



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

9-9

September 24, 1996

To: Board of Directors (Water Planning and Resources Committee--Information)
(Engineering and Operations Committee--Information)

From: General Manager Walter Stone

Submitted by: Debra C. Man, Chief Debra C. Man
Planning and Resources

Subject: Fiscal Year 1996-97 First Quarter Status Report on the Local Projects and
Groundwater Recovery Programs

RECOMMENDATION

For information only.

EXECUTIVE SUMMARY

Metropolitan has entered into agreements to provide financial assistance to 42 water recycling and nine groundwater treatment projects. Under these agreements, up to 224,000 acre-feet per year (AFY) is eligible for assistance.

Thirty-six of these projects are in operation and 15 are under design or construction. Seven water recycling projects and one groundwater recovery project are expected to begin operation this fiscal year, increasing the total production of operating projects from 52,865 acre-feet in last fiscal year to about 66,000 acre-feet this fiscal year. Since 1982, Metropolitan has provided approximately \$29.9 million to the operating projects for production of about 223,000 acre-feet of water. This locally-developed water improves regional water supply reliability by displacing requirements for future Metropolitan capital improvements and water importation.

In August 1995, your Board authorized the General Manager to amend existing LPP agreements to include terms of the proposed Local Resources Program (LRP) on a temporary basis. Five LPP agreements have been amended and negotiations are ongoing to amend 15 others.

Quarterly Highlights

- Metropolitan entered into an LPP agreement with the City of Glendale to implement the Brand Park Reclaimed Water Project in the first quarter of fiscal year 1996-97. The project will ultimately deliver about 225 acre-feet per year (AFY) of recycled water for landscape irrigation.
- Combined recycling and groundwater recovery production was 52,865 in fiscal year 1995-96 which is an increase of about 17,700 acre-feet from the prior year.
- The Tustin Desalter Project began operation. The project will ultimately deliver 3,000 AFY of treated groundwater for municipal use.

Water Recycling

Metropolitan has entered into LPP agreements to provide financial assistance to 42 water recycling projects (see Table 1). Under these agreements, up to 190,000 AFY is eligible for assistance. Thirty of these projects are in operation and the remaining twelve projects are under design or construction. Operating recycling projects are expected to increase production from 41,487 acre-feet last fiscal year to about 54,000 acre-feet this year (see Figure 1). Since inception of the LPP, Metropolitan has contributed approximately \$24.7 million supporting the production of about 175,000 acre-feet of recycled water principally for landscape irrigation, nurseries, groundwater recharge, and industrial uses.

Groundwater Recovery

Metropolitan has entered into LPP and GRP agreements to provide financial assistance to nine projects that recover contaminated groundwater (see Table 2) which are expected to produce about 34,000 AFY by year 2004. Six of these projects are in operation and the remaining three projects are under design or construction. Operating groundwater recovery projects are expected to increase production from 11,378 acre-feet last fiscal year to about 12,200 acre-feet this fiscal year (see Figure 1). Since inception of the LPP and GRP,

**TABLE 1
RECYCLING CONTRACTS**

MEMBER AGENCY	PROJECT	CONTRACT YIELD (AFY)	FY 95-96 YIELD (AFY)	FY 96-97 ¹ YIELD (AFY)	TOTAL TO DATE ¹	
					YIELD (AFY)	CONTRIB. (\$)
LOCAL PROJECTS PROGRAM:						
City of Burbank	1. Burbank Reclaimed Water System Expansion Project	850	186	68	254	39,101
Calleguas MWD	2. Oak Park/North Ranch Reclaimed Water Dist. System	1,300	260	256	528	81,374
Central Basin MWD	3. Cerritos Reclaimed Water Extension Project	260	254	32	644	99,114
	4. Lakewood Water Reclamation Project	440	440	78	2,913	448,540
Chino Basin MWD	5. Carbon Canyon Reclamation Project	13,500	0	0	0	0
Coastal MWD	Green Acres Reclamation Project (Coastal MWD) ²	800	0	0	0	0
	6. San Clemente Water Reclamation Project	4,000	355	62	2,208	340,032
	7. South Laguna Reclamation Expansion Project	700	158	0	212	32,571
	8. South Laguna Reclamation Project	860	776	36	8,254	610,167
Eastern MWD	9. Rancho California Reclamation Expansion Project	6,000	1,473	236	4,382	674,828
	10. Eastern Regional Reclaimed Water System	4,830	0	0	0	0
	11. Eastern Reach 1, Phase II Water Reclamation Project	1,700	0	0	0	0
City of Glendale	12. Glendale Water Reclamation Expansion Project	600	306	41	1,403	216,016
Las Virgenes MWD	13. Calabasas Reclaimed Water System Extension Project	700	363	0	2,471	380,549
	14. Las Virgenes MWD Reclamation Project	2,700	1,712	0	26,381	2,806,369
City of Long Beach	15. Long Beach Reclamation Project	1,700	1,260	405	8,894	1,276,552
	16. Long Beach Reclaimed Water Master Plan Phase I	2,750	0	0	0	0
City of Los Angeles	17. Los Angeles Greenbelt Project	1,610	791	0	2,166	333,610
	18. Sepulveda Basin Water Reclamation Project	1,900	0	0	0	0
MWD of Orange County	19. Green Acres Reclamation Project (MWDOC) ²	5,400	1,271	0	3,484	536,551
	20. Irvine Reclamation Project	10,000	10,000	1,566	60,342	7,995,217
	21. Moulton Niguel Water Reclamation Project	8,000	1,594	0	3,935	605,928
	22. Santa Margarita Water Reclamation Project	3,600	1,801	523	11,220	1,653,834
	23. Trabuco Canyon Reclamation Expansion Project	800	412	0	1,145	176,376
San Diego County Water Authority	24. Encina Basin Water Reclamation Project Phase I	2,050	1,245	381	3,719	572,788
	25. Encina Water Pollution Control Reclamation Project	165	163	15	500	76,969
	26. Escondido Regional Reclaimed Water Project	2800	0	0	0	0
	27. Fallbrook Sanitary District Water Reclamation Project	1,200	507	83	1,672	255,252
	28. North City Water Reclamation Project	17,500	0	0	0	0
	29. Oceanside Water Reclamation Project	300	18	12	88	13,614
	30. Otay Water Reclamation Project Phase I	1,500	919	124	3,379	520,335
	31. Padre Dam MWD Reclaimed Water System Phase I	850	0	0	0	0
	32. Rancho Santa Fe Reclaimed Water System	220	0	0	0	0
	33. San Elijo Water Reclamation System	1,600	0	0	0	0
	34. San Pasqual Water Reclamation Project	1,100	244	37	356	54,778
	35. Santa Maria Water Reclamation Project	1,600	0	0	0	0
	36. Shadowridge Water Reclamation Project	375	338	105	1,329	204,681
City of Santa Ana	Green Acres Reclamation Project (Santa Ana) ²	800	50	0	167	25,687
Three Valleys MWD	37. Walnut Valley Water Reclamation Expansion Project	500	500	0	1,094	168,430
Subtotal		107,560	27,396	4,057	153,138	20,199,264
TEMPORARY LOCAL RESOURCE PROGRAM:³						
Central Basin MWD	1. Century Reclamation Program	5,500	2,734	386	7,250	1,314,746
	2. Rio Hondo Water Reclamation Program	5,000	170	47	318	62,180
City of Glendale	3. Glendale Verdugo-Scholl Reclaimed Water Project	2,000	217	54	270	64,497
	4. Glendale Brand Park Reclaimed Water Project	225	0	0	0	0
West Basin MWD	5. West Basin Water Reclamation Program	70,000	10,991	2,755	14,007	3,051,426
Subtotal		82,725	14,112	3,242	21,845	4,492,848
Total		190,285	41,508	7,299	174,983	24,692,112

1. Reported totals through August 1996 have been updated to reflect deliveries reported to date - not all information is complete.

2. Green Acres Reclamation Project is approved as one project to deliver water to Coastal MWD, MWDOC, and Santa Ana.

3. Contribution subject to change based on annual reconciliation of actual project cost.

**TABLE 2
GROUNDWATER RECOVERY CONTRACTS**

MEMBER AGENCY	PROJECT	CONTRACT YIELD (AFY)	FY 95-96 YIELD (AF)	FY 96-97 YIELD* (AF)	TOTAL TO DATE	
					YIELD* (AF)	Contribution* (\$)
GROUNDWATER RECOVERY PROGRAM:						
City of Santa Monica	1. Santa Monica Ground-water Treatment Plant	1,800	1,800.0	0.0	6,970.0	0.0
City of Burbank	2. Burbank Lake St. GAC Treatment Plant	2,744	2,225.8	268.2	7,987.9	528,362.6
West Basin MWD	3. West Basin Desalter #1	1,524	1,114.9	242.5	4,557.6	1,139,400.0
San Diego CWA	4. Oceanside Desalter #1	2,000	2,269.6	154.9	5,020.1	1,187,144.4
MWD of Orange	5. Tustin Desalter #1	3,271	0.0	0.0	0.0	0.0
County	6. Irvine Desalter	6,700	0.0	0.0	0.0	0.0
Western MWD/ Chino Basin MWD	7. Chino Basin Desalination Program, Phase I	8,000	0.0	0.0	0.0	0.0
Subtotal		26,039	7,410.3	665.6	24,535.6	2,854,907.1
LOCAL PROJECTS PROGRAM:						
Foothill MWD	8. Glenwood Nitrate Water Reclamation Project	1,600	1,196.7	1.0	3,002.2	462,332.6
Western MWD	9. Arlington Basin Ground-water Desalter Project	6,100	2,770.6	517.5	20,379.6	4,716,305.7
Subtotal		7,700	3,967.3	518.5	23,381.8	5,178,638.3
Total		33,739	11,377.6	1,184.1	47,917.4	8,033,545.4

*Includes Deliveries/Payments reported through August

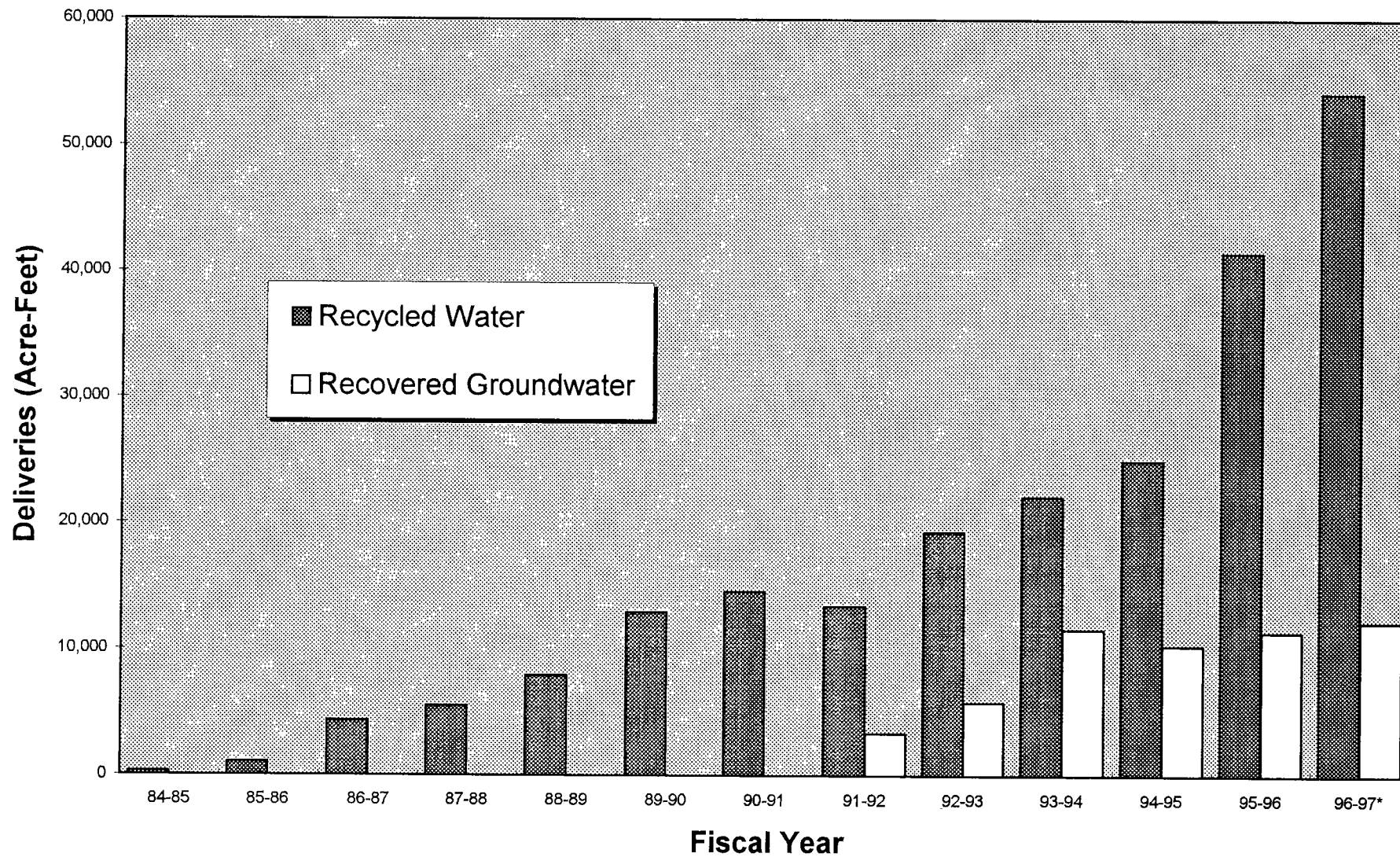
TABLE 3
GROUNDWATER RECOVERY PROGRAM
Board-Approved Projects Under Negotiation

MEMBER AGENCY	PROJECT	OPERATING AGENCY	MAXIMUM YIELD (AFY)
Eastern MWD	1. Menifee Basin Desalter Project	Eastern MWD	3,360
Three Valleys MWD	2. Rowland Groundwater Treatment	Three Valleys MWD	516
San Diego CWA	3. Lower Sweetwater River Basin Groundwater Demineralization Project, Phase I	Sweetwater Authority	3,600
Total			7,476

TABLE 4
APPLICATIONS UNDER REVIEW

MEMBER AGENCY	PROJECT	OPERATING AGENCY	MAXIMUM YIELD (AFY)
GROUNDWATER PROJECTS:			
City of Beverly Hills	1. Beverly Hills Desalter	City of Beverly Hills	2,688
MWD of Orange County	2. Capistrano Beach Desalter	Capistrano Beach CWD	1,372
	3. San Juan Basin Desalter	San Juan Basin Authority	2,200
Three Valleys MWD	4. Baldwin Park Operable Unit (San Gabriel Basin)	Three Valleys MWD	24,100
San Diego CWA	5. Oceanside Desalter Phase II	City of Oceanside	4,500
	6. Bonsall Desalter	Rainbow MWD	2,000
Subtotal			36,860
RECYCLING PROJECTS:			
Calleguas MWD	1. Conejo Creek Diversion Project	Calleguas MWD	14,000
	2. Olsen Road Reclaimed Water Project	City of Thousand Oaks	225
City of Pasadena	3. Pasadena Reclaimed Water Project	City of Pasadena	4,000
Chino Basin MWD	4. Chino Basin RP-4 Reclamation Project	Chino Basin MWD	7,102
San Diego CWA	5. San Pasqual Groundwater Management Project	City of San Diego	8,000
Subtotal			33,327
Total			70,187

**FIGURE 1: METROPOLITAN WATER DISTRICT
LOCAL PROJECTS PROGRAM AND
GROUNDWATER RECOVERY PROGRAM PRODUCTION**



*Projected production