

Inyo/Los Angeles Cooperative Effort to Develop Revisions to the Green Book

Problem Statement and Workplan I.D - Surface Water Management

March 21, 2008

Developed by Staff from Inyo County Water Department and
Los Angeles Department of Water and Power

Background

Requirements to manage surface water operations are mentioned in multiple sections of the 1991 EIR, Agreement, and the Green Book. Thus, it is relevant to review the provisions of the 1991 EIR and Agreement as well as the Green Book in order to define the scope of this task to revise the surface water management provisions.

Surface Water Management under the 1991 EIR:

The 1991 EIR states that (f)uture groundwater pumping and surface water management practices in the Owens Valley will be governed by the goals and provisions of the Agreement (1991 EIR p. S-5)

The 1991 EIR requires LADWP to continue to provide water to certain lands that were irrigated at that time:

(L)and owned by Los Angeles that is currently irrigated or supplied with water will continue to be irrigated or supplied with water in the future (1991 EIR, p. S-6)

The 1991 EIR also anticipated increased surface water exports from the Owens Valley to Los Angeles:

Compared to pre-1970 conditions, the project would increase the amount of groundwater and surface water exported from Owens Valley to Los Angeles. The increased amount of water exported would be obtained from an increase in groundwater pumping, from surface water that has been made available by a reduction in the number of irrigated acres owned by Los Angeles and from surface water that formerly did not enter the aqueduct system (1991 EIR, p. S-8)

The 1991 EIR anticipated that the future surface water budget under the Agreement could be made significantly different from the 1970 to 1990 period by reductions in available water due to decreased Mono Basin exports:

The future surface water budget under the Agreement is not expected to be significantly different from the 1970 to 1990 period, except for the possible change associated with reductions in Long Valley outflow due to decreased Mono Basin exports (1991 EIR p. 9-58).

Agreement Provisions Pertaining to Surface Water Management

The management strategy of the Agreement is expressed as:

The overall goal of managing the water resources within Inyo County is 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.

Concerning Type C and D vegetation, the Agreement states in regard to the management of surface water management practices:

The communities comprising this classification exist because of high groundwater conditions, natural surface water drainage, and/or surface water management practices in the area, i.e., conveyance facilities, wet year water spreading, etc. (Agreement, Section II.C and D, p. 9.)

The Agreement's goal for the management of Type B, C, and D vegetation is:

...to manage groundwater pumping and surface water management practices so as to avoid causing significant decreases in live vegetation cover, and to avoid causing a significant amount of vegetation comprising either the Type B, C, or D classification to change to vegetation in a classification type which precedes it alphabetically (for example, Type D changing to either Type C, B, or A vegetation). (Agreement section IV A, p. 14)

Type E vegetation is supplied using ground or surface water and the revised Green Book cannot interfere with attaining the goals for that vegetation type. Type E vegetation is to be managed such that:

These lands will be supplied with water and will be managed to avoid causing significant decreases and changes in vegetation from vegetation conditions which existed on such lands during the 1981-82 runoff year. Significant decreases and changes in vegetation will be determined as set forth in the management goals for Type B, C, and D vegetation; however, conversion of cultivated land by the Department or its lessee to other irrigated uses shall not be considered a significant decrease or change. Another primary goal is to avoid significant decreases in recreational uses and wildlife habitats that in the past have been dependent on water supplied by the Department. (Agreement section IV A, p. 16-17).

Additionally, under the heading of Type E Vegetation Classification, the Agreement protected enhancement/mitigation projects from future water reductions unless the County and Department agree to such reductions, many of which also are supplied via ground and surface water conveyances.

...the Department shall provide water to any enhancement/mitigation projects added since 1981-1982, unless the Inyo County Board of Supervisors and the Department agree to reduce or eliminate such water supply. (Agreement section IV A, p. 17)

The Agreement recognized that successive dry years could result in insufficient water to meet all needs and during periods of dry year water shortages the Agreement provides that:

A program providing for reasonable reductions in irrigation water supply for Los Angeles-owned lands in the Owens Valley and for enhancement/mitigation projects may be implemented if such a program is approved by the Inyo County Board of Supervisors and the Department, acting through the Standing Committee. (Agreement section IV A, p. 17)

Furthermore, the Agreement requires significant impacts attributable to changes in ground or surface water management to be mitigated.

Any significant effect on the environment of Inyo County attributable to groundwater pumping or to Department surface water management practices, shall be mitigated as soon as a reasonable and feasible mitigation plan is developed (Agreement Section III F, p. 12-13).

Procedures are included in the Agreement to determine if decreases in live cover, changes in vegetation type, or other observed effects on the environment are attributable to groundwater pumping and/or to surface water management practices, and if determined to be attributable, if such changes are significant (Agreement, Section IV.B., p. 18-19).

In order to meet the Agreement's goals for Type B, C, and D vegetation (Agreement, Section IV.A), the Agreement specifically addresses permanent changes in canal operations:

The Department shall continue to operate canals in accordance with its practices from 1970 (past practices have included taking canals out of service for maintenance and for operational purposes). However, any permanent change in canal operations, compared to past practices, shall be subject to prior Standing Committee approval. The Department will continue to determine and implement maintenance activities to control aquatic weeds and ditch bank vegetation in order to maintain canals in a clean and efficient manner. (Agreement, Section IV.A, p. 16.)

Green Book Provisions Pertaining to Surface Water Management

Section I of the Green Book provides:

When reference is made to changes in surface-water management practices, changes will be determined in comparison with past practices since 1970. (Green Book, p. 1)

In regard to the management of "surface water management practices," for Type B and C, vegetation, the Green Book states:

Should water balance calculations project that less soil water will be available in an area of Type B or C vegetation than is required by the vegetation, and should it be determined that the projected soil water deficit is not attributable to groundwater pumping, it will be determined whether the projected deficit is attributable to changes in surface water management practices. If the projected soil water deficit is attributable to changes in surface water management practices, such action as is feasible and necessary will be taken to avoid significant decreases and changes in the vegetation. (Green Book, Section I.B.2.b, p. 14.)

In regard to the management of "changes in surface water management practices," for Type D, vegetation, the Green Book states:

If, through field observation and other monitoring, it is determined that changes in surface water management practices could affect or has affected an area of Type D vegetation, the Technical Group shall take such action as is feasible and necessary to prevent significant decreases and changes in vegetation. (Green Book, Section I.B.3.b, p.18).

The Green Book contains similar language pertaining to management of Other Vegetation (Section I.D., p. 32). The Green Book also refers to surface water management practices throughout Section I.C, Impact Determination and Mitigation. It is not likely, however, that Section I.C will need to be addressed or revised by this working group.

Problem Statement

The purpose of the Green Book is to prescribe methods for the Technical Group to follow to implement the Agreement. The goals of both the Agreement and the Green Book are to manage ground water pumping and surface water in order to avoid certain changes to vegetation and other adverse effects on the environment while providing a reliable supply of water for export to Los Angeles. It is not clearly understood if the procedures contained in the Green Book are adequate to assess whether current practices are in accordance with the Agreement. This working group will focus on procedures to identify surface water management practices and develop methods for determining if a change in management practice has occurred and recommend changes for insertion into the Green Book.

The primary task for this workplan is to prepare revisions to the Green Book that provide methods that can be used by the Technical Group to determine if changes in surface water management practices have affected vegetation, or the environment of Inyo County, and methods to determine if canal operations have changed compared with practices since 1970.

Description of work

Tasks to complete for this Workplan:

1. Document LADWP's surface water management practices in the context of the 1991 EIR, Agreement, and Green Book.
2. Define what constitutes a change in surface water management practices in the context of the 1991 EIR, Agreement, and Green Book as documented in #1.
3. Describe what actions should be taken if a change in LADWP's surface water management practice is suspected of causing a significant effect to type B, C, or D vegetation.
4. The work group will produce a document that can be incorporated into the final revised Green Book.

Deliverables

Revised text for relevant sections of the Green Book

Schedule

To be determined.

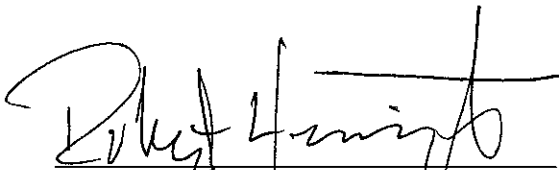
Personnel


Randy Jackson (ICWD) and Robert Prendergast (LADWP) are the lead investigators of this cooperative study and will also oversee the work of MWH Consultants if needed.

Budget

MWH will continue to be funded through a direct contract with LADWP. Additional funds may be necessary if a facilitator is required for this work.

Approval for Release:


Project Manager, ICWD / Date


Project Manager, LADWP / Date