



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

7-2

December 16, 1993

To: Board of Directors (Engineering and Operations Committee--Action)
(Finance and Insurance Committee--Action)

From: General Manager

Subject: Appropriation No. 673 for \$440,000 to Finance All Estimated Costs for the Installation of an Electric Fish Barrier System Across the Inlet Canal to Lake Skinner and Delegation of Authority to Negotiate a Contract

Report

Lake Skinner is a part of Metropolitan's complex water storage, treatment, and distribution system and is supplied by the San Diego Canal. Water is withdrawn from the lake and treated at the Skinner filtration plant prior to distribution to south Riverside and San Diego counties. Besides its primary function as a storage reservoir, Lake Skinner has served as a recreational facility for fishing and camping enthusiasts for nearly 15 years, with fish plantings provided by the California Department of Fish and Game (CDF&G) and Riverside County.

Algae, which grows along the sidewalls and bottom of the San Diego Canal, reduces flow in the canal and increases the water turbidity. Chlorine is applied to the water to reduce algae in the canal. The water is then dechlorinated near the canal outlet to prevent the release of chlorine into Lake Skinner. Chlorination inadvertently has killed migrating fish in the canal, which raised strong CDF&G concerns and prompted Metropolitan to investigate the installation of a viable fish barrier system.

Metropolitan hired a consultant, **Tenera Environmental Services (TES)**, to study the migratory fish problem. Based upon **TES's** recommendations, Metropolitan, with the assistance of Smith-Root, Inc., engineering consultant and fish barrier manufacturer, installed and placed in operation on October 26, 1992, a temporary electric fish barrier test facility at the Lake Skinner Inlet Canal. This test facility was to examine the effectiveness of such a fish barrier under actual operating conditions. The test facility included electrical control and monitoring equipment, a series of electrodes temporarily laid on the bottom of the canal, temporary equipment housing, and electrical power service.

From October 26, 1992 to June 16, 1993, the fish barrier was continually operated. On February 8, 1993, CDF&G planted 1,500 marked trout in Lake Skinner as part of its normal stocking program. On June 1 and 2, 1993, the canal was chlorinated with nets installed immediately upstream of the fish barrier to catch any marked dead fish that may have passed through the barrier. The test indicated that no marked fish had been found or killed upstream of the inlet canal. Before the barrier was put into service, the chlorination process resulted in kills of several hundred to as many as one thousand fish each time the canal was chlorinated.

It is proposed to continue Smith-Root's participation in the project by negotiating a sole-source contract for furnishing and installing a permanent fish barrier because of the unique nature of its patented design and the successful results of the test program. Therefore the contract is exempt from competitive bidding under Administrative Code Section 8103(d). Also, consideration of any other vendor would involve installation of a significantly different barrier system that would require a new, rigorous, and costly test program before it could be competitively bid against the Smith-Root proposal. The total estimated cost for design, equipment, materials, and installation of a permanent facility by Smith-Root is \$250,000.

It is understood and recognized that Smith-Root shall implement a positive, continuing program of affirmative action in the performance of the work, and shall promote the realization of full equal employment opportunity.

The design work would be accomplished in Fiscal Year 1993/94 with installation completed in late 1994. Testing and providing electrical power to the site were previously accomplished under separate appropriations, at total costs of \$109,100 and \$81,400, respectively. The total estimated costs for installation of the permanent fish barrier under Appropriation No. 673 is \$440,000. The total cost of all required work is \$630,500. A breakdown of costs is shown on the attached financial statement.

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act in that it involves construction and location of limited numbers of new, small facilities and structures.

Board Committee Assignments

This letter is referred for action to:

The Engineering and Operations Committee for consideration because of its jurisdiction over the initiation, scheduling, contracting, and performance of construction programs pursuant to Administrative Code Section 2431(b); and

The Finance and Insurance Committee for consideration because of its jurisdiction over appropriations pursuant to Administrative Code Section 2441(d).

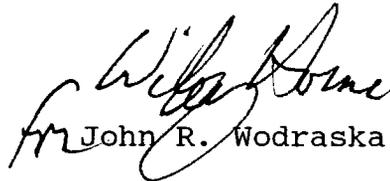
Recommendations

ENGINEERING AND OPERATIONS COMMITTEE FOR ACTION.

It is recommended that your Board authorize the General Manager to have all work performed for installation of an electric fish barrier system at Lake Skinner, and delegate to the General Manager the authority to negotiate a contract with Smith-Root, Inc.

FINANCE AND INSURANCE COMMITTEE FOR ACTION.

It is recommended that your Board approve Appropriation No. 673 in the amount of \$440,000 from the Pay-As-You-Go Fund to finance all estimated costs for the installation of an electric fish barrier system at Lake Skinner.


for John R. Wodraska

GB/jj/aj
(bdapr:apr-673.gb-12163)
Attachment

Financial Statement
(Program No. 5-0307-21)

The total estimated cost breakdown is shown below:

	<u>Total Project Cost</u>
APPROPRIATION NO. 673	
Labor:	
Engineering (Design Review)	\$ 63,000
Contract Administration and Inspection	18,000
District Forces Construction	3,000
Environmental Review	2,000
Administrative Overhead	47,500
Contract --Furnish and Install	250,000
Contingencies	<u>56,500</u>
Total Appropriation No. 673	\$440,000
FURNISH ELECTRICAL POWER TO SITE	81,400
TEMPORARY FISH BARRIER AND TESTING	109,100
Total Project Cost	\$630,500
Projected Expenditure of Funds:	
Through Fiscal Year 1993/94	\$100,000
Fiscal Year 1994/95	<u>\$340,000</u>
Total	\$440,000
Source of Funds: Pay-As-You-Go Fund	
Fiscal Year 1993/94 Capital Program:	
Program Estimate	\$545,000
Budget Estimate for Fiscal Year 1993/94	\$458,700
Class One: Project directly related to delivery of water which, if delayed, will adversely impact reliability of service.	
Project Benefit: This program will prevent migratory fish from entering the canal and being killed during the chlorination process, which is done to reduce algae and maintain flow, while maintaining storage and distribution of good quality water at Lake Skinner.	