



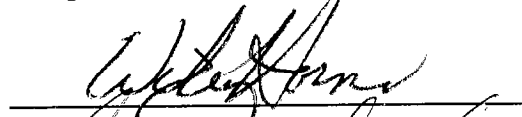
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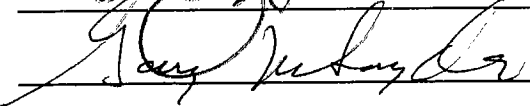
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

9-8

January 21, 1997

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

**From:** General Manager 

**Submitted by:** Gary M. Snyder  
Chief Engineer 

**Subject:** Capital Program Variance Reporting, December 1996

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## RECOMMENDATION

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For information only.

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## EXECUTIVE SUMMARY

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This report shows the mid-year variance between budget estimates and actual expenditures for the Fiscal Year 1996/97 Capital Program. Overall, expenditures through December 1996 were projected to be \$225.6 million. Actual expenditures were \$167.5 million representing a variance of \$58.1 million or 26 percent of the estimate.

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## DETAILED REPORT

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At a budget review workshop held on May 1 - 2, 1995, the Special Budget and Financial Analysis Committee requested that staff provide variance explanations for the Capital Program twice during the fiscal year. This report contains the mid-year analysis.

Overall, expenditures through December 1996, were projected to be \$225.6 million. Actual expenditures were \$167.5 million representing a variance of \$58.1 million or 26 percent of the estimate. This variance has resulted from a shift in the timing of CIP expenditures; however, the ten-year CIP remains at \$3.9 billion. Attachment "B" is a chart which reflects a comprehensive review of the latest project cost and schedule data.

Nineteen programs with a combined variance of \$39.9 million, 75 percent of total variance, are listed in Attachment "A" and their specific program variance explanations are detailed below. Programs not specifically listed in Attachment "A" have variances of less than \$750,000 or are within 15 percent of the estimate.

### **Jensen and Mills Filtration Plants--Oxidation Retrofit Program**

#### **\$13,883,900 under Estimate**

Fiscal year objectives were based on the proposed federal Disinfectants/Disinfection By-Product Rule, Stage 1, with a previously planned compliance date of June 1998. Due to delayed Federal promulgation of the rule and Metropolitan rate refinement activities, design work on the Oxidation Retrofit Program has been curtailed while revised completion dates are being considered. This issue will be discussed further at the March 1997 Board of Directors meeting.

### **Inland Feeder**

#### **\$8,488,200 under Estimate**

Program expenditures for FY 1996/97 were based on a system on-line date of 2002. In September 1996 a revised on-line date of 2004 was adopted by your Board resulting in a downsizing of staff deployment on the project and a reduction in expenditures in right-of-way and engineering design costs, for the current fiscal year.

### **Union Station Long-Term Headquarters Facility**

#### **\$4,703,100 under Estimate**

Invoices have not been paid due to contractor invoicing problems. Billings are approximately 45 days behind schedule. Variances should be reduced in the third and fourth quarters, FY 1996/97.

### **Garvey Reservoir Repair**

#### **\$4,466,800 under Estimate**

The reservoir liner contract experienced delays due to California Division of Safety of Dams (DSOD) review and resulting comments. The liner project was advertised in April 1996, but, resolving DSOD concerns with Metropolitan's specifications delayed the bid opening to August 1996. Costs are anticipated to remain below budgeted amounts for this fiscal year.

**Jensen Filtration Plant--Expansion No. 1****\$3,266,900 under Estimate**

The Jensen filtration plant expansion encompassed a number of projects, some of which were significantly delayed. The installation of the plant control system has been delayed due to termination of the original control system contract because of nonperformance by the contractor. The emergency generator project was delayed due to unforeseen design changes necessary to interface the generator with the future Oxidation Retrofit facility at the Jensen plant. Further delays involve design and construction of unforeseen repairs to Finished Water Reservoir No. 2 that resulted from damages caused by the Northridge earthquake. These improvements must be finished prior to completing the retrofit of the existing Finished Water Reservoir No. 1.

**Mills Filtration Plant--Expansion No. 2****\$3,923,100 under Estimate**

The Mills filtration plant expansion included several project schedule impacts which contributed to the variance. Construction progressed faster than anticipated in the spring of 1996, resulting in progress payments to the contractor earlier than the payment schedule for the FY 1996/97. In addition, the Mills plant flocculator retrofit project was delayed pending the results of the Jensen plant flocculator retrofit evaluation program. Costs are anticipated to remain below budgeted amounts for this fiscal year.

**Local Groundwater Storage Agreements****\$3,192,300 under Estimate**

Actual expenditures are less than projected because several local groundwater conjunctive use programs were delayed due to protracted negotiations. Costs are anticipated to remain below budgeted amounts for this fiscal year.

**Distribution System--Replacement of Area Control Systems****\$3,127,900 under Estimate**

The JWP Controls, Inc., contract was terminated due to nonperformance by the contractor. Metropolitan sued and the litigation was settled; the settlement amount was credited to the program in November 1996. The system equipment was not received until December 1996, therefore the payment is not reflected in expenditures through December 1996. Variances should be reduced in the third quarter FY 1996/97.

**San Diego Pipeline No. 6****\$2,396,600 under Estimate**

Program expenditures for FY 1996/97 were based on a program on-line date of 2001. In September 1996, the results of the rate refinement process delayed initiating design activities and resulted in reduction in FY 1996/97 expenditures to meet the revised on-line date of 2004.

**Desalination Demonstration Project****\$1,345,300 under Estimate**

Subsequent to the preparation of the capital budget, the scope of the project was modified, which delayed the start of design activities. Rather than preparing a site-specific design of a five-MGD demonstration plant with Metropolitan staff which the Capital Program reflected, a generic design will be completed by a consultant with Metropolitan participation. Metropolitan will provide one-half of funding for final design with remaining funds to be provided by the U.S./Israel Science and Technology Foundation. Progress of the design phase was further delayed by the desire of the project sponsors to increase the demonstration plant design capacity. Costs are anticipated to remain below budgeted amounts for this fiscal year.

**Diemer and Weymouth Install Emergency Generators****\$1,347,000 under Estimate**

The expenditure variance for this program was due to a six-month delay in awarding the Diemer Emergency Generator construction contract and an 18-month delay in completing design of the Weymouth Emergency Generator. Specifically, the Diemer contract was delayed to readvertise the specifications after the three initial bids were rejected for nonresponsiveness. The delays in the advertisement of the Weymouth contract resulted from an acoustic study required to assess the noise impact of the new system, and various other design changes requested by the City of LaVerne. The acoustic study resulted in relocating the generator building farther from Moreno Avenue at LaVerne, increasing the size of a sound wall, additions of enhanced mufflers for the diesel engine generators, and louvered silencers for the generator building.

**San Joaquin Reservoir--Improvement****\$1,146,600 under Estimate**

The expenditure variance is due to an interruption in completing design of the reservoir cover, liner, and chemical distribution system caused by an unforeseen major landslide which significantly changed the reservoir configuration. Construction of the failed embankment is currently underway.

**Colorado River Aqueduct--Supervisory Control and Data Acquisition (SCADA) System****\$1,104,100 under Estimate**

The expenditure variance occurred because the SCADA contract was delayed until the vendor could demonstrate their ability to perform the job. A decision had been made to award the contract to Systems Integrated (SI). This decision was conditional on SI being able to complete formal acceptance testing. SI was unable to complete formal acceptance testing until November 1996. Purchase of electrical transducers were also delayed due to procurement delays. The transducers should be delivered in the first half of 1997.

**Digital Microwave Services to Plants and Desert Facilities****\$1,072,500 under Estimate**

The program is under budget because the payment to Southern California Edison (SCE), as part of the revised Joint Use Communications Agreement, is pending final signature of the agreement by SCE management.

**San Jacinto Tunnel, West Portal--Seismic Modifications****\$966,700 under Estimate**

The design phase of this project has been delayed due to extended time needed by the consultants to design the access ramp, slope run-off drainage, and modifications to roof openings to meet operational requirements. The final drawings were submitted by the consultants in November 1996. The project was advertised in December 1996. The Board will be requested to approve an award for construction in March 1997.

**Skinner Filtration Plant--Flocculator Replacement in Modules 1 and 2****\$806,500 under Estimate**

The project has been delayed six months pending results of tests of flocculators being used at the Jensen filtration plant in order to determine the best flocculators to use at Skinner filtration plant.

**Electronic Document Management (EDM)****\$751,900 under Estimate**

Since the preparation of the Capital Program for Fiscal Year 1996/97, staff has changed the scope of the EDM project resulting in a schedule slip and the budget variance. The new scope of the project is a fully integrated approach to incorporate the requirements of all divisions. As a result of the program's new direction, staff will come forward to your Board in the last quarter of the fiscal year to request authority and funding to proceed with implementation of the EDM project.

**Diemer Land Acquisition and Habitat Conservation Plan****\$1,638,800 over Estimate**

Actual expenditures were greater than projected because at the time the FY 1996 /97 program budget was prepared, land acquisition was anticipated in June 1996. However, due to protracted negotiations, acquisition and expenditures did not occur until November 1996.

**Eastside Reservoir Project****\$10,785,700 over Estimate**

Actual expenditures were greater than anticipated in the construction of the West Dam. The contractor had not yet supplied cashflow projections at the time the FY 1996/97 program budget was prepared, and began work on noncritical work ahead of schedule which resulted in higher than expected expenditures.

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## Attachment A

<b>Fiscal Year 1996/97 Capital Program Variance Report Dollars in Thousands</b>				
<b>Program Title</b>	<b>Estimate thru 12/30/96</b>	<b>Actual thru 12/30/96</b>	<b>Variance</b>	<b>%</b>
Jensen & Mills Filtration Plants - Oxidation Retrofit Program	18,335.0	4,451.1	13,883.9	75%
Inland Feeder	19,595.8	11,173.6	8,488.2	43%
Union Station Long-Term Headquarters Facility	13,936.0	9,232.9	4,703.1	34%
Garvey Reservoir Repair	4,763.2	296.4	4,466.8	94%
Jensen Filtration Plant - Expansion No. 1	5,935.2	2,668.3	3,266.9	55%
Mills Filtration Plant - Expansion No. 2	8,838.4	4,915.3	3,923.1	44%
Local Groundwater Storage Agreements	4,500.0	1,307.7	3,192.3	71%
Distribution System - Replacement of Area Control Systems	4,945.6	1,817.7	3,127.9	63%
San Diego Pipeline No. 6	2,405.3	8.5	2,396.6	99%
Desalination Demonstration Project	2,331.8	986.5	1,345.3	58%
Diemer and Weymouth Install Emergency Generators	1,480.2	133.2	1,347.0	91%
San Joaquin Reservoir - Improvement	1,455.0	308.4	1,146.6	78%
Colorado River Aqueduct-Supervisory Control and Data Acquisition (SCADA) System	1,369.0	264.9	1,104.1	81%
Digital Microwave Services to Plants and Desert Facilities	1,276.4	203.9	1,072.5	84%
San Jacinto Tunnel, West Portal - Seismic Modifications	1,002.8	36.1	966.7	96%
Skinner Filtration Plant - Flocculator Replacement in Modules 1 and 2	827.9	21.4	806.5	97%
Electronic Document Management	751.9	0.0	751.9	100%
Diemer Land Acquisition and Habitat Conservation Plan	732.3	2,371.1	-1,638.8	-224%
Eastside Reservoir Project	101,865.4	112,651.1	-10,785.7	-11%
Other - 60 Remaining Programs w/Variance under \$750,000	29,277.8	14,685.8	14,592.0	50%
<b>TOTALS</b>	<b>225,625.0</b>	<b>167,533.9</b>	<b>58,091.1</b>	<b>26%</b>

### Capital Improvement Program

