



**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

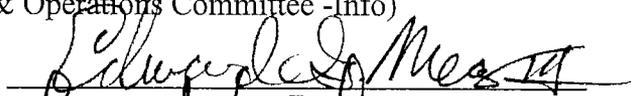
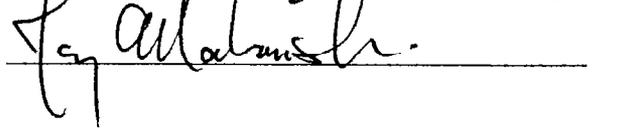
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May 22, 1997

**To:** Board of Directors (Water Planning and Resources Committee--Info)  
(Engineering & Operations Committee -Info)

**From:**  General Manager

**Submitted by:** Chief of Operations

**Subject:** Interim Agricultural Water Program Audit

## RECOMMENDATION(S)

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For information only.

## EXECUTIVE SUMMARY

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Metropolitan's Operations Division has completed an audit of the Interim Agricultural Water Program (Program). The Program, commencing May 1, 1994, was established as a three-year demonstration program to provide water to agricultural users at a price reflective of the water's interruptible status during a shortage. In September 1996, your Board extended the Program water rate structure through FY 2000-01 in response to recommendations presented through the Rate Refinement Process (RRP). During this time, the price differential between full service and Program water of \$113/AF and \$137/AF will remain in effect for untreated and treated water, respectively.

Section 4903 of Metropolitan's Administrative Code (Code) required staff to audit the Program at the end of FY 95-96. In accordance with Code requirements, Operations Division initiated an audit in August 1996. Objectives of the audit were to:

- Review Program water demand at a member agency and subagency level;
- Verify that participants received the Program rate for water;
- Verify agricultural use of parcels receiving Program water through random site inspections;
- Assess the impact of a 30 percent cutback on member agencies;

- Survey member agencies', subagencies', and Program participants' overall satisfaction with the Program.

The Program has been well received by member agencies, subagencies, and agricultural water users and audit results indicate overall compliance with provisions of the Program.

## **DETAILED REPORT**

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On May 10, 1994, your Board adopted the Interim Agricultural Water Program (Program). At that time, staff recommended that the Program be set up as a demonstration program with a sunset/renewal period in three years. The Program provides water to agricultural users at a price reflective of the water's interruptible nature. During a shortage, Metropolitan could reduce Program water deliveries up to 30 percent prior to any mandatory reduction to municipal and industrial users. Once Municipal and industrial delivery reductions have occurred, Metropolitan may further reduce Program deliveries. This is consistent with the Metropolitan Water District Act, which states that surplus water deliveries (including agricultural water deliveries), may be discontinued in whole or in part upon one year's notice, per Resolution 8504 adopted by your Board on September 10, 1996, and the Program conditions. Metropolitan accounts for agricultural deliveries through the Program. On September 10, 1996, your Board extended the Program through fiscal year 2000-2001.

Some of the provisions of the Program require that: (1) maximum annual Program deliveries not exceed 155,190 acre-feet (the average agricultural water deliveries for the four-year period which began in FY 1989-90); (2) member agencies provide Metropolitan with monthly certifications of Program water deliveries; (3) member agencies pass the entire Program water pricing differential of \$137/AF and \$113/AF for treated and untreated Program water, respectively, directly on to their subagencies and use their best efforts to assure that their subagencies pass the entire pricing differential through to the agricultural water users; and (4) member agencies submit a plan to meet the mandatory 30 percent cuts to agriculture in the event of a drought. Section 4903 of Metropolitan's Administrative Code (Code) required Metropolitan to audit the Program at the end of FY 1995-96. In accordance with Code requirements, Operations Division initiated an audit in August 1996. Objectives of the audit were to:

- Review Program water demand at a member agency and subagency level;
- Verify that Program participants received the Program rate water;
- Verify agricultural use of parcels receiving Program water through random site inspections;
- Assess the impact of a 30 percent cutback on member agencies;

- Survey member agencies', subagencies', and Program participants' overall satisfaction with the Program.

As part of the audit, Operations Division surveyed all member agencies and subagencies using agricultural water, met with the agencies, and randomly inspected parcels receiving agricultural water. The survey gathered data on specific uses of Program water within a member agency's service area such as: (1) amount of water used for various types of crops; (2) acreage devoted to various types of crops; (3) probable impact of 30 percent cutback; (4) rate structure and transfer of the Program rate; (5) Program drawbacks and benefits; and (6) areas of improvement. Metropolitan later met with each agency to review their survey response. Survey findings reported by agencies are summarized in Exhibit A (attached). Copies of completed surveys are available from Operations Division upon request.

#### **Results of Audit:**

The Program has been well received by member agencies, subagencies, and agricultural water users. Furthermore, audit results indicate overall compliance with provisions of the Program. In many areas the economic viability of agricultural enterprises rests on the availability of Program water. At the same time, the financial contributions provided to Metropolitan through the agencies' purchase of Program water benefit Metropolitan's entire service area. During the site visits, Metropolitan found that many individual agricultural water users were unaware of the Program extension and welcomed the economic benefit they would receive, in exchange for their continued commitment to interruptibility, from the availability of Program water through FY 2000-01.

#### ***Review Program water demand at member agency and subagency level***

The maximum amount of water delivered annually under the Program is limited to 155,190 acre-feet, which is equivalent to the average agricultural water deliveries for the four consecutive fiscal years beginning in FY 1989-90. A summary of Program deliveries during the two fiscal years following the inception of the Program (FY 1994-95 and FY 1995-96), as well as maximum amount allowed under the Program, is summarized in Table 1 (attached). The percentage of Program deliveries in each member agency's total deliveries for FYs 1994-95 and 1995-96 are summarized in Table 2 (attached).

As seen in Table 1, total Program deliveries were 84,976 and 110,613 acre-feet in FY 1994-95 and FY 1995-96, respectively. Higher FY 1995-96 deliveries reflect the hot, dry weather patterns of that year. San Diego County Water Authority receives the most Program water (53,286 and 69,465 acre-feet in FY 1994-95 and FY 1995-96, respectively). As seen in Table 2, Western Municipal Water District of Riverside County receives the largest percentage of Program deliveries compared to total water deliveries.

***Verify that Program participants received discounted water***

Spot checks of billing records indicated that member agencies and subagencies generally were transferring the agricultural pricing differential directly to the end users. In cases where an agency's supply consisted of both local and imported sources, the Program pricing differential for individual users would be based on the percentage of imported water in the agency's total supply. In a few cases, subagencies did not appear to be transferring the pricing differential since the water delivered to the consumer is blended with local groundwater and the resulting price is already lower than the price of Program water.

***Verify agricultural use of parcels receiving Program water through random site inspections***

During the audit, Metropolitan's staff spot checked two to three parcels for each member agency or subagency certifying Program deliveries. Member agencies and subagencies maintained parcel records of the acreage and types of crops grown by individual agricultural water users receiving Program water. Overall, results of these inspections were consistent with information provided to retail water suppliers by agricultural water users. Exhibit A summarizes the amount of acreage devoted to various agricultural uses within individual agency service areas.

***Assess the impact of a 30 percent cutback on member agencies***

Member agencies and subagencies required Program participants to sign an agreement certifying their understanding of the Program provisions. As a result, most growers were aware of the potential for a 30 percent cutback in Program deliveries during a shortage. Agencies reported that Program water significantly reduces a grower's operating expenses and many growers rely on the lower Program rate to remain competitive. As a result, when signing up for the Program, agricultural users weigh the Program's economic benefit against the possibility of having Program deliveries cut or having to pay a much higher price for water. Some growers whose groves would be irreparably damaged by a cutback do not participate in the Program.

***Survey member agencies', subagencies' and Program participants' overall satisfaction with the Program.***

Overall, member agencies, subagencies and agricultural users perceive the Program as beneficial. For many farmers, particularly avocado growers and citrus growers throughout Metropolitan's service area, agriculture would not be a financially viable enterprise without the availability of water at the Program rates.

Generally, the only concern agricultural water users expressed about the Program is related to the possibility for a 30 percent cutback in Program deliveries during a shortage. Some agencies reported that an inability to sustain production in the event of a cutback may deter growers from participating in the Program.

**Next Step:**

Several member agencies asked that a User Handbook be prepared for the Program. Operations staff will work with member agency staff in preparing a handbook.

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**Table 1**  
**Interim Agricultural Program Water Deliveries**

<b>PARTICIPATING AGENCIES</b>	<b>FY 1994-95</b>	<b>FY 1995-96</b>	<b>4-Year Average</b>
Anaheim	101	16	115
Calleguas Municipal Water District	3,928	5,084	7,164
Chino Basin Municipal Water District	9	77	122
Coastal Municipal Water District	82	76	232
Eastern Municipal Water District	3,718	5,511	6,761
Fullerton	22	15	60
Las Virgenes Municipal Water District	1	6	207
Municipal Water District of Orange County	4,079	3,146	7,425
Three Valleys Municipal Water District	94	53	106
San Diego County Water Authority	53,286	69,465	100,459
Western Municipal Water District	19,655	27,164	32,347
<b>TOTAL</b>	<b>84,976</b>	<b>110,613</b>	<b>146,620</b>

**Table 2**  
**Interim Agricultural Program Water**  
**Agency Percentages of Total Deliveries**

<b>PARTICIPATING AGENCIES</b>	<b>FY 1994-95</b>	<b>FY 1995-96</b>
Anaheim	0.47%	0.09%
Calleguas Municipal Water District	4.45%	5.37%
Chino Basin Municipal Water District	0.02%	0.20%
Coastal Municipal Water District	0.22%	0.18%
Eastern Municipal Water District	7.90%	10.36%
Fullerton	0.32%	0.19%
Las Virgenes Municipal Water District	0.00%	0.03%
Municipal Water District of Orange County	1.98%	1.48%
Three Valleys Municipal Water District	0.16%	0.09%
San Diego County Water Authority	13.37%	15.55%
Western Municipal Water District	35.20%	38.45%

**Exhibit A**  
**INTERIM AGRICULTURAL WATER PROGRAM**  
**ACREAGE DEVOTED TO AGRICULTURE**  
**FISCAL YEAR 1995-96**

<b>PARTICIPATING AGENCIES</b>	<b>NURSERY/ ROW CROPS</b>	<b>TREES/ VINES</b>	<b>FOWL/ LIVESTOCK</b>	<b>TOTAL ACREAGE</b>
<b>Anaheim</b>	na	na	na	na
<b>Calleguas Municipal Water District</b>				
City of Camarillo	1576	na	na	na
Camarosa	2675	2605	na	na
City of Simi Valley/VCWWD #8	na	na	na	na
VCWWD #1 & 19	561.3	6244.4	210.5	7016.2
<b>Chino Basin Municipal Water District</b>				
City of Chino Hills	0	0	116.4	116.4
<b>Eastern Municipal Water District</b>	na	na	na	na
Fullerton	na	na	na	na
<b>Las Virgenes Municipal Water District</b>	na	na	na	na
<b>Municipal Water District of Orange County</b>				
Brea	0	104	0	104
Capistrano Valley WD	108	45	400	553
Irvine Ranch Water District	2450	128	0	2578
Orange	160	0	0	160
Trabuco Canyon Water District	182	0	0	182
Yorba Linda Water District	102	0	0	102
<b>Three Valleys Municipal Water District</b>				
City of Laverne	33.5	0	0	33.5
<b>San Diego County Water Authority</b>				
City of Escondido	27.8	3054.83	5.2	3087.83
City of Oceanside	864.55	876.13	4	1744.68
City of Poway	na	na	na	na
City of San Diego	125	0	0	125
Fallbrook Public Utility District	651	4708	na	5359
Olivenhain Municipal Water District	808.1	235.3	40.9	1084.3
Otay Water District	282	0	0	282
Padre Dam Municipal Water District	21	678	1128	1827
Rainbow Municipal Water District	na	na	na	na
Rincon del Diablo MWD	10.1	501.7	NA	511.8
Santa Fe Irrigation District	na	na	na	na
Vallecitos WD	905	3893	300	5098
Valley Center Municipal Water District	na	na	na	na
Vista Irrigation District	na	na	na	na
Yuima MWD	na	na	na	na
<b>Western Municipal Water District</b>	na	na	na	na
Rancho California Water District	0	6731.25	0	6731.25

na =information not available