

February 19, 1999

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

**From:** General Manager \_\_\_\_\_

**Submitted by:** Debra C. Man, Chief \_\_\_\_\_  
Planning and Resources Division

**Subject:** Semiannual Status Report on Metropolitan's Local Resource Programs for July through December 1998

**RECOMMENDATION**

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For information only.

**EXECUTIVE SUMMARY**

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Metropolitan has entered into 61 agreements with member agencies to support recycling and groundwater recovery in its service area. During the reporting period, Metropolitan provided \$6.8 million of incentive payments for approximately 35,500 acre-feet of recycled water and recovered groundwater produced by 41 operating projects. Total contributions since 1982 amount to approximately \$60.8 million to support more than 376,000 acre-feet of water production. This locally developed water improves regional water supply reliability by displacing requirements for future Metropolitan capital improvements and water importation.

**DETAILED REPORT**

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**Introduction**

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

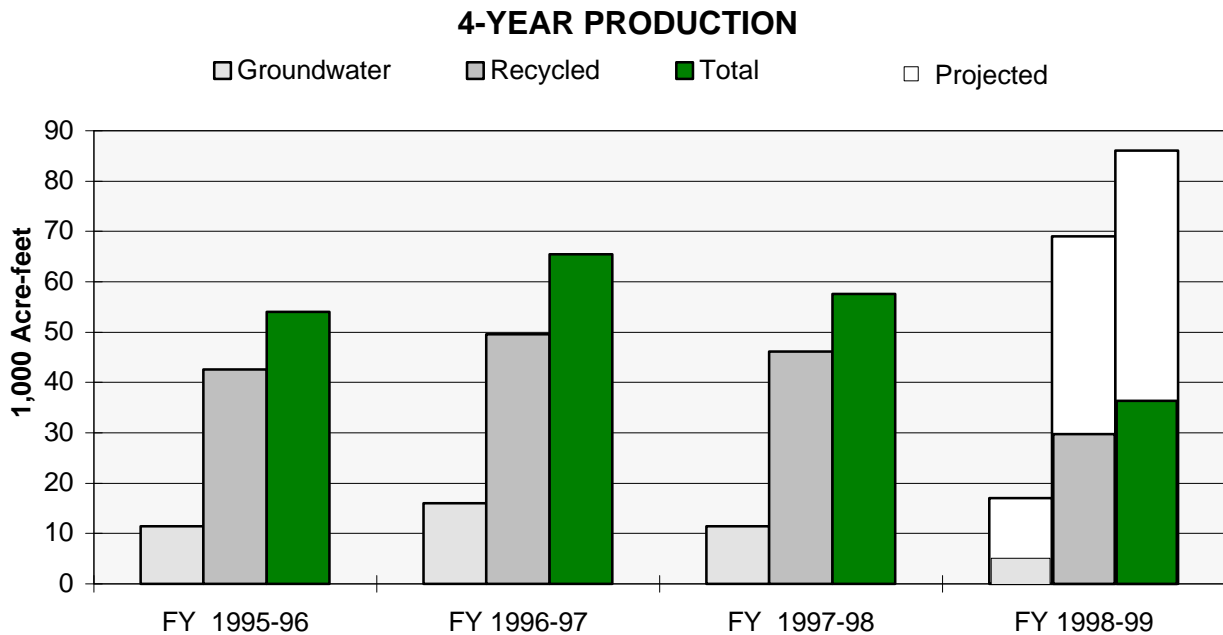
Financial Incentives		
LPP	LRP	GRP
\$154/AF	\$0 to \$250/AF	\$0 to \$250/AF

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 in excess of 376,000 acre-feet (AF) of recycled water and recovered groundwater with approximately \$60.8 million in financial assistance for

41 operating projects. With the execution of eight new agreements during the reporting period, Metropolitan has now entered into 61 local resource agreements with member agencies (see attached **Table 1 and 2**).

During the semiannual reporting period, operating projects produced more than 35,500 AF of water and contributions were approximately \$6.8 million. Summary data are presented in the table and chart below:

	Recovered Groundwater	Recycled Water	Total
<b>Projects Under Contract</b>	18	43	61
In Operation	7	34	41
Ultimate Yield (AFY)	59,215	204,285	263,500
<b>Deliveries (AF)</b>			
FY 98-99 to Date	5,596	29,932	35,528
FY 97-98 Total	11,429	47,206	58,635
Since Inception	79,725	296,303	376,028
<b>Payments (\$ millions)</b>			
FY 98-99 to Date	0.79	6.03	6.82
FY 97-98 Total	1.37	9.39	10.76
Since Inception	12.27	48.52	60.79



Overall, the program is expected to produce approximately 249,000 AF by the year 2020 as the 14 competitively-selected LRP projects are added to Metropolitan's programs. The **attached map** shows the location of the existing and 14 new projects.

#### Year-2020 Forecast

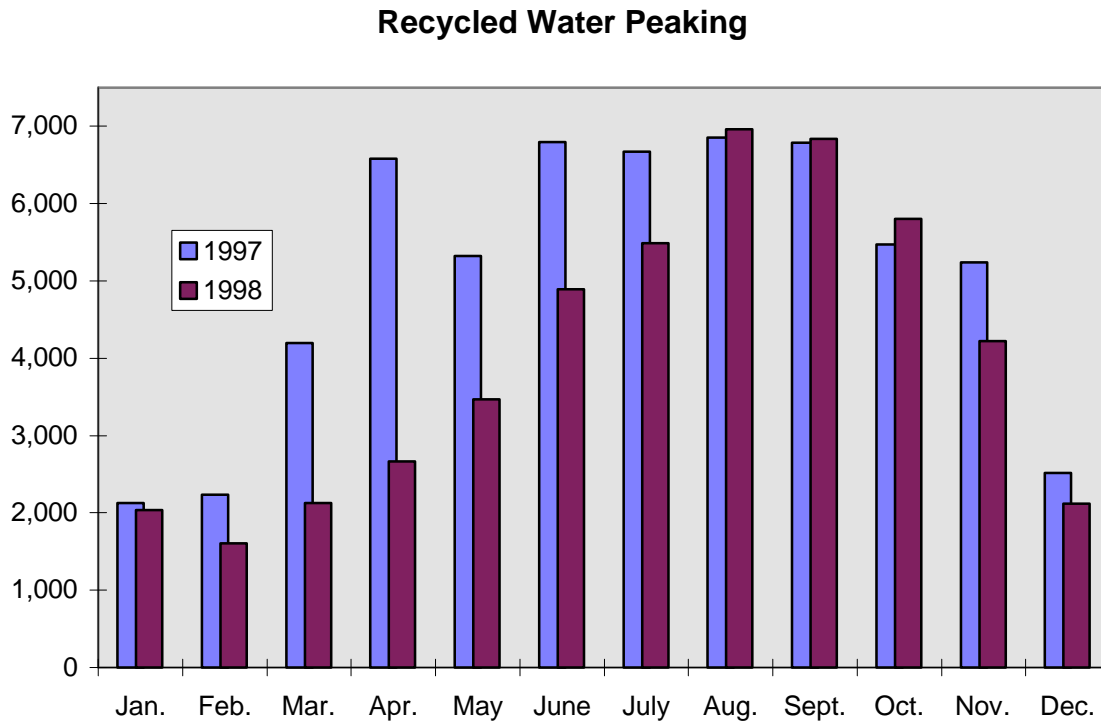
<u>Agreements</u>	<u>Production (AFY)</u>
61 Existing	205,000
14 New LRP	51,000
75 Total	256,000

#### Highlights of the Semiannual Reporting Period

1. Under the new competitive LRP, Metropolitan's review committee selected 14 proposed projects (**see attached Table 3**) that would collectively yield 51,500 acre-feet per year (AFY). These projects were selected from a field of 28 proposals received in response to a request for proposal issued in June 1998. Each of the 14 projects will be presented to the Board for its consideration in entering financial assistance agreements which must be executed by April 2000.
2. Eight new agreements were executed for projects that will produce approximately 32,500 AF of annual yield (**see attached Table 4**). These grandfathered projects are the last ones to be included in the GRP and LPP which were closed for new agreements as of December 1998.
3. Orange County Water District (OCWD) dedicated its new Biological Denitrification Project on December 15, 1998 under a cooperative effort of OCWD, the City of Garden Grove, and Municipal Water District of Orange County. Metropolitan has contributed 50 percent of the cost of the pilot project which will operate for two years to determine full scale feasibility. The experimental technique, the first and only to be used in this country, will demonstrate a potential cost reduction of as much as 60 percent of current denitrification technology.
4. On October 15, 1998 West Basin Municipal Water District dedicated its newly expanded recycling plant at the Mobil refinery with project partners Mobil Oil and the City of Torrance. The on-site treatment facility will provide an additional 1,900 AFY of recycled water for Mobil's boiler feedwater system and increase recycled water use in the West Basin service area to more than 20,000 AFY.
5. The Bureau of Reclamation's Southern California Comprehensive Water Reclamation and Reuse Study is undergoing extensive outreach to local agencies to develop plans for the next generation of recycling projects for the region. Emphasis will be on sub-regional projects which link recycled water supplies to demand areas involving more than one agency. Reconnaissance studies completed in December 1998 show substantial long-term opportunities by 2040, however practical project configurations and cost data need to be developed with local agencies.

## Peak Reduction Benefits

Because recycled water is principally used for irrigation purposes, Metropolitan receives significant benefits in peak reduction during the high-demand summer months. The figure below illustrates the production pattern of the projects Metropolitan is supporting.



DC:jpa

**Attachment 10-11A**

Attachment 10-11A

TABLE 1  
RECYCLING CONTRACTS

MEMBER AGENCY	PROJECT	CONTRACT YIELD (AFY)	FY 97-98 <sup>1</sup> YIELD (AFY)	FY 98-99 <sup>1</sup> YIELD (AFY)	TOTAL TO DATE <sup>2</sup>	
					YIELD (AF)	Contribution (\$)
<b>LOCAL PROJECTS PROGRAM:</b>						
Calleguas MWD	1. Oak Park/North Ranch Reclaimed Water Dist. System	1,300	711	731	2,594	399,476
	2. Conejo Creek Diversion Project	14,000	0	0	0	0
Central Basin MWD	3. Cerritos Reclaimed Water Extension Project	260	260	219	1,351	207,992
	4. Lakewood Water Reclamation Project	440	368	251	3,894	599,630
Coastal MWD	5. San Clemente Water Reclamation Project	4,000	251	236	2,991	460,599
	6. South Laguna Reclamation Expansion Project	700	0	0	54	8,239
	7. South Laguna Reclamation Project	860	669	403	10,084	610,167
Eastern MWD	8. Rancho California Reclamation Expansion Project	6,000	1,460	1,617	9,280	1,429,089
	9. Eastern Regional Reclaimed Water System	4,830	0	0	0	0
	10. Eastern Reach 1, Phase II Water Reclamation Project	1,700	0	0	0	0
City of Glendale	11. Glendale Water Reclamation Expansion Project	600	239	168	2,112	325,171
Inland Empire Utility	12. Carbon Canyon Reclamation Project	13,500	0	14	14	2,094
Las Virgenes MWD	13. Calabasas Reclaimed Water System Extension Project	700	279	317	3,632	559,359
	14. Las Virgenes MWD Reclamation Project	2,700	1,703	0	33,125	2,806,369
City of Long Beach	15. Long Beach Reclamation Project	1,700	1,700	1,664	14,016	2,061,875
	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	739	528	4,270	657,626
	18. Sepulveda Basin Water Reclamation Project	1,900	0	0	0	0
MWD of Orange County	19. Irvine Reclamation Project	10,000	8,848	5,033	81,558	11,262,419
	20. Moulton Niguel Water Reclamation Project	8,000	1,244	1,238	8,454	1,301,947
	21. Santa Margarita Water Reclamation Project	3,600	1,465	1,217	15,264	2,276,656
	22. Trabuco Canyon Reclamation Expansion Project	800	423	89	2,027	312,158
San Diego County Water Authority	23. Encina Water Pollution Control Reclamation Project <sup>3</sup>	165	84	84	819	126,049
	24. Oceanside Water Reclamation Project	300	5	14	121	18,619
	25. Santa Maria Water Reclamation Project	1,600	0	0	0	0
	26. Shadowridge Water Reclamation Project	375	267	205	2,043	314,622
Three Valleys MWD	27. Walnut Valley Water Reclamation Expansion Project	500	0	0	1,559	240,117
Subtotal		84,890	20,715	14,026	199,260	25,980,273
<b>TEMPORARY LOCAL RESOURCE PROGRAM:</b>						
City of Burbank	28. Burbank Reclaimed Water System Expansion Project	850	401	273	1,376	343,810
Central Basin MWD	29. Century Reclamation Program	5,500	2,755	1,724	14,544	3,175,415
	30. Rio Hondo Water Reclamation Program	5,000	191	144	887	209,057
Coastal MWD	31. Green Acres Reclamation Project (Coastal MWD) <sup>2</sup>	800	0	0	0	0
City of Glendale	32. Glendale Brand Park Reclaimed Water Project	225	57	53	142	35,400
	33. Glendale Verdugo-Scholl Reclaimed Water Project	2,000	479	351	1,519	364,505
MWD of Orange County	Green Acres Reclamation Project (MWDOC) <sup>2</sup>	5,400	991	662	6,358	1,350,756
San Diego County	34. Encina Basin Water Reclamation Project Phase I	2,050	1,189	805	6,673	1,272,039
	35. Escondido Regional Reclaimed Water Project	2,800	0	0	0	0
	36. Fallbrook Public Utility District Water Reclamation Project	1,200	652	397	3,346	719,969
	37. North City Water Reclamation Project	17,500	0	1,181	1,181	295,125
	38. Otay Water Reclamation Project Phase I	1,500	743	524	5,417	1,087,056
	39. Padre Dam MWD Reclaimed Water System Phase I	850	14	165	179	44,675
	40. Rancho Santa Fe Reclaimed Water System	220	0	0	0	0
	41. San Elijo Water Reclamation System	1,600	0	0	0	0
	42. San Pasqual Water Reclamation Project	1,100	253	131	953	226,118
City of Santa Ana	Green Acres Reclamation Project (Santa Ana) <sup>2</sup>	800	409	196	1,221	292,259
West Basin MWD	43. West Basin Water Reclamation Program	70,000	18,358	9,301	53,247	13,125,800
Subtotal		119,395	26,491	15,906	97,043	22,541,983
<b>Operating Projects:</b>	<b>34</b>	<b>Total</b>	<b>204,285</b>	<b>47,206</b>	<b>29,932</b>	<b>48,522,255</b>

1. Totals through January 1999 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 1997-98 Fiscal Year, however Metropolitan's financial contribution is limited to contract yield.

**TABLE 2  
GROUNDWATER RECOVERY CONTRACTS**

MEMBER AGENCY	PROJECT	CONTRACT YIELD <sup>1</sup> (AFY)	FY 97-98 YIELD <sup>2</sup> (AF)	FY 98-99 YIELD <sup>2</sup> (AF)	TOTAL TO DATE <sup>2</sup>		
					YIELD (AF)	Contribution (\$)	
<b>GROUNDWATER RECOVERY PROGRAM:</b>							
City of Beverly Hills	1. Beverly Hills Desalter	2,600	0.0	0.0	0.0	0.0	
City of Burbank	2. Burbank Lake St. GAC Treatment Plant	2,744	678.0	0.0	10,175.9	842,479.3	
Coastal MWD	3. Capistrano Beach Desalter	1,300	0.0	0.0	0.0	0.0	
Eastern MWD	4. Menifee Basin Desalter Project	3,360	0.0	0.0	0.0	0.0	
MWD of Orange County	5. Tustin Desalter Project	3,271	2,714.9	1,302.9	5,940.8	495,107.0	
	6. Irvine Desalter Project	6,700	0.0	0.0	0.0	0.0	
	7. San Juan Basin Desalter	4,800	0.0	0.0	0.0	0.0	
San Diego CWA	8. Oceanside Desalter Project Phase I	2,000	2,149.7	1,084.6	10,284.8	1,812,743.3	
	9. Oceanside Desalter Project Phase II	4,500	0.0	0.0	0.0	0.0	
	10. Lower Sweetwater Desalter Phase I	3,600	0.0	0.0	0.0	0.0	
City of Santa Monica	11. Santa Monica Groundwater Treatment Plant	1,800	1,800.0	900.0	11,470.0	0.0	
Three Valleys MWD	12. Rowland Desalter	516	0.0	0.0	0.0	0.0	
City of Torrance	13. Madrona Desalination Facility Project	2,400	0.0	0.0	0.0	0.0	
West Basin MWD	14. West Basin Desalter Project	1,524	949.9	803.9	7,361.9	1,840,500.0	
	15. Sepulveda Desalination Facility	2,400	0.0	0.0	0.0	0.0	
Western MWD/ Inland Empire Utility	16. Chino Basin Desalter Phase I	8,000	0.0	0.0	0.0	0.0	
Subtotal		51,515	8,292.5	4,091.4	45,233.4	4,990,829.6	
<b>LOCAL PROJECTS PROGRAM:</b>							
Foothill MWD	17. Glenwood Nitrate Water Reclamation Project	1,600	619.7	345.3	4,854.2	747,540.6	
Western MWD	18. Arlington Desalter	6,100	2,516.9	1,158.9	29,637.9	6,533,115.2	
Subtotal		7,700	3,136.6	1,504.2	34,492.1	7,280,655.8	
<b>Operating Projects:</b>	<b>7</b>	<b>Total</b>	<b>59,215</b>	<b>11,429.1</b>	<b>5,595.6</b>	<b>79,725.5</b>	<b>12,271,485.5</b>

1. Most contracts allow an additional 20% production.  
 2. Totals through December 1998 as reported to date - not all information is complete.

**TABLE 3**

**LOCAL RESOURCE PROGRAM  
RECOMMENDED PROJECT LIST**

<b>Project</b>	<b>Member Agency</b>	<b>Maximum Production (AFY)</b>
1. Westlake Wells - Tapia WRF Intertie Project	Las Virgenes Municipal Water District	150
2. Rincon del Diablo Recycled Water Program	San Diego County Water Authority (SDCWA)	648
3. Non-Domestic Water System Development for Ladera Ranch and Talega Valley	Municipal Water District of Orange County (MWDOC) Central Basin	2,772
4. Juan Well Filter Facility	Municipal Water District	900
5. Olivenhain Recycled Project-Southeast Quadrant	SDCWA	1,788
6. Capistrano Valley Non-Domestic Water System Expansion	MWDOC	2,895
7. Temescal Basin Desalting Facility	Western Municipal Water District	10,000
8. Dry Weather Runoff Reclamation Facility	City of Santa Monica	280
9. Harbor Water Recycling Project	City of Los Angeles	5,000
10. Moulton Niguel Phase 4 Expansion	MWDOC	1,276
11. Encina Basin Water Reclamation Program - Phase 2	SDCWA	2,950
12. Colored Water Treatment Facility	MWDOC	11,300
13. Otay Recycled Distribution Expansion Project	SDCWA Central Basin	8,515
14. Alamitos Barrier Reclaimed Water Project	Municipal Water District	<u>3,024</u>
		51,498

**TABLE 4**  
**GRANDFATHERED AGREEMENTS**  
**EXECUTED DURING REPORTING PERIOD**

Member Agency	Project	Operating Agency	Maximum Yield (AFY)
<b>RECYCLING PROJECTS PROGRAM:</b>			
1. Calleguas MWD	Conejo Creek Diversion Project	Calleguas MWD	14,000
<b>GROUNDWATER RECOVERY PROGRAM:</b>			
2. City of Beverly Hills	Beverly Hills Desalter	City of Beverly Hills	2,600
3. Coastal MWD	Capistrano Beach Desalter	Capistrano Beach CWD	1,300
4. MWD of Orange Co.	San Juan Basin Desalter	San Juan Basin Authority	4,800
5. San Diego CWA	Oceanside Desalter Project Phase II	City of Oceanside	4,500
6. Three Valleys MWD	Rowland Desalter	Three Valleys MWD	516
7. City of Torrance	Madrona Desalination Facility	Water Replenishment District of So. California	2,400
8. West Basin MWD	Sepulveda Desalination Facility	Water Replenishment District of So. California	2,400
Subtotal			18,516
<b>Total</b>			<b>32,516</b>



MAP

