



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-6

April 21, 1998

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

From: *for* General Manager

Edward J. McCall

Submitted by: Gary M. Snyder
Chief Engineer

Wayne Bousle for Snyder

Subject: Appropriate \$33,900,000 to Implement the Drainage Water Quality Management Plan for the Lake Mathews Watershed

Reference: Appropriation No. 15253

RECOMMENDATION(S)

To design and construct the Lake Mathews Drainage Water Quality Management Plan facilities, it is recommended that your Board:

1. Appropriate \$33.9 million from the Pay-As-You-Go Fund to finance budgeted costs to complete Phase I of the program;
2. Authorize the General Manager to approve all work necessary to implement Phase I, except for competitively bid contracts involving an amount greater than \$250,000; and
3. Authorize the General Manager to apply for and execute a State Revolving Fund (SRF) loan for up to \$45.9 million and to disperse funds for loan payments.

EXECUTIVE SUMMARY

Your Board previously approved Metropolitan's participation in the implementation of the Drainage Water Quality Management Plan (Plan) for the Lake Mathews watershed. The Plan is a joint program involving the County of Riverside (County), the Riverside County Flood Control and Water Conservation District (RCFC & WCD) and Metropolitan. In August 1994, your Board appropriated \$3.5 million for studies to more accurately define the project and for the design of Phase I of the Plan. The consultant's estimated program cost of the Plan at the time was \$23.8 million. During preliminary design, unfavorable geological conditions were discovered which will substantially increase the cost of the dam foundation, and the cost of necessary environmental mitigation has been included. These factors have contributed to

substantially increasing the total program cost estimate to \$45.9 million, with a Phase I estimated cost of \$37.4 million.

Through the RCFC & WCD, Metropolitan has previously applied for and been approved for a \$20 million low-interest (2.8 percent) SRF loan to finance a portion of the project. The State Water Resources Control Board (SWRCB) has determined that it is more appropriate to grant the loan directly to Metropolitan, since we will own and operate all Phase I facilities. Following your Board's approval, SWRCB staff will recommend to its Board that the loan be transferred to Metropolitan. In time, area drainage plan fees which will be collected by the County will be used to at least partially reimburse Metropolitan for funds expended for the project.

JUSTIFICATION

Due to increased development of the Lake Mathews watershed, protection of the quality of water in Lake Mathews has become increasingly important to Metropolitan. Monitoring has shown that a high level of contaminants enters the lake through Cajalco Creek. The flow of contaminants and sediments into the lake will ultimately increase treatment costs and/or public health risks and over time reduce the usable volume of the lake. Contamination is most effectively controlled at the source rather than at a water treatment plant. The Plan provides a cost-effective means of source protection and enables the County to meet United States Environmental Protection Agency (USEPA) regulations and the conditions of the Lake Mathews Community Plan (LMCP).

ALTERNATIVE(S) TO PROPOSED ACTION

Do Not Implement the Drainage Water Quality Management Plan

This alternative would involve the least capital expenditure since minimal additional labor and no construction costs would be incurred. This alternative could result in increased contamination levels in the lake, reduced storage capacity in the lake due to sediment buildup, and increased treatment costs and public health risks. Metropolitan would also have to revise its commitment to assist the County and RCFC & WCD in providing facilities to meet the Lake Mathews Community Plan and in addressing the USEPA nonpoint source pollution regulations.

FUNDING REQUEST

Program Name: Drainage Water Quality Management Plan for the Lake Mathews Watershed*			
Source of Funds: Pay-As-You-Go Fund			
Appropriation No.: 15253	Board Action No.: 2	FY 98/99 Budget: \$5,506,072	
Requested Amount: \$33,900,000	Capital Program No.: 15253-W		
Total Appropriated Amount: \$37,400,000	Capital Program Page No.: E-12		
Total Program Estimate: \$45,900,000	Program Category: Water Quality		

*Previously entitled Cajalco Creek Dam and Detention Basin

ACTIONS AND MILESTONES

- o Complete final design for the Cajalco Creek Dam and Detention Basin in October 1998
- o Complete environmental permits for the Cajalco Dam and Detention Basin in March 1999
- o Complete construction of Cajalco Dam and Detention Basin in December 2000

CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION

The EIR for the Drainage Water Quality Management Plan was prepared by the County of Riverside acting as Lead Agency pursuant to the California Environmental Quality Act (CEQA) and was certified by the Riverside County Board of Supervisors on December 21, 1992. In January 1993, Metropolitan as responsible agency for the purpose of approving the Plan under CEQA, considered the environmental impacts as shown in the EIR prior to approving the Plan. An Addendum to the EIR will be prepared as required by CEQA to address minor project design changes.

DETAILED REPORT

Protecting Lake Mathews has recently become of paramount concern to Metropolitan due to increased development in the Lake Mathews watershed. Originally, the Lake Mathews Community Plan (LMCP) restrained development in the area by requiring the construction of a bypass channel around Lake Mathews as a condition for increased development density. The bypass was estimated to cost at least \$100 million, not including the cost of environmental mitigation. Further, the bypass channel did not contribute to satisfying impending USEPA non-point source pollution regulations which will apply to the watershed.

In an attempt to find a more cost-effective method of meeting the objectives of the LMCP, Metropolitan, in conjunction with the County and private developers in 1991, formulated the Drainage Water Quality Management Plan. The Plan is a novel watershed management effort that utilizes a series of engineered wetlands, water quality ponds, a sedimentation basin and a dam to remove contaminants from Cajalco Creek upstream of Lake Mathews. Phase I of the Plan includes construction of the Cajalco Creek dam and detention basin, relocation of a portion of Cajalco Road, four smaller sediment detention basins, and a contribution to RCFC & WCD's Smith Road sediment detention basin. Phase II will include a series of engineered wetlands and water quality ponds; these facilities would be built over a period of time as development in the watershed progresses. The Plan has received the support of environmental groups. In 1992, the County amended the LMCP to substitute the Plan for the bypass channel.

Following the completion of the Environmental Impact Report in 1993, a soft real estate market caused the developers to discontinue participation in the Plan. The County, RCFC & WCD, and Metropolitan continued to seek means of proceeding with the Plan. In August 1994, your Board approved Metropolitan's continued participation in the Plan and appropriated \$3.5 million for studies to more accurately define the project and for the design of a dam and sediment detention basin, two of the major components.

In 1995, the three agencies signed an agreement to proceed with the Plan. The Agreement reaffirmed the importance of the Plan and defined the roles of each agency regarding implementation. Metropolitan agreed, as authorized by the Board in August 1994, to provide funding for implementation of the Plan, up to a limit of \$23.8 million. Metropolitan is to be reimbursed, in part, by area drainage plan fees collected from developers, though full reimbursement may never be realized.

In early 1997, the RCFC & WCD applied for a State Revolving Fund (SRF) loan to provide a low-interest source of funds for the Plan. The State Water Resources Control Board (SWRCB) approved a low-interest (approximately 2.8 percent) rate loan of \$20 million.

Recently, in developing loan contract documents, the SWRCB decided that since Metropolitan will finance, own, and operate the dam and detention basin, the loan should be made directly to Metropolitan. Consequently, the SWRCB has proposed rescinding the \$20 million loan to RCFC & WCD and simultaneously granting it to Metropolitan at an anticipated interest rate of 2.6 percent. These funds will be deposited in the Pay-As-You-Go fund, to offset a portion of the initial funding by Metropolitan. Prior to taking this action, the SWRCB has asked Metropolitan to take formal action to authorize the General Manager to execute a SRF loan agreement in an amount of up to \$45.9 million and disperse funds for repayment of this loan. Metropolitan would make annual payments on the loan as needed to supplement funds available from Area Drainage Plan (ADP) fees. The \$20 million SRF loan will result in a interest savings to Metropolitan of approximately \$8,000,000.

The SWRCB has indicated that additional loan funds will be available in the future and has suggested that Metropolitan apply for the balance of the program cost after the initial \$20 million has been expended. Accordingly, authorization is requested for the General Manager to apply for SRF loans for the full program cost.

Also in 1997, in accordance with the provisions of the Agreement, staff offered to participate in an additional RCFC & WCD project. The project will include a sedimentation detention basin in the Smith Road area, upstream of the Cajalco Creek dam and detention basin. This facility would significantly reduce the sediment load on the Metropolitan detention basin and reduce Metropolitan's operating cost.

Recently, Metropolitan's design consultant completed the conceptual design report for the dam and detention basin. The estimated cost of this portion of the Plan has increased significantly, thereby increasing the cost of the overall Plan. The cost estimate for the project has increased to \$45.9 million, with an estimated Phase I cost of \$37.4 million. A breakdown of the estimated Phase I costs is shown on Attachment A. The estimated increase is due to significant, unanticipated geological conditions which will substantially increase the depth and cost of the dam foundation. In addition, costs associated with wetlands mitigation have now been defined and included in the Phase I budget, and the 1994 cost estimate prepared by a consultant was based on unrealistic labor costs and contingency factors. The cost of the contribution to the Smith Road facility is now also included in this estimate. The Phase I estimate of \$37.4 million includes work currently under design and the Smith Road contribution of \$1.0 million. The balance of the program cost is for facilities that will be constructed in the future and operated by RCFC & WCD. Staff is recommending that your Board increase the appropriation to cover the Phase I work. When RCFC & WCD is ready to proceed with the future facilities, staff will re-examine the funding options and will provide recommendations to your Board.

In response to the increase in the project cost, staff is requesting Riverside County to increase ADP fees to more realistically cover the actual costs of the Plan. This effort must be approved by the County Board of Supervisors and thus is not assured.

The basis under which the Plan was originally conceived is still sound and staff recommends that your Board appropriate funds for the completion of the design and construction of Phase I. The Plan provides for the protection of the quality of water in Lake Mathews, reduces the sediment buildup in the lake, enables the County to meet USEPA regulations, and enables the conditions of the LMCP to be met. Construction will be by competitively bid contract, staff will return to your Board for award of contracts involving a total amount in excess of \$250,000. At the time of award of the construction project, staff will update the program estimate based on the bids received.

Attachment A

FINANCIAL STATEMENT

(Capital Program No. 15253-W)

The breakdown of the total estimated cost for design and construction of the Lake Mathews Drainage Water Quality Management Plan is as follows:

	<u>BOARD ACTION NO. 1</u>	<u>BOARD ACTION NO. 2</u>
Labor:		
Study/Investigations	\$ 310,000	\$ 275,000
Preliminary Design	90,000	45,000
Final Design	250,000	95,000
Environmental Documentation	110,000	240,000
Project Management	0	250,000
Consultant Interface	0	95,000
Contract Administration and Field Inspection	0	1,600,000
Construction Support	<u>0</u>	<u>235,000</u>
Subtotal Labor	\$ 760,000	\$ 2,835,000
Material and Supplies	10,000	60,000
Incidental Expenses	30,000	60,000
Professional/Technical Services	1,865,000	4,730,000
Operating Equipment	17,000	60,000
Administrative Overhead	286,000	1,564,000
Environmental Mitigation	282,000	2,580,000
Contracts	0	19,870,000
Contingencies	<u>250,000</u>	<u>5,641,000</u>
Total	<u>\$3,500,000</u>	<u>\$37,400,000</u>

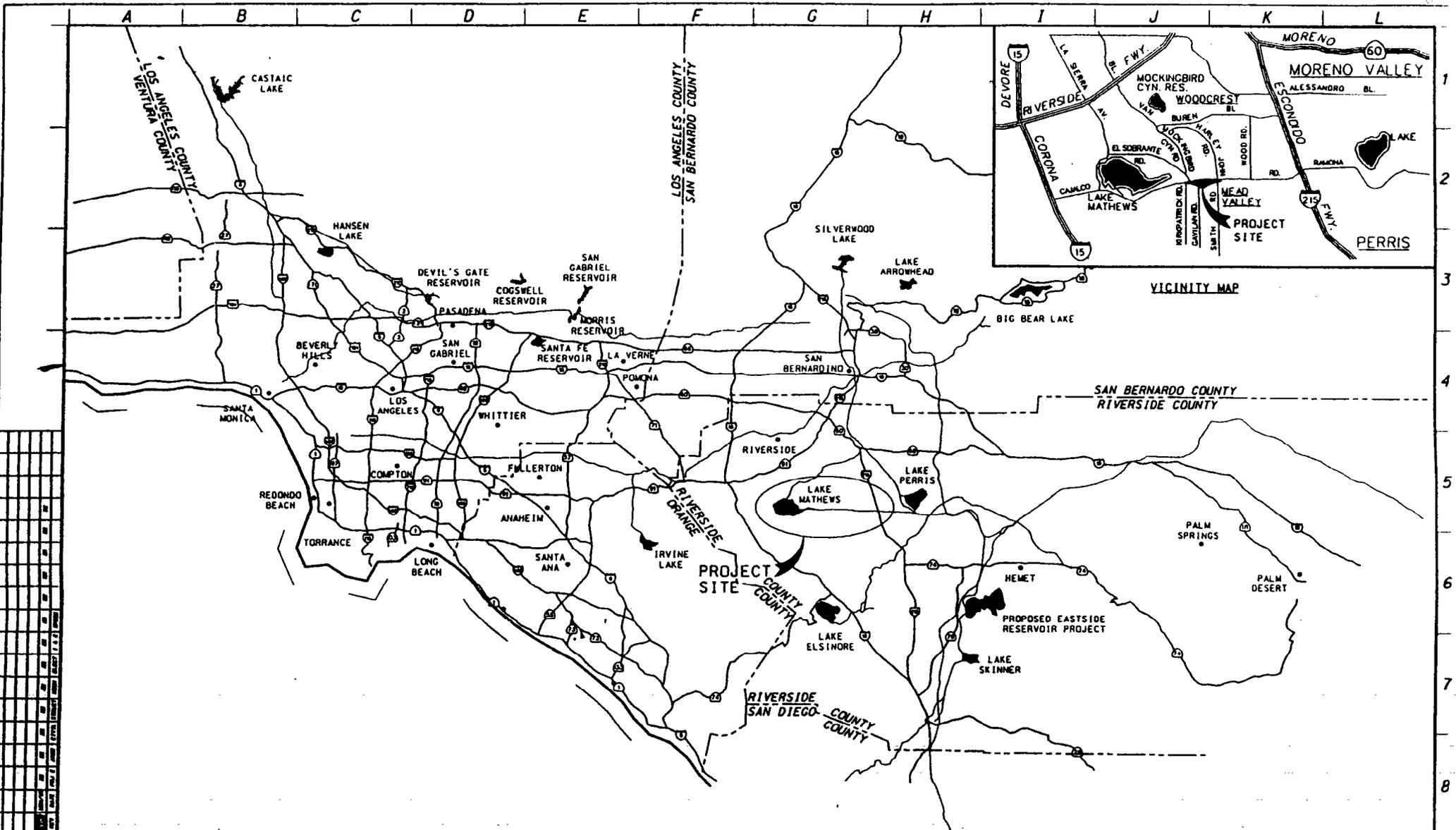
Source of Funds: Pay-As-You-Go Fund

Projected Expenditures of Funds (assuming no SRF loan):

Through Fiscal Year 1997/98	3,050,000
Fiscal Year 1998/99	5,506,000
Fiscal Year 1999/00	19,820,000
Fiscal Year 2000/01	1,535,000
Fiscal Year 2001/02	510,000
Fiscal Year 2002/03	350,000
Fiscal Year 2003/04	365,000
Fiscal Year 2004/05	380,000
Fiscal Year 2005/06	243,000
Contingencies	<u>5,641,000</u>
Total	<u>\$37,400,000</u>

Capital Program for Fiscal Year 1998/99

Total Program Estimate	\$45,900,000
Program Estimate for FY 1998/99	\$ 5,506,072



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AVWD METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	
DESIGNED	DATE: OCTOBER 1997
DRAWN	APPROVED
RECORD	APPROVED

CAJALCO CREEK DAM & DETENTION BASIN
 RIVERSIDE COUNTY, CALIFORNIA
GENERAL LOCATION MAP AND VICINITY MAP

SPECIFICATION	0000
HOW SHEET	0-0000
SHEET	G-1
NO.	8-0000