



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

9-15

September 30, 1997

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

From: *for* General Manager Edward J. Meese III

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

Subject: Fiscal Year 1997-98 First Quarter Status Report on the Local Projects and
Groundwater Recovery Programs

RECOMMENDATION

For information only.

EXECUTIVE SUMMARY

Metropolitan has entered into 53 agreements to provide financial assistance to 42 water recycling and 11 groundwater treatment projects. Under these agreements, up to 230,980 acre-feet per year (AFY) is eligible for assistance.

Thirty-seven of these projects are in operation. Five water recycling projects are expected to begin operation this fiscal year, increasing production from about 65,400 acre-feet last fiscal year to about 78,000 acre-feet this fiscal year. Since 1982, Metropolitan has provided approximately \$45.5 million to support about 290,500 acre-feet of water production for operating projects. This locally-developed water improves regional water supply reliability by reducing requirements for future Metropolitan capital improvements and water importation.

DETAILED REPORT

Introduction

Metropolitan's three programs, the Local Projects Program (LPP), the Groundwater Recovery Program (GRP), and the temporary Local Resources Program (LRP), provide financial assistance for local water development as listed below:

	LPP	Temporary LRP	GRP
Type of Production	Recycled Water	Recycled Water	Recovered Groundwater
Financial Assistance	\$154/AF	\$0 to \$250/AF	\$0 to \$250/AF

Locally developed water, under these programs, improves regional water supply reliability by reducing requirements for future Metropolitan capital improvements and water importation. Since 1982, these three programs have supported production of 290,500 acre-feet (AF) of recycled water and recovered groundwater with \$45.5 million in financial assistance for 37 operating projects.

Quarterly Highlights

- Los Angeles International Airport (LAX) recently began using recycled water for landscape irrigation via the "Westside Project", a joint project of the Los Angeles Department of Water and Power (DWP) and West Basin Municipal Water District (WBMWD). Recycled water use at LAX will increase to approximately 150 acre-feet per year within the next year. Completion of a four-mile DWP pipeline, which connects LAX to the existing WBMWD project, will also provide recycled water to other nearby sites including Loyola Marymount University and the Playa Vista development.
- The City of San Diego celebrated the opening of the North City Water Reclamation Plant. The 35-acre facility is expected to ultimately produce 30,000 acre-feet of recycled water annually with the first 8,700 acre-feet designated for landscape irrigation and industrial use under an LRP agreement. The LRP project consists of the installation of 45 miles of distribution pipeline to deliver recycled water to a portion of Poway and the northern and central areas of the City of San Diego.
- Assembly Bill 1522 (Thomson), which Metropolitan supported, was signed into law giving public agencies authority to require recycled water use for toilet and urinal flushing in certain types of new structures. The new law provides opportunities to improve recycled water efficiency and offset use of potable water in new commercial, retail, and office buildings, theaters, auditoriums, schools, hotels, apartments, barracks, dormitories, jails, prisons, and reformatories.

Water Recycling Status

Metropolitan has entered into 42 LPP agreements to assist recycled water production of up to 190,300 acre-feet per year (Table 1). Thirty of these projects are in operation and the remaining 12 projects are under design or construction. Operating recycling projects are expected to increase production from about 49,000 acre-feet last fiscal year to about 61,000 acre-feet this fiscal year (see Figure 1). Since inception of its programs, Metropolitan has contributed approximately \$34.5 million supporting production of nearly 225,800 AF of recycled water production under LPP and LRP for landscape irrigation, nurseries, seawater barriers, and industrial uses.

Groundwater Recovery Status

Metropolitan has entered into 11 agreements that will recover about 40,700 AFY of degraded groundwater (Table 2). Seven of these projects are in operation and the remaining four are in design or construction. Operating groundwater recovery projects are expected to increase production from about 16,000 acre-feet last fiscal year to 17,000 acre-feet this fiscal year (see Figure 1). Since inception of this program, Metropolitan has contributed approximately \$11 million, supporting production of about 64,700 acre-feet of recovered groundwater production for municipal uses.

Projects Under Consideration

Applications have been received for 12 new water recycling projects and eight new groundwater recovery projects which would collectively yield of about 149,400 AFY (Table 3).

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Attachments

SEPT97QTR.DC/BOARD

**TABLE 1
RECYCLING CONTRACTS**

MEMBER AGENCY	PROJECT	CONTRACT	FY 96-97 ¹	FY 97-98 ¹	TOTAL TO DATE ¹	
		YIELD (AFY)	YIELD (AFY)	YIELD (AFY)	YIELD (AF)	Contribution (\$)
LOCAL PROJECTS PROGRAM:						
Calleguas MWD	1. Oak Park/North Ranch Reclaimed Water Dist. System	1,300	880	256	1,408	216,786
Central Basin MWD	2. Cerritos Reclaimed Water Extension Project	260	260	0	871	134,165
	3. Lakewood Water Reclamation Project	440	440	69	3,344	515,007
Chino Basin MWD	4. Carbon Canyon Reclamation Project	13,500	0	0	0	0
Coastal MWD	5. San Clemente Water Reclamation Project	4,000	358	42	2,545	391,992
	6. South Laguna Reclamation Expansion Project	700	0	0	54	8,239
	7. South Laguna Reclamation Project	860	795	27	9,040	610,167
Eastern MWD	8. Rancho California Reclamation Expansion Project	6,000	2,058	214	6,418	988,310
	9. Eastern Regional Reclaimed Water System	4,830	0	0	0	0
	10. Eastern Reach I, Phase II Water Reclamation Project	1,700	0	0	0	0
City of Glendale	11. Glendale Water Reclamation Expansion Project	600	318	0	1,680	258,766
Las Virgenes MWD	12. Calabasas Reclaimed Water System Extension Project	700	437	0	3,036	467,590
	13. Las Virgenes MWD Reclamation Project	2,700	3,784	0	31,422	2,806,369
City of Long Beach	14. Long Beach Reclamation Project	1,700	1,345	348	10,182	1,474,904
	15. Long Beach Reclaimed Water Master Plan Phase I	2,750	0	0	0	0
City of Los Angeles	16. Los Angeles Greenbelt Project	1,610	821	0	2,987	460,044
	17. Sepulveda Basin Water Reclamation Project	1,900	0	0	0	0
MWD of Orange County	18. Irvine Reclamation Project	10,000	8,900	1,252	68,928	9,317,507
	19. Moulton Niguel Water Reclamation Project	8,000	2,038	0	5,972	919,750
	20. Santa Margarita Water Reclamation Project	3,600	1,885	522	13,104	1,944,047
	21. Trabuco Canyon Reclamation Expansion Project	800	369	0	1,515	233,248
San Diego County Water Authority	22. Encina Water Pollution Control Reclamation Project ³	165	165	16	667	102,641
	23. Oceanside Water Reclamation Project	300	26	0	102	15,770
	24. Santa Maria Water Reclamation Project	1,600	0	0	0	0
	25. Shadowridge Water Reclamation Project	375	346	103	1,674	257,811
Three Valleys MWD	26. Walnut Valley Water Reclamation Expansion Project	500	466	0	1,559	240,117
Subtotal		70,890	25,691	2,849	166,509	21,363,229
TEMPORARY LOCAL RESOURCE PROGRAM:						
City of Burbank	27. Burbank Reclaimed Water System Expansion Project	850	517	67	770	192,260
Central Basin MWD	28. Century Reclamation Program	5,500	3,201	428	10,493	2,162,790
	29. Rio Hondo Water Reclamation Program	5,000	281	35	587	133,932
Coastal MWD	30. Green Acres Reclamation Project (Coastal MWD) ²	800	0	0	0	0
City of Glendale	31. Glendale Brand Park Reclaimed Water Project	225	0	0	0	0
	32. Glendale Verdugo-Scholl Reclaimed Water Project	2,000	443	0	661	162,097
MWD of Orange County	Green Acres Reclamation Project (MWDOC) ²	5,400	1,307	164	4,870	978,556
San Diego County	33. Encina Basin Water Reclamation Project Phase I	2,050	1,340	381	5,060	928,116
	34. Escondido Regional Reclaimed Water Project	2,800	0	0	0	0
	35. Fallbrook Public Utility District Water Reclamation Project	1,200	707	224	2,520	513,569
	36. North City Water Reclamation Project	17,500	0	0	0	0
	37. Otay Water Reclamation Project Phase I	1,500	896	135	4,286	813,249
	38. Padre Dam MWD Reclaimed Water System Phase I	850	0	0	0	0
	39. Rancho Santa Fe Reclaimed Water System	220	0	0	0	0
	40. San Elijo Water Reclamation System	1,600	0	0	0	0
	41. San Pasqual Water Reclamation Project	1,100	245	41	605	138,968
City of Santa Ana	Green Acres Reclamation Project (Santa Ana) ²	800	364	42	657	151,309
West Basin MWD	42. West Basin Water Reclamation Program	70,000	14,446	3,237	28,824	7,020,150
Subtotal		119,395	23,746	4,753	59,332	13,194,995
Total		190,285	49,437	7,603	225,841	34,558,225

1. Totals through August 1997 as 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. Actual production is reported for the 1996-97 Fiscal Year, however Metropolitan's financial contribution is limited to contract yield.

**TABLE 2
GROUNDWATER RECOVERY CONTRACTS**

MEMBER AGENCY	PROJECT	CONTRACT YIELD ¹ (AFY)	FY 96-97 YIELD ² (AF)	FY 97-98 YIELD ² (AF)	TOTAL TO DATE ²	
					YIELD (AF)	Contribution (\$)
GROUNDWATER RECOVERY PROGRAM:						
City of Santa Monica	1. Santa Monica Groundwater Treatment Plant	1,800	1,800.0	300.0	9,070.0	0.0
City of Burbank	2. Burbank Lake St. GAC Treatment Plant	2,744	1,778.2	263.8	9,761.7	560,018.6
West Basin MWD	3. West Basin Desalter Project	1,524	1,293.0	0.0	5,608.1	1,402,050.0
San Diego CWA	4. Oceanside Desalter Project	2,000	2,185.3	388.3	7,438.8	1,712,379.3
	5. Lower Sweetwater River Groundwater Demineralization Project, Phase I					
MWD of Orange County	6. Tustin Desalter Project	3,271	1,923.0	470.0	2,393.0	193,787.0
	7. Irvine Desalter Project	6,700	0.0	0.0	0.0	0.0
Western MWD/ Chino Chino Basin MWD	8. Chino Basin Desalination Program, Phase I	8,000	0.0	0.0	0.0	0.0
Eastern MWD	9. Meniffee Basin Desalter Project	3,360	0.0	0.0	0.0	0.0
Subtotal		32,999	8,979.5	1,422.1	34,271.6	3,868,235.0
LOCAL PROJECTS PROGRAM:						
Foothill MWD	10. Glenwood Nitrate Water Reclamation Project	1,600	888.0	0.0	3,889.2	598,930.6
Western MWD	11. Arlington Basin Groundwater Desalter Project ³	6,100	6,176.2	474.1	26,512.4	6,500,340.4
Subtotal		7,700	7,064.2	474.1	30,401.6	7,099,271.0
Total		40,699	16,043.7	1,896.2	64,673.2	10,967,506.0

1. Most contracts allow an additional 20% production.

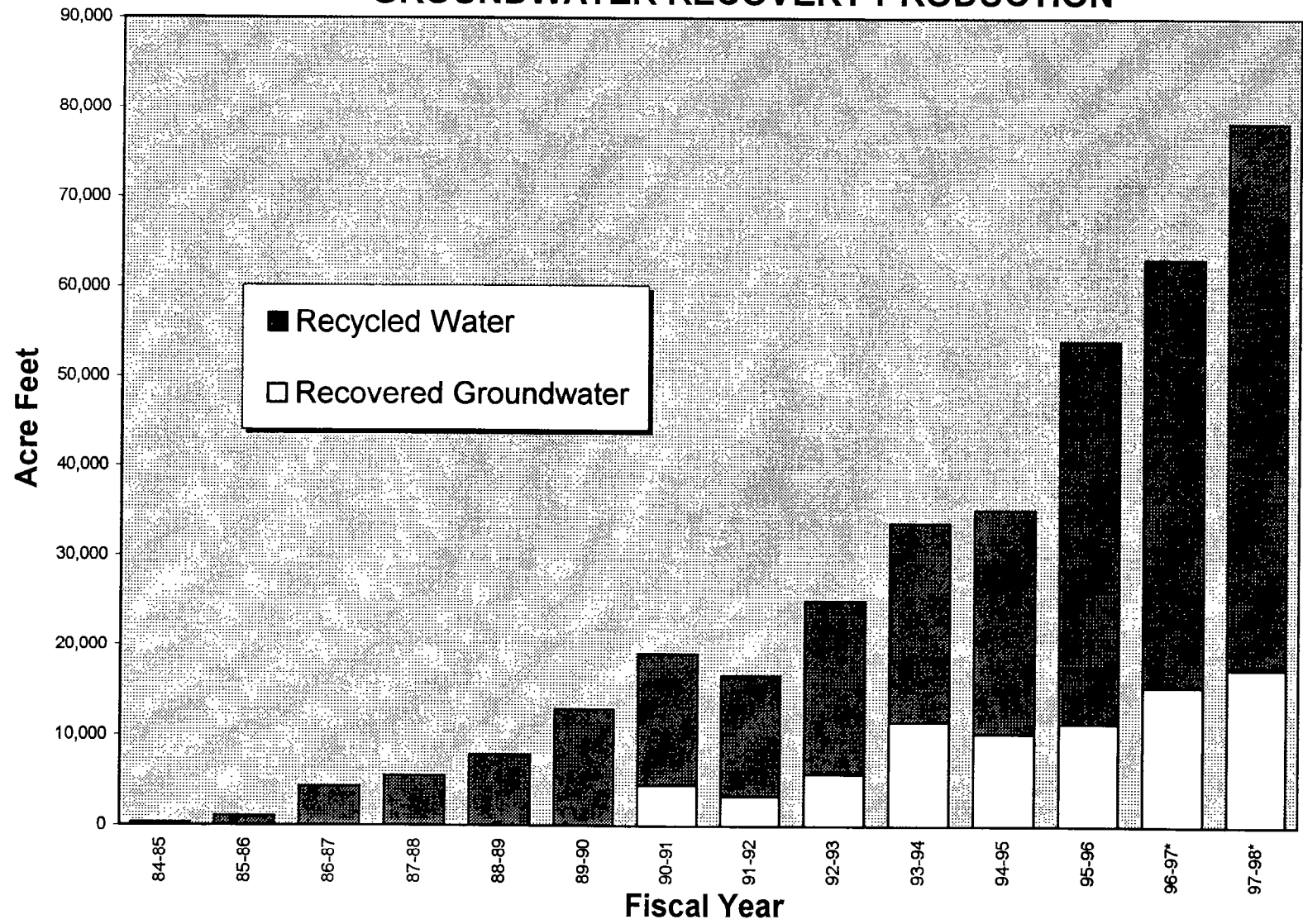
2. Totals through August 1997 as reported to date - not all information is complete.

3. Actual production is reported for the 1996-97 Fiscal Year, however Metropolitan's financial contribution is limited to contract yield.

**TABLE 3
PROJECT APPLICATIONS**

MEMBER AGENCY	PROJECT	OPERATING AGENCY	MAXIMUM YIELD (AFY)
GROUNDWATER PROJECTS:			
City of Beverly Hills	1. Beverly Hills Desalter	City of Beverly Hills	2,688
Coastal MWD	2. Capistrano Beach Desalter	Capistrano Beach CWD	1,372
MWD of Orange Co.	3. San Juan Basin Desalter	San Juan Basin Authority	2,200
San Diego CWA	4. Oceanside Desalter Phase II	City of Oceanside	4,500
	5. Bonsall Desalter	Rainbow MWD	2,000
Three Valleys MWD	6. Baldwin Park Operable Unit (San Gabriel Basin)	Three Valleys MWD	24,100
	7. Rowland Groundwater Treatment Plant	Three Valleys MWD	516
West Basin MWD	8. Sepulveda Desalination Facility Project	Water Replenishment District of So. California	2,335
Subtotal			39,711
RECYCLING PROJECTS:			
Calleguas MWD	9. Conejo Creek Diversion Project	Calleguas MWD	14,000
	10. Olson Road Reclaimed Water Project	City of Thousand Oaks	225
Central Basin MWD	11. Alamitos Barrier Reclaimed Water Project	Water Replenishment District of So. California	3,000
City of Los Angeles	12. Harbor Water Recycling Project	City of Los Angeles	5,000
City of Pasadena	13. Pasadena Reclaimed Water Project	City of Pasadena	4,000
Chino Basin MWD	14. Chino Basin RP-4 Reclamation Project	Chino Basin MWD	7,102
MWD of Orange County	15. Orange County Reclamation Project, Phase I	Orange County Water District	50,000
San Diego CWA	16. San Pasqual Groundwater Management Project	City of San Diego	8,000
	17. Rincon Del Diablo Reclaimed Water Distribution Project	Rincon Del Diablo	450
	18. Water Repurification Project	City of San Diego	15,000
	19. Southeast Quadrant Reclaimed Water Project	Olivenhain MWD	2,150
	20. Northwest Quadrant Reclaimed Water Project	Olivenhain MWD	800
Subtotal			109,727
Total			149,438

**FIGURE 1
MET RECYCLING AND
GROUNDWATER RECOVERY PRODUCTION**



*Estimated