

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

June 8, 2004 Board Meeting

9-14

Subject

Appropriate \$1.852 million; and authorize design and repairs of the Rialto Feeder as part of the Conveyance and Distribution Rehabilitation Program (Approp. 15377)

Description

Metropolitan's Rialto Feeder conveys State project water from the California Department of Water Resources' Devil Canyon Power Plant to Metropolitan's San Dimas Flow Control Facility near Live Oak Reservoir. The length of the Rialto Feeder is 30 miles, of which approximately 16 miles are prestressed concrete cylinder pipe (PCCP) while the remaining 14 miles are welded steel pipe. The Rialto Feeder was installed in 1973. Under Metropolitan's PCCP Inspection Program (Approp. 15297), all 163 miles of PCCP in Metropolitan's Distribution System are being inspected using remote field eddy current/transformer coupling (RFEC/TC) technology to assess the pipes' structural integrity.

A recent RFEC/TC inspection was conducted on a 6.5-mile segment of the Rialto Feeder. The inspection revealed that two sections of the pipe need to be repaired as soon as possible. One of the sections shows evidence of "broken back" damage. A "broken back" occurs where differential settlement between the pipe and an adjacent structure causes the pipe to crack. A second pipe section has as many as 40 prestressed wire breaks. Preliminary testing indicates that there are other segments with fewer wire breaks, and these sections are being evaluated for their pipe integrity. This assessment is scheduled for completion by early summer, and staff will return to the Board with any possible remediation measures as needed.

In order to make repairs of two pipe segments, a seven-day shutdown is required. This shutdown has been coordinated with the affected member agencies and is scheduled to begin on June 7, 2004. Two different repair methods are proposed, based on the locations of the segments and their condition. For the first repair, the PCCP would be removed and 44 feet of steel pipe would be installed in its place. The location of the first repair is approximately 3,000 feet east of Live Oak Reservoir, in an area where direct excavation is feasible. The second repair is an 18-foot-long pipe segment that is within the Rialto Feeder's Tunnel No. 3, approximately 2,700 feet east of Live Oak Reservoir. Due to its location within a tunnel, carbon fiber lining will be used for this repair because it reduces costs and simplifies construction.

It is recommended that Metropolitan forces perform the pipe fabrication and repairs for the first repair location, while a specialized contractor would perform the carbon fiber installation. The amount of the contract for the carbon fiber installation is expected to fall within the Chief Executive Officer's authority for award.

Field inspections and assessments are currently underway to develop a prioritized list of future repairs for this portion of the Rialto Feeder. This project has been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included within the fiscal year 2004/05 capital budget. A detailed financial statement appears in [Attachment 1](#).

Policy

Metropolitan Water District Administrative Code § 5108: Capital Project Appropriation
Metropolitan Water District Administrative Code § 8113: Construction Contract Award

California Environmental Quality Act (CEQA)


CEQA determination for Staff Recommendation:

The proposed actions are exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions include the immediate remedial repair of existing pipelines with the same purpose and capacity. Accordingly, the proposed actions qualify under a statutory exemption (Sections 21060.3 and 21080(b) of the California Public Resources Code and Section 15269 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed actions qualify under a statutory exemption (Sections 21060.3 and 21080(b) of the California Public Resources Code and Section 15269 of the State CEQA Guidelines).

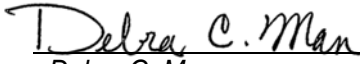
Staff Recommendation

Adopt the CEQA determination and appropriate \$1.852 million for design and repairs of the Rialto Feeder.
Fiscal Impact: \$1.852 million of funds budgeted within the fiscal year 2004/05 Capital Investment Plan.



Roy L. Wolfe
Manager, Corporate Resources

6/2/2004
Date



Debra C. Man
for Ronald R. Gastelum
Chief Executive Officer

6/2/2004
Date

Attachment 1 – Financial Statement for the Rialto Feeder Repairs

BLA #3016

Financial Statement for the Conveyance and Distribution System Rehabilitation Program

A breakdown of Board Action No. 6 for Approp. No. 15377 for the repair of the Rialto Feeder, part of the Conveyance and Distribution System Rehabilitation Program is as follows:

	Previous Board Action No. 5 (Nov. 2003)	Current Board Action No. 6 (Jun. 2004)	New Total Appropriated Amount
Labor			
Studies and Investigations	\$ 870,000	\$ 0	\$ 870,000
Design and Specifications	1,562,500	60,000	1,622,500
Owner Costs (Program management, environmental monitoring, permitting)	1,653,500	40,000	1,693,500
Construction Inspection and Support	433,300	20,000	453,300
Metropolitan Force Construction	4,978,000	1,200,000	6,178,000
Materials and Supplies	2,346,000	100,000	2,446,000
Incidental Expenses	782,000	5,000	787,000
Professional/Technical Services	402,000	0	402,000
Equipment Use	568,000	17,000	585,000
Contracts	4,077,400	240,000	4,317,400
Remaining Budget	2,118,000	170,000	2,288,000
Total	\$ 19,790,700	\$ 1,852,000	\$ 21,642,700

Funding Request

Program Name:	Conveyance and Distribution System Rehabilitation Program		
Source of Funds:	Construction Funds (General Obligation, Revenue Bonds, or Pay-As-You-Go)		
Appropriation No.:	15377	Board Action No.:	6
Requested Amount:	\$ 1,852,000	Capital Program No.:	15377-I
Total Appropriated Amount:	\$ 21,642,700	Capital Program Page No.:	E-11
Total Program Estimate:	\$ 43,540,000	Program Goal:	R-Reliability