

**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

FILED by order  
of the Board of Directors of  
The Metropolitan Water District  
of Southern California  
at its meeting held JAN 14 1992

39427

*Baren E. [Signature]* 8-10  
Executive Secretary

December 18, 1991

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

*From:* General Manager

*Subject:* Status Report on the Imperial Irrigation District/Metropolitan  
Water District Water Conservation Agreement

Report

The Imperial Irrigation District (Imperial) and The Metropolitan Water District of Southern California (Metropolitan) entered into a water conservation agreement (Conservation Agreement) in December 1988 which became effective in December 1989 after Coachella Valley Water District's (Coachella) and Palo Verde Irrigation District's (Palo Verde) approval. The Conservation Agreement calls for Metropolitan to bear the capital, annual direct and indirect costs of 15 different conservation projects that Imperial is implementing. Imperial is bearing all costs associated with two additional projects designated as augmentation projects. The capital costs of the conservation program were estimated in 1988 dollars to total \$97.8 million. Indirect costs total \$23 million. The annual direct costs were estimated in 1988 dollars to total \$2.6 million upon full implementation of the program. In return, Metropolitan will be entitled to divert from the Colorado River a quantity of water equal to the amount of water conserved by the conservation and the augmentation projects, estimated in 1988 to total 106,110 acre-feet per year upon full implementation of the program, and for at least 35 years thereafter, except under certain limited conditions specified in the 1989 Approval Agreement.

The program is administered by a three-person Program Coordinating Committee (PCC) consisting of a representative from Imperial, Metropolitan, and a third person who serves as Chairman. A five-person Water Conservation Measurement Committee (WCMC) oversees and approves the determination of the water conserved by the program. In addition to the three PCC members, the WCMC includes one member representing Coachella and another representing Palo Verde.

Conservation project implementation began in February 1990. During 1990 and 1991, approximately

\$54.1 million has been expended as shown in Table 1. Actual project capital costs, particularly canal lining, are higher than estimated in the Conservation Agreement mainly due to unforeseen need for additional project planning and acquisition of field verification data. Through December 1991, 123 miles of lateral and main canals were concrete lined, over 27,900 twelve-hour deliveries were made, five canal headings were automated, and one reservoir was placed into operation ("Z" Reservoir). Also, five non-leak gates, six tailwater recovery systems, and three drip irrigation systems were installed, while another three drip irrigation systems and six tailwater recovery systems are under construction. These projects have conserved an estimated 33,929 acre-feet of water which is available to Metropolitan in 1992 (Table 2).

Verification of conserved water through December 1991 has indicated that canal seepage rates are lower in certain instances than estimates contained in the Conservation Agreement which were based on a report prepared by Parsons Water Resources, Inc. As such, a number of canal lining projects have been deferred. A cost analysis was carried out utilizing the seepage results obtained to identify those remaining unlined canals that would keep the equivalent annual cost per acre-foot of conserved water under \$128 (1988 dollars). Alternate projects are being identified to substitute for the canal lining projects placed on hold. These include additional regulating reservoirs, the extension of lateral interceptor projects being undertaken, and the expansion of certain on-farm projects.

Projects budgeted for implementation in 1992 are estimated to conserve approximately 15,000 acre-feet at a total cost of \$28.8 million in 1992 dollars, including indirect costs. As contemplated at the time the Agreement was negotiated, the final costs for the program due to escalation will require an increase in the capital appropriation for these projects. Nonetheless, when such costs are indexed back to the 1988 dollars contained in the Agreement, it is anticipated that the total program will be implemented at or below the costs shown in the agreements which were effectively \$120 per acre-foot (\$128 per acre-foot without the augmentation projects).

#### Board Committee Assignments

This letter was referred for information to:

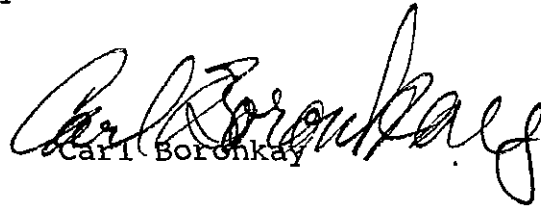
The Engineering and Operations Committee because of its authority to study and advise on the performance of construction programs and work and operation and maintenance

of facilities required for the production of water pursuant to Administrative Code Section 2431(b) and (c); and

The Finance and Insurance Committee because of its authority to study and advise on disposition of appropriated funds pursuant to Administrative Code Section 2441(c) and (d).

Recommendation

For information only.

  
Carl Boronkay

FZK:gn

Table 1

Imperial-Metropolitan Water Conservation Program  
Costs Through 1992

<u>Year</u>	<u>Capital and Annual Direct Funding Call</u>	<u>Interest Earned</u>	<u>End-of-Year Capital and Annual Direct Bank Account Balances</u>	<u>Costs<sup>1/</sup> (Million Dollars)</u>			<u>Total</u>
				<u>Capital</u>	<u>Annual Direct</u>	<u>Indirect</u>	
1990	18.3	0.9	3.0 <sup>2/</sup>	15.6	0.6	4.6	20.8
1991	<u>36.8</u>	<u>1.3<sup>4/</sup></u>	12.4 <sup>3,4/</sup>	<u>27.2<sup>4/</sup></u>	<u>1.5<sup>4/</sup></u>	<u>4.6</u>	<u>33.3</u>
<b>Subtotal</b>	55.1	2.2		42.8	2.1	9.2	54.1
1992	<u>20.1<sup>5/</sup></u>			<u>21.8<sup>5/</sup></u>	<u>2.4<sup>5,6/</sup></u>	<u>4.6</u>	<u>28.8</u>
<b>Total</b>	75.2			64.6	4.5	13.8	82.9

[1] Current dollars.

[2] End-of-Year capital and annual direct bank account balance excludes funds withdrawn after the end of the bank business day on December 31, 1990 for payment of costs incurred in 1990. Amount to be credited against 1992 funding call.

[3] \$9.4 million of this amount will be credited against 1993 funding call.

[4] Projected.

[5] Budget estimate for 1992 approved by the PCC. \$1.1 million of the costs will be funded by interest earned on the 1992 capital and annual direct funding call.

[6] Includes \$200,000 as first annual payment to cover Imperial's increased costs for insurance and liability related to ongoing direct costs of the non-structural projects of the program, and the operation, maintenance, and replacement of the structural projects of the program.

Table 2

Water Conserved Through 1992 by  
Imperial/Metropolitan Water Conservation Program  
(Acre-Feet)

<u>Year</u>	<u>Annual Amount of New Water Conserved</u>	<u>Water Available to Metropolitan</u>
1989 (Augmentation Projects)	6,110	
1990	20,590	6,110
1991	7,229	26,700
1992	15,408 <sup>1/</sup>	33,929

[1] Pending PCC and WCMC approval.