



**MWD**

*METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA*

**9-1(ii)**

June 25, 1993

To: Board of Directors

From: General Manager

Subject: Operating Data for May 1993

The following tables contain May 1993 data on Metropolitan's water and power sales and purchases, treatment plant operations, reservoir storage, financial status, construction, and employment; and Los Angeles Civic Center rainfall and temperature readings.

WATER SALES

	<u>May 1993</u> AF	<u>April 1993</u> AF	<u>May 1992</u> AF	<u>Total Fiscal Year to Date</u> AF
<b>TOTAL WATER SALES</b>	165,693	153,328	151,531	1,742,016
<b>REVENUE</b>	43,921,938	42,179,192	32,222,194	482,683,565
<b>BASIC SERVICE</b>	136,010	113,680	135,353	1,374,842
<b>AGRICULTURAL</b>	1,646	435	276	30,681
<b>SPREADING</b>	0	0	1,779	92
<b>BARRIER INJECTION</b>	2,769	2,709	2,808	30,021
<b>SEASONAL STORAGE</b>				
Spreading	3,040	18,446	1,289	147,496
Reservoir Storage	1,997	2,577	8,619	47,655
In-Lieu	18,738	14,876	262	95,018
<b>RECLAIMED</b>	1,493	605	1,135	16,211
<b>TREATED</b>	117,845	107,803	99,259	1,126,532
<b>UNTREATED</b>	46,356	44,919	51,137	599,273

(See Tables A, B, and C for details.)

METROPOLITAN'S STATE WATER PROJECT (SWP)  
CHARGES AND PAYMENTS--FISCAL YEAR 1992/93

The following table shows a comparison of totals from July 1, 1992, through May 31, 1993:

<u>Components*</u>	<u>SWP Statement of Charges to Date**</u>	<u>1992/93 Annual Budget to Date</u>	<u>Amount Paid to Date**</u>
Capital	\$ 130,040,775	\$ 129,270,880	\$ 130,040,775
Minimum	71,095,036	94,857,000	73,023,225
Power	<u>150,800,379</u>	<u>103,351,000</u>	<u>53,929,488</u>
Total	\$ 351,936,190	\$ 327,478,880	\$ 256,993,488

\* The component designations combine the Delta Water Charge and Transportation Charge components with similar names except that power charges and credits have been excluded from the minimum components and combined with other power charges and credits under the "Power" components.

\*\* The difference between the Statement of Charges to Date and the Amount Paid to Date is due to changes in the Variable OMP&R water quantities, revised off-aqueduct power charges, and the application of power credits.

POWER FOR PUMPING

The following quantities of electric energy were generated for Metropolitan's pumping system in May 1993:

<u>Colorado River Energy</u>	<u>kWh</u>
Hoover Power Plant	151,188,000
Parker Power Plant	22,872,000
Southern California Edison (SCE)	
Benefit Energy	16,668,282
SCE Exchange Energy	0
SCE Purchased Energy	16,145,000
California Department of Water	
Resources (DWR) Purchased Energy	2,970,000
Other Purchased Energy	<u>9,597,000</u>
Total Generated for Metropolitan	219,440,282
Colorado River Aqueduct (CRA)	
Power Available to DWR	0
CRA Power Available to SCE	0

HYDROELECTRIC POWER RECOVERY PLANTS--FISCAL YEAR 1992/93  
ENERGY AND REVENUE ACCOUNT

May 1993

<u>PLANT</u>	<u>Energy Sales (kWh)</u>		<u>Gross Energy Revenue</u>	
	<u>This Month</u>	<u>F.Y. to Date</u>	<u>This Month</u>	<u>F.Y. to Date</u>
<b>PHASE I</b>				
Greg Avenue	758,400	1,588,800	\$ 34,143.17	\$ 70,496.54
Lake Mathews	3,516,000	33,420,000	158,290.32	1,482,175.26
Foothill Feeder	4,224,000	46,908,000	190,164.48	2,073,504.24
San Dimas	4,176,000	35,352,000	188,003.52	1,552,156.65
Yorba Linda	2,760,000	24,222,000	124,255.20	1,073,826.96
<b>PHASES II-IV</b>				
Sepulveda Canyon	5,448,000	22,644,000	201,285.62	1,065,186.11
Venice	3,735,000	11,871,000	138,644.33	544,829.38
Temescal	1,788,000	18,588,000	66,797.89	823,856.92
Corona	1,755,000	18,498,000	65,437.20	822,605.75
Perris	0	1,863,000	0.00	168,798.98
Rio Hondo	1,138,000	10,582,000	42,512.79	475,848.03
Coyote Creek	1,494,000	16,122,000	55,985.71	704,009.24
Red Mountain	0	15,276,000	0.00	736,568.21
Valley View	0	7,280,000	0.00	362,037.40
Total	30,729,400	264,214,800	\$1,265,520.23	\$11,955,899.67

WATER QUALITY--FILTRATION PLANT EFFLUENT (Average for Month)

<u>Quality</u>								
			<u>Diemer</u>	<u>Jensen</u>	<u>Weymouth</u>	<u>Skinner Plant 1</u>	<u>Skinner Plant 2</u>	<u>Mills</u>
Hardness--mg/l as CaCO <sub>3</sub>	May	1993	264*	178*	256*	302*	296*	116*
	April	1993	296	180	294	270	268	98
	May	1992	253	157	252	269	271	123
Total Dissolved Solids--mg/l	May	1993	571**	415**	559**	627**	618**	314**
	April	1993	632	419	614	568	547	272
	May	1992	556	403	549	578	579	356

\* Preliminary

\*\* Estimate

\*\*\* Not in Service

(See Table D for Analysis of Water Supplies.)

WATER PROCESSED

		<u>Diemer</u> AF	<u>Jensen</u> AF	<u>Weymouth</u> AF	<u>Skinner</u> AF	<u>Mills</u> AF
<u>Individual Plant</u>	May 1993	32,460	35,454	23,791	24,004	6,221
	April 1993	32,553	17,700	24,048	19,651	5,103
	May 1992	25,462	19,934	25,163	23,798	4,880
		<u>Avg.</u> <u>Rate</u> cfs	<u>Ann.</u> <u>Diff.</u> %	<u>Treated</u> AF		<u>Total Fiscal</u> <u>Year to Date</u> AF
<u>Total all Plants</u>	May 1993	1,983	+23	121,930		1,126,534
	April 1993	1,665	+22	99,055		1,004,604
	May 1992	1,614	+11	99,237		999,183

RESERVOIRS

	<u>Usable</u> <u>Storage</u> %	<u>May</u> <u>1993</u> AF	<u>April</u> <u>1993</u> AF	<u>May</u> <u>1992</u> AF	<u>Annual</u> <u>Difference</u> AF
<u>Distribution</u>					
Lake Mathews	95	172,202	161,250	171,117	1,085
Lake Skinner	92	40,334	37,184	39,795	539

Colorado River Basin

Upper Basin	72	22,508,000	19,330,000	20,710,000	1,798,000
Lower Basin	83	23,849,000	24,069,000	22,061,000	1,788,000

(See Table E for details.)

State Water Project

Oroville	99	3,486,334	3,244,232	1,849,747	1,636,587
San Luis (State)	88	939,481	1,041,867	828,830	110,651
Pyramid	96	160,560	159,131	161,883	(1,323)
Castaic	87	266,274	283,338	293,587	(27,313)
Silverwood	96	68,154	68,135	67,791	363
Perris	93	119,093	120,092	115,263	3,830

Central Valley Project

Clair Engle	75	1,828,580	1,388,580	1,138,480	690,100
Shasta	98	4,355,110	4,147,610	2,483,110	1,872,000
Folsom	9	95,300	86,400	670,300	(575,000)
New Melones	28	684,400	581,500	797,100	(112,700)
San Luis (federal)	75	728,602	899,069	742,852	(14,250)

FINANCE INVESTMENT PORTFOLIO (FACE VALUE AT MATURITY)

<u>Securities</u>	<u>5-31-93 Balance</u>	<u>Percent</u>
U.S. Treasury Obligations	\$ 394,283,000	34.5
U.S. Guarantees - GNMA's	6,660,000	.6
Federal Agency Obligations	219,495,000	19.2
Repurchase Agreements	183,730,000	16.0
Bankers Acceptances	77,900,000	6.8
Commercial Paper	211,427,000	18.5
Negotiable Certificates of Deposit	33,821,000	3.0
Local Agency Investment Fund	15,000,000	1.3
California G.O. Bond (SWP)	35,000	-
Cash and Equivalents:		
Demand Accounts	\$ 665,000	
Petty Cash and Draft Account	77,000	
Overnight Investments	<u>\$ (241,000)</u>	<u>.1</u>
<b>TOTAL</b>	<b><u>\$ 1,142,852,000</u></b>	<b><u>100.0</u></b>

Yield Comparisons (Percent)

	<u>4-30-92</u>	<u>5-31-93</u>
	<u>(12-Month Moving Average)</u>	
1-Year Treasury Bill	3.5	3.4
1-Year Time Deposit	3.3	3.2
6-Month Treasury Bill	3.3	3.2
6-Month Time Deposit	3.1	3.0
Portfolio Yield (Range)	3.7	3.6 (3.0% to 10.3%)

(See Tables F for financial summaries.)

CONSTRUCTION PROGRESS FOR MAY 1993

Construction Branch personnel continued field inspection duties, contract administration activities, and construction support work throughout the month in connection with 8 construction projects having a contract value in excess of \$138 million. Contract earnings under these contracts were approximately \$ 8,218,294 during the month. Status of these contracts at the end of the month follows:

	<u>PERCENT COMPLETED</u>	<u>ESTIMATED COMPLETION</u>
Modifications to Ventilation Hood System at Water Quality Laboratory	99	June 1993

	<u>PERCENT COMPLETED</u>	<u>ESTIMATED COMPLETION</u>
Maintenance Building and Operations Building Annex at Mills Plant	70	October 1993
Site Preparations for Henry J. Mills Filtration Plant Expansion No. 2	72	October 1993
Etiwanda Power Plant	50	November 1993
Joseph Jensen Filtration Plant Expansion No. 1	57	December 1994
Construction of San Diego Canal Relocation	17	February 1994
Cathodic Protection System for East Orange County Feeder No. 2	0	Not established to date

There were no new construction contracts awarded by the Board of Directors or the General Manager during the month. There was one construction contract completed during the month. Construction of Service Connection LA-35 was completed by the prime contractor, Dillingham Construction, Inc., and accepted by Metropolitan on May 11, 1993.

(See attached Monthly Progress Report for details.)

MAY RAINFALL AT LOS ANGELES CIVIC CENTER (INCHES)

During the Month	0.02
Total for Season (Fiscal Year)	26.54
Normal for Season to Date	14.82
Difference from Normal	11.72
Percent of Normal	179

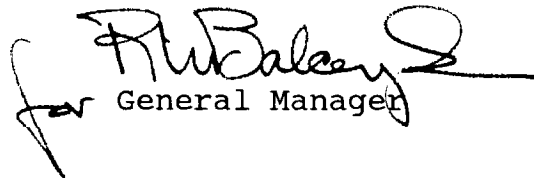
MAY TEMPERATURES AT LOS ANGELES CIVIC CENTER (DEGREES F)

Average Maximum	77.0
Average Minimum	60.7
Average	68.85
30-Year Normal	64.9

EMPLOYMENTRegular Employees by Division/Department

	<u>May 1992</u>	<u>May 1993</u>	<u>Difference</u>
Engineering	354	395	+ 41
Operations	958	957	- 1
Other Divisions and Departments	<u>693</u>	<u>727</u>	<u>+ 34</u>
<u>Total Regular Employees</u>	2,005	2,079	+ 74
<u>Full-Time Equivalent (FTE)--</u> <u>Temporary Employees*</u>	86	111	+ 25
<u>Total Sunset Employees</u>	625	127	-498
<u>Total Pasadena Employees</u>	187	34	-153
<u>Total California Plaza Employees</u>	0	714	+714
<u>Minority Applicants</u>	121	466	+345
<u>Minority New Hires</u>	6	2	- 4
<u>Non-Minority Applicants</u>	171	218	+ 47
<u>Non-Minority New Hires</u>	6	3	- 3

\* Full-Time Equivalent Positions (approximate)--based on hours worked by temporary employees.

  
for General Manager

JEF:ks/atr  
(brd:op5-93/6163)  
Attachments

METROPOLITAN WATER DISTRICT OF SO. CAL.  
 Year to date Water sales in A.F. to Month of May 1993  
 TABLE A YEAR TO DATE

AGENCY	BASIC SERVICE	AGRIC	SPREADING	(NOTE 1) INJECTION	--- SEASONAL STORAGE (NOTE 2) --- RESERVOIR	IN-LIEU	SPREADING	RECLAIMED	(NOTE 3) SPECIALS (\$)	DOLLAR AMOUNT
CITY OF ANAHEIM	14630.6	71.7	0.0	0.0	1436.8	0.0	0.0	0.0	0.00	4,563,209.50
CITY OF BURBANK	16709.3	0.0	0.0	0.0	0.0	596.4	500.0	0.0	-427,955.60	5,164,665.00
BEVERLY HILLS	11402.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	3,671,637.20
CITY OF COMPTON	4341.8	0.0	0.0	0.0	0.0	829.7	0.0	0.0	0.00	1,566,488.70
CALLEGUAS MWD	75494.8	3381.3	0.0	0.0	1357.3	0.0	1845.6	0.0	-289,520.00	25,758,676.90
CHINO BASIN MWD	31645.6	146.4	0.0	0.0	0.0	10171.8	30831.9	0.0	60,132.00	15,484,591.30
CENTRAL BASIN MWD	52054.7	0.0	0.0	4895.8	0.0	15368.9	22986.7	676.2	-387,977.50	24,828,638.00
COASTAL MWD	55731.5	0.0	0.0	0.0	419.0	404.0	0.0	1107.4	860.43	18,130,952.83
EASTERN MWD	49845.0	0.0	92.1	0.0	0.0	0.0	2138.8	0.0	117,479.30	16,760,387.20
CITY OF FULLERTON	8946.6	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.00	2,890,819.40
FOOTHILL MWD	6631.4	0.0	0.0	0.0	0.0	1292.1	0.0	0.0	-16,489.00	2,381,118.10
CITY OF GLENDALE	23507.2	0.0	0.0	0.0	0.0	0.0	0.0	287.5	0.00	7,525,043.40
CITY OF LOS ANGELES	247432.5	0.0	0.0	0.0	11577.0	12835.5	0.0	0.0	-3,500,000.00	72,358,898.00
CITY OF LONG BEACH	37310.7	0.0	0.0	0.0	0.0	2074.0	0.0	935.7	2,500.00	12,289,141.60
LAS VIRGENES MWD	13976.9	0.0	0.0	0.0	1426.8	0.0	0.0	2942.7	-95,018.40	4,861,498.20
ORANGE COUNTY MWD	122837.4	3582.2	0.0	0.0	0.0	25127.8	24269.6	9026.2	-48,420.00	48,196,890.30
CITY OF PASADENA	7160.0	0.0	0.0	0.0	0.0	11879.8	0.0	0.0	-200,392.05	4,516,727.35
THREE VALLEYS MWD	51921.0	106.4	0.0	0.0	0.0	0.0	4433.5	0.0	-100,962.00	16,628,247.10
CITY OF SANTA ANA	10063.6	0.0	0.0	0.0	0.0	2243.7	0.0	0.0	0.00	3,695,950.30
SAN DIEGO CWA	363104.7	0.0	0.0	0.0	31437.8	0.0	0.0	1234.9	-2,559,064.75	110,773,143.85
CITY OF SAN FERNANDO	319.2	0.0	0.0	0.0	0.0	113.0	0.0	0.0	0.00	125,721.40
CITY OF SANTA MONICA	4814.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-523,998.00	1,026,271.00
CITY OF SAN MARINO	953.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-6,306.00	300,688.80
CITY OF TORRANCE	17769.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	5,721,714.60
SAN GABRIEL VALLEY	9467.1	0.0	0.0	0.0	0.0	0.0	60490.0	0.0	-34,629.00	13,176,097.20
WEST BASIN MWD	114288.8	0.0	0.0	25125.1	0.0	10615.1	0.0	0.0	-300,515.00	46,754,957.30
RIVERSIDE	22481.8	23362.2	0.0	0.0	0.0	1466.1	0.0	0.0	-281,038.00	13,528,640.30
SPC CONT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,750.00	2,750.00
<b>TOTALS :</b>	<b>1374842.0</b>	<b>30681.3</b>	<b>92.1</b>	<b>30020.9</b>	<b>47654.7</b>	<b>95017.9</b>	<b>147496.1</b>	<b>16210.6</b>	<b>-8,588,563.57</b>	

GRAND TOTAL SALES: 1,742,015.6 ACRE FEET

TOTAL NET INVOICE \$ 482,683,564.83

NOTE 1: INJECTION INCLUDES SEA WATER BARRIER AND GROUND WATER REPLENISHMENT BY INJECTION.

NOTE 2: AGRICULTURAL, ADJUSTMENTS AND RECLASSIFICATIONS BY SEASONAL STORAGE (SSS) BILLING MAY LAG ACTUAL DELIVERIES BECAUSE MUCH OF THE WATER IS CERTIFIED FOR UP TO FOUR MONTHS AFTER DELIVERY.

NOTE 3: SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATION, I.I.C.P., ETC.



METROPOLITAN WATER DISTRICT OF SO. CAL.  
 Billing Activity Report for the Month of May 1993  
 TABLE A

AGENCY	BASIC SERVICE	AGRIC	SPREADING	(NOTE 1) INJECTION	--- SEASONAL STORAGE (NOTE 2) --- RESERVOIR	IN-LIEU	SPREADING	RECLAIMED	(NOTE 3) SPECIALS (\$)	DOLLAR AMOUNT
CITY OF ANAHEIM	3333.6	4.6	0.0	0.0	74.2	0.0	0.0	0.0	0.00	1,091,197.90
CITY OF BURBANK	2008.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-38,575.60	608,161.40
BEVERLY HILLS	1162.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	374,260.60
CITY OF COMPTON	532.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	171,593.80
CALLEGUAS MWD	8846.5	195.9	0.0	0.0	59.3	0.0	73.4	0.0	0.00	2,938,590.90
CHINO BASIN MWD	223.0	4.4	0.0	0.0	0.0	4673.2	2966.9	0.0	0.00	1,344,707.40
CENTRAL BASIN MWD	3820.2	0.0	0.0	365.9	0.0	3271.7	0.0	61.2	0.00	2,002,654.50
COASTAL MWD	6308.7	0.0	0.0	0.0	0.0	0.0	0.0	69.0	860.43	2,038,057.83
EASTERN MWD	6330.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	2,058,912.00
CITY OF FULLERTON	2393.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.00	771,512.00
FOOTHILL MWD	191.3	0.0	0.0	0.0	0.0	538.6	0.0	0.0	0.00	170,934.40
CITY OF GLENDALE	2601.8	0.0	0.0	0.0	0.0	0.0	0.0	78.6	0.00	825,675.20
CITY OF LOS ANGELES	19574.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3,500,000.00	1,866,726.10
CITY OF LONG BEACH	4913.2	0.0	0.0	0.0	0.0	502.0	0.0	132.1	0.00	1,663,613.00
LAS VIRGENES MWD	1001.3	0.0	0.0	0.0	883.8	0.0	0.0	219.6	-18,446.40	501,830.00
ORANGE COUNTY MWD	12490.2	400.0	0.0	0.0	0.0	3406.1	0.0	652.5	-50,142.00	4,637,862.10
CITY OF PASADENA	-1377.1	0.0	0.0	0.0	0.0	1679.8	0.0	0.0	0.00	102,426.80
THREE VALLEYS MWD	5909.2	10.0	0.0	0.0	0.0	0.0	0.0	0.0	-22,422.00	1,794,228.90
CITY OF SANTA ANA	936.5	0.0	0.0	0.0	0.0	2243.7	0.0	0.0	0.00	757,024.10
SAN DIEGO CWA	36081.6	0.0	0.0	0.0	979.3	0.0	0.0	279.6	0.00	10,939,808.60
CITY OF SAN FERNANDO	128.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	41,505.80
CITY OF SANTA MONICA	733.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	236,090.40
CITY OF SAN MARINO	101.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	32,715.20
CITY OF TORRANCE	2031.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	654,207.40
SAN GABRIEL VALLEY	798.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	257,149.20
WEST BASIN MWD	12231.8	0.0	0.0	2403.1	0.0	1397.4	0.0	0.0	-45,625.00	4,950,485.00
RIVERSIDE	2702.3	1029.3	0.0	0.0	0.0	1025.3	0.0	0.0	0.00	1,294,610.90
SPC CONT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.00	250.00
TOTALS :	136010.4	1646.4	0.0	2769.0	1996.6	18737.8	3040.3	1492.6	-3,674,100.57	

GRAND TOTAL SALES: 165,693.1 ACRE FEET

TOTAL NET INVOICE \$ 43,921,937.83

NOTE 1: INJECTION INCLUDES SEA WATER BARRIER AND GROUND WATER REPLENISHMENT BY INJECTION.

NOTE 2: AGRICULTURAL, ADJUSTMENTS AND RECLASSIFICATIONS BY SEASONAL STORAGE (SSS) BILLING MAY BE FOR A PAST MONTH BECAUSE MUCH OF THE WATER IS CERTIFIED FOR UP TO FOUR MONTHS AFTER DELIVERY.

NOTE 3: SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATION, I.I.C.P., ETC.

METROPOLITAN WATER DISTRICT OF SO. CAL.  
 WATER SALES IN ACRE-FEET FOR THE MONTH OF MAY 1993  
 TABLE B

AGENCY	---BASIC---TREATED(NOTE)-----				AF AMOUNT	---BASIC---UNTREATED(NOTE)-----				AF AMOUNT	RECLAIMED	TOTAL AF AMOUNT
	SERVICE	AGRIC	SEASONAL	GWR		SERVICE	AGRIC	SEASONAL	GWR			
CITY OF ANAHEIM	3409.8	0.7	0.0	0.0	3410.5	-76.2	3.9	74.2	0.0	1.9	0.0	3412.4
CITY OF BURBANK	2008.5	0.0	0.0	0.0	2008.5	0.0	0.0	0.0	0.0	0.0	0.0	2008.5
BEVERLY HILLS	1162.3	0.0	0.0	0.0	1162.3	0.0	0.0	0.0	0.0	0.0	0.0	1162.3
CITY OF COMPTON	532.9	0.0	0.0	0.0	532.9	0.0	0.0	0.0	0.0	0.0	0.0	532.9
CALLEGUAS MWD	8846.5	195.9	132.7	0.0	9175.1	0.0	0.0	0.0	0.0	0.0	0.0	9175.1
CHINO BASIN MWD	0.0	0.0	0.0	0.0	0.0	223.0	4.4	7640.1	0.0	7867.5	0.0	7867.5
CENTRAL BASIN MWD	3820.2	0.0	3271.7	365.9	7457.8	0.0	0.0	0.0	0.0	0.0	61.2	7519.0
COASTAL MWD	6308.7	0.0	0.0	0.0	6308.7	0.0	0.0	0.0	0.0	0.0	69.0	6377.7
EASTERN MWD	6715.6	0.0	0.0	0.0	6715.6	-384.8	0.0	0.0	0.0	-384.8	0.0	6330.8
CITY OF FULLERTON	2393.8	2.2	0.0	0.0	2396.0	0.0	0.0	0.0	0.0	0.0	0.0	2396.0
FOOTHILL MWD	191.3	0.0	538.6	0.0	729.9	0.0	0.0	0.0	0.0	0.0	0.0	729.9
CITY OF GLENDALE	2601.8	0.0	0.0	0.0	2601.8	0.0	0.0	0.0	0.0	0.0	78.6	2680.4
CITY OF LOS ANGELES	1911.7	0.0	0.0	0.0	1911.7	17662.3	0.0	0.0	0.0	17662.3	0.0	19574.0
CITY OF LONG BEACH	4913.2	0.0	502.0	0.0	5415.2	0.0	0.0	0.0	0.0	0.0	132.1	5547.3
LAS VIRGENES MWD	1001.3	0.0	883.8	0.0	1885.1	0.0	0.0	0.0	0.0	0.0	219.6	2104.7
ORANGE COUNTY MWD	11642.6	236.4	3406.1	0.0	15285.1	847.6	163.6	0.0	0.0	1011.2	652.5	16948.8
CITY OF PASADENA	-1377.1	0.0	1679.8	0.0	302.7	0.0	0.0	0.0	0.0	0.0	0.0	302.7
THREE VALLEYS MWD	4233.7	0.0	0.0	0.0	4233.7	1675.5	10.0	0.0	0.0	1685.5	0.0	5919.2
CITY OF SANTA ANA	936.5	0.0	2243.7	0.0	3180.2	0.0	0.0	0.0	0.0	0.0	0.0	3180.2
SAN DIEGO CWA	20862.9	0.0	190.3	0.0	21053.2	15218.7	0.0	789.0	0.0	16007.7	279.6	37340.5
CITY OF SAN FERNANDO	128.9	0.0	0.0	0.0	128.9	0.0	0.0	0.0	0.0	0.0	0.0	128.9
CITY OF SANTA MONICA	733.2	0.0	0.0	0.0	733.2	0.0	0.0	0.0	0.0	0.0	0.0	733.2
CITY OF SAN MARINO	101.6	0.0	0.0	0.0	101.6	0.0	0.0	0.0	0.0	0.0	0.0	101.6
CITY OF TORRANCE	2031.7	0.0	0.0	0.0	2031.7	0.0	0.0	0.0	0.0	0.0	0.0	2031.7
SAN GABRIEL VALLEY	798.6	0.0	0.0	0.0	798.6	0.0	0.0	0.0	0.0	0.0	0.0	798.6
WEST BASIN MWD	12231.8	0.0	1397.4	2403.1	16032.3	0.0	0.0	0.0	0.0	0.0	0.0	16032.3
RIVERSIDE	1422.7	784.5	45.1	0.0	2252.3	1279.6	244.8	980.2	0.0	2504.6	0.0	4756.9
SPC CONT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL:</b>	<b>99564.7</b>	<b>1219.7</b>	<b>14291.2</b>	<b>2769.0</b>	<b>117844.6</b>	<b>36445.7</b>	<b>426.7</b>	<b>9483.5</b>	<b>0.0</b>	<b>46355.9</b>	<b>1492.6</b>	<b>165693.1</b>

NOTE: GROUND WATER REPLENISHMENT (GWR) INCLUDES SPREADING AND INJECTION. WATER DELIVERIES UNDER SPREADING ARE BILLED AS SEASONAL STORAGE DURING PERIODS THAT PROGRAM IS ACTIVE.



METROPOLITAN WATER DISTRICT OF SO. CAL.  
 WATER SALES IN DOLLARS FOR THE MONTH OF MAY 1993  
 TABLE C

AGENCY	---BASIC---TREATED------(NOTE 1)-				DOLLAR AMOUNT	--BASIC--UNTREATED------(NOTE 1)-				DOLLAR AMOUNT RECLAIMED	(NOTE 2) SPECIAL	TOT DOLLAR (\$ ) AMOUNT
	SERVICE	AGRIC	SEASONAL	GWR		SERVICE	AGRIC	SEASONAL	GWR			
CITY OF ANAHEIM	1097955	225	0	0	1098181	-20497	1049	12465	0	-6983	0	1091197
CITY OF BURBANK	646737	0	0	0	646737	0	0	0	0	0	-38575	608161
BEVERLY HILLS	374260	0	0	0	374260	0	0	0	0	0	0	374260
CITY OF COMPTON	171593	0	0	0	171593	0	0	0	0	0	0	171593
CALLEGUAS MWD	2848573	63079	26938	0	2938590	0	0	0	0	0	0	2938590
CHINO BASIN MWD	0	0	0	0	0	59987	1183	1283536	0	1344707	0	1344707
CENTRAL BASIN MWD	1230104	0	664155	117819	2012079	0	0	0	0	0	-9424	2002654
COASTAL MWD	2031401	0	0	0	2031401	0	0	0	0	0	5796	2038057
EASTERN MWD	2162423	0	0	0	2162423	-103511	0	0	0	-103511	0	2058912
CITY OF FULLERTON	770803	708	0	0	771512	0	0	0	0	0	0	771512
FOOTHILL MWD	61598	0	109335	0	170934	0	0	0	0	0	0	170934
CITY OF GLENDALE	837779	0	0	0	837779	0	0	0	0	0	-12104	825675
CITY OF LOS ANGELES	615567	0	0	0	615567	4751158	0	0	0	4751158	-3500000	1866726
CITY OF LONG BEACH	1582050	0	101906	0	1683956	0	0	0	0	0	-20343	1663613
LAS VIRGENES MWD	322418	0	179411	0	501830	0	0	0	0	0	18446	501830
ORANGE COUNTY MWD	3748917	76120	691438	0	4516476	228004	44008	0	0	272012	-100485	4637862
CITY OF PASADENA	-443426	0	340999	0	-102426	0	0	0	0	0	0	-102426
THREE VALLEYS MWD	1363251	0	0	0	1363251	450709	2690	0	0	453399	-22422	1794228
CITY OF SANTA ANA	301553	0	455471	0	757024	0	0	0	0	0	0	757024
SAN DIEGO CWA	6717853	0	38630	0	6756484	4093830	0	132552	0	4226382	-43058	10939808
CITY OF SAN FERNANDO	41505	0	0	0	41505	0	0	0	0	0	0	41505
CITY OF SANTA MONICA	236090	0	0	0	236090	0	0	0	0	0	0	236090
CITY OF SAN MARINO	32715	0	0	0	32715	0	0	0	0	0	0	32715
CITY OF TORRANCE	654207	0	0	0	654207	0	0	0	0	0	0	654207
SAN GABRIEL VALLEY	257149	0	0	0	257149	0	0	0	0	0	0	257149
WEST BASIN MWD	3938639	0	283672	773798	4996110	0	0	0	0	0	-45625	4950485
RIVERSIDE	458109	252609	9155	0	719873	344212	65851	164673	0	574737	0	1294610
SPC CONT	0	0	0	0	0	0	0	0	0	0	250	250
<b>TOTAL:</b>	<b>32059833</b>	<b>392743</b>	<b>2901113</b>	<b>891618</b>	<b>\$36245308</b>	<b>9803893</b>	<b>114782</b>	<b>1593228</b>	<b>0</b>	<b>\$11511903</b>	<b>-161173</b>	<b>\$43921937</b>

NOTE 1: GROUND WATER REPLENISHMENT (GWR) INCLUDES SPREADING AND INJECTION. WATER DELIVERIES UNDER SPREADING ARE BILLED AS SEASONAL STORAGE DURING PERIODS THAT PROGRAM IS ACTIVE.

NOTE 2: SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATION, I.I.C.P., ETC.

## The Metropolitan Water District of Southern California

**TABLE D**  
**MONTHLY ANALYSES OF THE DISTRICT WATER SUPPLIES--APRIL 1993**

CONSTITUENTS	SYMBOLS AND UNITS	SOURCE WATERS							FILTRATION PLANT EFFLUENTS					
		LAKE HAVASU NEAR WHIT- SETT INTAKE	SAN JACINTO TUNNEL WEST PORTAL	LAKE MATH- EWS	CASTAIC LAKE	SILVER- WOOD LAKE	LAKE PERRIS	LAKE SKIN- NER	WEY- MOUTH PLANT	DIEMER PLANT	JENSEN PLANT	SKIN- NER PLANT NO. 1	SKIN- NER PLANT NO. 2	MILLS PLANT
MONTH OR DAY OF SAMPLING		4-6-93	4-5-93	4-5-93	APR 93	4-5-93	4-5-93	APR 93	APR 93	APR 93	APR 93	APR 93	APR 93	APR 93
SILICA	SiO <sub>2</sub> mg/L	7.3	9.1	8.9	15.3	15.0	1.0	9.7	10.1	10.2	15.0	9.5	9.5	15.1
CALCIUM	Ca mg/L	75	64	70	38	20	26	64	68	70	37	62	62	20
MAGNESIUM	Mg mg/L	30	25	28	18.5	9.5	17	26	27.5	29	18.5	24.5	24.5	9.5
SODIUM	Na mg/L	97	83	91	72	50	82	80	86	88	74	81	80	54
POTASSIUM	K mg/L	4.9	4.2	5.0	3.4	2.6	4.5	4.4	4.3	4.4	3.4	4.2	4.3	2.9
CARBONATE	CO <sub>3</sub> mg/L	0	1	0	0	0	5	2	0	0	2	0	0	2
BICARBONATE	HCO <sub>3</sub> mg/L	163	153	159	120	78	113	148	151	155	118	150	149	81
SULFATE	SO <sub>4</sub> mg/L	273	196	245	114	52	55	216	213	256	107	195	205	58
CHLORIDE	Cl mg/L	89	74	86	85	57	122	75	83	81	87	79	78	60
NITRATE	NO <sub>3</sub> mg/L	0.3	0.3	0.7	2.5	0.7	0.2	0.45	2.0	1.95	2.55	0.4	0.45	2.55
FLUORIDE	F mg/L	0.40	0.40	0.40	0.30	0.20	0.20	0.30	0.40	0.30	0.30	0.30	0.30	0.20
BORON	B mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DISSOLVED SOLIDS	TDS mg/L	659	533	614	409	246	369	552	570	618	406	531	538	265
TOTAL HARDNESS AS CaCO <sub>3</sub>	mg/L	311	263	290	171	89	135	267	283	294	169	256	256	89
TOTAL ALKALINITY AS CaCO <sub>3</sub>	mg/L	134	127	130	98	64	101	125	124	127	101	123	122	70
FREE CARBON DIOXIDE	CO <sub>2</sub> mg/L	1.4	1.1	2.1	2.3	1.5	0.3	1.0	2.6	2.1	1.3	2.3	4.1	0.3
H <sup>+</sup> CONCENTRATION	pH	8.30	8.39	8.09	7.94	7.94	8.77	8.39	7.99	8.08	8.20	8.03	7.78	8.62
SPECIFIC CONDUCTANCE	µmho/cm	1064	910	1020	730	454	715	928	995	1000	739	934	926	491
COLOR	CU	--	--	--	--	--	--	--	--	3	2	--	--	--
FILTER EFFLUENT TURBIDITY	NTU	--	--	--	--	--	--	--	0.10	0.07	0.08	0.12	--	0.11
TURBIDITY	NTU	0.95	3.0	0.93	1.5	1.8	0.73	2.5	0.09	0.07	0.08	0.11	0.10	0.11
TEMPERATURE	°C	18	17	14	14	11	17	19	14	15	14	19	19	17
BROMIDE	Br mg/L	0.08	0.07	0.09	0.30	0.20	0.37	0.10	--	--	--	--	--	--
TOTAL TRIHALOMETHANES	TTHMs µg/L	--	--	--	--	--	--	--	36	40	64	56	48	56
PCT. STATE PROJECT WATER	% SPW %	0	0	0	100	100	100	0	9	1	100	0	0	100

TABLE E. GENERAL MANAGER'S MONTHLY REPORT

May 1993

Storage in Colorado River Basin Reservoirs at End of Month

(1,000 acre-feet)

Reservo	Usable Contents Above Lowest Outlet	Percent of Usable Capacity	Usable Contents Above Min. Power Head	Change * in Contents During Month	Change * in Contents Since May 1992
<u>Upper Basin</u>					
Fontenelle	216	63	21	120	63
Flaming Gorge	3,202	85	2,969	86	(57)
Blue Mesa	603	73	522	190	(26)
Morrow Point	116	99	41	5	4
Crystal	18	102	7	1	2
Navajo	1,548	91	---	131	(58)
Powell	16,805	69	12,808	2,645	1,870
Subtot	22,508	72	16,368	3,178	1,798
<u>Lower Basin</u>					
Mead	21,521	82	11,497	(406)	1,733
Mohave	1,717	95	1,500	170	51
Havasu	611	99	172	16	4
Subtot	23,849	83	13,169	(220)	1,788
Basin To	46,357	78	29,537	2,958	3,586

\* Numbers within ( ) are negative numbers.

FINANCIAL SUMMARY  
 FISCAL YEAR 1992-93  
 CASH BASIS  
 (\$ in Millions)

TABLE F

	ACTUAL THRU MAY 1993	BUDGET THRU MAY 1993	VARIANCE DOLLARS + / (-)	PROJECTED YEAR END	ANNUAL BUDGET	VARIANCE DOLLARS + / (-)
<u>RECEIPTS</u>						
WATER SALES	\$483.8	\$484.2	(\$0.4)	\$525.9	\$528.1	(\$2.2)
POWER RECOVERIES	13.0	17.7	(4.7)	15.0	20.0	(5.0)
TAXES	86.6	83.5	3.1	88.1	85.0	3.1
INTEREST AND OTHER	22.4	38.0	(15.6)	24.5	40.8	(16.3)
ADDITIONAL REVENUES	22.4	47.5	(25.1)	25.0	50.0	(25.0)
<b>TOTAL RECEIPTS</b>	<u>628.2</u>	<u>670.9</u>	<u>(42.7)</u>	<u>678.5</u>	<u>723.9</u>	<u>(45.4)</u>
<u>EXPENDITURES</u>						
STATE WATER CONTRACT	262.0	327.1	65.1	247.2	334.4	87.2
STATE WATER BANK	0.5	0.8	0.3	0.5	0.8	0.3
COLORADO RIV. SUPPLIES	59.1	70.7	11.6	64.0	73.3	9.3
MWD CAPITAL PROGRAM	114.7	110.5	(4.2)	122.7	118.0	(4.7)
MWD O&M	173.5	217.0	43.5	193.0	236.6	43.6
<b>TOTAL EXPENDITURES</b>	<u>609.8</u>	<u>726.1</u>	<u>116.3</u>	<u>627.4</u>	<u>763.1</u>	<u>135.7</u>
<b>INCREASE (DECREASE) in CASH and INVESTMENTS</b>	<u>\$18.4</u>	<u>(\$55.2)</u>	<u>\$73.6</u>	<u>\$51.1</u>	<u>(\$39.2)</u>	<u>\$90.3</u>

ACRE-FEET SALES IN THOUSANDS

	ACTUAL	BUDGETED	DIFFERENCE
CUMULATIVE MAY TO MARCH	1,755.9	1,825.1	(69.2)
APRIL DELIVERIES	153.3	188.8	(35.5)
MAY DELIVERIES	165.7	137.5	28.2

The Metropolitan Water District of Southern California

**MONTHLY PROGRESS REPORT  
OF CONSTRUCTION AND PROCUREMENT CONTRACTS**

May 1993

SUMMARY OF PROGRESS

	<u>Construction Contracts</u>	<u>Procurement Contracts</u>
Number of Contracts	8	3
Total Bid Amount of Contracts in Progress	\$ 138,317,537	\$ 10,189,978
Number of Contracts Awarded this Month	0	0
Total Bid Amount of Contracts Awarded this Month	0	0
Contract Gross Earnings this Month	8,218,294	0

There were no new construction contracts awarded by the Board of Directors or the General Manager during the month of May 1993.

One construction contract was completed during the month of May 1993. Contract No. 1397 covering the construction of Service Connection No. LA-35, was completed by the prime contractor, Dillingham Construction N. A., Inc., and accepted by District forces on May 11, 1993.

A tabular summary of current construction contracts is included as page 3 of this report. Details of the status of current construction contracts are shown on pages 6 through 13 of this report.

Tabular summaries of construction contracts completed this month and of construction contracts which have been completed but have final payments pending are included on page 4 of this report.

There were no procurement contracts awarded or completed during the month of May 1993.

A tabular summary of procurement contracts is included on page 5 of this report.



## CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
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Summary of Construction Contracts Completed During the Month .....	4
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Etiwanda Power Plant Specs. No. 1230--Contract No. 1408 .....	6
Jensen Plant Expansion No. 1 Specs. No. 1200--Contract No. 1393 .....	7
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THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**SUMMARY OF CONSTRUCTION CONTRACTS**

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Earnings This Month	Earnings To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete	Percent Contract Time Elapsed
1408	1230	Etiwanda Power Plant	Advanco Constructors	\$ 3,820,000	\$ 122,897	\$ 1,935,578	8/28/92	11/18/93	11/93	50	52
1293	1200	Joseph Jensen Filtration Plant Expansion No. 1	Hyman/JWP West, A Joint Venture	101,986,000	5,242,197	58,740,670	9/05/91	09/19/94	12/94	57	53
1410	1237	Site Preparation for Henry J. Mills Filtration Plant for Expansion No. 2	Kiewit Pacific Company	15,219,400	1,624,800	11,580,870	10/06/92	12/20/93	11/93	76	48
1411	1192A	Maintenance Building and Operations Building Annex at Mills Plant	Tilden-Coil Constructors, Inc.	2,569,690	352,544	1,295,363	10/14/92	10/04/93	10/93	70	58
1414	1247	San Diego Canal Relocation	Kasler Corporation	9,872,635	872,441	1,726,698	03/22/93	02/02/94	02/94	17	13
1406	1224	Modification to Ventilation Hood System at Water Quality Laboratory	Sanders Engineering Co., Inc.	227,887	3,415	225,040	08/25/92	01/06/93	06/93	99	100
1415	1258	Cathodic Protection System for East Orange County Feeder No. 2	Harco Technologies Corporation	375,925	—	—	—	—	—	—	—

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MAY 1993

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**SUMMARY OF CONSTRUCTION CONTRACTS COMPLETED THIS MONTH**

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
1397	1225	Service Connection LA-35	Dillingham Construction, N.A., Inc.	\$ 4,246,000	\$ 4,360,000	05/11/93	05/20/93	06/24/93

**SUMMARY OF CONSTRUCTION CONTRACTS WHICH HAVE BEEN COMPLETED BUT HAVE FINAL PAYMENTS PENDING**

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
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**Note:**

Final payment of \$2.8 million was made to Kaweah Construction Company on May 21, 1993, thus settling all outstanding claims filed by the prime contractor under Contract No. 1375, construction of the Washwater Reclamation Expansion at Diemer plant.

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**SUMMARY OF PROCUREMENT CONTRACTS**

Cont. No.	Spec. No.	Equipment or Material	Contractor	Contract Price	Earnings This Month	Earnings To Date	Starting Date	Delivery Date	Remarks
1355	1146	Conical Plug Valves for Etiwanda Control Facility and Power Plant	Willamette Valve Co., Inc.	\$ 3,999,978	—	\$ 3,904,584	7/28/89	2/22/91	
1396	1207	Four Computer-Based Control Systems	JWP Controls	6,670,000	—	875,321	3/12/92	—	
1403	1240	Nine Hydrofoil Flocculators for Jensen Expansion No. 1	Chemineer, Inc.	249,000	—	—	6/02/92	1/27/93	

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Etiwanda Power Plant		
<b>CONTRACTOR</b>	Advanco Constructors		
<b>SPECIFICATIONS NO.</b>	1230	<b>BID</b>	\$ 3,820,000
<b>CONTRACT NO.</b>	1408	<b>EXTRA WORK TO DATE</b>	39,663
<b>CONTRACT STARTING DATE</b>	August 31, 1992	<b>EARNINGS THIS MONTH</b>	122,897
<b>CONTRACT COMPLETION DATE</b>	November 18, 1993	<b>EARNINGS TO DATE</b>	1,935,578
<b>ESTIMATED COMPLETION DATE</b>	November 1993	<b>ESTIMATED PERCENT COMPLETE</b>	50
		<b>PERCENT CONTRACT TIME ELAPSED</b>	52

**SCOPE OF WORK**

Construction of a power plant with a 25,200 kVA A.C. generator, maintenance building, a switchyard, and all appurtenant work located near the intersection of Arrow Highway and Etiwanda Avenue in the City of Rancho Cucamonga, California, Riverside County.

**CONSTRUCTION PROGRESS**

Erection of forms and placement of reinforcing steel, embedments, and concrete were in progress throughout the month at the powerhouse and in the switchyard.

Installation of electrical ductbanks, including placement of concrete encasement and backfill material, continued in the switchyard area. Placement of backfill around the transformer base was also completed in the switchyard area.

Installation and testing of the rotor within the powerhouse were continued throughout the month.

Installation of required piping, including drilling of core holes through the maintenance building walls for the gas lines, was started during the month.

Contractor personnel, including employees of subcontractors, averaged 23 persons during the month of May 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Joseph Jensen Filtration Plant--Expansion No. 1		
<b>CONTRACTOR</b>	Hyman/JWP West, A Joint Venture		
<b>SPECIFICATIONS NO.</b>	1200	<b>BID</b>	\$ 101,986,000
<b>CONTRACT NO.</b>	1393	<b>EXTRA WORK TO DATE</b>	276,984
<b>CONTRACT STARTING DATE</b>	September 5, 1991	<b>EARNINGS THIS MONTH</b>	5,242,197
<b>CONTRACT COMPLETION DATE</b>	September 19, 1994	<b>EARNINGS TO DATE</b>	58,740,670
<b>ESTIMATED COMPLETION DATE</b>	December 1994	<b>ESTIMATED PERCENT COMPLETE</b>	57
		<b>PERCENT CONTRACT TIME ELAPSED</b>	53

**SCOPE OF WORK**

Construction of 510-million-gallon-per-day expansion of the existing plant including influent and effluent pipelines, filter modules, flocculation basins, chemical mixing storage facilities, plant control units, washwater reclamation facilities, finished water reservoirs, and appurtenant work location at 13100 Balboa Boulevard, Granada Hills, California.

**CONSTRUCTION PROGRESS**

Construction of forms and placement of reinforcing steel and concrete were in progress throughout the month at various locations in Filter Modules Nos. 2 and 3, Finished Water Reservoir No. 2, and Washwater Reclamation Plant No. 2, as required. Installation of mechanical embeds and piping was also in progress in the filter modules, finished water reservoir, and washwater reclamation plant in conjunction with concrete placing operations.

Excavation, shoring, and installation of yard piping continued throughout the jobsite as required during the month.

Backfill operations were continued within the filter modules and around the completed portions of the washwater reclamation facilities.

Installation of conduit, embedded conduit supports, and ground wire continued for the filter modules and washwater facilities. Installation of site electrical ductbanks continued and installation of water quality instruments in the filter modules was started during the month.

Painting and coating of miscellaneous metals, piping, and mechanical equipment were continued in Filter Module No. 2 as required during the month.

Contractor personnel, including employees of subcontractors, averaged 245 persons during the month of May 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Service Connection LA-35		
<b>CONTRACTOR</b>	Dillingham Construction N.A., Inc.		
<b>SPECIFICATIONS NO.</b>	1225	<b>BID</b>	\$ 4,246,000
<b>CONTRACT NO.</b>	1397	<b>EXTRA WORK TO DATE</b>	66,094
<b>CONTRACT STARTING DATE</b>	November 13, 1991	<b>EARNINGS THIS MONTH</b>	58,145
<b>CONTRACT COMPLETION DATE</b>	March 15, 1993	<b>EARNINGS TO DATE</b>	4,300,094
<b>ACTUAL COMPLETION DATE</b>	May 11, 1993	<b>ESTIMATED PERCENT COMPLETE</b>	100
		<b>PERCENT CONTRACT TIME ELAPSED</b>	100

**SCOPE OF WORK**

Construction of a service connection between the existing Balboa Inlet Tunnel and Los Angeles Department of Water and Power High Speed Channel which includes the removal of a 32-foot length of the tunnel and installation of a concrete enclosed steel wye branch, 43 feet of 109-inch-diameter welded-steel pipe, 900 feet of 91-inch-diameter steel pipeline, and appurtenances.

**CONSTRUCTION PROGRESS**

All work required under the contract was completed by the prime contractor, Dillingham Construction N. A., Inc., and was accepted by District forces on May 11, 1993.

The Notice of Completion was recorded by the Los Angeles County Recorder on May 20, 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Site Preparation for Henry J. Mills Filtration Plant Expansion No. 2		
<b>CONTRACTOR</b>	Kiewit Pacific Company		
<b>SPECIFICATIONS NO.</b>	1237	<b>BID</b>	\$ 15,219,400
<b>CONTRACT NO.</b>	1410	<b>EXTRA WORK TO DATE</b>	9,323
<b>CONTRACT STARTING DATE</b>	October 6, 1992	<b>EARNINGS THIS MONTH</b>	1,624,800
<b>CONTRACT COMPLETION DATE</b>	December 20, 1993	<b>EARNINGS TO DATE</b>	11,580,870
<b>ESTIMATED COMPLETION DATE</b>	November 1993	<b>ESTIMATED PERCENT COMPLETE</b>	76
		<b>PERCENT CONTRACT TIME ELAPSED</b>	48

**SCOPE OF WORK**

Excavation, installation of District-furnished equipment including large diameter pipe, removal and installation of pipelines, site preparation and grading, construction of an underdrain system, and other appurtenant work for Expansion No. 2 of the Henry J. Mills Filtration Plant at 550 East Alessandro Boulevard, Riverside, California.

**CONSTRUCTION PROGRESS**

Drilling and blasting operations were in progress throughout the month as required. Excavated material continues to be transported to the rock crusher for processing for future use as a fill material.

Placement of Zone 1 and chimney drain material continued for the reclamation basin embankment. Placement of processed material for future Filter Modules Nos. 3 and 4 embankments was also continued throughout the month.

Backfill operations were in progress throughout the month for the 54-inch-diameter rejection pipeline and the reservoir bypass and effluent pipelines.

Erection of forms and placement of reinforcing steel and concrete were continued for the reservoir inlet and outlet conduits, the reservoir inlet gate, reservoir outlet structure, and the outlet pipe encasement.

Contractor personnel, including employees of subcontractor, averaged 90 persons during the month of May 1993.



The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Maintenance Building and Operations Building Annex at Henry J. Mills Filtration Plant		
<b>CONTRACTOR</b>	Tilden-Coil Constructors, Inc.		
<b>SPECIFICATIONS NO.</b>	1192A	<b>BID</b>	\$ 2,569,690
<b>CONTRACT NO.</b>	1411	<b>EXTRA WORK TO DATE</b>	2,216
<b>CONTRACT STARTING DATE</b>	October 14, 1992	<b>EARNINGS THIS MONTH</b>	352,544
<b>CONTRACT COMPLETION DATE</b>	October 4, 1993	<b>EARNINGS TO DATE</b>	1,295,363
<b>ESTIMATED COMPLETION DATE</b>	October 1993	<b>ESTIMATED PERCENT COMPLETE</b>	70
		<b>PERCENT CONTRACT TIME ELAPSED</b>	58

**SCOPE OF WORK**

Construction of an approximately 7,700 square foot addition to the existing Operations Building and construction of an approximately 9,600 square foot new Maintenance Building and all appurtenant work located at 550 East Alessandro Boulevard in the City of Riverside, California.

**CONSTRUCTION PROGRESS**

Concrete placing operations were in progress during the month at the planter wall footing at the maintenance building and for the top of shear walls, second floor decks, and planter wall footing at the operations building annex.

Installation of the roof, as well as all metal studs and drywalls, were completed at the maintenance building. Installation of structural steel at roof elevations and the roof drain and overflow were completed at the operations building annex.

Installation of duct work was completed at the maintenance building and installation of lighting fixtures is now in progress. At the operations annex building, installation of duct work and electrical conduit is now in progress.

Painting of all interior walls and ceiling surfaces and installation of required wall tiles are in progress at the maintenance building.

Contractor personnel, including employees of subcontractors, averaged 23 persons during the month of May 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Construction of the San Diego Canal Relocation		
<b>CONTRACTOR</b>	Kasler Corporation		
<b>SPECIFICATIONS NO.</b>	1247	<b>BID</b>	\$ 9,872,685
<b>CONTRACT NO.</b>	1414	<b>EXTRA WORK TO DATE</b>	0
<b>CONTRACT STARTING DATE</b>	March 22, 1993	<b>EARNINGS THIS MONTH</b>	872,441
<b>CONTRACT COMPLETION DATE</b>	February 2, 1994	<b>EARNINGS TO DATE</b>	1,726,698
<b>ESTIMATED COMPLETION DATE</b>	February 1994	<b>ESTIMATED PERCENT COMPLETE</b>	17
		<b>PERCENT CONTRACT TIME ELAPSED</b>	13

**SCOPE OF WORK**

Relocation of approximately 1.4 miles of existing San Diego Canal and construction of two siphons, a radial gate structure, and a turn-out structure and appurtenant work located at Newport Road, 2 miles east of Highway 79, Hemet, Riverside County, California.

**CONSTRUCTION PROGRESS**

Stripping operations continued along the canal alignment and at the future barrow pit areas. Stripped materials are being stockpiled at District-designated locations.

Placement of subgrade fill was completed for the Domenigoni Valley radial gate structure, north siphon, spillway, and turnout structure.

Construction of the future canal embankment was continued throughout the month. Excavation continued for the required dewatering trench.

Construction of forms and placement of reinforcing steel and concrete were started during the month for the radial gate structure and the north siphon.

Contractor personnel, including employees of subcontractors averaged 25 persons during the month of May 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Modifications to the Ventilation Hood System at Water Quality Laboratory		
<b>CONTRACTOR</b>	Sanders Engineering Company, Inc.		
<b>SPECIFICATIONS NO.</b>	1224	<b>BID</b>	\$ 277,887
<b>CONTRACT NO.</b>	1406	<b>EXTRA WORK TO DATE</b>	0
<b>CONTRACT STARTING DATE</b>	August 25, 1992	<b>EARNINGS THIS MONTH</b>	3,415
<b>CONTRACT COMPLETION DATE</b>	January 8, 1993	<b>EARNINGS TO DATE</b>	225,040
<b>ESTIMATED COMPLETION DATE</b>	June 1993	<b>ESTIMATED PERCENT COMPLETE</b>	99
		<b>PERCENT CONTRACT TIME ELAPSED</b>	100

**SCOPE OF WORK**

Modifications of the existing laboratory fume exhaust system, including removing or modifying existing ducts and ventilating equipment, making necessary structural modifications, furnishing and installing new duct work, mechanical systems, and electrical or control systems, and balancing the installed system at the La Verne Facility Water Quality Laboratory.

**CONSTRUCTION PROGRESS**

The contractor completed all electrical punch list items and the project is substantially completed during the month.

The only remaining work is balancing of the ventilation system to achieve the desired air flow throughout the ventilation system.

Work remaining is scheduled for completion during early June 1993.

Contractor personnel, including employees of subcontractors, averaged three persons during the month of May 1993.

The Metropolitan Water District of Southern California

**MONTHLY CONSTRUCTION PROGRESS REPORT**

May 1993

<b>CONSTRUCTION OF</b>	Cathodic Protection System for East Orange County Feeder No. 2		
<b>CONTRACTOR</b>	Harco Technologies Corporation		
<b>SPECIFICATIONS NO.</b>	1258	<b>BID</b>	\$ 375,925
<b>CONTRACT NO.</b>	1415	<b>EXTRA WORK TO DATE</b>	—
<b>CONTRACT STARTING DATE</b>	—	<b>EARNINGS THIS MONTH</b>	—
<b>CONTRACT COMPLETION DATE</b>	—	<b>EARNINGS TO DATE</b>	—
<b>ESTIMATED COMPLETION DATE</b>	—	<b>ESTIMATED PERCENT COMPLETE</b>	—
		<b>PERCENT CONTRACT TIME ELAPSED</b>	—

**SCOPE OF WORK**

Installation of 11 deep well anode assemblies, including rectifiers and other appurtenances, along the East Orange County Feeder No. 2, located at various sites within the cities of Yorba Linda, Placentia, Anaheim, Tustin, Orange, Santa Ana, and Irvine--all in Orange County, California.

**CONSTRUCTION PROGRESS**

The contractor continued to submit documentation required prior to final award of the contract.

The Notice to proceed is scheduled to be mailed to the contractor during the first week in June 1993.