



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

9-1

April 21, 1998

To: Board of Directors

From: General Manager

Submitted by: Chief Engineer
Chief of Operations

Subject: Operating Data for March 1998

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The following tables contain March 1998 data on Metropolitan's water and power sales and purchases, treatment plants operations, reservoir storage, construction, employment, and Los Angeles Civic Center rainfall:

WATER SALES

TOTAL FISCAL	March 1998 AF	March 1997 AF	Year to Date AF
Total Water Sales	85,371	143,271	1,252,626
Revenue	\$34,479,995	\$55,080,996	\$465,244,291
Basic Service	68,498	116,239	957,470
Agricultural	756	6,109	79,097
Seasonal Storage	12,735	17,570	157,480
Seawater Barrier	1,249	0	15,575
Desalt & GWR	119	0	7,595
Reclaimed	2,012	3,351	35,408
Treated	66,098	108,948	829,819
Untreated	17,140	30,972	379,804

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

**METROPOLITAN'S STATE WATER PROJECT (SWP)
CHARGES AND PAYMENTS--FISCAL YEAR 1997/98**

The following table shows a comparison of totals through March 1998:

<u>Components</u>	<u>SWP Statement of Charges to Date</u>	<u>1997/98 Annual Budget to Date</u>	<u>Amount Paid to Date</u>
Capital	149,141,236	149,141,236	144,342,887
Minimum	104,943,846	87,950,100	87,984,854
Power	71,608,386	60,380,393	55,339,661
Category III	10,000,000	0	0
Credits	<u>(47,373,936)</u>	<u>(19,443,587)</u>	<u>(36,147,258)</u>
Net SWP Costs	<u>\$288,319,533</u>	<u>\$278,028,142</u>	<u>\$251,520,144</u>

NOTE: Explanation of Budget-to-Date and Payments and Credits-to-Date variances:

The CAPITAL variance of \$4.8 million results from the December '97 revised billing that adjusted the 1998 invoice for audit findings and the resolution of several issues which were still under discussion at the issuance of the original invoice dated June 30, 1997. The POWER variance of \$5.0 million is due to a \$2.5 million decrease in OFF-AQUEDUCT charges from the May 1997 revision and the December revised billing and \$2.5 million decrease in VARIABLE due to the adjustment of the variable rates to \$0.00 for September thru December 1997. CREDITS have a variance of (\$16.7) million due to consideration of \$5.6 million in Off-Aqueduct credits to the current fiscal year instead of the prior fiscal year, \$7.3 million for return of replacement reserves, \$2.0 million for revised 1991, 1992, and 1996 Off-Aqueduct operating costs and water deliveries, (\$7.3) million delayed SMIF interest earnings, \$1.6 million accelerated refund of interest earnings, (\$0.9) million reduction in interest earnings from projected to actual, and \$8.5 million accelerated refund of bond cover.

POWER FOR PUMPING

The following quantities of electric energy were generated for Metropolitan's pumping system in March 1998:

<u>Colorado River Energy</u>	<u>Kwh</u>
Hoover Power Plant	149,564,000
Parker Power Plant	33,660,000
Subtotal	<u>183,224,000</u>
Southern California Edison (SCE) Benefit	
Energy	10,360,456
SCE Exchange Energy	(56,176,000)
SCE Purchased Energy	0
California Department of Water Resources	0
(DWR) Purchased Energy	
Other Purchased Energy	<u>0</u>
Total Generated for Metropolitan	137,408,456
Power Available to DWR	11,970,000
CRA Power Available to SCE	0

**HYDROELECTRIC POWER RECOVERY PLANTS--FISCAL YEAR 1997/98
ENERGY AND REVENUE ACCOUNT**

PLANT	<u>March 1998</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>
PHASE I				
Greg Avenue	0	67,200	0.00	2,769.31
Lake Mathews	3,462,000	28,003,477	144,815.46	1,159,893.45
Foothill Feeder	0	24,074,299	0.00	994,966.25
San Dimas	0	17,586,000	0.00	724,719.06
Yorba Linda	<u>1,560,000</u>	<u>19,341,120</u>	<u>65,254.80</u>	<u>799,532.52</u>
Subtotal	5,022,000	89,072,096	210,070.26	3,681,880.59
PHASES II - IV				
Sepulveda Canyon	0	6,114,442	0.00	361,432.08
Venice	0	400,500	0.00	26,174.31
Temescal	1,866,000	14,127,000	70,831.57	631,689.23
Corona	1,842,000	14,544,000	69,875.40	660,315.06
Perris	297,000	4,374,000	11,483.14	267,086.98
Rio Hondo	0	2,834,000	0.00	148,481.26
Coyote Creek	1,617,000	13,791,000	61,053.31	629,098.11
Red Mountain	1,872,000	25,020,000	71,008.62	1,154,604.43
Valley View	<u>0</u>	<u>0</u>	<u>0.00</u>	<u>0.00</u>
Subtotal	7,494,000	81,204,942	284,252.04	4,224,826.37
Total Phase I-IV	<u>12,516,000</u>	<u>170,277,038</u>	<u>494,322.30</u>	<u>7,906,706.96</u>
Etiwanda	<u>0</u>	<u>16,377,000</u>	<u>0.00</u>	<u>421,508.66</u>
Total	<u>12,516,000</u>	<u>186,654,038</u>	<u>494,322.30</u>	<u>\$8,328,215.62</u>

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 ₃	Mar. 98	292*	136*	292*	284*	283*	81*
	Feb. 98	298	133	294	294	294	93
	Mar. 97	314	156	311	314	309	109
Total Dissolved Solids--mg/l	Mar. 98	609**	286**	604**	583**	586**	216**
	Feb. 98	610	286	603	598	595	238
	Mar. 97	669	338	656	656	653	273

* Preliminary

** Estimate

NA: Not Analyzed. Plant out of 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>						
	Mar. 98	24,511	7,511	23,427	10,171	2,633
	Feb. 98	15,106	9,758	36,300	7,419	2,189
	Mar. 97	34,440	21,021	23,432	23,859	5,012
		<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>						
	Mar. 98	1,110	37	68,253	867,366	
	Feb. 98	1,275	3	70,772	799,113	
	Mar. 97	1,752	51	107,763	928,002	

RESERVOIR STORAGE

	<u>Usable</u> <u>Storage</u> %	<u>March 1998</u>	<u>February 1998</u>	<u>March 1997</u>	<u>Annual</u> <u>Difference</u>
<u>Distribution</u>					
Lake Mathews	93	169,561	172,733	151,636	17,925
Lake Skinner	83	36,543	36,780	32,303	4,240
<u>Colorado River Basin</u>					
Upper Basin	83	25,735,600	26,110,600	23,977,600	1,758,000
Lower Basin	95	27,244,000	27,246,200	25,062,500	2,181,500
(See Table E for details)					
<u>State Water Project</u>					
Oroville	79	2,782,762	2,684,162	2,932,617	(149,855)
San Luis (State)	100	1,063,330	1,062,273	1,085,458	(22,128)
Pyramid	95	158,716	163,982	155,800	2,916
Castaic	99	301,211	300,324	272,680	28,531
Silverwood	85	60,333	65,993	29,716	30,617
Perris	84	106,735	105,995	113,165	(6,430)
<u>Central Valley Project</u>					
Clair Engle	91	2,220,480	1,966,680	2,102,080	118,400
Shasta	77	3,437,210	3,451,410	3,683,910	(246,700)
Folsom	67	680,300	558,800	469,700	210,600
New Melones	83	1,999,100	1,954,500	2,022,300	(23,200)
San Luis (federal)	99	964,750	963,266	924,225	40,525

CONSTRUCTION PROGRESS FOR MARCH 1998

Twenty-one construction contracts, having a contract value in excess of \$1 billion, were in progress during the month of March 1998. Contract earnings under these contracts were \$23,295,624 this month. Status of these contracts at the end of the month follows:

	<u>Percent Completed</u>	<u>Estimated Completion</u>
Standby Emergency Power Additions Robert B. Diemer Filtration Plant	79	May 1998
Garvey Reservoir Composite Lining Construction	99	April 1998
Inland Feeder Contract No. 4 Mentone Pipeline Station 1019 to 1053	99	April 1998
Water Quality Laboratory Expansion	93	June 1998
Eastside Reservoir Project - P-1 Pressure Tunnel	84	July 1998
Eastside Reservoir Project - P-1 Pumping Plant	33	February 1999
Eastside Reservoir Project West Dam, Saddle Dam, and Forebay	66	June 1999
Eastside Reservoir Project East Dam	64	July 1999
Eastside Reservoir Project Inlet/Outlet Tower	26	September 1999
Inland Feeder Contract No. 2 Arrowhead East Tunnel	17	March 2002
Joseph Jensen Filtration Plant Finished Water Reservoir No. 2 Repairs	36	October 1998
Protective Roof Structure for San Jacinto Diversion Structure	80	June 1998
Eastside Reservoir Project Inland Feeder Pressure Control Structure	13	October 1999
Standby Emergency Power Additions F. E. Weymouth Filtration Plant	27	October 1998
Inland Feeder Riverside Pipeline - South	2	December 1999
Inland Feeder Riverside Pipeline - North	4	April 2000
Joseph Jensen Filtration Plant, Module No. 1 Filter Materials Replacement	11	October 1998
Union Station Headquarters Building	71	November 1998
Joseph Jensen Filtration Plant Washwater Tank No. 1 Roof Repair	3	January 1999
Eastside Reservoir Project North Rim	-	-
Eastside Reservoir Project Secondary Inlet	-	-

Awarded Contracts:

Contract No. 1497, in the amount of \$11,270,000, was awarded to J. F. Shea Co., Inc., to provide all labor, materials, equipment, and services necessary for constructing the North Rim at the Eastside Reservoir Project site. The work includes clearing, grubbing, and stripping; excavating the access portal and adits; portal backfilling instrumentation; shotcreting; grouting; constructing roads; and all other appurtenant work.

Completed Contracts:

Contract No. 1491, seismic upgrade and rock anchor installation of discharge pipelines at Hinds Pumping Plant, was completed on March 30, 1998; the Notice of Completion was recorded on April 3, 1998.

Procurement Contracts:

No procurement contracts were completed this month.

RAINFALL AT LOS ANGELES CIVIC CENTER (INCHES)

During the Month	4.06
Total for Season (Fiscal Year)	26.89
Normal for Season to Date	13.42
Difference from Normal	13.47
Percent of Normal	200.4%
During Same Month Last Year	0.00
Total for Season (Last Fiscal Year)	12.40

MARCH TEMPERATURES AT LOS ANGELES CIVIC CENTER (DEGREES)

Average Maximum	70.2
Average Minimum	53.7
Average	61.95
30-Year Normal	60.7

EMPLOYMENT

Regular Employees by Division/Department

	<u>March 1997</u>	<u>March 1998</u>	<u>Difference</u>
Engineering	437	418	-19
Operations	903	843	-60
Other Divisions and Departments	<u>655</u>	<u>629</u>	<u>-26</u>
<u>Total Permanent Employees</u>	1,995	1,890	-105
<u>Total Sunset Employees</u>	15	14	-1
<u>Total Two Cal Plaza Employees</u>	848	814	-34
<u>Minority Applicants</u>	56	52	-4
<u>Minority New Hires</u>	1	0	-1
<u>Non-Minority Applicants</u>	49	83	34
<u>Non-Minority New Hires</u>	0	3	3

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WATER INFORMATION SYSTEM (WINS)

BILLING ACTIVITY REPORT FOR THE MONTH OF MARCH 1998

TABLE A

<u>AGENCY</u>	<u>FULL SERVICE</u> (AF)	<u>AGR</u> (AF)	<u>ALL SEASONAL</u> <u>STORAGE</u> (AF)	<u>SEAWATER</u> <u>BARRIER</u> (AF)	<u>DESALTER &</u> <u>GWR</u> (AF)	<u>RECLAIMED</u> (AF)	<u>AGENCY TOTAL</u> <u>AF VOLUME</u> (AF)	<u>SPECIALS</u> (<u>\$</u>)	<u>DOLLAR</u> <u>AMOUNT</u> (<u>\$</u>)
City of Anaheim	1,135.5	.0	88.8	.0	.0	.0	1,224.3	5,150.00	462,708.00
City of Burbank	1,328.3	.0	.0	.0	.0	2.3	1,330.6	44,323.54	616,245.84
City of Beverly Hills	919.7	.0	.0	.0	.0	.0	919.7	59,006.50	455,397.20
City of Compton	308.7	.0	.0	.0	.0	.0	308.7	4,687.03	137,736.73
Calleguas MWD	5,451.4	34.5	-1,560.0	.0	.0	16.4	3,942.3	203,114.38	2,107,885.18
State of California	-12.1	.0	.0	.0	.0	.0	-12.1	-492.10	-4,715.00
Chino Basin MWD	2,454.2	.8	.0	.0	.0	.0	2,455.0	30,138.21	886,842.81
Central Basin MWD	3,304.6	.0	1,147.8	301.5	.0	86.8	4,840.7	46,165.50	1,897,631.20
Coastal MWD	2,406.4	.0	.0	.0	.0	.0	2,406.4	95,346.94	1,132,505.34
Eastern MWD	2,283.5	17.7	.0	.0	.0	48.5	2,349.7	1,300.00	1,020,877.70
City of Fullerton	8.9	.0	.0	.0	.0	.0	8.9	2,975.00	6,810.90
Foothill MWD	350.2	.0	285.1	.0	.0	77.5	712.8	12,129.06	233,738.86
City of Glendale	1,585.0	.0	.0	.0	.0	6.7	1,591.7	77,004.83	758,464.83
City of Los Angeles	245.7	.0	4,538.0	.0	.0	8.0	4,791.7	749,274.67	2,230,700.97
City of Long Beach	2,356.4	.0	2,290.4	.0	.0	8.0	4,654.8	8,250.00	1,686,842.40
Las Virgenes MWD	945.6	8.3	.0	.0	.0	.0	953.9	41,162.21	451,156.01
MWD of Orange County	6,892.8	45.6	2,717.1	.0	138.2	244.3	10,038.0	241,175.89	3,960,840.19
City of Pasadena	1,865.6	.0	.0	.0	.0	.0	1,865.6	-7,225.00	796,848.60
Three Valleys MWD	1,987.0	3.0	.0	.0	.0	.0	1,990.0	10,608.00	792,297.60
City of Santa Ana	899.2	.0	1,204.6	.0	.0	.0	2,103.8	24,492.27	761,381.47
San Diego CWA	19,777.0	598.8	1,843.0	.0	.0	76.7	22,295.5	-5,934.10	8,205,781.50
City of San Fernando	.0	.0	.0	.0	.0	.0	.0	275.00	275.00
City of Santa Monica	770.6	.0	.0	.0	.0	.0	770.6	23,645.50	355,774.10
City of San Marino	.0	.0	.0	.0	.0	.0	.0	2,921.12	2,921.12
City of Torrance	1,444.2	.0	.0	.0	.0	.0	1,444.2	3,050.00	625,500.20
Upper San Gabriel Valley	310.7	.0	.0	.0	.0	.0	310.7	-112,996.65	20,915.05
West Basin MWD	8,443.6	.0	181.0	947.8	-18.7	1,437.1	10,990.8	696,535.67	4,442,350.07
Western MWD of Riverside	1,035.4	47.4	.0	.0	.0	.0	1,082.8	6,151.92	434,282.12
TOTALS:	68,498.1	756.1	12,735.8	1,249.3	119.5	2,012.3		\$2,262,235.39	

GRAND TOTAL SALES: 85,371.1 ACRE FEET

TOTAL NET INVOICE \$34,479,995.99

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. SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATIONS, RTS, CMC, ETC. ALL SEASONAL STORAGE INCLUDES COOPERATIVE STORAGE PROGRAM.

WATER INFORMATION SYSTEM (WINS)

FISCAL YEAR TO DATE BILLING ACTIVITY REPORT THROUGH MARCH 1998 TABLE A

<u>AGENCY</u>	<u>FULL SERVICE</u> (AF)	<u>AGR</u> (AF)	<u>ALL SEASONAL</u> <u>STORAGE</u> (AF)	<u>SEAWATER</u> <u>BARRIER</u> (AF)	<u>DESALTER &</u> <u>GWR</u> (AF)	<u>RECLAIMED</u> (AF)	<u>AGENCY TOTAL</u> <u>AF VOLUME</u> (AF)	<u>SPECIALS</u> (<u>\$</u>)	<u>DOLLAR</u> <u>AMOUNT</u> (<u>\$</u>)	
City of Anaheim	12,264.6	.0	2,276.6	.0	.0	.0	14,541.2	182,355.10	5,440,709.40	
City of Burbank	9,674.0	.0	.0	.0	822.3	354.4	10,850.7	331,616.85	4,330,440.45	
City of Beverly Hills	9,939.0	.0	.0	.0	.0	.0	9,939.0	497,267.52	4,780,976.52	
City of Compton	2,773.6	.0	.0	.0	.0	.0	2,773.6	32,175.28	1,227,596.88	
Calleguas MWD	61,149.1	4,225.8	1,765.8	.0	.0	483.9	67,624.6	1,395,652.12	29,430,860.82	
State of California	19.3	.0	.0	.0	.0	.0	19.3	2,109.30	8,845.00	
Chino Basin MWD	31,052.0	77.2	10,147.1	.0	.0	.0	41,276.3	20,430.06	13,241,307.76	
Central Basin MWD	42,799.7	.0	6,846.7	4,174.2	.0	3,031.4	56,852.0	-142,275.77	21,330,293.23	
Coastal MWD	40,530.3	62.4	.0	.0	.0	232.5	40,825.2	750,384.29	18,201,484.19	
Eastern MWD	41,853.5	805.3	1,330.9	.0	.0	1,019.6	45,009.3	-1,296,512.03	17,169,840.37	
City of Fullerton	4,257.3	4.3	.0	.0	.0	.0	4,261.6	-17,506.87	1,818,653.63	
Foothill MWD	6,337.8	.0	1,113.1	.0	.0	425.1	7,876.0	89,304.06	3,078,657.36	
City of Glendale	19,619.4	.0	.0	.0	.0	883.6	20,503.0	628,854.52	8,894,559.12	
City of Los Angeles	64,896.1	.0	25,531.7	.0	.0	806.0	91,233.8	261,947.29	31,910,042.39	
City of Long Beach	26,307.5	.0	9,518.3	.0	.0	822.0	36,647.8	209,213.38	14,181,464.88	
Las Virgenes MWD	11,794.2	41.6	2,203.5	.0	.0	313.1	14,352.4	321,356.16	6,007,684.36	
MWD of Orange County	106,063.1	2,382.7	25,641.8	.0	1,877.0	9,962.1	145,926.7	1,860,409.09	52,604,208.09	
City of Pasadena	13,555.3	.0	388.6	.0	.0	.0	13,943.9	243,127.07	6,198,148.87	
Three Valleys MWD	43,899.5	82.0	2,304.5	.0	.0	166.3	46,452.3	368,146.04	18,647,273.44	
City of Santa Ana	5,410.7	.0	4,836.9	.0	.0	266.7	10,514.3	171,435.45	3,839,473.15	
San Diego CWA	257,040.5	52,360.4	40,016.1	.0	1,394.0	2,542.5	353,353.5	2,889,130.72	124,205,099.82	
City of San Fernando	.2	.0	.0	.0	.0	.0	.2	-32,123.00	-32,036.80	
City of Santa Monica	8,259.0	.0	.0	.4	.0	.0	8,259.4	198,732.50	3,758,533.90	
City of San Marino	1,152.5	.0	.0	.0	.0	.0	1,152.5	22,266.46	518,993.96	
City of Torrance	15,144.2	.0	.0	.0	.0	.0	15,144.2	289,782.44	6,816,932.64	
Upper San Gabriel Valley	5,036.8	.0	21,409.6	.0	.0	.0	26,446.4	-1,060,458.46	6,098,839.14	
West Basin MWD	94,854.5	.0	1,252.1	11,401.0	568.2	14,099.1	122,174.9	5,664,743.76	48,157,446.86	
Western MWD of Riverside	21,786.5	19,055.3	897.0	.0	2,933.8	.0	44,672.6	-189,345.89	13,377,961.71	
TOTALS:	957,470.2	79,097.0	157,480.3	15,575.6	7,595.3	35,408.3		\$13,692,217.44		
GRAND TOTAL SALES:	1,252,626.7 ACRE FEET							TOTAL NET INVOICE	\$465,244,291.14	

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.
SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATIONS, RTS, CMC, ETC.
ALL SEASONAL STORAGE INCLUDES COOPERATIVE STORAGE PROGRAM.

WATER INFORMATION SYSTEM (WINS)

BILLING ACTIVITY IN ACRE FEET FOR THE MONTH OF MARCH 1998

TABLE B

AGENCY	TREATED				UNTREATED				RECL (AF)	TOTAL VOLUME (AF)
	FULL SERVICE (AF)	AGR (AF)	SSS (AF)	VOLUME (AF)	FULL SERVICE (AF)	AGR (AF)	SSS (AF)	VOLUME (AF)		
City of Anaheim	487.0	.0	11.3	498.3	648.5	.0	77.5	726.0	.0	1,224.3
City of Burbank	1,328.3	.0	.0	1,328.3	.0	.0	.0	.0	2.3	1,330.6
City of Beverly Hills	919.7	.0	.0	919.7	.0	.0	.0	.0	.0	919.7
City of Compton	308.7	.0	.0	308.7	.0	.0	.0	.0	.0	308.7
Calleguas MWD	5,451.4	34.5	-1,560.0	3,925.9	.0	.0	.0	.0	16.4	3,942.3
State of California	.0	.0	.0	.0	-12.1	.0	.0	-12.1	.0	-12.1
Chino Basin MWD	.0	.0	.0	.0	2,454.2	.8	.0	2,455.0	.0	2,455.0
Central Basin MWD	3,606.1	.0	882.3	4,488.4	.0	.0	265.5	265.5	86.8	4,840.7
Coastal MWD	2,406.4	.0	.0	2,406.4	.0	.0	.0	.0	.0	2,406.4
Eastern MWD	2,742.7	17.7	.0	2,760.4	-459.2	.0	.0	-459.2	48.5	2,349.7
City of Fullerton	8.9	.0	.0	8.9	.0	.0	.0	.0	.0	8.9
Foothill MWD	350.2	.0	285.1	635.3	.0	.0	.0	.0	77.5	712.8
City of Glendale	1,585.0	.0	.0	1,585.0	.0	.0	.0	.0	6.7	1,591.7
City of Los Angeles	2,626.8	.0	2,178.2	4,805.0	-2,381.1	.0	2,359.8	-21.3	8.0	4,791.7
City of Long Beach	2,356.4	.0	2,290.4	4,646.8	.0	.0	.0	.0	8.0	4,654.8
Las Virgenes MWD	945.6	8.3	.0	953.9	.0	.0	.0	.0	.0	953.9
MWD of Orange County	6,888.9	28.0	2,723.2	9,640.1	3.9	17.6	-6.1	15.4	382.5	10,038.0
City of Pasadena	1,865.6	.0	.0	1,865.6	.0	.0	.0	.0	.0	1,865.6
Three Valleys MWD	1,067.3	.0	.0	1,067.3	919.7	3.0	.0	922.7	.0	1,990.0
City of Santa Ana	899.2	.0	1,204.6	2,103.8	.0	.0	.0	.0	.0	2,103.8
San Diego CWA	8,171.1	333.8	858.5	9,363.4	11,605.9	265.0	984.5	12,855.4	76.7	22,295.5
City of San Fernando	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
City of Santa Monica	770.6	.0	.0	770.6	.0	.0	.0	.0	.0	770.6
City of San Marino	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
City of Torrance	1,444.2	.0	.0	1,444.2	.0	.0	.0	.0	.0	1,444.2
Upper San Gabriel Valley	310.7	.0	.0	310.7	.0	.0	.0	.0	.0	310.7
West Basin MWD	9,391.4	.0	181.0	9,572.4	.0	.0	.0	.0	1,418.4	10,990.8
Western MWD of Riverside	649.2	40.6	.0	689.8	386.2	6.8	.0	393.0	.0	1,082.8
GRAND TOTAL:	56,581.4	462.9	9,054.6	66,098.9	13,166.0	293.2	3,681.2	17,140.4	2,131.8	85,371.1

FULL SERVICE INCLUDES SEAWATER BARRIER.
RECL. INCLUDES DESALTER AND GWR.

WATER INFORMATION SYSTEM (WINS)

FISCAL YEAR TO DATE BILLING ACTIVITY IN ACRE FEET THROUGH MARCH 1998 TABLE B

AGENCY	TREATED				UNTREATED				RECL (AF)	TOTAL VOLUME (AF)
	FULL SERVICE (AF)	AGR (AF)	SSS (AF)	VOLUME (AF)	FULL SERVICE (AF)	AGR (AF)	SSS (AF)	VOLUME (AF)		
City of Anaheim	4,661.8	.0	1,145.5	5,807.3	7,602.8	.0	1,131.1	8,733.9	.0	14,541.2
City of Burbank	9,674.0	.0	.0	9,674.0	.0	.0	.0	.0	1,176.7	10,850.7
City of Beverly Hills	9,939.0	.0	.0	9,939.0	.0	.0	.0	.0	.0	9,939.0
City of Compton	2,773.6	.0	.0	2,773.6	.0	.0	.0	.0	.0	2,773.6
Calleguas MWD	61,149.1	4,225.8	1,765.8	67,140.7	.0	.0	.0	.0	483.9	67,624.6
State of California	.0	.0	.0	.0	19.3	.0	.0	19.3	.0	19.3
Chino Basin MWD	.0	.0	.0	.0	31,052.0	77.2	10,147.1	41,276.3	.0	41,276.3
Central Basin MWD	46,973.9	.0	5,971.4	52,945.3	.0	.0	875.3	875.3	3,031.4	56,852.0
Coastal MWD	40,530.3	62.4	.0	40,592.7	.0	.0	.0	.0	232.5	40,825.2
Eastern MWD	42,312.7	805.3	.0	43,118.0	-459.2	.0	1,330.9	871.7	1,019.6	45,009.3
City of Fullerton	4,257.3	4.3	.0	4,261.6	.0	.0	.0	.0	.0	4,261.6
Foothill MWD	6,337.8	.0	1,113.1	7,450.9	.0	.0	.0	.0	425.1	7,876.0
City of Glendale	19,619.4	.0	.0	19,619.4	.0	.0	.0	.0	883.6	20,503.0
City of Los Angeles	32,262.6	.0	9,296.6	41,559.2	32,633.5	.0	16,235.1	48,868.6	806.0	91,233.8
City of Long Beach	26,307.5	.0	9,518.3	35,825.8	.0	.0	.0	.0	822.0	36,647.8
Las Virgenes MWD	11,794.2	41.6	2,203.5	14,039.3	.0	.0	.0	.0	313.1	14,352.4
MWD of Orange County	104,936.0	1,025.8	6,612.6	112,574.4	1,127.1	1,356.9	19,029.2	21,513.2	11,839.1	145,926.7
City of Pasadena	13,555.3	.0	388.6	13,943.9	.0	.0	.0	.0	.0	13,943.9
Three Valleys MWD	29,603.8	.0	.0	29,603.8	14,295.7	82.0	2,304.5	16,682.2	166.3	46,452.3
City of Santa Ana	5,410.7	.0	4,836.9	10,247.6	.0	.0	.0	.0	266.7	10,514.3
San Diego CWA	91,748.9	46,430.6	6,950.8	145,130.3	165,291.6	5,929.8	33,065.3	204,286.7	3,936.5	353,353.5
City of San Fernando	.2	.0	.0	.2	.0	.0	.0	.0	.0	.2
City of Santa Monica	8,259.4	.0	.0	8,259.4	.0	.0	.0	.0	.0	8,259.4
City of San Marino	1,152.5	.0	.0	1,152.5	.0	.0	.0	.0	.0	1,152.5
City of Torrance	15,144.2	.0	.0	15,144.2	.0	.0	.0	.0	.0	15,144.2
Upper San Gabriel Valley	5,036.8	.0	.0	5,036.8	.0	.0	21,409.6	21,409.6	.0	26,446.4
West Basin MWD	106,255.5	.0	1,252.1	107,507.6	.0	.0	.0	.0	14,667.3	122,174.9
Western MWD of Riverside	13,531.5	12,043.1	897.0	26,471.6	8,255.0	7,012.2	.0	15,267.2	2,933.8	44,672.6
GRAND TOTAL:	713,228.0	64,638.9	51,952.2	829,819.1	259,817.8	14,458.1	106,528.1	379,804.0	43,003.6	1,252,626.7

FULL SERVICE INCLUDES SEAWATER BARRIER.
RECL. INCLUDES DESALTER AND GWR.

**WATER INFORMATION SYSTEM (WINS)
REVENUE ACTIVITY FOR THE MONTH OF MARCH 1998
TABLE C**

AGENCY	TREATED			DOLLAR AMOUNT (\$)	UNTREATED			DOLLAR AMOUNT (\$)	RECL (\$)	SPECIAL (\$)	TOTAL DOLLAR AMOUNT (\$)
	FULL SERVICE (\$)	AGR (\$)	SSS (\$)		FULL SERVICE (\$)	AGR (\$)	SSS (\$)				
City of Anaheim	209,897.00	.00	3,277.00	213,174.00	226,326.50	.00	18,057.50	244,384.00	.00	5,150.00	462,708.00
City of Burbank	572,497.30	.00	.00	572,497.30	.00	.00	.00	.00	-575.00	44,323.54	616,245.84
City of Beverly Hills	396,390.70	.00	.00	396,390.70	.00	.00	.00	.00	.00	59,006.50	455,397.20
City of Compton	133,049.70	.00	.00	133,049.70	.00	.00	.00	.00	.00	4,687.03	137,736.73
Calleguas MWD	2,349,553.40	10,143.00	-452,400.00	1,907,296.40	.00	.00	.00	.00	-2,525.60	203,114.38	2,107,885.18
State of California	.00	.00	.00	.00	-4,222.90	.00	.00	-4,222.90	.00	-492.10	-4,715.00
Chino Basin MWD	.00	.00	.00	.00	856,515.80	188.80	.00	856,704.60	.00	30,138.21	886,842.81
Central Basin MWD	1,554,229.10	.00	256,767.90	1,810,997.00	.00	.00	61,861.50	61,861.50	-21,392.80	46,165.50	1,897,631.20
Coastal MWD	1,037,158.40	.00	.00	1,037,158.40	.00	.00	.00	.00	.00	95,346.94	1,132,505.34
Eastern MWD	1,182,103.70	5,203.80	.00	1,187,307.50	-160,260.80	.00	.00	-160,260.80	-7,469.00	1,300.00	1,020,877.70
City of Fullerton	3,835.90	.00	.00	3,835.90	.00	.00	.00	.00	.00	2,975.00	6,810.90
Foothill MWD	150,936.20	.00	82,608.60	233,544.80	.00	.00	.00	.00	-11,935.00	12,129.06	233,738.86
City of Glendale	683,135.00	.00	.00	683,135.00	.00	.00	.00	.00	-1,675.00	77,004.83	758,464.83
City of Los Angeles	1,132,150.80	.00	631,678.00	1,763,828.80	-831,003.90	.00	549,833.40	-281,170.50	-1,232.00	749,274.67	2,230,700.97
City of Long Beach	1,015,608.40	.00	664,216.00	1,679,824.40	.00	.00	.00	.00	-1,232.00	8,250.00	1,686,842.40
Las Virgenes MWD	407,553.60	2,440.20	.00	409,993.80	.00	.00	.00	.00	.00	41,162.21	451,156.01
MWD of Orange County	2,969,115.90	8,232.00	793,811.20	3,771,159.10	1,361.10	4,153.60	-1,421.30	4,093.40	-55,588.20	241,175.89	3,960,840.19
City of Pasadena	804,073.60	.00	.00	804,073.60	.00	.00	.00	.00	.00	-7,225.00	796,848.60
Three Valleys MWD	460,006.30	.00	.00	460,006.30	320,975.30	708.00	.00	321,683.30	.00	10,608.00	792,297.60
City of Santa Ana	387,555.20	.00	349,334.00	736,889.20	.00	.00	.00	.00	.00	24,492.27	761,381.47
San Diego CWA	3,521,744.10	98,137.20	266,862.00	3,886,743.30	4,050,459.10	62,540.00	229,388.50	4,342,387.60	-17,415.30	-5,934.10	8,205,781.50
City of San Fernando	.00	.00	.00	.00	.00	.00	.00	.00	.00	275.00	275.00
City of Santa Monica	332,128.60	.00	.00	332,128.60	.00	.00	.00	.00	.00	23,645.50	355,774.10
City of San Marino	.00	.00	.00	.00	.00	.00	.00	.00	.00	2,921.12	2,921.12
City of Torrance	622,450.20	.00	.00	622,450.20	.00	.00	.00	.00	.00	3,050.00	625,500.20
Upper San Gabriel Valley	133,911.70	.00	.00	133,911.70	.00	.00	.00	.00	.00	-112,996.65	20,915.05
West Basin MWD	4,047,693.40	.00	52,721.00	4,100,414.40	.00	.00	.00	.00	-354,600.00	696,535.67	4,442,350.07
Western MWD of Riverside	279,805.20	11,936.40	.00	291,741.60	134,783.80	1,604.80	.00	136,388.60	.00	6,151.92	434,282.12
TOTAL :	24,386,583.40	136,092.60	2,648,875.70	27,171,551.70	4,694,934.00	69,195.20	857,719.60	5,521,848.80	-475,639.90	2,262,235.39	34,479,995.99

SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATION, RTS, CMC, ETC.
FULL SERVICE INCLUDES SEAWATER BARRIER.
RECL. INCLUDES DESALTER AND GWR.

**WATER INFORMATION SYSTEM (WINS)
REVENUE ACTIVITY FOR THE FISCAL YEAR THRU THE MONTH OF MARCH 1998
TABLE C**

AGENCY	TREATED			DOLLAR AMOUNT (\$)	UNTREATED			DOLLAR AMOUNT (\$)	RECL (\$)	SPECIAL (\$)	TOTAL DOLLAR AMOUNT (\$)
	FULL SERVICE (\$)	AGR (\$)	SSS (\$)		FULL SERVICE (\$)	AGR (\$)	SSS (\$)				
City of Anaheim	2,009,235.80	.00	332,195.00	2,341,430.80	2,653,377.20	.00	263,546.30	2,916,923.50	.00	182,355.10	5,440,709.40
City of Burbank	4,169,494.00	.00	.00	4,169,494.00	.00	.00	.00	.00	-170,670.40	331,616.85	4,330,440.45
City of Beverly Hills	4,283,709.00	.00	.00	4,283,709.00	.00	.00	.00	.00	.00	497,267.52	4,780,976.52
City of Compton	1,195,421.60	.00	.00	1,195,421.60	.00	.00	.00	.00	.00	32,175.28	1,227,596.88
Calleguas MWD	26,355,262.10	1,242,385.20	512,082.00	28,109,729.30	.00	.00	.00	.00	-74,520.60	1,395,652.12	29,430,860.82
State of California	.00	.00	.00	.00	6,735.70	.00	.00	6,735.70	.00	2,109.30	8,845.00
Chino Basin MWD	.00	.00	.00	.00	10,843,887.40	18,219.20	2,358,771.10	13,220,877.70	.00	20,430.06	13,241,307.76
Central Basin MWD	20,246,716.40	.00	1,731,834.50	21,978,550.90	.00	.00	203,944.90	203,944.90	-709,926.80	-142,275.77	21,330,293.23
Coastal MWD	17,468,559.30	18,345.60	.00	17,486,904.90	.00	.00	.00	.00	-35,805.00	750,384.29	18,201,484.19
Eastern MWD	18,224,584.20	248,947.70	.00	18,473,531.90	-160,260.80	.00	310,099.70	149,838.90	-157,018.40	-1,296,512.03	17,169,840.37
City of Fullerton	1,834,896.30	1,264.20	.00	1,836,160.50	.00	.00	.00	.00	.00	-17,506.87	1,818,653.63
Foothill MWD	2,731,591.80	.00	323,226.90	3,054,818.70	.00	.00	.00	.00	-65,465.40	89,304.06	3,078,657.36
City of Glendale	8,455,961.40	.00	.00	8,455,961.40	.00	.00	.00	.00	-190,256.80	628,854.52	8,894,559.12
City of Los Angeles	13,904,814.10	.00	2,696,307.20	16,601,121.30	11,385,231.50	.00	3,785,866.30	15,171,097.80	-124,124.00	261,947.29	31,910,042.39
City of Long Beach	11,338,532.50	.00	2,760,307.00	14,098,839.50	.00	.00	.00	.00	-126,588.00	209,213.38	14,181,464.88
Las Virgenes MWD	5,083,300.20	12,230.40	639,015.00	5,734,545.60	.00	.00	.00	.00	-48,217.40	321,356.16	6,007,684.36
MWD of Orange County	45,227,145.00	301,244.70	1,922,886.40	47,451,276.10	393,357.90	320,228.40	4,433,804.40	5,147,390.70	-1,854,867.80	1,860,409.09	52,604,208.09
City of Pasadena	5,842,301.80	.00	112,720.00	5,955,021.80	.00	.00	.00	.00	.00	243,127.07	6,198,148.87
Three Valleys MWD	12,759,237.80	.00	.00	12,759,237.80	4,989,199.30	19,352.00	536,948.50	5,545,499.80	-25,610.20	368,146.04	18,647,273.44
City of Santa Ana	2,332,011.70	.00	1,402,701.00	3,734,712.70	.00	.00	.00	.00	-66,675.00	171,435.45	3,839,473.15
San Diego CWA	39,543,957.90	13,650,596.40	2,033,483.40	55,228,037.70	57,686,768.40	1,399,432.80	7,776,975.50	66,863,176.70	-775,245.30	2,889,130.72	124,205,099.82
City of San Fernando	86.20	.00	.00	86.20	.00	.00	.00	.00	.00	-32,123.00	-32,036.80
City of Santa Monica	3,559,801.40	.00	.00	3,559,801.40	.00	.00	.00	.00	.00	198,732.50	3,758,533.90
City of San Marino	496,727.50	.00	.00	496,727.50	.00	.00	.00	.00	.00	22,266.46	518,993.96
City of Torrance	6,527,150.20	.00	.00	6,527,150.20	.00	.00	.00	.00	.00	289,782.44	6,816,932.64
Upper San Gabriel Valley	2,170,860.80	.00	.00	2,170,860.80	.00	.00	4,988,436.80	4,988,436.80	.00	-1,060,458.46	6,098,839.14
West Basin MWD	45,795,864.50	.00	363,663.60	46,159,528.10	.00	.00	.00	.00	-3,666,825.00	5,664,743.76	48,157,446.86
Western MWD of Riverside	5,829,194.50	3,543,553.40	260,130.00	9,632,877.90	2,880,995.00	1,654,879.20	.00	4,535,874.20	-601,444.50	-189,345.89	13,377,961.71
TOTAL :	307,386,418.00	19,018,567.60	16,090,552.00	341,495,537.60	90,679,291.60	3,412,111.60	24,658,393.50	118,749,796.70	-8,693,260.60	13,692,217.44	465,244,291.14

SPECIALS REPRESENT MONETARY DEBITS AND CREDITS FOR CONSERVATION, RTS, CMC, ETC.
FULL SERVICE INCLUDES SEAWATER BARRIER.
RECL. INCLUDES DESALTER AND GWR.

The Metropolitan Water District of Southern California

TABLE D

MONTHLY ANALYSES OF THE DISTRICT WATER SUPPLIES -- FEBRUARY 1998

CONSTITUENTS	SYMBOLS AND UNITS	SOURCE WATERS							FILTRATION PLANT EFFLUENTS					
		LAKE HAVASU NEAR WHITSETT INTAKE	SAN JACINTO TUNNEL WEST PORTAL	LAKE MATH- EWS	LAKE CASTAIC	LAKE SILVER- WOOD	LAKE PERRIS	LAKE SKIN- NER	WEY- MOUTH PLANT	DIEMER PLANT	JENSEN PLANT	SKIN- NER PLANT NO. 1	SKIN- NER PLANT NO. 2	MILLS PLANT
		2/3/98	2/1/98	2/1/98	Feb-98	2/1/98	2/1/98	Feb-98	Feb-98	Feb-98	Feb-98	Feb-98	Feb-98	Feb-98
MONTH OR DAY OF SAMPLING	→													
SILICA	SiO ₂ mg/L	9.6	9.4	10.1	14.2	14.8	6.5	9.6	10.5	10.8	13.9	9.2	9.3	14.3
CALCIUM	Ca mg/L	75	75	75	31	19	28	75	74	74	31	74	74	19
MAGNESIUM	Mg mg/L	26.5	27	28	14	12	16.5	26.5	26.5	27.5	13.5	26.5	26.5	11
SODIUM	Na mg/L	85	87	92	44	47	71	86	89	90	46	85	85	48
POTASSIUM	K mg/L	3.9	4.2	4.3	2.8	2.7	4.0	4.3	4.5	4.4	2.8	4.2	4.2	2.9
CARBONATE	CO ₃ mg/L	0	0	0	0	0	1	0	0	0	0	0	0	2
BICARBONATE	HCO ₃ mg/L	163	162	161	104	93	122	159	150	155	105	154	156	77
SULFATE	SO ₄ mg/L	236	239	246	70	28	52	238	239	241	72	239	237	26
CHLORIDE	Cl mg/L	77	78	83	51	65	93	81	83	83	53	83	81	73
NITRATE	NO ₃ mg/L	1.1	1.0	0.8	2.1	2.4	0.3	0.8	1.0	1.0	2.0	0.8	--	2.6
FLUORIDE	F mg/L	0.35	0.36	0.34	0.24	0.14	0.20	0.35	0.35	0.34	0.24	0.34	--	0.13
BORON	B mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL DISSOLVED SOLIDS	TDS mg/L	596	602	620	282	237	334	600	603	610	286	598	595	238
TOTAL HARDNESS AS CaCO ₃	mg/L	296	298	303	135	97	138	296	294	298	133	294	294	93
TOTAL ALKALINITY AS CaCO ₃	mg/L	134	133	132	85	76	102	130	123	127	86	126	128	67
FREE CARBON DIOXIDE	CO ₂ mg/L	1.8	1.4	1.7	1.7	1.3	0.7	1.2	2.0	2.6	0.9	2.3	2.4	0.5
H ⁺ CONCENTRATION	pH	8.18	8.30	8.21	8.01	8.06	8.46	8.36	8.09	8.00	8.29	8.04	8.04	8.44
SPECIFIC CONDUCTANCE	µmho/cm	948	957	981	490	431	610	963	968	972	496	958	955	436
COLOR	CU	4	6	6	11	12	8	7	1	2	1	3	--	3
FILTER EFFLUENT TURBIDITY	NTU	--	--	--	--	--	--	--	0.07	0.07	0.05	0.10	--	0.06
TURBIDITY	NTU	1.3	0.80	1.8	7.3	1.9	0.70	2.2	0.06	0.07	0.05	0.09	0.07	0.06
TEMPERATURE	°C	13	12	12	12	9	14	13	13	13	12	13	14	12
BROMIDE*	Br mg/L	0.07	0.07	0.07	0.14	0.21	0.28	0.07	0.07	0.07	0.14	0.07	--	0.19
TOTAL ORGANIC CARBON	TOC mg/L	2.58	3.01	2.90	2.39	2.56	4.11	2.42	2.16	2.24	2.38	2.32	--	2.05
TOTAL TRIHALOMETHANES	TTHMs µg/L	--	--	--	--	--	--	--	29	30	51	34	24	66
PCT. STATE PROJECT WATER	%SPW %	0	0	0	100	100	100	0	0	0	100	0	0	100

*Treatment plant bromides are influent values.

TABLE E, GENERAL MANAGER'S MONTHLY REPORT

March 1998

Storage in Colorado River Reservoirs at the end of the Month

Reservoir	(ACRE-FEET)				
	Usable Contents Above Lowest Outlet	Percent Of Usable Capacity	Usable Contents Above Inactive ¹ Storage	Change * in Contents During Month	Change * in Contents Since Mar-1997
<u>Upper Basin</u>					
Fontenelle	116,200	34%	0	(18,600)	(5,200)
Flaming Gorge	3,235,100	86%	3,001,600	(12,800)	51,900
Blue Mesa	452,400	55%	371,300	(21,000)	106,300
Morrow Point	109,700	94%	34,800	1,700	(400)
Crystal	16,300	93%	11,700	(400)	(300)
Navajo	1,532,400	90%	872,500	32,600	250,100
Powell	20,273,500	83%	16,276,300	(356,500)	1,355,600
Subtotal	25,735,600	83%	20,568,200	(375,000)	1,758,000
<u>Lower Basin</u>					
Mead	25,046,000	96%	15,022,000	32,000	2,260,000
Mohave	1,656,000	92%	1,438,000	(1,900)	(70,800)
Havasu	542,000	88%	102,600	(32,300)	(7,700)
Subtotal	27,244,000	95%	16,562,600	(2,200)	2,181,500
Basin Total	52,979,600	89%	37,130,800	(377,200)	3,939,500

¹ Inactive storage is the minimum amount of storage above the dead storage pool for maintaining the respective minimum reservoir elevations required for surface diversions or minimum power pool, whichever is greater.

* Numbers within parentheses are negative numbers.

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

March 1998

SUMMARY OF PROGRESS

	<u>Construction Contracts</u>	<u>Procurement Contracts</u>
Number of Contracts	21	6
Total Bid Amount of Contracts in Progress	\$1,022,472,499	\$48,745,700
Number of Contracts Awarded this Month	1	0
Total Bid Amount of Contracts Awarded this Month	11,270,000	0
Contract Gross Earnings this Month	23,295,624	3,956,783

AWARDED CONTRACTS

Contract No. 1497, in the amount of \$11, 270,000, was awarded to J. F. Shea Co., Inc., to provide all labor, materials, equipment, and services necessary for constructing the North Rim at the Eastside Reservoir Project site. The work includes clearing, grubbing, and stripping; excavating the access portal and adits; portal backfilling; instrumentation; shotcreting; grouting; constructing roads; and all other appurtenant work.

COMPLETED CONTRACTS

Construction

Contract No. 1491, seismic upgrade and rock anchor installation of discharge pipelines at Hinds Pumping Plant, was completed on March 30, 1998; the Notice of Completion was recorded on April 3, 1998.

Procurement

No procurement contracts were completed this month.

SUMMARIES/STATUS OF CONTRACTS

A tabular summary of current construction contracts is included on pages 4 through 6 of this report. Details of the status of current construction contracts are shown on pages 9 through 29 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 7 of this report.

A tabular summary of procurement contracts is included on page 8 of this report.

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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	Extra Work to Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		ESRP CONTRACTS:									
1452	1326	West Dam, Saddle Dam, and Forebay	Atkinson-Washington-Zachry, A Joint Venture	\$384,150,000	\$7,627,520	\$263,770,621	\$10,474,546	03/26/96	06/07/99	06/99	66
1471	1345	P-1 Pressure Tunnel	Atkinson-Washington-Zachry, A Joint Venture	13,103,000	1,105,687	11,204,367	220,437	12/02/96	07/01/98	07/98	84
1473	1328	East Dam	Kiewit-Granite, A Joint Venture	275,511,090	8,405,183	175,633,714	854,738	12/19/96	07/01/99	07/99	64
1477	1342	P-1 Pumping Plant	Advanco Constructors, Div. of Zurn Constructors, Inc.	62,200,000	2,131,949	21,591,830	828,888	02/19/97	02/12/99	02/99	33
1482	1343	ESRP Inlet/Outlet Tower	Atkinson-Washington-Zachry, A Joint Venture	40,598,600	1,046,173	10,579,376	21,123	03/10/97	09/27/99	09/99	26
1492	1341	ESRP Inland Feeder Pressure Control Structure	Advanco Constructors, Div. of Zurn Constructors, Inc.	22,369,407	391,854	2,906,184	4,271	10/10/97	10/04/99	10/99	13
1497	1329	ESRP North Rim	J. F. Shea Co., Inc.	11,270,000	0	0	0	--	--	--	0
1498	1374	ESRP Secondary Inlet	J. F. Shea Co., Inc.	16,178,102	0	0	0	--	--	--	0
			ESRP TOTALS	\$825,380,199	\$20,708,366	\$485,686,092	\$12,404,003				
		INLAND FEEDER CONTRACTS:									
1480	1358	Arrowhead East Tunnel	Shank/Balfour Beatty	\$88,373,316	\$677,396	\$14,821,185	\$199,794	04/23/97	03/01/02	03/02	17

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	Extra Work to Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
1481	1382	Inland Feeder Mentone Pipeline Station 1019 to 1053	Kenko, Inc., dba McGrand & Associates	3,288,750	38,200	3,293,097	17,347	02/18/97	04/20/98	04/98	99
1489	1300	Inland Feeder Riverside Pipeline - South	Steve P. Rados, Inc.	34,400,000	296,897	615,072	8,060	12/04/97	12/31/99	12/99	2
1490	1349	Inland Feeder Riverside Pipeline - North	L. H. Woods & Sons, Inc.	42,651,552	821,038	1,712,407	8,117	12/03/97	04/14/00	04/00	4
			INLAND FDR TOTALS	\$168,713,618	\$1,833,531	\$20,441,761	\$233,318				
		MISCELLANEOUS CONTRACTS:									
1487	1388	Joseph Jensen Filtration Plant Finished Water Reservoir #2 Repairs	Serrot Corporation	\$1,092,999	\$0	\$369,354	\$79,814	07/18/97	10/23/98	10/98	36
1495	1394	Joseph Jensen Filtration Plant, Module No.1 Filter Materials Replacement	Kiewit Pacific Co.	2,468,600	119,789	263,376	0	01/21/98	10/01/98	10/98	11
1499	1395A	Joseph Jensen Filtration Plant Washwater Tank No. 1 Roof Repair	Pitt-Des Moines, Inc.	513,600	14,500	14,500	0	03/17/98	01/14/99	01/99	3
1466	1279A	Water Quality Laboratory Expansion	S. J. Amoroso Construction Co., Inc.	10,530,000	40,344	9,976,763	169,360	09/03/96	06/05/98	06/98	93
1494	1316A	Standby Emergency Power Additions	Robert Mills dba Mills Construction	1,162,000	113,078	316,578	0	10/24/97	10/20/98	10/98	27

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	Extra Work to Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		F. E. Weymouth Plant	Company								
1476	1317A	Standby Emergency Power Additions, Robert B. Diemer Filtration Plant	Pickard Construction, Inc.	688,900	24,626	565,319	19,521	01/09/97	05/29/98	05/98	79
1472	1254	Garvey Reservoir Composite Lining Construction	Serrot Corporation	9,190,000	0	9,400,678	226,657	11/18/96	04/20/98	04/98	99
1486	1318	Protective Roof Structure for San Jacinto Diversion Structure	Advanco Constructors, Div. of Zurn Constructors, Inc.	739,826	207,650	630,900	41,000	09/18/97	06/05/98	06/98	80
1491	1391	Seismic Upgrade and Rock Anchor Installation of Discharge Pipelines at Hinds Pumping Plant	Mitchell Pacific Constructors, Inc.	1,992,757	233,740	1,992,757	0	09/23/97	03/30/98 ACTUAL	04/03/98 NOC FILED	100
			MISC. CONT. TOTALS	\$28,378,682	\$753,727	\$23,530,225	\$536,352				

Form 42-18 12-82

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

SUMMARY OF CONSTRUCTION CONTRACTS COMPLETED THIS MONTH

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

Note: Contract No.1491 was completed this month; however, final payment is pending.

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THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

SUMMARY OF CONSTRUCTION CONTRACTS COMPLETED THIS MONTH PENDING FINAL PAYMENT

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
1491	1391	Seismic Upgrade and Rock Anchor Installation of Discharge Pipelines at Hinds Pumping Plant	Mitchell Pacific Constructors, Inc.	\$1,992,757	\$1,992,757	03/30/98	04/03/98	04/98

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
		ESRP CONTRACTS:							
1454	1293A	Eastside Reservoir Project Pumps, Motors, and Related Equipment for the P-1 Pumping Plant	Nissho Iwai American Corporation	\$22,600,000	\$3,898,699	\$16,087,283	02/12/96	07/31/98	Four month time extension granted for final delivery.
1457	1339	Eastside Reservoir Project Butterfly Valves	Nissho Iwai American Corporation	11,880,000	58,084	12,829,940	02/12/96	07/31/98	\$194,886 of earnings to date is for extra work. Six month extension granted for delivery of one valve.
1462	1347	Eastside Reservoir Project Fixed Cone Valves and Spherical Valve	Kvaerner Hydro Power, Inc.	2,093,000	0	1,452,097	05/22/96	05/28/98	\$33,698 of earnings to date is for extra work. Final delivery adjusted approx. two months to reflect delayed delivery of the spherical valve.
1470	1340	Eastside Reservoir Project Electric Motor-Operated Sleeve Valves	Nissho Iwai American Corporation	2,722,000	0	1,363,709	09/16/96	07/23/98	\$1,200 of earnings to date is for extra work.
		INLAND FEEDER CONTRACTS:							
1496	1403	Inland Feeder Arrowhead West Fabricated Steel Pipe and Fittings Station 251+35 to Station 286+43.75	Ameron International	1,820,700	0	0	02/19/98	09/25/98	
		MISCELLANEOUS CONTRACTS:							
1396A	1207	Four Computer-Based Control Systems	Systems Integrated	7,630,000	0	12,677,711	01/10/95	12/15/96 Final Delivery	Change orders for this contract have been authorized. Monthly earnings are for extra work.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project West Dam, Saddle Dam, and Forebay		
CONTRACTOR	Atkinson-Washington-Zachry, A Joint Venture		
SPECIFICATIONS NO.	1326	BID AMOUNT	\$384,150,000
CONTRACT NO.	1452	EXTRA WORK TO DATE	10,474,546
CONTRACT STARTING DATE	March 26, 1996	EARNINGS THIS MONTH	7,627,520
CONTRACT COMPLETION DATE	June 7, 1999	EARNINGS TO DATE	263,770,621
ESTIMATED COMPLETION DATE	June 1999	ESTIMATED PERCENT COMPLETE	66

SCOPE OF WORK

Work includes clearing, grubbing and stripping; demolition; excavation; foundation dewatering; rock foundation treatment; plastic concrete cutoff in the West Dam foundation; foundation grouting; foundation clean-up; dam embankment and instrumentation; Forebay embankment, liner structures and road; and all other appurtenant work for the Eastside Reservoir Project West Dam, Saddle Dam, and Forebay.

CONSTRUCTION PROGRESS

Production of six-inch-minus material at the on-site rock processing plant and hauling to the East Dam stockpile continued. The sixth interim delivery of six-inch-minus material for Milestone No. 5 was completed. The interim delivery date for Milestone No. 7 will be approximately July 15, 1998.

Dewatering of the West Dam excavation continued on a limited basis for construction water purposes, and re-injection of the water west of the San Diego Canal continued. Dewatering of Borrow Area BA-1 West began. Limited excavation of common material on both abutments of the West Dam foundation continued, and limited rock excavation in the boat launch area continued.

West Dam foundation cleaning and placement of backfill concrete continued on a limited basis. Production drilling of grout holes and grouting of curtain holes on the north and south abutments in the foundation continued. Drilling and grouting of consolidation holes for the West Dam are considered substantially complete. Drilling of the drain holes in the lower adit continued this period.

Placement of West Dam embankment continued as follows: core and core base embankment in the middle and south channels; placement of rock shell embankment upstream and downstream in the north, middle, and south channels; placement of random fill downstream in the north, middle, and south channels; placement of upstream and downstream filters in the middle and south channels; and limited random fill in the canyon adjacent to the south abutment.

Construction of the Forebay concrete grade beam, liner, and canal connection continued. Limited clean-up of the Saddle Dam foundation and embankment surface began. No activity in the Inlet/Outlet Channel or lower adit occurred this period.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project P-1 Pressure Tunnel		
CONTRACTOR	Atkinson-Washington-Zachry, A Joint Venture		
SPECIFICATIONS NO.	1345	BID AMOUNT	\$13,103,000
CONTRACT NO.	1471	EXTRA WORK TO DATE	220,437
CONTRACT STARTING DATE	December 2, 1996	EARNINGS THIS MONTH	1,105,687
CONTRACT COMPLETION DATE	July 1, 1998	EARNINGS TO DATE	11,204,367
ESTIMATED COMPLETION DATE	July 1998	ESTIMATED PERCENT COMPLETE	84

SCOPE OF WORK

Construction of the P-1 Pressure Tunnel for the Eastside Reservoir Project. The project includes excavating an 18 to 20-foot wide tunnel; excavating the west portal; rock bolting and fiber reinforced shotcreting; installing cement grouted rock bolts with shotcrete or steel sets; installing of steel liner and backfill concrete; cement mortar lining; and all other work shown, specified or otherwise required to complete the work.

CONSTRUCTION PROGRESS

Delivery and installation of the tunnel liner sections continued. Welding of the tunnel liner joints between Stations 18+73 and 10+09 was completed.

Tunnel liner encasement was completed between Stations 19+29 and 10+17.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project East Dam		
CONTRACTOR	Kiewit-Granite, A Joint Venture		
SPECIFICATIONS NO.	1328	BID AMOUNT	\$275,511,090
CONTRACT NO.	1473	EXTRA WORK TO DATE	854,738
CONTRACT STARTING DATE	December 19, 1996	EARNINGS THIS MONTH	8,405,183
CONTRACT COMPLETION DATE	July 1, 1999	EARNINGS TO DATE	175,633,714
ESTIMATED COMPLETION DATE	July 1999	ESTIMATED PERCENT COMPLETE	64

SCOPE OF WORK

Construction of the Eastside Reservoir Project's East Dam, including clearing, grubbing and stripping; demolition; excavation; foundation dewatering; rock foundation treatment; concrete cutoff; foundation grouting; foundation clean-up; dam embankment construction; instrumentation installation; detention basin dike construction; low flow channel, unlined and concrete lined; structures; roads; and all other work shown, specified or otherwise required to complete the work.

CONSTRUCTION PROGRESS

Construction of the East Recreation Area continued. Additional Recreation Area fill placement was completed.

Dewatering continued in the south half of the dam. Excavation of Common I, Common II, and unrippable rock excavation continued within the dam footprint. Rock foundation cleaning in the shell areas continued, and final rock foundation cleaning began in the north dam area.

Placement of Zone 3 and Zone 3A material continued in the shell areas. Placement of Zone 1A and Zone 2 in the core began. Placement of Zones 2A, 5, 6, and 7 continued.

Additional downstream grouting to verify consolidation grouting continued in the north half of the dam.

Subcontractor, Kajima/SMW Seiko, A Joint Venture, continued construction of the Concrete Cutoff in the south half of the dam. Subcontractor, Sudhakar/IDM West, A Joint Venture, continued foundation drilling and grouting. Subcontractor, Smith and Reynolds, continued landscape screening near the Goodhart Canyon Detention Basin.

Excavation and fill operations continued in the Northeast Marina Area.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project P-1 Pumping Plant		
CONTRACTOR	Advanco Constructors, Div. of Zurn Constructors, Inc.		
SPECIFICATIONS NO.	1342	BID AMOUNT	\$62,200,000
CONTRACT NO.	1477	EXTRA WORK TO DATE	828,888
CONTRACT STARTING DATE	February 19, 1997	EARNINGS THIS MONTH	2,131,949
CONTRACT COMPLETION DATE	February 12, 1999	EARNINGS TO DATE	21,591,830
ESTIMATED COMPLETION DATE	February 1999	ESTIMATED PERCENT COMPLETE	33

SCOPE OF WORK

Provide all labor materials, equipment, and services necessary to construct the P-1 Pumping Plant at the Eastside Reservoir Project site.

CONSTRUCTION PROGRESS

Erection of forms, installation of reinforcing steel, and placement of structural concrete continued for the slabs, walls, and decks in the pumphouse, pressure control structure, and control center. Concrete encasements and shearkey placement continued for the pressure conduits and fixed cone valve vault. Backfill concrete placement continued around the north and east sides of the pressure control structure, to subgrade elevation in the control center, and at the south side of the pumphouse wall.

Pipe installation in the pumphouse and control center continued. Welding and backfilling of the low level outlet and pressure control conduits continued. Drilling, blasting, and excavation for the butterfly valve vault and pumphouse conduit were completed. Drilling and blasting began at the substation for the bus support and fence post foundations.

Electrical conduit and grounding grid installation continued in the pumphouse, control center, and pressure control structure walls. Manhole installation continued in the substation.

The contractor continued to receive Metropolitan-Furnished Equipment (MFE) and placed it in the MFE storage building.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF Eastside Reservoir Project Inlet/Outlet Tower
CONTRACTOR Atkinson-Washington-Zachry, A Joint Venture

SPECIFICATIONS NO.	1343	BID AMOUNT	\$40,598,600
CONTRACT NO.	1482	EXTRA WORK TO DATE	21,123
CONTRACT STARTING DATE	March 10, 1997	EARNINGS THIS MONTH	1,046,173
CONTRACT COMPLETION DATE	September 27, 1999	EARNINGS TO DATE	10,579,376
ESTIMATED COMPLETION DATE	September 1999	ESTIMATED PERCENT COMPLETE	26

SCOPE OF WORK

Provide all labor, materials, equipment, and services necessary to construct the Inlet/Outlet Tower at the Eastside Reservoir Project site.

CONSTRUCTION PROGRESS

Structural mass concrete was placed for the third level of the west wet well wall and the second and third levels of the east wet well wall. Structural mass concrete was also placed for the first level of the valve tower west wall and the emergency gate base slab.

Placement of concrete for the bridge abutment continued.

Five mass concrete placements were completed on the east and west sides of the tower structure.

Assembly and alignment of the 84-inch-diameter pipes on Valve Tier No. 9 were completed.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project Inland Feeder Pressure Control Structure		
CONTRACTOR	Advanco Constructors, Div. of Zurn Constructors, Inc.		
SPECIFICATIONS NO.	1341	BID AMOUNT	\$22,369,407
CONTRACT NO.	1492	EXTRA WORK TO DATE	4,271
CONTRACT STARTING DATE	October 10, 1997	EARNINGS THIS MONTH	391,854
CONTRACT COMPLETION DATE	October 4, 1999	EARNINGS TO DATE	2,906,184
ESTIMATED COMPLETION DATE	October 1999	ESTIMATED PERCENT COMPLETE	13

SCOPE OF WORK

Provide all labor, materials, equipment, and services necessary to construct the Inland Feeder Pressure Control Structure at the Eastside Reservoir Project site.

CONSTRUCTION PROGRESS

The current schedule indicates procurement and delivery of the 133.5-inch manifold pipe for the Pressure Control Structure as the critical path. A union trades strike began February 12, 1998, which may affect the progress of this activity and delay completion of all work.

Installation of reinforcing steel and placement of structural concrete for Valve Vaults Nos. 1 and 2 slabs on grade, and for Valve Vaults Nos. 2 and 3 butterfly valve pedestals were completed. Fabrication of concrete formwork for the Pressure Control Structure and valve vaults continued. Assembly of the Manitowoc 4100 crane for installation of the large diameter pipe was completed.

Installation of the 8-inch toe drain and 24-inch outlet pipe of the Detention Basin Spillway began. Fine grading and erection of the edge forms for the slab on grade at the Colorado River Aqueduct Channel and storm drain flume began.

Rough grading and installation of reinforcing steel for the slab on grade at the Colorado River Aqueduct Channel and storm drain flume were completed. Removal of the surcharge fill between Stations Nos. 10+78 and 15+00 of the Inland Feeder Pipeline was completed. Trimming of the east embankment slopes and subgrade of the Detention Basin Spillway, including exporting of excess excavation material of the Detention Basin were completed. Trimming, scarification, and recompaction of fill material to 95 percent of the relative compaction of the subgrade for the Colorado River Aqueduct Channel Rejection Spillway began. Backfill of unclassified fill in the area of the Colorado River Aqueduct tie-in to the first and second barrels was completed.

Relocation of telephone lines and removal of power poles along Lakeview and Fifth Streets were completed.

Relocation of telephone lines and removal of power poles along Lakeview and Fifth Streets were completed.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Eastside Reservoir Project North Rim		
CONTRACTOR	J. F. Shea Co., Inc.		
SPECIFICATIONS NO.	1329	BID AMOUNT	\$11,270,000
CONTRACT NO.	1497	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	--	EARNINGS THIS MONTH	0
CONTRACT COMPLETION DATE	--	EARNINGS TO DATE	0
ESTIMATED COMPLETION DATE	--	ESTIMATED PERCENT COMPLETE	0

SCOPE OF WORK

Provide all labor, materials, equipment, and services necessary for constructing the North Rim at the Eastside Reservoir Project site. The work includes clearing, grubbing, and stripping; excavating the access portal and adits; portal backfilling; instrumentation; shotcreting; grouting; constructing roads; and all other appurtenant work.

CONSTRUCTION PROGRESS

The Notice of Award was mailed to the contractor on March 12, 1998.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF Eastside Reservoir Project Secondary Inlet

CONTRACTOR J. F. Shea Co., Inc.

SPECIFICATIONS NO.	1374	BID AMOUNT	\$16,178,102
CONTRACT NO.	1498	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	--	EARNINGS THIS MONTH	0
CONTRACT COMPLETION DATE	--	EARNINGS TO DATE	0
ESTIMATED COMPLETION DATE	--	ESTIMATED PERCENT COMPLETE	0

SCOPE OF WORK

Provide all labor, materials, equipment, and services necessary to construct the Secondary Inlet at the Eastside Reservoir Project site.

CONSTRUCTION PROGRESS

The Notice to Proceed was mailed to the contractor April 6, 1998.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Arrowhead East Tunnel		
CONTRACTOR	Shank/Balfour Beatty, a Joint Venture		
SPECIFICATIONS NO.	1358	BID AMOUNT	\$88,373,316
CONTRACT NO.	1480	EXTRA WORK TO DATE	199,794
CONTRACT STARTING DATE	April 23, 1997	EARNINGS THIS MONTH	677,396
CONTRACT COMPLETION DATE	March 1, 2002	EARNINGS TO DATE	14,821,185
ESTIMATED COMPLETION DATE	March 2002	ESTIMATED PERCENT COMPLETE	17

SCOPE OF WORK

The Arrowhead East section of the Inland Feeder Project includes approximately 27,350 feet of 12-foot diameter (finished) tunnel and 3,466 feet of 12-foot diameter pipeline from the contract limit line near Strawberry Creek Portal to the contract limit line near City Creek Portal. Work includes excavation and backfill, installation of pipeline and tunnel, protection and support of existing facilities, manholes, access facilities, and restoration.

CONSTRUCTION PROGRESS

The contractor completed assembly of the tunnel boring machine (TBM) cutter head and shield. Assembly of the TBM trailing gear, locomotives, and rail cars continued.

Construction of the muck car roll over pit continued. Installation of the muck conveyor system in the spoil area was completed.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Inland Feeder Mentone Pipeline Station 1019 to 1053		
CONTRACTOR	Kenko, Inc., dba McGrand & Associates		
SPECIFICATIONS NO.	1382	BID AMOUNT	\$3,288,750
CONTRACT NO.	1481	EXTRA WORK TO DATE	17,347
CONTRACT STARTING DATE	February 18, 1997	EARNINGS THIS MONTH	38,200
CONTRACT COMPLETION DATE	April 20, 1998	EARNINGS TO DATE	3,293,097
ESTIMATED COMPLETION DATE	April 1998	ESTIMATED PERCENT COMPLETE	99

SCOPE OF WORK

Construction of Mentone Pipeline Station 1019 to 1053 for the Inland Feeder Project, located in San Bernardino County. The project consists of installing 3,400 linear feet of 145.5-inch diameter Metropolitan-furnished fabricated steel pipe and fittings, improving approximately 1/2 mile of County Street (Opal Avenue), relocating and modifying 1,300 linear feet of a sewer line, relocating 300 linear feet of 48-inch diameter water line at Opal Avenue, constructing 60 feet long protective slab over existing Bear Valley Canal at Nice Avenue, removing 265 feet of existing unreinforced trapezoidal concrete canal, constructing manhole and appurtenant structures, relocating 900 linear feet of an 8-inch diameter water line, constructing temporary access roads, constructing a masonry wall, supporting and protecting existing utilities, replacing existing landscaping and sprinklers, maintaining street closures and detouring traffic, miscellaneous construction and all other work as required.

CONSTRUCTION PROGRESS

The contractor completed Opal Avenue street improvements and opened it to through traffic on March 2, 1998. The opening of Opal Avenue was the largest portion of work left to complete. Once opened, it rendered the project substantially complete. Charging of liquidated damages ceased on March 2, 1998.

The contractor continued to perform minor work, punch list items, and demobilization. Funds continue to be retained to cover the contractor's deductible for seven liability claims.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Inland Feeder Riverside Pipeline - South		
CONTRACTOR	Steve P. Rados, Inc.		
SPECIFICATIONS NO.	1300	BID AMOUNT	\$34,400,000
CONTRACT NO.	1489	EXTRA WORK TO DATE	8,060
CONTRACT STARTING DATE	December 4, 1997	EARNINGS THIS MONTH	296,897
CONTRACT COMPLETION DATE	December 31, 1999	EARNINGS TO DATE	615,072
ESTIMATED COMPLETION DATE	December 1999	ESTIMATED PERCENT COMPLETE	2

SCOPE OF WORK

Furnish and install approximately 7 miles of 145-1/2 inches inside diameter welded steel pipeline for the Inland Feeder Riverside Pipeline - South. The work includes the construction of a reinforced concrete box siphon, approximately 270 lineal feet in length, reinforced concrete transition structures with concrete-lined canal turnout from and return to the existing San Diego Canal, and appurtenant work.

CONSTRUCTION PROGRESS

The contractor continued with transmittal of submittals and mobilization of field offices, fuel tank, storage containers, and equipment in the contractor's fenced yard. Metropolitan's field office was established onsite this period. Manufacturing of steel pipe was suspended due to a strike at Ameron's (the pipe supplier) plant. The contractor continued clearing and grubbing, installing temporary fences, and pot-holing to find and support existing utilities.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Inland Feeder Riverside Pipeline - North		
CONTRACTOR	L. H. Woods & Sons, Inc.		
SPECIFICATIONS NO.	1349	BID AMOUNT	\$42,651,552
CONTRACT NO.	1490	EXTRA WORK TO DATE	8,117
CONTRACT STARTING DATE	December 3, 1997	EARNINGS THIS MONTH	821,038
CONTRACT COMPLETION DATE	April 14, 2000	EARNINGS TO DATE	1,712,407
ESTIMATED COMPLETION DATE	April 2000	ESTIMATED PERCENT COMPLETE	4

SCOPE OF WORK

Furnish and install approximately 8.5 miles of 145-1/2-inch-diameter welded steel pipeline and constructing roads, utility lines, drainage structures, a bridge, and other appurtenances for the Inland Feeder Riverside Pipeline - North.

CONSTRUCTION PROGRESS

The contractor completed installation of fencing for the Stephen's Kangaroo Rat and the contractor's yard, set up field offices, and continued mobilizing. Installation of easement fences, pot-holing for existing utilities, and fabrication of "k"-pipe continued. The Davis Road detour was implemented; and clearing and grubbing began.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF Joseph Jensen Filtration Plant, Module No. 1 Filter Materials Replacement

CONTRACTOR Kiewit Pacific Co.

SPECIFICATIONS NO.	1394	BID AMOUNT	\$2,468,600
CONTRACT NO.	1495	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	January 21, 1998	EARNINGS THIS MONTH	119,789
CONTRACT COMPLETION DATE	October 1, 1998	EARNINGS TO DATE	263,376
ESTIMATED COMPLETION DATE	October 1998	ESTIMATED PERCENT COMPLETE	11

SCOPE OF WORK

Removing and disposing of existing anthracite, sand, and gravel from 16 filter units in Module No. 1; providing and installing new anthracite, silica sand and gravel, and either garnet sand and gravel or ilmenite sand and gravel in 16 filter units in Module No. 1; cleaning of filter beds; and other appurtenant work at the Joseph Jensen Filtration Plant.

CONSTRUCTION PROGRESS

The contractor completed the removal of filter material from Filter Beds Nos. 6, 9, and 10, cleaning of Filter Beds Nos. 1, 2, 6, and 9, and installation of filter material in Filter Bed No. 5.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF Joseph Jensen Filtration Plant Washwater Tank No. 1 Roof Repair

CONTRACTOR Pitt-Des Moines, Inc.

SPECIFICATIONS NO.	1395A	BID AMOUNT	\$513,600
CONTRACT NO.	1499	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	March 17, 1998	EARNINGS THIS MONTH	14,500
CONTRACT COMPLETION DATE	January 14, 1999	EARNINGS TO DATE	14,500
ESTIMATED COMPLETION DATE	January 1999	ESTIMATED PERCENT COMPLETE	3

SCOPE OF WORK

Demolishing and disposing of the existing steel tank roof; designing, furnishing, and installing a new steel tank roof; coating the interior and exterior surfaces of the new tank roof and walls; repair existing floor coal tar enamel coating; and other appurtenant work for the Washwater Tank No. 1 repair at the Joseph Jensen Filtration Plant in Granada Hills, California.

CONSTRUCTION PROGRESS

The Notice to Proceed was mailed to the contractor on March 13, 1998.

Mobilization costs associated with bonds were incurred this period.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Water Quality Laboratory Expansion		
CONTRACTOR	S. J. Amoroso Construction Co., Inc.		
SPECIFICATIONS NO.	1279A	BID AMOUNT	\$10,530,000
CONTRACT NO.	1466	EXTRA WORK TO DATE	169,360
CONTRACT STARTING DATE	September 3, 1996	EARNINGS THIS MONTH	40,344
CONTRACT COMPLETION DATE	June 5, 1998	EARNINGS TO DATE	9,976,763
ESTIMATED COMPLETION DATE	June 1998	ESTIMATED PERCENT COMPLETE	93

SCOPE OF WORK

Construction of the Water Quality Laboratory expansion in LaVerne.

CONSTRUCTION PROGRESS

Submittals for approval of materials and equipment continued to be received for review. Demonstration and training of Metropolitan personnel in the use of equipment and systems installed in the new addition (Phase 1) were completed.

Demolition and removal of existing light fixtures for remodeling of the existing Water Quality Building (Phase 3) were in progress. Landscape irrigation, grading, and planting continued.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Standby Emergency Power Additions F. E. Weymouth Filtration Plant		
CONTRACTOR	Robert Mills dba Mills Construction Company		
SPECIFICATIONS NO.	1316A	BID AMOUNT	\$1,162,000
CONTRACT NO.	1494	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	October 24, 1997	EARNINGS THIS MONTH	113,078
CONTRACT COMPLETION DATE	October 20, 1998	EARNINGS TO DATE	316,578
ESTIMATED COMPLETION DATE	October 1998	ESTIMATED PERCENT COMPLETE	27

SCOPE OF WORK

Construction of a masonry building, diesel-operated emergency power system, all switchgear, power panels, conduits, wiring, emission control equipment, external fuel tanks, piping, controls, monitoring systems, accessories and appurtenances at the F. E. Weymouth Filtration Plant. The work also includes modifications to the existing system, existing emergency power equipment, switchgear, and controls.

CONSTRUCTION PROGRESS

Concrete for the generator fuel tank anchor blocks was placed. The fuel tank, fuel lines, and vent line were installed and tested. Backfilling of the fuel tank was in progress.

Placement of masonry block for the generator building continued. The generator and control room slabs were placed. The concrete pad for the future generator was also placed. Fence posts were installed in the concrete slab for the transformer and load bank south of the generator building.

Installation of electrical conduit below grade was in progress. Vapor barrier and protective concrete were placed in the electrical trenches.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Standby Emergency Power Additions, Robert B. Diemer Filtration Plant		
CONTRACTOR	Pickard Construction, Inc.		
SPECIFICATIONS NO.	1317A	BID AMOUNT	\$688,900
CONTRACT NO.	1476	EXTRA WORK TO DATE	19,521
CONTRACT STARTING DATE	January 9, 1997	EARNINGS THIS MONTH	24,626
CONTRACT COMPLETION DATE	May 29, 1998	EARNINGS TO DATE	565,319
ESTIMATED COMPLETION DATE	May 1998	ESTIMATED PERCENT COMPLETE	79

SCOPE OF WORK

Construction of a concrete masonry structure, relocation of an existing generator from the Skinner Filtration Plant to the new structure, controls, switchgear, an outdoor yard containing a step-up transformer, a load bank and an underground fuel storage system, and all appurtenances at the Diemer Filtration Plant. The work also requires modification of existing power supply, existing site switchgear and facilities associated with the installation of new facilities.

CONSTRUCTION PROGRESS

The contractor completed asphalt concrete pavement around the new building, and completed installation of acoustic sound panels in the generator room. Installation of electrical conduit inside the building continued. The contractor began installation of motorized louvers, and painting and coating inside and outside the building.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Garvey Reservoir Composite Lining Construction		
CONTRACTOR	Serrot Corporation		
SPECIFICATIONS NO.	1254	BID AMOUNT	\$9,190,000
CONTRACT NO.	1472	EXTRA WORK TO DATE	226,657
CONTRACT STARTING DATE	November 18, 1996	EARNINGS THIS MONTH	0
CONTRACT COMPLETION DATE	April 20, 1998	EARNINGS TO DATE	9,400,678
ESTIMATED COMPLETION DATE	April 1998	ESTIMATED PERCENT COMPLETE	99

SCOPE OF WORK

Constructing a composite lining for the Garvey Reservoir in Monterey Park. Work includes constructing approximately 1,800,000 square feet of each of the following: primary Hypalon lining, secondary Hypalon lining, geotextile fabric, and composite drainage course. Appurtenant work is also included.

CONSTRUCTION PROGRESS

A partial pay estimate was not prepared, as no substantial work was completed this period.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Protective Roof Structure for San Jacinto Diversion Structure		
CONTRACTOR	Advanco Constructors, Div. of Zurn Constructors, Inc.		
SPECIFICATIONS NO.	1318	BID AMOUNT	\$739,826
CONTRACT NO.	1486	EXTRA WORK TO DATE	41,000
CONTRACT STARTING DATE	September 18, 1997	EARNINGS THIS MONTH	207,650
CONTRACT COMPLETION DATE	June 5, 1998	EARNINGS TO DATE	630,900
ESTIMATED COMPLETION DATE	June 1998	ESTIMATED PERCENT COMPLETE	80

SCOPE OF WORK

Construction of a protective roof, reinforced concrete, concrete caissons, walls, floor slabs, access ramp, and other appurtenances to be built over the existing San Jacinto Diversion Structure, located north of the City of San Jacinto in Riverside County.

CONSTRUCTION PROGRESS

Concrete was formed and placed for the east, west, and south walls. In addition, concrete was formed and placed for the EMWD vault upper walls, with the vault backfilled to grade. Formwork and concrete placement were in progress for the retaining wall. Roof beam formwork was also in progress.

The Metropolitan Water District of Southern California
MONTHLY CONSTRUCTION PROGRESS REPORT

March 1998

CONSTRUCTION OF	Seismic Upgrade and Rock Anchor Installation of Discharge Pipelines at Hinds Pumping Plant		
CONTRACTOR	Mitchell Pacific Constructors, Inc.		
SPECIFICATIONS NO.	1391	BID AMOUNT	\$1,992,757
CONTRACT NO.	1491	EXTRA WORK TO DATE	0
CONTRACT STARTING DATE	September 23, 1997	EARNINGS THIS MONTH	233,740
ACTUAL COMPLETION DATE	March 30, 1998	EARNINGS TO DATE	1,992,757
		ESTIMATED PERCENT COMPLETE	100

SCOPE OF WORK

Construction of modifications to three existing ten-foot-diameter discharge pipelines at the Hinds Pumping Plant, located in Desert Center, California. Modifications include seismic upgrading by installing 151 rock anchors to restrain pipeline movement and structural framing to support such restraining. All construction is in a mountainous terrain where road access, access for installing rock anchors, and access to the pipelines may be limited.

CONSTRUCTION PROGRESS

The contract work was accepted by Metropolitan on March 30, 1998; the Notice of Completion was recorded on April 3, 1998.

**Monthly Construction Progress Report
March 1998**

CONSTRUCTION OF	Union Station Headquarters Building		
CONTRACTOR	Union Station Partners (USP)		
AGREEMENT NO.	5394	CONTRACT AMOUNT (Guaranteed Maximum Price)	\$98,100,000
CONTRACT START DATE	May 1996	EXTRA WORK TO DATE	0
CONTRACT COMP. DATE	November 1998	COST THIS MONTH	\$ 6,245,400
ESTIMATED COMP. DATE	November 1998	COST TO DATE	\$ 60,548,900*
ESTIMATED PERCENT COMPLETE	71 PERCENT		

* The cost to date amount was understated in the February report by approximately \$724,000

SCOPE OF WORK

Construct a long-term headquarters facility at Union Station. The facility is to be ready for occupancy in November 1998.

CONSTRUCTION PROGRESS

The initial element work for the core and shell, and the tenant improvements continued during this period. Interior flooring and ceiling were completed at the lower levels. Contractors continued installation of drywall and framing at levels 1 through 12. Deck slabs poured during this period included level 12 through level 14 Helipad. Moment frame columns and beams, precast beams and columns were erected on level 14. Plumbing, HVAC, electrical and fire sprinkler systems were installed on levels 1 through 12. Punch-style window frames and glass were assembly on level 2 through 10.

Note:

The total contract cost with USP for the construction of the Union Station Headquarters building is approximately \$128,010,000. This amount includes purchase of the land for \$14,000,000, site demolition of approximately \$809,000, project management and design cost of \$15,100,000, and core and shell construction for approximately \$98,100,000. The total cost incurred to date for contract with USP, is approximately \$79,830,000.