

ATTACHMENT F

**July 8, 2003 Environmental Commitment Plan for
the All-American Canal Lining Project**



United States Department of the Interior

BUREAU OF RECLAMATION

Lower Colorado Regional Office

P.O. Box 61470

Boulder City, NV 89006-1470

IN REPLY REFER TO:

LC-2610

ENV-6.00

JUL 08 2003

Mr. Jesse Silva, General Manager
All-American Canal Lining Project
Imperial Irrigation District
1284 Main Street
El Centro, CA 92243

Subject: Environmental Commitment Plan for All-American Canal Lining Project

Dear Mr. Silva:

Bureau of Reclamation is pleased to provide the enclosed Environmental Commitment Plan (ECP) noted above. The ECP is a compilation of environmental commitments identified in the Final Environmental Impact Statement/Environmental Impact Report, March 1994 and Reclamation's Record of Decision (ROD) signed by the Regional Director on July 29, 1994. Additional commitments were developed during consultations with the U.S. Fish and Wildlife Service and the California State Preservation Officer and are contained in the ROD. The ROD is the decision document authorizing the selection of the Parallel Canal Alternative as the agency Preferred Alternative for lining the Canal and implementation of the environmental commitments that are contained in the ECP. In July 1999, and May 19, 2003, the FEIS/EIR and ROD were re-examined and validated by Reclamation until completion of proposed construction in 2006. Reclamation is legally responsible for implementation of the environmental commitments and will work with Imperial Water District to assure they are accomplished as part of Reclamation's Federal involvement in this project pursuant to Section 203, Title II, of Public Law 100-675. This ECP will become part of the administrative record of the All-American Canal Lining Project.

Environmental commitments may be modified or new ones developed subsequent to the issuance of this ECP as a result of project design, updated consultations or other unanticipated factors. Upon agreement of the responsible parties, new or modified environmental commitments will be added to this ECP by amendment.

If you have any questions, please contact me by phone at 702-293-8519 or by email at jgreen@lc.usbr.gov.

Sincerely,

Mr. James Green
Regional Environmental Officer

Enclosure

CC: Mr. Michael King, All-American Canal, Project Manager, Imperial Irrigation District, P.O. Box 937, Imperial, CA 92251

Mr. Dennis Underwood, Vice President, Colorado River Resources,
The Metropolitan Water District of Southern California, Attention: Mr. Thomas Ryan,
Water Resource Management Group, P.O. Box 54153, Los Angeles, CA 90054

A Century of Water for the West
1902-2002

**ENVIRONMENTAL COMMITMENT PLAN
for the
ALL AMERICAN CANAL LINING PROJECT**

Reclamation as lead Federal agency is responsible for implementing these environmental commitments

| # | Mitigation Measure | Location | Timing | Responsibility/ Implementation | Verification |
|----------------------------|--|---------------------------|------------------------------------|-----------------------------------|------------------|
| A. Air Quality | | | | | |
| a. | Emissions from vehicular exhaust and dust generation will be controlled in accordance with applicable regulations of the Imperial County Air Pollution Control District (ICAPCD). For construction-related dust generation, applicable standard dust control measures will be implemented. | Construction area | Daily during construction | IID, Construction contractor | IID |
| b. | All applicable permits required for construction activities (including excavation and equipment operation) will be obtained. | Construction area | Prior to and during construction | Construction contractor | IID |
| B. Wetlands Habitat | | | | | |
| a. | The wetlands mitigation complex between Drop 3 and Drop 4 will be expanded/enhanced to mitigate wetlands impacts along the All American Canal. This expanded/enhanced acreage will include 43 acres of honey mesquite and/or cottonwood willow (24 acres for canal bank vegetation impacts and 19 acres for other wetlands vegetation impacts), and one acre of marsh vegetation. Honey mesquite/qaibush associations may be planted in areas of high salinity soils. All riparian plantings in mitigation areas will be designed to achieve a density of approximately 100 mature trees per acre. A site-specific mitigation plan will be developed by a qualified biologist (selected by IID and approved by the All American Canal Lining Coordinating Committee) (AACLCC) to implement this mitigation measure based on local physical and biological suitability criteria including soil characteristics, salinity, ground water depths, topography, existing vegetation conditions, and maximization of habitat value for the Yuma clapper rail and California black rail. | Between Drop 3 and Drop 4 | Prior to and during construction | Reclamation, IID | Reclamation, IID |
| b. | Implementation of the above described wetlands mitigation plan will occur prior to disturbance of the wetlands located between Drop 2 and Drop 3. | Between Drop 2 and Drop 4 | Prior to construction between Drop | Reclamation, IID | Reclamation, IID |

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| | | | 2 and Drop 3 | | |
| c. | The wetlands mitigation site will be monitored during installation and then monthly during the first and second growing seasons, twice annually during years three through five, and annually for years six through ten. The site will then be monitored in post-planting years 15, 20 and 25. In addition, the existing Drop 3 to Drop 4 wetlands complex will be monitored to observe non-Project-related changes. In light of the results of monitoring, the mitigation plan will be reviewed following each survey year to assess the need for corrections or modifications. | Existing and constructed wetland complexes between Drop 2 and Drop 4 | Through post-planting year 25 | Reclamation, IID | Reclamation, IID |
| d. | Groundwater elevation will be monitored within the wetland complex between Drop 3 and Drop 4 to identify decreases as a result of the Project, if any. If groundwater elevation decreases as a result of the Project, the Project sponsors will initiate discussions with the U.S. Fish and Wildlife Service (USFWS) to identify and implement reasonable measures to ensure maintenance of existing values within the wetland. Special attention will be given to maintenance of Yuma clapper rail and black rail habitat. | Drop 3 to Drop 4 | After construction | Reclamation, IID | Reclamation, IID |
| e. | <p>[Note: this is the approach used in the Coachella Canal Lining Project and the numbers must be recalculated based on the relative amount of flow]. Potential incremental contributions to cumulative razorback sucker impacts will be offset by stocking 1,300 razorback suckers at least 25 centimeters (approximately 10 inches) or greater in length in the Colorado River between Parker Dam and Imperial Dam.</p> <p>Mitigation for impacts to bonytail chubs will be to provide \$3,250 (of a \$50,000 total) to the bonytail hatchery program described in the <i>"Biological Opinion for Interim Surplus Criteria, Secretarial Implementation Agreements, Water Administration, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary, Arizona, California and Nevada"</i> (U.S. Fish and Wildlife Service, January 2001).</p> <p>Creation or restoration of 2.9 acres of backwaters along the lower Colorado River and creation of 24 to 73 acres of southwestern willow flycatcher habitat along the lower Colorado River, with the specific amount of creation to be determined based on the monitoring results and the guidance provided in the <i>Biological Opinion for Interim Surplus Criteria, Secretarial Implementation Agreements, Water</i></p> | Lower Colorado River | Concurrent with construction of the Project | Reclamation, IID, MWD | Reclamation |

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| | <p><i>Administration, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary, Arizona, California and Nevada</i> (U.S. Fish and Wildlife Service, January 2001).</p> <p>Mitigation for the Project's incremental contribution to cumulative impacts along the lower Colorado River in association with all the other water conservation and transfer projects will include providing an incremental portion (6.5 percent) of the funds necessary to monitor 372 acres of southwestern willow flycatcher habitat along the River.</p> <p>[Note: this is what is actually stated in the Final EIS/R, MMRP, and ROD]. The Project sponsors will provide \$100,000 to the U.S. Bureau of Reclamation for the purpose of funding one or more future backwater restoration and enhancement projects along the lower Colorado River.</p> | | | | |

C. Terrestrial Habitat and Special Status Species

| | | | | | |
|----|--|-------------------|--|------------------------------|------------------------------|
| a. | Those habitats disturbed by the Project which support the flat-tailed horned lizard, Colorado fringe-toed lizard, silver-leaved dune sunflower, giant Spanish needles, Peirson's milkvetch, Wiggin's croton, sand food, and Andrew's dune scarab beetle (Special Status Species) shall be compensated by acquisition and management of replacement lands on an acre-for-acre basis. This analysis will be based on the the USFWS' August 1993 report "Surveys for Seven Rare Plant Species, the Flat-Tailed Horned Lizard, and the Colorado Fringe-Toed Lizard." | Construction area | Prior to and during construction | Reclamation, IID | Reclamation, IID |
| b. | Prior to disturbance, abundance and habitat characterization studies will be conducted for Pierson's milkvetch, sand food, Wiggin's croton, and silver-leaved dune sunflower plants in the area potentially disturbed by the Project. The concluding report shall be completed at least 90 days prior to disturbance. | Construction area | 90 days prior to construction | Reclamation, IID | Reclamation, IID |
| c. | Potential areas with the highest priority for use for construction staging, concrete batch plant, access roads, borrow and disposal activities are those that have been previously disturbed. Those potential disturbance areas, where Special Status Species are likely to occur which have not previously been surveyed, would be surveyed by qualified biologists. Construction plans would be modified to the extent practicable to minimize impacts to Special Status Species habitats. Final construction plans and specifications will incorporate the biological survey's recommendations and the requirement to make maximum use of previously disturbed areas for all construction activities. | Construction area | Prior to and monthly during construction | Reclamation, IID | Reclamation, IID |
| d. | Vegetation would be crushed rather than bladed wherever possible. When blading is required, topsoil will be stockpiled on-site for reapplication after construction. Following completion of construction, | Construction area | Monthly during, and | Construction contractor, IID | Construction contractor, IID |

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| | work areas will be graded to blend with original ground contours and topsoil will be replaced to facilitate natural revegetation. | | after construction | | |
| e. | At the conclusion of Project construction, a Project area-wide survey would be conducted by Reclamation to quantify actual construction impacts. | Construction area | After construction | Construction Contractor, IID, Reclamation | Reclamation |
| D. Large Mammal Escape | | | | | |
| a. | Continuous slipform ridges will be located along both sides of the entire length of the proposed canal, with deflector cables added upstream of each Drop structure to channel swimming wildlife to the canal sides. The slipform ridges will typically be spaced 18 inches apart, will protrude 1.5 inches from the canal sideslope, and will begin nine inches from the top edge of the lining and end below the low operating water level. The effectiveness of the proposed design will be determined by IID prior to the final design of the slipform ridges. Documentation of the design and construction of the described slipform ridges and deflector cables will be submitted to IID after completion of Project construction. | Canal | During design, construction, and after construction | Reclamation, IID | Reclamation, IID |
| E. Canal Fishery | | | | | |
| a. | A total of 197 artificial reefs will be placed in the new concrete-lined canal to provide protective cover, reduce flow velocity and maintain shoreline gamefish. The reefs will be made of discarded automobile tires bound together into mats, with each mat measuring approximately 16 by 50 feet. The locations and adequacy of these reefs will be determined by the District, in consultation with federal and state resource agencies. | Canal | During construction | Reclamation, IID | Reclamation, IID |
| b. | If the described artificial reefs are determined to be inadequate mitigation for impacts to the canal fishery, additional measures will be implemented which may include stocking channel catfish in the canal at rates required to maintain the channel catfish population and/or improving fishery habitat in regulating reservoirs within the IID. | Canal | After construction | Reclamation, IID | Reclamation, IID |
| F. Cultural Resources | | | | | |
| a. | All cultural resource activities shall be conducted in accordance with the Project's Programmatic Agreement among Reclamation, IID, and the State Historic Preservation Officer. See attached Programmatic Agreement. | Canal and construction area | During design and construction | Reclamation, IID, SHPO | Reclamation, IID, SHPO |
| G. Recreation | | | | | |
| a. | An Interim Recreation Management Plan will be prepared jointly with the Bureau of Land Management | Construction area | Prior to and | IID, Construction | Reclamation, IID |

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| | (BLM). This plan will address numerous issues including restriction of public access in the Pilot Knob Area of Critical Environmental Concern (ACEC), temporary closure of acreage needed for construction activities, the posting of signs at public access points, off-highway public traffic hazards, use of literature (handouts) to inform visitors about the program and safety hazards, modifications to public access to compensate for construction activities, and provision of safe public access to observe construction at selected sites. | | during construction | contractor, BLM | |
| H. Geodetic Survey Monuments | | | | | |
| a. | The U.S. Coast and Geodetic Survey will be notified not less than 90 days in advance of any planned construction activities that would disturb or destroy any geodetic control survey monuments. Documentation of notices shall be provided to IID prior to construction. | Project area | 90 days prior to construction | Construction contractor | Reclamation, IID |
| I. Sand and Gravel Supplies | | | | | |
| a. | During the Project design phase, an assessment will be made of the cultural and biological resources that may be affected at each sand and gravel borrow site considered by IID. Environmental restrictions and mitigation requirements contained in cultural and biological technical studies that may be performed for the sand and gravel sites will be included in the Project construction specifications. | Project area | Prior to construction | Reclamation, IID | Reclamation, IID |
| J. Transportation | | | | | |
| a. | Off-highway traffic hazards to the public will be addressed in the Interim Recreation Management Plan (See Section G). Specific measures to be addressed in the plan will include the use of warning signs and flag people as necessary. | Project area | Prior to and during construction | Construction contractor, IID | Reclamation, IID |
| K. Public Safety | | | | | |
| a. | Slipform ridges will be installed along the canal sideslopes (See Section D). The effectiveness of these ridges in addressing public safety will be evaluated by field testing prior to construction. If tests prove the ridges are ineffective, safety ladders will be installed in addition to slipform ridges. Deflector systems, such as cables with visible buoys, would be installed upstream of all Drop structures. | Canal | Prior to construction | Reclamation, IID | Reclamation, IID |
| b. | An operation and maintenance plan for the old unlined canal would be developed in coordination with the Bureau of Land Management and implemented. | Old Canal | Prior to, and after construction | IID, Reclamation | IID, Reclamation |

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L. Immigration From Mexico

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| a. | Warning signs in English, Spanish, and international symbols will be posted on both sides of the canal to warn people of the dangerous waters. | Canal | After construction | Construction contractor, IID | Reclamation, IID |
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M. Indian Trust Assets

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|----|--|--------------|-------------------------------------|---|------------------|
| a. | If contractor access to the upstream end of the Project area requires crossing the Fort Yuma Indian Reservation land or if Reservation gravel is to be used, and agreement with the Quechan Indian Tribe will be required. Applicable compensation and environmental mitigation (if necessary) will be negotiated as part of that agreement. | Project area | Prior to access to Reservation land | Reclamation, IID, Construction contractor | Reclamation, IID |
|----|--|--------------|-------------------------------------|---|------------------|