



● **Board of Directors**
Engineering and Operations Committee

December 14, 1999 Board Meeting

9-1

Subject

Construction of the Cajalco Creek Dam and Detention Basin

Description

Metropolitan has recognized the impact of urban runoff on water quality in Lake Mathews. To protect the Lake, Metropolitan has entered into a memorandum of understanding (MOU) with several Riverside County agencies to create the Lake Mathews Drainage Water Quality Management Plan (Plan). The MOU defines the responsibilities of each agency in reducing the flow of contaminants into the Lake. Recognizing the importance of the Plan, the State Water Resources Control Board has authorized a \$20,000,000 low interest rate loan (currently estimated to be 2.5%) to help finance the project.

The Cajalco Creek Dam and Detention Basin Project (Project) is a major component of the Plan. The Project includes the construction of a 1500-ft long, 45-ft high dam across Cajalco Creek upstream of Lake Mathews. Approximately one mile of Cajalco Road will be rerouted around the south end of the dam. In addition, four small sedimentation basins will be constructed on four tributaries south of Lake Mathews.

Approval of the recommendation will authorize the award of a construction contract to the responsible low bidder, Kiewit Pacific Co., in the amount of \$22,085,140. The engineer's estimate was \$21,000,000. In addition, it is recommended that the Board approve a \$400,000 increase (for a maximum agreement amount of \$2,467,000) to Agreement 4803 with John Tettener and Associates, the design consultant, to provide engineering and geotechnical support during construction.

Funds for construction are included in the project budget and within the current appropriation. The project budget remains unchanged at \$37.4 million (see [Attachment 1](#) for the detailed report, [Attachment 2](#) for the location map, [Attachment 3](#) for the Abstract of Bids, and [Attachment 4](#) for the MBE/WBE Participation).

Policy

Administrative Code Article 8113: Construction Contract Award

Administrative Code Article 8117: Professional and Technical Consultants.

Board Options/Fiscal Impacts

Option #1

Award a construction contract to the low bidder, Kiewit Pacific Co., to perform the construction of the Cajalco Creek Dam and Detention Basin and amend the John Tettener and Associates contract to provide engineering and geotechnical support during construction. This would result in improved water quality in Lake Mathews, as well as allow Metropolitan to take advantage of both the \$20 million SRF loan and the favorable low bid. It would also allow Metropolitan to meet its responsibilities as defined in the Plan MOU.

Fiscal Impact: \$22,485,140 expenditure of appropriated funds.

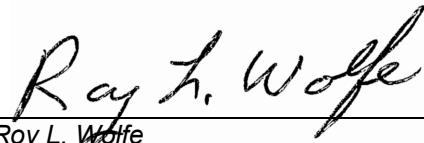
Option #2

Do not award contract. In this event, the benefits identified in Option #1 would not be realized.

Fiscal Impact: No cost.

Staff Recommendation

Option #1



Roy L. Wolfe
Acting Manager, Corporate Resources

11/19/99

Date



Ronald R. Jeter
General Manager

11/29/99

Date

Attachment 1 – Detailed Report

Attachment 2 – Location Map

Attachment 3 – Abstract of Bids

Attachment 4 – MBE/WBE Participation

Detailed Report

Project and Program Description

The current project involves the construction of a 1500-ft long, 45-ft high dam across Cajalco Creek upstream of Lake Mathews. To construct the dam, approximately one mile of Cajalco Road will be rerouted around the south end of the dam. In addition, four small sedimentation basins will be constructed on four tributaries south of Lake Mathews several miles west of the new dam.

This current project is the major component of the Drainage Water Quality Management Plan (DWQMP) for the Lake Mathews watershed. The DWQMP is a joint program between the County of Riverside, Riverside County Flood Control and Water Conservation District (RCFC&WCD) and Metropolitan. The objectives of the DWQMP are to:

1. Protect Lake Mathews against urban storm water entering the lake.
2. Provide a barrier against potential spills of hazardous material in the 40-square-mile watershed.
3. Assist the County in managing storm water runoff from the watershed and meeting proposed National Pollutant Discharge Elimination System (NPDES) permit requirements.

The roles and responsibilities of each agency are defined in a 1995 memorandum of understanding (MOU), authorized by the Board.

In addition to the construction of the current project facilities, five other water quality wetland/diversion projects are included in the DWQMP. The construction of these facilities will be triggered by future development within the watershed. The DWQMP program includes the current project and the five future facilities.

Project and Program Cost Estimates

In May of 1998, the Board authorized funds for the construction of the current project, the Cajalco Creek Dam and Detention Basin Project. The total funding appropriated for the project is \$37,400,000. This includes the cost of environmental documentation and mitigation, design, and construction. Partial financing for the project will be provided by a \$20 million low interest (approximately 2.5%) State Revolving Fund loan authorized by the State Water Resources Control Board and by Area Drainage Plan (ADP) fees collected by Riverside County from land developers.

The program estimate of \$45,900,000 includes the cost of the current project and the future water quality wetland/diversion projects. The RCFC&WCD is responsible for the design and construction of the five remaining facilities, subject to available funding from either Metropolitan or other sources. Additional funding from Metropolitan would be subject to Board approval.

Costs for the Cajalco Creek Dam and Detention Basin were previously planned and budgeted. The current appropriation for the program remains unchanged at \$37,400,000, while the total program estimate remains \$45,900,000.

Consultant Contract Amendment

John Tettemer and Associates was selected under the RFP process to provide design services for the project. It was anticipated that, as the engineer of record, John Tettemer and Associates would provide engineering and geotechnical support during construction.

In January 1995, the Board authorized the General Manager to enter into an agreement with John Tettemer and Associates for geotechnical investigation, design and the preparation of specifications for the Cajalco Creek Dam and Detention Basin Project. The Board authorized \$1,900,000 for these services. The General Manager has since approved a contract increase of \$167,000 for a maximum agreement amount of \$2,067,000.

It is recommended that the Board approve an amendment to Agreement 4803 with John Tettemer and Associates to increase the contract amount by \$400,000 for a maximum agreement amount of \$2,467,000. Although there are limited subcontracting opportunities, the Consultant has goals of 5% of the construction support services subcontracted to MBE firms and 5% to WBE firms.

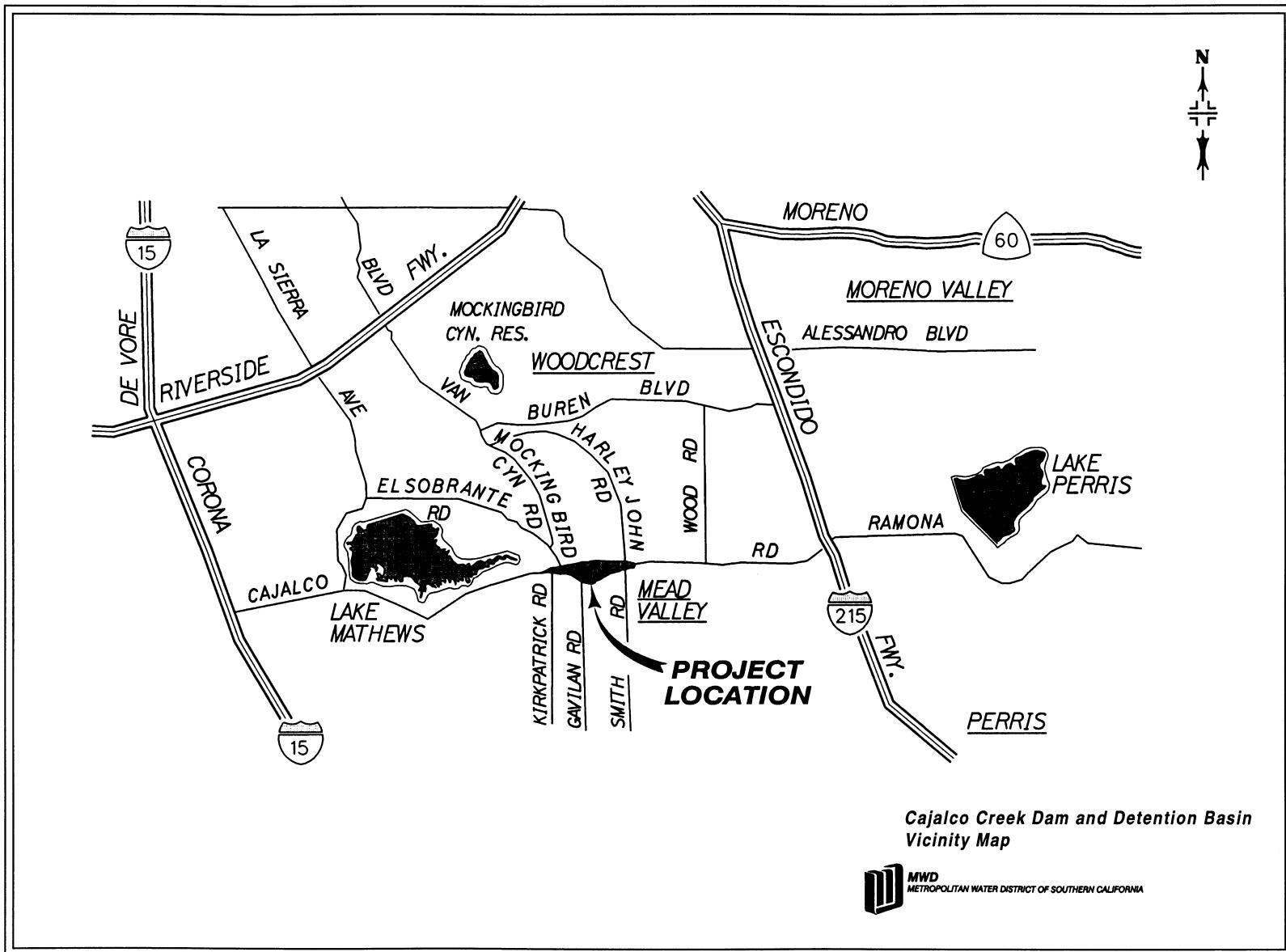
Award of Construction Contract

A total of 5 bids was received and opened under Specification 1362 as amended for the construction of the Cajalco Creek Dam and Detention Basin. The responsible low bid from Kiewit Pacific Co., in the amount of \$22,085,140, complies with the requirements of the specifications, is \$5,289,135 below the next lowest bid, and is \$1,085,140 above the Engineer's estimate.

The specification established mandatory subcontracting requirements and required the bidder to conduct a good-faith effort to encourage participation of minority and women-owned business enterprises. The Business Outreach Office has reviewed the anticipated levels of participation submitted by Kiewit Pacific Co., and deemed it acceptable in meeting the criteria set forth in the specification.

CEQA Compliance/Environmental Documentation

The EIR for the DWQMP 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 a 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 was prepared as required by CEQA to address minor project design changes. No further environmental documentation is required for this project.



The Metropolitan Water District of Southern California**Abstract of Bids Received October 21, 1999, at 2:00 p.m.****Specifications No. 1362, as Amended****Cajalco Creek Dam and Detention Basin**

The project consists of constructing the Cajalco Creek Detention Basin, Cajalco Creek Sedimentation Basin, four other sedimentation basins, and realignment of Cajalco, Gavilan and El Sobrante Roads. The work includes constructing a detention basin, dam embankment, sedimentation basin embankment, reinforced concrete outlet tower and outlet box conduit, spillway and auxiliary structures, drainage structures, roadways, slide gates, dam instrumentation, data acquisition system, and other appurtenances.

Engineer's Estimate: **\$21,000,000**

Bidder & Location	Item 1 Mobilization	Items 2 through 31 Unit Price	Item 32 Landscape Maintenance	Total Items 1 through 32
Kiewit Pacific Company – Vancouver, WA	\$500,000	\$21,485,140.00	\$100,000	\$22,085,140.00
Sukut Construction, Inc. – Santa Ana, CA	\$500,000	\$26,774,275.70	\$100,000	\$27,374,275.70
C. W. Poss, Inc. – Fullerton, CA	\$500,000	\$27,653,073.30	\$100,000	\$28,253,073.30
C. A. Rasmussen, Inc. – Corona, CA	\$500,000	\$29,838,410.60	\$100,000	\$30,438,410.60
Ford Construction Company, Inc. – Lodi, CA	\$500,000	\$31,277,910.00	\$50,000	\$31,827,910.00

MBE/WBE PARTICIPATION
Specifications No. 1362, as Amended

Name of Bidder: Kiewit Pacific Company

MBE/WBE Participation Levels: 7% MBE and 3% WBE

Mandatory Subcontracting Minimum: 15%

Name of Certified MBE/WBE Subcontractor/Supplier	Work to Be Performed or Materials To Be Supplied	Participation	
		MBE%	WBE%
Geofon, Inc. – Diamond Bar, CA	Instrumentation	0.98%	
Sudhakar Company, Inc. – Rialto, CA	Striping	0.16%	
Romero General Construction Corp. – Escondido, CA	Asphalt Paving and Aggregate Base	3.38%	
Ugalde Trucking Company, Inc. – Anaheim, CA	Supply Filter Rock	2.60%	
Acacia Landscaping & Erosion Control, Inc. – Santa Barbara, Inc.	Landscaping		1.39%
Hydrosprout, Inc. – Escondido, CA	Hydroseeding		1.13%
Pinnacle Petroleum – Seal Beach, CA	Supply Fuel		0.57%
Total Committed Participation		7.12%	3.09%