



**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

7-4

January 20, 1998

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

**From:** <sup>FOR:</sup> General Manager

**Submitted by:** Chief Engineer

**Subject:** Appropriate \$273,000 to Finance all Estimated Remaining Costs for Repairs to the Joseph Jensen Filtration Plant Finished Water Reservoir No. 2

**Reference:** Appropriation No. 15288 / Authorization No. 2

**RECOMMENDATION(S)**

---

---

To complete the repairs to the Joseph Jensen Filtration Plant Finished Water Reservoir No. 2, it is recommended that your Board appropriate \$273,000 from the Pay-As-You-Go-Fund to finance all estimated remaining costs.

**EXECUTIVE SUMMARY**

---

---

The Jensen Finished Water Reservoir No. 2 (Jensen reservoir) was damaged by the 1994 Northridge Earthquake. In May 1997, the Board authorized \$1,395,000 to finance the costs for repairs. A competitively bid construction contract was awarded to Serrot Corporation (Serrot) in the amount of \$1,093,000 to remove and repair the floating Hypalon cover, repair cracks in the asphalt bottom, and reinstall the floating cover. As work proceeded, repairs to the existing asphalt liner have been more extensive than originally anticipated. Consequently, staff has investigated the merits of a polypropylene liner to mitigate future potential leakage and recommends its installation. Moreover, staff has accepted a value engineering proposal to install a new polypropylene cover in lieu of repairing the old cover for a credit to Metropolitan. This request for additional funding will cover the cost of the change order proposal, including contingencies and all other Metropolitan costs.

**JUSTIFICATION**

---

---

The polypropylene liner greatly increases the operational reliability of the Jensen reservoir, particularly after an earthquake.

## **ALTERNATIVE TO PROPOSED ACTION**

---

### **Do not increase the appropriation or install the polypropylene liner.**

If the polypropylene liner change order is not issued, the contract can be completed without increasing the appropriation funding. However, Metropolitan would lose the benefit of a more reliable reservoir.

## **FUNDING REQUEST**

---

<b>Program Name:</b> Jensen Filtration Plant - Finished Water Reservoir No. 2			
<b>Source of Funds:</b> Pay-As-You-Go Fund			
<b>Appropriation No.:</b> 15288	<b>Authorization No.:</b> 2	<b>FY 97/98 Budget:</b> \$1,793,100	
<b>Requested Amount:</b>	\$ 273,000	<b>Capital Program No.:</b>	15288-A
<b>Total Appropriated Amount:</b>	\$2,173,000	<b>Capital Program Page No.:</b>	E-49
<b>Total Program Estimate:</b>	\$2,173,000*	<b>Program Category:</b>	Asset/System Integrity

\*This reflects a decrease from \$2,540,000 for Fiscal Year 1997/98.

## **ACTIONS AND MILESTONES**

---

1. Completed final design of the Jensen reservoir repairs in May 1997
2. Started construction in July 1997
3. Complete all work by December 1998

## **CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION**

---

This project is categorically exempted from the provisions of the California Environmental Quality Act (CEQA) because it involves repair and minor modifications of existing facilities (CEQA Guidelines Section 15301). No further environmental documentation or reviews are necessary for your Board to take action on these recommendations.

**DETAILED REPORT**

---

Construction of the reservoir was near completion when the reservoir suffered significant damage to its asphalt-lining system from the Northridge Earthquake. Initial repairs of the asphalt were short-lived. As a result, staff proposed a more extensive repair program to the Board.

In May 1997, the Board authorized \$1,395,000 to finance the costs for the repairs. A competitively bid construction contract was awarded to Serrot Corporation in the amount of \$1,093,000 to remove the floating Hypalon cover, repair cracks in the asphalt bottom, and repair and reinstall the floating cover. As work proceeded, damage and resulting repairs to the existing asphalt liner have been more extensive than originally anticipated. Consequently, staff has investigated the merits of a polypropylene liner to mitigate future potential leakage and recommends its installation on top of the repaired asphalt. Moreover, staff has accepted a value engineering proposal to install a new polypropylene floating cover in lieu of repairing the old cover for a credit to Metropolitan. In addition, the original floating cover was used to cover the Iron Mountain landfill for an additional cost savings to Metropolitan of \$100,000. The Iron Mountain landfill project was used for the disposal of refuse and construction debris from the Iron Mountain Pumping Plant and associated housing units.

This letter seeks your Board's authorization to increase the Appropriation from \$1,900,000 to \$2,173,000. Funds to cover the increase are requested from the Pay-As-You-Go-Fund. A breakdown of all estimated costs is shown on the Financial Statement on Attachment A.

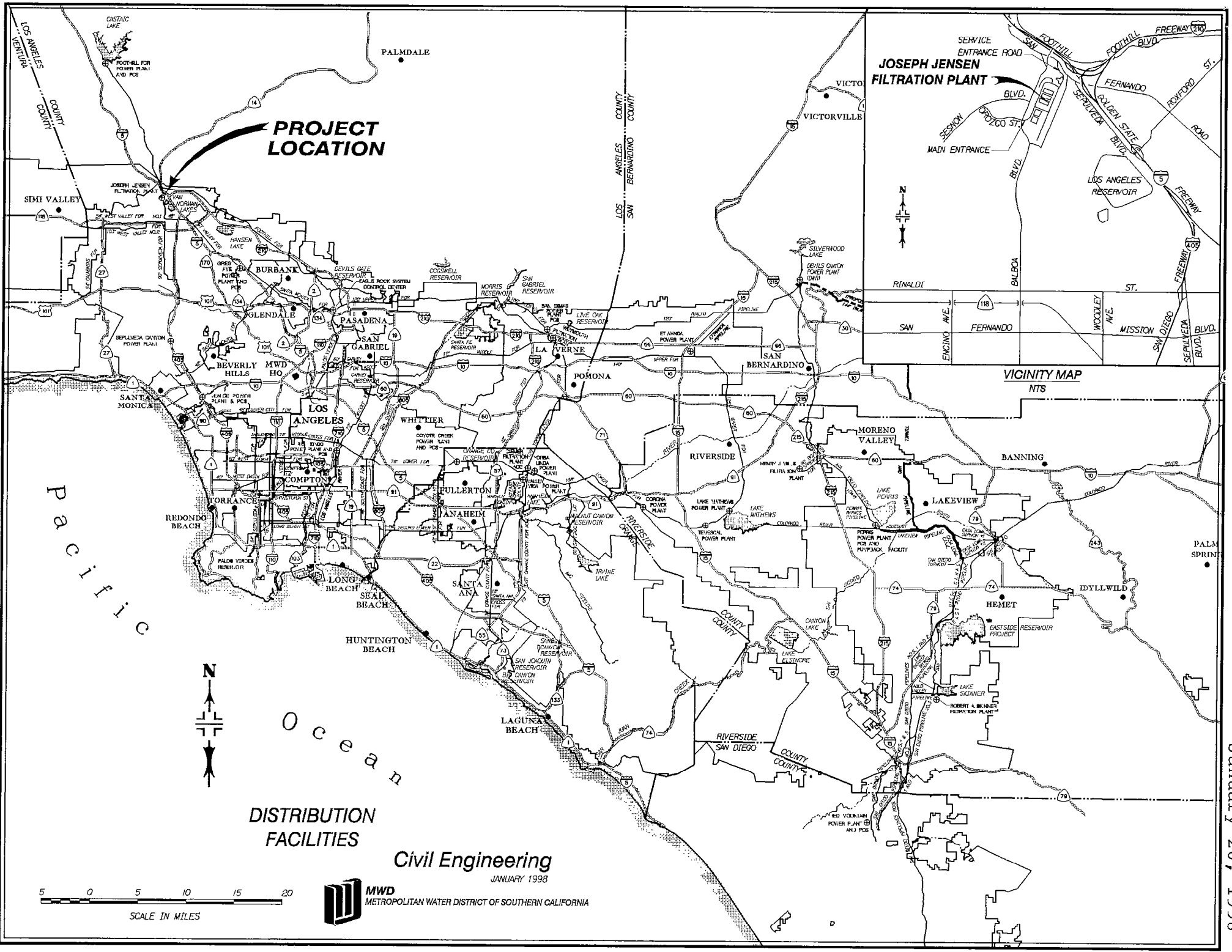
TT:MFB/mg:rev9  
(burch)  
Attachment(s)

**Attachment A to 7-4**  
Financial Statement  
Joseph Jensen Filtration Plant Finished Water Reservoir No. 2  
Capital Program No. 15288

The total estimated cost breakdown of repairs to the Jensen Finished Water Reservoir No. 2:

Program Summary	Authorization <u>No. 1</u>	Authorization <u>No. 2</u>
Construction Specifications No. 1388	\$1,093,000	\$1,093,000
Unit Rate Work\Quantity Increases		132,000
Cover and Liner Change Order		<u>94,000</u>
<b>Subtotal Contract</b>		<b>\$1,319,000</b>
Labor:		
Engineering		
Investigation, Study, and Project Management	\$ 127,000	\$ 127,000
Engineering Design	70,000	70,000
Contract Administration, Inspection Submittal Reviews, Construction Support and As-Builts	180,000	198,000
Operations	12,000	12,000
Environmental Compliance	2,000	2,000
Water Quality	<u>1,000</u>	<u>1,000</u>
<b>Subtotal Labor</b>	<b>\$ 392,000</b>	<b>\$ 410,000</b>
Materials and Supplies	\$ 1,000	\$ 1,000
Incidental Expenses	4,000	4,000
Professional and Technical Services	30,000	36,000
Equipment Use/Rental	5,000	20,000
Administrative Overhead	213,000	233,000
Contingency	<u>162,000</u>	<u>150,000</u>
<b>Total</b>	<b><u>\$1,900,000</u></b>	<b><u>\$2,173,000</u></b>
Projected Expenditure of Funds:		
Through FY 1996/97		\$ 362,000
FY 1997/98		928,000
FY 1998/99		733,000
Contingency		<u>150,000</u>
<b>Total</b>		<b><u>\$2,173,000</u></b>

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



**PROJECT  
LOCATION**

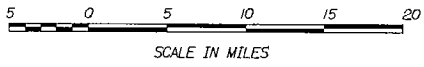
**JOSEPH JENSEN  
FILTRATION PLANT**

**VICINITY MAP**

**DISTRIBUTION  
FACILITIES**

**Civil Engineering**

JANUARY 1998



Item 7-4

Engineering Division  
January 20, 1998