log will be used to determine which area of the well casing will be slotted.

A control system may be installed to activate the new well at a minimum system pressure setting to supply the town system. Conveying the water from the proposed well to the distribution system will require the installation of piping to Clay Street.

6. **Impacts of Project**
   In order to provide supply for the E/M project and town water supply there will be groundwater withdrawals from the proposed well. Pumping groundwater may potentially lower the shallow water table in areas with groundwater dependent vegetation. As this project will be operated under the terms of the Agreement, the vegetation protection terms of the Agreement will be implemented to ensure that any significant impacts of the project on groundwater dependent vegetation is avoided.

   Attachment A addresses potential significant impacts and mitigation measures that have been incorporated into the project to result in no impacts or less than significant impacts with mitigation incorporated.

7. **Cost of Project**
   LADWP will bear the cost of drilling the new well, equipping the well for operation and supply to the E/M project. Inyo County will install a chlorination station and piping from the proposed well to Clay Street.

   The lessee will be responsible for general cleanup of the parcel, removing dead trees, brush and trash. The lessee will also be responsible for the construction and installation of any necessary head ditches and checks to facilitate flood irrigation of the project. The lessee will prepare, seed and irrigate to germinate a suitable pasture over the parcel and will irrigate the established pasture, maintain and operate all on-site ditches, conveyances and checks for the life of the project.

8. **Schedule**
   It is anticipated that the new well will be constructed in 2005.
9. **Compliance with the Agreement**

The Green Book, the technical appendix to the Agreement, includes guidelines for drilling and activating new production wells. Based on the Green Book guidelines, LADWP can replace existing wells or construct new wells in areas where hydrogeologic conditions are favorable and the operation does not cause a significant change in vegetation. This section addresses compliance with the terms of the Agreement with respect to this project.

1. **Evaluation of Potential Impacts**
   a) Existing information on the hydrogeologic conditions at the site will be evaluated. Existing data will include water levels, pumping data, well logs, well test reports, and the application of existing groundwater models to this project.
   b) An inventory of vegetation that could potentially be affected by the well operation will be performed.
   c) An assessment of other potential significant effects on the environment indicates that no springs, flowing wells, or private wells are located in the area that could be significantly impacted by this project.

2. **Construction and Testing**
   a) LADWP will design and contract drilling of the proposed well according to the current practice of the industry.
   b) Inyo County will obtain the necessary well permits.
   c) A step drawdown aquifer test with at least three ramping steps and a 24 hour constant discharge rate test will be performed.
   d) An initial operation and monitoring management plan will be established with Inyo County.

10. **Goal**

The Green Book states in section I.C.2.a, “In developing a mitigation plan, the Technical Group shall first establish a goal for the plan in conformance with the goals and principles of the Agreement.” The goal for this project was noted in the Final 1991 EIR and was approved by the Standing Committee in 1988 with the acceptance of the Final Scoping Document for this project. The goal for this project is to enhance the aesthetics and regreen abandoned land adjacent to the residential area east of Independence. This will be achieved by establishing an irrigated pasture supplied with pumped groundwater.

11. **Reporting and Monitoring Program**

The Green Book, section I.C.2.c., states: “As part of each mitigation plan, the Technical Group shall develop a reporting and monitoring program. At least
once per year, the Technical Group shall report, in writing to the Standing Committee, on the effectiveness of the mitigation plan in achieving its goal."

The pasture will be monitored, once fully implemented, using the Natural Resources Conservation Service Guide to Pasture Condition Scoring (Attachment B). Monitoring will be conducted jointly by the lessee and LADWP field staff. This pasture condition assessment is designed to ensure that both plant and livestock productivity are optimized while making certain that detrimental effects to soil and water resources are minimized as much as possible.

Pasture condition assessment will be conducted once every five years if the pasture is in good to excellent condition. If management changes are implemented because the pasture scores less than 80 percent, assessments will be conducted more frequently as an evaluation of the effectiveness of the change in management.

Once per year, the Technical Group will report to the Standing Committee on the effectiveness of the project. In years when pasture condition assessment is conducted, this information will be included in the annual report. In addition, changes in management prescription initiated to improve the assessment of the pasture will be discussed in the annual report.