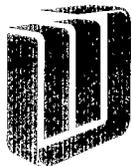


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FILED by order  
of the Board of Directors of  
The Metropolitan Water District  
of Southern California

at its meeting held MAR 8 1994

*Daren E. Wolf*  
Executive Secretary



**MWD**

*METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA*

February 16, 1994

To: Board of Directors (Water Problems Committee--Information)  
From: General Manager  
Subject: Release of Coachella Canal Lining Project Draft  
Environmental Impact Statement/Report by U.S. Bureau  
of Reclamation

Report

The Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) for the Coachella Canal Lining Project (Project), a proposed water conservation project located in Imperial and Riverside counties, was filed by the U.S. Bureau of Reclamation (Reclamation) on January 11, 1994. By lining the earthen sections of a 33-mile reach of the Coachella Canal shown in Figure 1, approximately 31,000 acre-feet of Colorado River water would be conserved annually. If an alternative mitigation water supply, for example groundwater from public lands, cannot be utilized to maintain existing and revegetated wetland habitat, and live stream conditions for the federally endangered desert pupfish, as much as 5,180 acre-feet per year would need to be diverted from the Coachella Canal for these purposes. Thus, Reclamation estimates that the net amount of water that could be conserved by the Project is approximately 25,700 acre-feet per year. This water would be made available to the California Contractors in accordance with the priorities contained in their water delivery contracts with the Secretary of the Interior (Secretary). The California Contractors are the Palo Verde Irrigation District, Imperial Irrigation District (Imperial), Coachella Valley Water District (Coachella), and Metropolitan.

Under the provisions of Public Law 100-675, the Secretary is authorized to construct, without federal funds, a new lined canal or to line the previously unlined portions of the Coachella Canal. The law allows any of the California Contractors, including Metropolitan, to provide the non-federal funding required for implementation of the Project. The Draft EIS/EIR anticipates a potential decision to line only a portion of the 33-mile earthen canal. Metropolitan has informed Coachella of its interest

in funding the more cost effective reaches, subject to the approval of your Board, and is awaiting Coachella's response to a proposal for Coachella to provide a portion of the funding for the Project to line all remaining unlined reaches. Upon completion of the environmental documentation and negotiation of a construction and funding contract, authorization by your Board to enter into the contract and fund construction of the Project would permit Metropolitan to receive the conserved water. Or, as required by Public Law 100-675, Metropolitan would be reimbursed by the other California Contractors who use the water.

Under an advance funding agreement among Reclamation, Coachella, and Metropolitan, Reclamation has completed the Draft EIS/EIR for the Project. The total amount provided by the advance funding agreement was \$140,000, \$126,000 of which was Metropolitan's share. Reclamation and Coachella are the responsible parties to insure the Draft EIS/EIR satisfies the disclosure requirements of the National Environmental Policy Act and the California Environmental Quality Act, respectively.

The Draft EIS/EIR identifies three alternatives for the Project. These are the Conventional Lining, Underwater Lining, and Parallel Canal alternatives. The preferred alternative identified in the Draft EIS/EIR is Conventional Lining and consists of constructing a lined canal in the existing cross section while bypassing the canal flow through temporary pipelines. The Underwater Lining alternative consists of lining the existing canal while the canal is still in service, allowing uninterrupted delivery of irrigation water. The underwater lining method was field tested between 1989 and 1991. Under the Coachella Canal In-Place Lining Prototype Project, a 1.4-mile section of the Coachella Canal was lined between siphons 14 and 15. The Parallel Canal alternative consists of constructing a new lined canal adjacent to the existing Coachella Canal. Reclamation reports the construction cost (in 1991 dollars), including mitigation costs of \$5.6 million, and the unit cost of the water made available by the Project to be:

- Conventional Lining      \$55.6 million (\$184 per acre-foot)
- Underwater Lining        \$89.6 million (\$275 per acre-foot)
- Parallel Canal            \$69.8 million (\$227 per acre-foot)

The unit costs assume an interest rate of 8 percent, a 50-year operational period, interest costs accrued during construction, annual operation and maintenance costs (\$81,000), and use of a portion of the conserved water for mitigation purposes.

The Draft EIS/EIR identifies significant environmental impacts from the Project along with mitigation to avoid, minimize, or compensate for impacts. These include impacts to desert riparian and marsh (wetlands) habitat that became established due to water seeping from the canal. One of the largest seepage supported habitat areas occurs within the U.S. Bureau of Land Management's (BLM) Salt Creek Area of Critical Environmental Concern (ACEC) (shown on Figure 1). Maintaining the wetlands habitat in the ACEC is important in that it provides habitat for federal and State listed endangered species and federal candidate species. An interagency biological workgroup consisting of representatives of Reclamation, the U.S. Fish and Wildlife Service, BLM, California Department of Fish and Game, Imperial, Coachella, and Metropolitan developed a mitigation plan for Project impacts to plant, animal, and aquatic environments. The mitigation being proposed for significant Project impacts consists primarily of maintaining and creating wetlands equivalent to the existing wetland values currently supported by canal seepage.

Terrestrial habitat would be avoided where possible. Mitigation for those areas impacted by the Project would consist of stockpiling and redistributing topsoil where necessary, restoring terrain to original topography, and replanting trees. The canal contains several different varieties of fish including channel catfish, largemouth bass, sunfish, flathead catfish, carp, and others. Lining the canal would eliminate canal bank vegetation which provides food and cover for these fishes. To mitigate for this impact, artificial reefs would be installed in the lined canal. One time channel catfish stocking in the newly lined canal would be undertaken to replace fish lost during construction.

As the Project would disturb ground which may affect cultural resources, Class III archeological surveys of land affected by the Project would be made prior to construction. Affected areas identified by the surveys would be avoided if possible or artifacts would be professionally recovered. Water conserved by the Project

would be diverted through the Colorado River Aqueduct from Lake Havasu. As this Project along with other proposed conservation projects would result in reduced flows in the Colorado River downstream of Parker Dam, \$30,000 would be provided for Lower Colorado River restoration of wetlands and nondredging backwater improvement work along the river.

A public hearing on the Draft EIS/EIR is scheduled for March 10, 1994 at the Coachella Valley Water District and the public comment period will close on March 15, 1994. Based on the present schedule, Reclamation proposes to file the final EIS/EIR in August 1994 with a Secretarial Record of Decision issued in October 1994.

Reclamation has informed Coachella and Metropolitan that in order to perform the work necessary to complete the Final EIS/EIR and issue a Record of Decision, an additional \$100,000 of non-federal funds will be required. Reclamation indicates that the cost has increased due to greater amounts of work than previously anticipated to complete technical analyses, and more review of the Draft EIS/EIR than originally estimated. Staff is currently reviewing information provided by Reclamation explaining the costs incurred to date and the expenditures projected to complete the environmental documentation. If your Board chose to authorize execution of a to-be-negotiated construction and funding contract in early 1995, the Project could be completed in early 1998, with a portion of the conserved water available as early as 1996.

#### Board Committee Assignment

This letter is referred for information to the Water Problems Committee because of its authority to study, advise, and make recommendations on the policies, sources, and means of importing water required by Metropolitan pursuant to Administrative Code Section 2481(a).

#### Recommendation

For information only.

  
John R. Wodraska

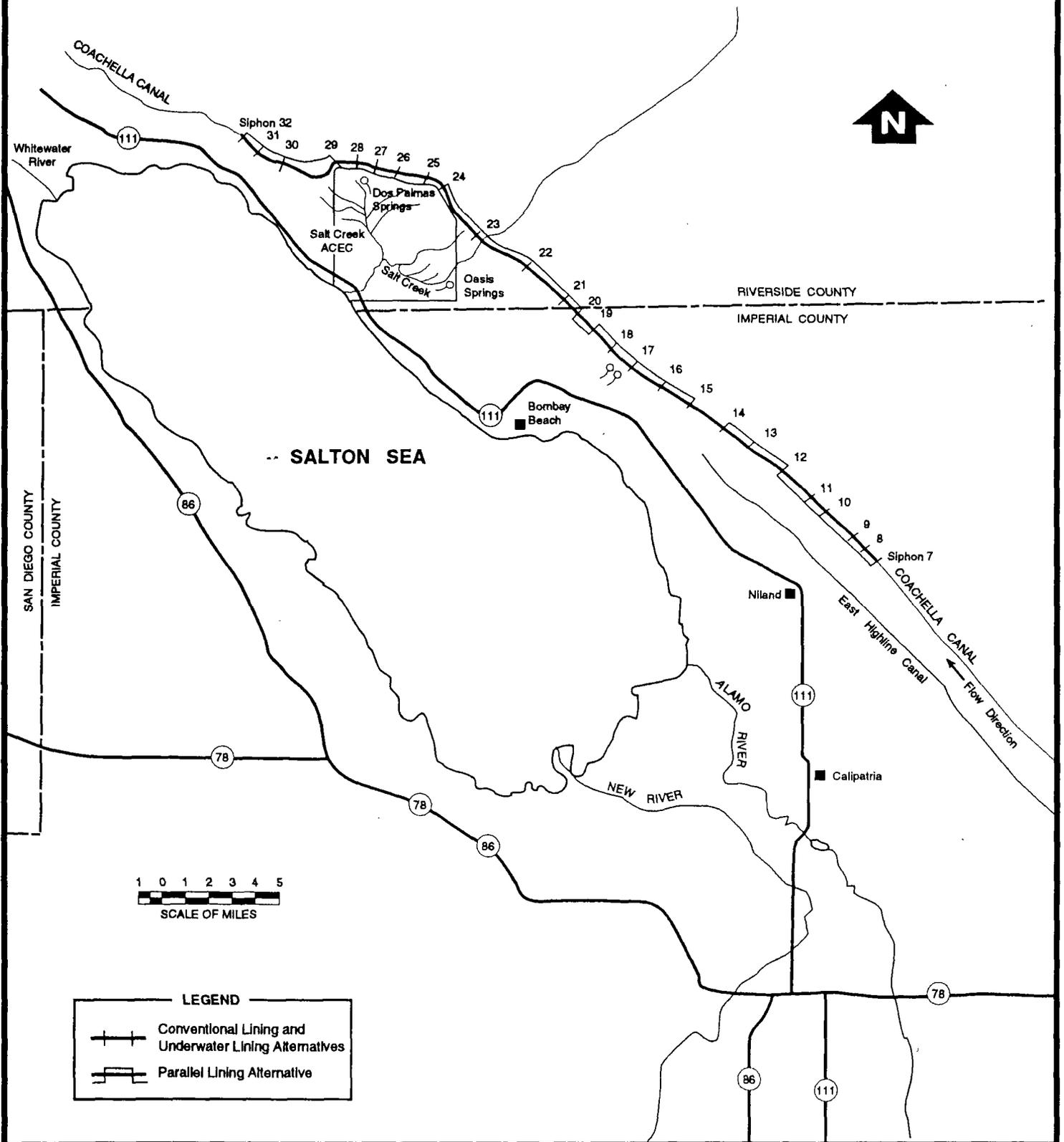
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Attachments

FIGURE 1

# COACHELLA CANAL LINING PROJECT

## SIPHON 7 TO SIPHON 14 AND SIPHON 15 TO SIPHON 32



1 0 1 2 3 4 5  
SCALE OF MILES

**LEGEND**

-  Conventional Lining and Underwater Lining Alternatives
-  Parallel Lining Alternative

Summary of principal environmental consequences

Resource and current status	Conventional Lining Alternative		Underwater Lining Alternative		Parallel Canal Alternative		No Action Alternative
	Potential project impact	Net Impact after mitigation	Potential project impact	Net Impact after mitigation	Potential project impact	Net Impact after mitigation	
Ground water  Ground water is augmented by canal seepage. Ground-water table currently is shallow under thousands of acres west of the canal.	Water table would drop along 33.4 miles of canal.	No mitigation possible.  Significant.	Water table would drop along 33.4 miles of canal.	No mitigation possible.  Significant.	Water table would drop along 33.4 miles of canal.	No mitigation possible.  Significant.	No impact.
Canal water quality  Currently reflects the quality of the Colorado River.	No permanent change in canal water quality. Turbidity during construction.	No mitigation needed.  Not significant.	No permanent change in canal water quality. Turbidity and possible pH change during construction.	No mitigation needed.  Not significant.	No permanent change in canal water quality. Turbidity during construction.	No mitigation needed.  Not significant.	No impact.
Wetlands habitat along the Coachella Canal  7,412 acres of wetlands, including 479 of marsh lie along the canal.	Loss of 4,293 acres of wetlands vegetation, including 112 acres of marsh.	No net loss of habitat value.  Not significant.	Loss of 4,293 acres of wetlands vegetation, including 112 acres of marsh.	No net loss of habitat value.  Not significant.	Loss of 4,293 acres of wetlands vegetation, including 112 acres of marsh.	No net loss of habitat value.  Not significant.	Natural succession of wetlands vegetation would continue to occur.
Wetlands habitat along the Colorado River.	Slightly reduced flow and water surface area.	Avoids potential cumulative impact.  Not significant.	Slightly reduced flow and water surface area.	Avoids potential cumulative impact.  Not significant.	Slightly reduced flow and water surface area.	Avoids potential cumulative impact.  Not significant.	No impact.
Terrestrial habitat  Approximately 29,000 acres of undisturbed desert lie in the project study area.	Acres of habitat temporarily disturbed: 121 desert scrub/ironwood, 56 desert wash.	No net loss of mature trees.  Not significant.	Acres of habitat temporarily disturbed: 38 desert scrub/ironwood, 57 desert wash.	No net loss of mature trees.  Not significant.	Acres of habitat disturbed: 302 desert scrub/ironwood, 186 desert wash.	No net loss of mature trees.  Not significant.	No impact.

APPENDIX

Summary of principal environmental consequences - continued

Resource and current status	Conventional Lining Alternative		Underwater Lining Alternative		Parallel Canal Alternative		No Action Alternative
	Potential project impact	Net impact after mitigation	Potential project impact	Net impact after mitigation	Potential project impact	Net impact after mitigation	
Special status species Marshes support Yuma clapper rail and California black rail. Salt Creek supports desert pupfish.	Loss of habitat for Yuma clapper rail, California black rail, and desert pupfish.	No net loss of habitat. Not significant.	Loss of habitat for Yuma clapper rail, California black rail, and desert pupfish.	No net loss of habitat. Not significant.	Loss of habitat for Yuma clapper rail, California black rail, and desert pupfish.	No net loss of habitat. Not significant.	No impact.
Canal fishery The canal supports 35,200 fish of various kinds.	Number of fish would reduce by 6,032.	Gamefish would be maintained, but channel catfish would be reduced by 570. Not significant.	Number of fish would reduce by 6,032.	Gamefish would be maintained, but channel catfish would be reduced by 570. Not significant.	Number of fish would reduce by 6,032.	Gamefish would be maintained, but channel catfish would be reduced by 570. Not significant.	No impact.
Cultural resources The canal area is archeologically sensitive.	Potential disturbance of some archeological sites.	Not significant.	Potential disturbance of some archeological sites.	Not significant.	Potential disturbance of some archeological sites.	Not significant.	No impact.
Hydroelectric power Powerplants at Hoover, Davis, and Parker Dams generate 5,936 MkWh <sup>1</sup> annually.	Annual power loss at Colorado River dams of 1.9 MkWh.	No mitigation needed. Not significant.	Annual power loss at Colorado River dams of 1.9 MkWh.	No mitigation needed. Not significant.	Annual power loss at Colorado River dams of 1.9 MkWh.	No mitigation needed. Not significant.	No impact.
Employment and income The unemployment rate in the Imperial and Coachella Valleys significantly exceeds the State average.	320 construction work years. Economic impact - \$22 million to local economy.	Beneficial impact. No mitigation.	500 construction work years. Economic impact - \$34 million to local economy.	Beneficial impact. No mitigation.	410 construction work years. Economic impact - \$28 million to local economy.	Beneficial impact. No mitigation.	No impact.

<sup>1</sup> Million kilowatthours.