

EASTERN MUNICIPAL WATER DISTRICT

2007 Consumer Confidence Report

ISSUED JULY 2008

Water Quality



HEMET WATER FILTRATION PLANT

www.emwd.org



Our Mission

The mission of Eastern Municipal Water District is to provide safe and reliable water and wastewater management services to our community in an economical, efficient and responsible manner, now and in the future.



Our Vision

To provide essential service to our community at a level that exceeds the performance of any other public or private agency.

inside this report

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This report contains important information about the quality of your water. If you would like to obtain this information in Spanish, visit us at www.emwd.org and select "EMWD en Español" or call (951) 928-3777 ext. 4221 for a copy by mail.

Este informe contiene información importante con sobre la calidad de su agua. Si usted desea obtener información en español, visitenos en www.emwd.org y seleccione "EMWD en Español" o llame (951) 928-3777, ext. 4221 para solicitar una copia por correo.

Your Water Quality 2007 Consumer Confidence Report

Dear EMWD Customer,

As General Manager of Eastern Municipal Water District (EMWD), I am pleased to present our annual Consumer Confidence Report for 2007. This report contains important and useful information about the sources, quality, and safety of your drinking water and describes how EMWD meets all drinking water standards as set by the U.S. Environmental Protection Agency and enforced by the California Department of Public Health.

To help increase awareness and improve the value placed on our water supplies, we encourage you to learn about the history of southern California water and EMWD's role in bringing water to our region. To get you started, a brief list and timeline, including pictures, of historical and recent EMWD milestones, and an article entitled "The Value of Water," are included in this year's report.

More than half of the potable water EMWD provides is used outdoors and nearly half of that is often wasted on over-watering. We are committed to reducing outdoor water use and this report details some of the efforts being made to accomplish this.

EMWD strives to be more responsive to you, our customers. Last year we included a survey card asking for ways to improve future reports and many of the suggestions received have been incorporated and are listed below. Once again, we hope you will take the time to complete and return the enclosed, postage-paid survey card. To show our appreciation, all customers who return a completed survey are eligible for a chance to win a \$100 gift card to a home improvement center.

Please look over this report and if you have any questions, call Amy Mora, Environmental Compliance Analyst, at (951) 928-3777, extension 6337.



Anthony J. Pack
GENERAL MANAGER, EASTERN MUNICIPAL WATER DISTRICT

Suggestions we've incorporated this year:

- ◆ More photos and captions
- ◆ Reduced report production costs
- ◆ Water use efficiency tips
- ◆ Reader-friendly tables and charts
- ◆ Environmentally friendly—the paper used for this report is certified by SmartWood, as a well-managed source of wood products whose forest management practices adhere to strict environmental and socioeconomic standards.

EMWD 2006 Consumer Confidence Report Survey
(ISSUED JULY 2007)

1. What best describes how you use/read this report:
 I read it cover to cover I only read one or two sections
 I read most of the sections I did not read it at all

2. Is this report "reader friendly" (print size, not too technical, etc.)
 Yes No

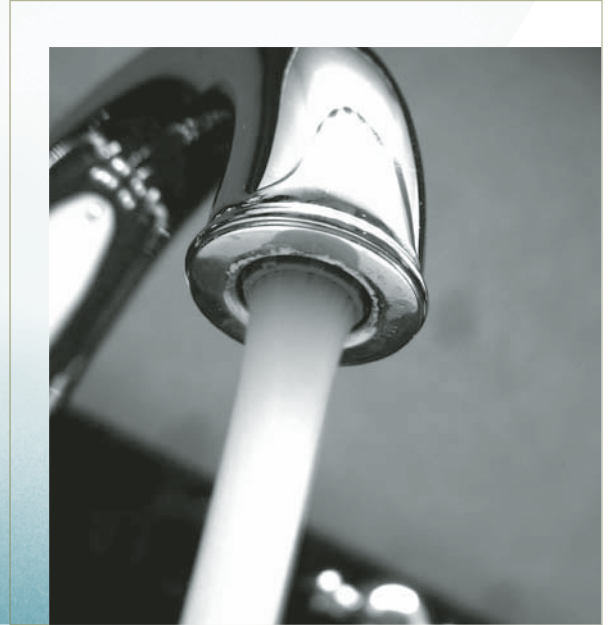
3. Please rate this report on the features below using the following scale:
1 poor, 2 below average, 3 average, 4 good, 5 excellent

Overall impression of the report	1	2	3	4	5
Overall layout	1	2	3	4	5
Able to easily find desired information	1	2	3	4	5

4. Do you have any specific suggestions on new features and/or sections we could add to improve this publication?

Thank you for participating in our survey. If you would like to enter our survey drawing for a chance to win a \$100 gift card to a local plant nursery or home improvement store, please provide your contact information below. This information is strictly for the survey drawing and will not be used for marketing purposes or shared with another party. The survey period will conclude September 30, 2007.

Name: _____ Phone number: _____
Address: _____
City: _____ State: _____ Zip/Postal Code: _____



The Source of Your Tap Water

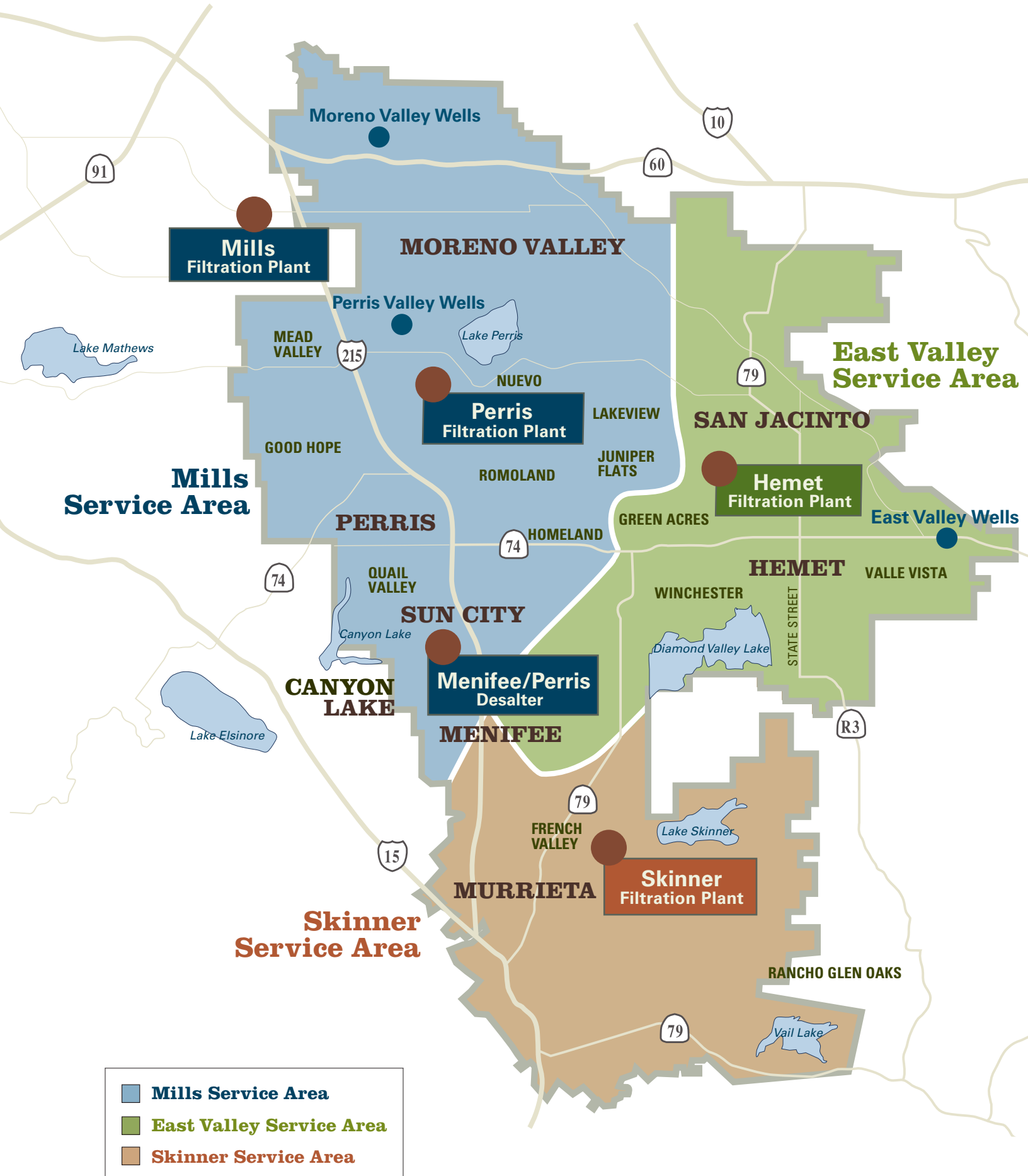
To help you find specific details about your tap water, we have organized this report according to the communities we serve.

Mills service area in the northwest portion of the District

East Valley service area in the northeast portion of the District

Skinner service area in the southern portion of the District

To find information such as the source, quality, and hardness of your tap water, simply locate your community on the map and match it with the service area on the foldout table.



The Communities We Serve...

Mills service area

COMMUNITIES SERVED:

GOOD HOPE

HOMELAND

JUNIPER FLATS

LAKEVIEW

MEAD VALLEY

MENIFEE**

MORENO VALLEY

NORTH CANYON LAKE

NUEVO

PERRIS

QUAIL VALLEY

ROMOLAND

SUN CITY**

Water from this service area comes from a combination of sources:

- The Henry J. Mills Filtration Plant* treats imported surface water supplied solely from northern California through the State Water Project (SWP).

Water from the Mills Plant is blended with several other EMWD water sources:

- Two Moreno Valley Wells serve two small portions of Moreno Valley near the intersections of Heacock and Fir, and Heacock and Ironwood.
- Three Perris Valley Wells serve a limited area of Perris – along Perris Boulevard south of the Ramona Expressway.
- The Perris Water Filtration Plant treats Colorado River water. This plant uses the latest ultrafiltration technology to remove particulate contaminants to produce quality, potable water. This plant serves Lakeview, Nuevo, Romoland, Homeland, and Juniper Flats.
- The Menifee/Perris Desalter converts salty groundwater into potable water using a reverse osmosis process. Menifee, Sun City, (North) Canyon Lake, and Quail Valley are the only communities within the Mills Service Area to receive blended water from this desalination plant.

*The Mills and Skinner Plants are owned and operated by the Metropolitan Water District of Southern California (MWD)

**Typically served by Mills Plant and occasionally served by the Skinner Plant

MORENO VALLEY CITY HALL



SKY DIVING AT PERRIS AIRPORT



HORSE RANCH IN THE NUEVO/LAKEVIEW AREA



East Valley service area

This service area is split into two regions

COMMUNITIES SERVED:

- DIAMOND VALLEY
- GREEN ACRES
- HEMET
- SAN JACINTO
- WINCHESTER***

West of State Street:

- The Hemet Water Filtration Plant treats water from the State Water Project. This plant uses the latest ultrafiltration technology to remove particulate contaminants and produce quality, potable water. Local groundwater also supplies this area.

COMMUNITIES SERVED:

- HEMET
- SAN JACINTO
- SOBOBA HOT SPRINGS
- VALLE VISTA

East of State Street:

- A system of deep groundwater wells serves these communities.

Skinner service area

Water from this service area comes from:

COMMUNITIES SERVED:

- FRENCH VALLEY
- MENIFEE**
- MURRIETA
- SUN CITY**
- WINCHESTER***

- The Robert A. Skinner Filtration Plant* treats water from the Colorado River and from the State Water Project.

* The Mills and Skinner Plants are owned and operated by the Metropolitan Water District of Southern California (MWD)

** Typically served by Mills Plant and occasionally served by the Skinner Plant

*** Typically served by Hemet Water Filtration Plant and occasionally served by the Skinner Plant

NEAR HOLLAND ROAD IN WINCHESTER



HEMET DEPOT ON FLORIDA AVENUE



HISTORIC ESTUDILLO MANOR IN SAN JACINTO



Abbreviations

AI	Aggressiveness Index	N	Nitrogen	RAA	Running Annual Average
AL	Action Level	NA	Not Applicable	SI	Saturation Index (Langelier)
CFU/mL	Colony-Forming Units per milliliter	ND	None Detected	TON	Threshold Odor Number
DLR	Detection Limits for purposes of Reporting	NL	Notification Level	TT	Treatment Technique
MCL	Maximum Contaminant Level	NTU	Nephelometric Turbidity Units	µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)
MCLG	Maximum Contaminant Level Goal	pCi/L	picoCuries per Liter	"---	Samples not required
MRDL	Maximum Residual Disinfectant Level	PHG	Public Health Goal	">"	greater than
MRDLG	Maximum Residual Disinfectant Level Goal	ppb	parts per billion or micrograms per liter (µg/L)	"<"	less than
		ppm	parts per million or milligrams per liter (mg/L)		
		ppt	parts per trillion or nanograms per liter (ng/L)		

Definitions

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL):

The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG):

The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standard (Primary Standard):

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary Drinking Water Standard (Secondary Standard):

MCLs for contaminants that do not affect health but are used to monitor the aesthetics of the water.

Treatment Technique:

A required process intended to reduce the level of a contaminant in drinking water.

Variations and Exemptions:

The California Department of Public Health grants permission not to meet an MCL or a treatment technique under certain conditions.

Distribution System Data

PARAMETER	UNITS	STATE OR	PHG	STATE	RANGE	ENTIRE	SERVICE AREA		
		FEDERAL	(MCLG)				DLR	DISTRIBUTION	MILLS
		MCL	(MRDLG)		AVERAGE	SYSTEM			
		[MRDL]	[MRDLG]						
DISINFECTANT BY-PRODUCTS AND DISINFECTANT RESIDUALS									
A Total Trihalomethanes (TTHM)	ppb	80	NA	0.5	Range RAA	0 - 74 27.7	0 - 54 22	0 - 74 24.6	44 - 63 54.2
B Haloacetic Acids (5) (HAA5)	ppb	60	NA	1(B)	Range RAA	0 - 37 10.1	0 - 22 9.3	0 - 19 5.0	14 - 37 22.1
C Bromate (<i>Mills plant only</i>)	ppb	10	0	5	Range Average	--- ---	ND - 15 7.9	--- ---	--- ---
Total Chlorine Residual	ppm	[4]	[4]	NA	Range Average	0 - 3.0 1.8	0 - 3.0 1.9	0 - 2.5 0.9	0.3 - 2.8 2.4
TREATMENT-RELATED FLUORIDE LEVELS									
D Fluoride Treatment-related	ppm	(D)	Optimal Fluoride Control Range		NA	0.6 - 1.2	(D)	0.7 - 1.3	
			1	0.1	Range Average	ND - 0.84 0.52	ND - 0.84 0.51	(D) (D)	0.34 - 0.81 0.66
PHYSICAL PARAMETERS									
Color	Units	15	NA	NA	Range Average	<2.5 - 5 <2.5	<2.5 - 5 <2.5	<2.5 - 5 <2.5	<2.5 - 2.5 <2.5
Odor Threshold	TON	3	NA	NA	Range Average	1 - 2 1	1 - 2 1	1 - 2 1	1 - 2 1
Turbidity	NTU	5	NA	NA	Range Average	<0.1 - 0.3 0.1	<0.1 - 1.7 0.1	<0.1 - 0.5 0.2	<0.1 - 0.3 0.1
pH	Units	6.5 - 8.5	NA	NA	Range Average	5.8 - 8.8 7.7	5.8 - 8.8 7.8	6.4 - 8.4 7.6	6.0 - 8.1 7.6
METALS AS A BY-PRODUCT OF CORROSION OF CONSUMERS' PLUMBING									
E Copper	ppb	AL=1300	170	50	NA	90th percentile of 50 samples: <200 ppb			
E Lead	ppb	AL=15	2	5	NA	90th percentile of 50 samples: <5 ppb One sample exceeded the AL			

Footnotes

- A** Total Trihalomethanes (TTHM) are the sum of the following analytes: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. Distribution system-wide average and range were taken from 28 samples collected quarterly.
- B** DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb. Distribution system-wide average and range were taken from 28 samples collected quarterly.
- C** Bromate is a disinfectant by-product resulting from the use of ozone. Currently, only Mills filtration plant uses ozone.
- D** Fluoridation treatment of water at Mills and Skinner Treatment plants started on October 29, 2007, and December 3, 2007, respectively. Optimal Fluoride Control range is based on average daily air temperature of the region. The East Valley service area does not have Fluoride added to its system at this time.
- E** Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. This rule requires systems to take water samples at 50 qualified homes every three years.

2007 Eastern Municipal Water District Water Quality Table

PARAMETER	UNITS	STATE OR FEDERAL MCL (MCLG)				RANGE AVERAGE	MORENO VALLEY, PERRIS, SUN CITY, MENIFEE & NORTH CANYON LAKE				MURRIETA	HEMET & SAN JACINTO		MAJOR SOURCES IN DRINKING WATER
		STATE	FEDERAL	PHG	DLR		MILLS PLANT	MORENO VALLEY WELLS	PERRIS VALLEY WELLS	PERRIS PLANT	MENIFEE & PERRIS DESALTERS	SKINNER PLANT	EAST VALLEY WELLS	
Percent of water delivered in service area	%					70.9	1.4	6.5	14.5	6.8	100.0	east side: 100%	west side: 100%	
Percent of total water delivered by EMWD	%					44.7	0.9	4.1	9.1	4.3	18.1	12.5	6.3	100.0
PRIMARY STANDARDS—MANDATORY HEALTH-RELATED STANDARDS														
CLARITY														
Combined Filter	NTU	0.3			Highest	0.13	---	---	0.77	---	0.13	---	1.00	
Effluent Turbidity	%	95 (A)	NA	NA	% < 0.3	100%	---	---	99.84%	---	100%	---	99.87%	Soil runoff
ORGANIC CHEMICALS														
<i>Pesticides/PCBs</i>														
Dibromochloropropane (DBCP)	ppt	200	1.7	10	Range Average	ND ND	30 - 81 52	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Banned nematocide that may still be present in soils
<i>Volatile Organic Compounds</i>														
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	Range Average	ND ND	2.2 - 7.5 4.6	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from factories, dry cleaners, and auto shops
Trichloroethylene (TCE)	ppb	5	0.8	0.5	Range Average	ND ND	ND ND	ND - 1.5 0.9	ND ND	ND ND	ND ND	ND ND	ND ND	Discharge from metal degreasing site and other factories
INORGANIC CHEMICALS														
Aluminum	ppb	200 (B) 1000	600	50	Range Average	ND - 92 65	---	ND ND	ND ND	ND ND	ND - 57 ND	ND ND	ND ND	Residue from water treatment process; natural deposits; erosion
Arsenic	ppb	10	0.004	2	Range Average	ND - 2.3 ND	---	ND - 2.4 ND	2.2 - 2.8 2.4	ND ND	ND ND	ND ND	ND ND	Natural deposits erosion, glass and electronics production wastes
Barium	ppb	1000	2000	100	Range Average	ND ND	---	150 - 190 170	150 - 160 155	ND ND	ND ND	ND - 110 100	ND ND	Oil and metal refineries discharge; natural deposits erosion
Fluoride Naturally-occurring	ppm	2.0	1	0.1	Range Average	ND - 0.1 ND	0.3 - 0.4 0.4	0.3 - 0.7 0.4	0.3 - 0.4 0.4	ND - 0.1 ND	0.2 - 0.3 0.2	0.2 - 0.6 0.3	ND - 0.2 0.1	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as N)	ppm	10	10	0.4	Range Average	ND - 1.1 0.7	10 - 23 18 (E)	3.4 - 6.6 5.8	0.4 - 0.8 0.6	1.2 - 1.8 1.4	ND - 0.4 ND	ND - 4.5 1.1	ND - 0.9 0.4	Runoff and leaching from fertilizer uses; septic tank and sewage; natural deposits erosion
Nitrate after blend (as N)	ppm	10	10	0.4	Range Average	---	3.3 - 7.4 5.5 (E)	---	---	---	---	---	---	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
Nitrite (as N)	ppm	1	1	0.4	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
Perchlorate	ppb	6	6	4	Range Average	ND ND	4.7 - 12 8.6 (E)	ND - 4.1 ND	ND ND	ND ND	ND ND	ND ND	ND ND	Industrial waste discharge
Perchlorate after blend	ppb	6	6	4	Range Average	---	ND ND (E)	---	---	---	---	---	---	Industrial waste discharge
RADIOLOGICALS														
Gross Alpha Particle Activity	pCi/L	15	(0)	3	Range Average	ND ND	---	6.1 6.1	4.1 4.1	---	ND - 5.5 ND	8.1 8.1	ND ND	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	(0)	4	Range Average	ND ND	---	6.4 6.4	5.3 5.3	---	ND ND	6 6	ND ND	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	1	Range Average	ND ND	---	3.7 3.7	3.3 3.3	---	1.5 - 3.2 ND	2.3 ND	ND ND	Erosion of natural deposits
DISINFECTATION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTATION BY-PRODUCTS PRECURSORS														
Total Trihalomethanes (TTHM)	ppb	80	NA	0.5	Range Average	13 - 79 21	ND ND	ND - 0.5 ND	33 33	ND ND	37 - 61 48	ND ND	28 - 64 44	By-product of drinking water chlorination
Halooacetic Acids (five) (HAA5)	ppb	60	NA	1	Range Average	2.7 - 7.4 5.0	---	---	15 15	---	13 - 24 17	---	ND - 31 15	By-product of drinking water chlorination
SECONDARY STANDARDS—AESTHETIC STANDARDS														
Chloride	ppm	500	NA	NA	Range Average	56 - 98 79	170 - 310 240	140 - 400 150	100 - 110 107	99 - 170 140	84 - 96 92	11 - 88 23	61 - 110 86	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	Range Average	1 - 2 1	<2.5 - 2.5 <2.5	<2.5 - 2.5 <2.5	<2.5 <2.5	<2.5 <2.5	1 - 2 2	<2.5 - 5 <2.5	<2.5 <2.5	Naturally occurring organic materials
Iron	ppb	300	NA	100	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND - 120 ND	ND ND	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	NL = 500	20	Range Average	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND - 70 21	ND ND	Leaching from natural deposits
Odor Threshold	TON	3	NA	1	Range Average	2 2	1 1	1 1	1 1	1 1	2 2	1 1	1 - 2 1	Naturally-occurring organic materials
Specific Conductance	μS/cm	1600	NA	NA	Range Average	390 - 620 530	860 - 1360 1110	760 - 1750 1180	1070 - 1120 1100	460 - 800 650	760 - 930 840	320 - 960 460	370 - 670 530	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	34 - 69 53	26 - 32 29	41 - 58 48	220 - 254 243	13 - 31 22	130 - 200 170	10 - 230 55	26 - 57 38	Runoff/leaching from natural; deposits industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range Average	220 - 330 290	560 - 850 700	460 - 1020 910	620 - 690 650	230 - 490 340	440 - 550 500	170 - 560 260	210 - 330 260	Runoff/leaching from natural deposits
Turbidity	NTU	5	NA	NA	Range Average	0.04 - 0.06 0.05	<0.1 <0.1	<0.1 - 0.7 0.2	<0.1 <0.1	<0.1 <0.1	0.05 - 0.07 0.05	0.1 - 1.1 0.3	<0.1 - 0.2 <0.1	Soil runoff
UNREGULATED CHEMICALS REQUIRING MONITORING														
Boron	ppb	NA	NL = 1000	100	Range Average	110 - 180 150	ND ND	200 - 500 300	100 - 200 140	ND - 160 ND	130 - 160 140	ND ND	ND - 190 ND	Runoff/leaching from natural deposits; industrial wastes
Vanadium	ppb	NA	NL = 50	3	Range Average	ND - 5.4 4.1	---	---	---	---	ND ND	---	---	Naturally-occurring; industrial waste discharge
OTHER PARAMETERS														
Alkalinity	ppm	NA	NA	NA	Range Average	65 - 78 72	71 - 80 76	100 - 160 120	120 - 140 130	30 - 72 49	91 - 106 98	110 - 170 130	52 - 92 74	
Calcium	ppm	NA	NA	NA	Range Average	19 - 23 21	69 - 120 95	67 - 160 100	77 - 86 81	27 - 68 46	44 - 60 53	36 - 90 52	13 - 29 23	
Chlorate	ppb	NA	NL = 800	20	Range Average	33 - 36 34	---	---	---	---	ND - 23 ND	---	---	By-product of drinking water chlorination; industrial processes
Corrosivity (as Aggressiveness Index)	AI	NA	NA	NA	Range Average	11.9 - 12.2 12.0	10.8 - 11.0 10.9	11.2 - 11.7 11.4	12.1 - 13.0 12.7	10.8 - 11.9 11.5	12.1 - 12.3 12.2	11.3 - 12.5 11.8	10.1 - 11.2 11.7	Elemental balance in water; affected by temperature, other factors
Corrosivity (as Saturation Index)	SI	NA	NA	NA	Range Average	0.13 - 0.31 0.22	-1.08 - -0.84 -0.96	-0.71 - -0.2 -0.46	0.20 - 0.93 0.67	-1.01 - 0.14 -0.32	0.15 - 0.52 0.38	-0.81 - -0.67 -0.07	-1.01 - 0.01 -0.14	
Hardness	ppm	NA	NA	NA	Range Average	85 - 116 103	270 - 500 385	250 - 550 360	320 - 340 328	111 - 210 160	194 - 254 226	110 - 290 150	77 - 140 108	Municipal and industrial waste discharges
HPC	CFU/mL	TT	NA	NA	Range Average	ND - 2 ND	ND - >5700 860	ND - >5700 250	ND - 130 15	ND - 120 25	ND - 3 ND	ND - >5700 200	ND - 87 5	Naturally present in the environment
Magnesium	ppm	NA	NA	NA	Range Average	9 - 15 12	24 - 47 36	20 - 34 26	29 - 32 30	8 - 15 11	19 - 25 22	3 - 17 6	10 - 16 12	
N-Nitrosodimethylamine (NDMA)	ppt	NA	3	2	Range RAA	ND - 7.1 ND	---	---	---	---	ND ND	---	---	By-product of drinking water chloramination; industrial processes
pH	Units	NA	NA	NA	Range Average	8.3 - 8.6 8.4	6.7 6.7	6.8 - 7.2 6.9	7.7 - 8.2 8.0	6.3 - 6.7 6.5	8.1 8.1	7.1 - 8.5 7.6	6.8 - 8.1 7.3	
Potassium	ppm	NA	NA	NA	Range Average	2.4 - 3.5 2.8	3.6 - 4.2 3.9	2.8 - 4.5 3.7	5.1 - 6.2 5.6	1.4 - 2.1 1.8	3.8 - 4.5 4.2	2.8 - 7.9 4.1	2.6 - 4.1 3.1	
Sodium	ppm	NA	NA	NA	Range Average	45 - 79 63	53 - 65 59	69 - 130 91	86 - 110 100	35 - 80 55	73 - 89 83	22 - 85 38	41 - 79 57	
Total Organic Carbon	ppm	TT	NA	0.30	Range Average	1.1 - 3.1 ND	ND ND	ND ND	2.1 - 2.2 2.2	ND ND	1.9 - 2.7 2.3	ND - 0.7 0.5	1.2 - 2.0 1.7	Various natural and man-made sources

Footnotes

A The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. Secondary standards were based on the treatment plant effluent or raw well water.

B Aluminum has both primary and secondary standards.

C Data for the naturally-occurring fluoride were taken at the source before the addition of fluoride.

D State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.

E Moreno Valley Wells are blended with Mills water to reduce Nitrate and Perchlorate levels to be compliant with State MCLs.

F The State primary MCL for perchlorate was set at 6 ppb effective October 18, 2007.

G Reported results for Mills and Skinner were taken from four consecutive quarters of monitoring from August 2005 to April 2006.

H The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.

I Total Trihalomethanes are the sum of the following analytes: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. Average and range for the Mills and Skinner treatment plant effluents were taken from weekly samples for TTHM and monthly samples for HAA5.

J DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.

K For Mills and Skinner plants, Metropolitan has developed a flavor-profile analysis method that can detect odor occurrences more accurately. For more information, call MWD at (213) 217-6850.

L Ranges for the Mills and Skinner plant effluents were taken from two quarterly samples.

M AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. AI > 12.0 indicates non-aggressive water. AI between 10.0 and 11.9 indicates moderately aggressive water.

N SI measures the tendency for a water to precipitate or dissolve calcium carbonate (a natural mineral in water). Positive indices indicate the tendency to precipitate and/or deposit scale on pipes and are assumed to be non-corrosive. Negative indices indicate the tendency to dissolve calcium carbonate and are assumed to be corrosive.

O HPC values were based on chlorinated treatment plant effluents or on unchlorinated raw well water.

P Ranges for the treatment plant effluent were taken from quarterly samples.

Q Average and range for Total Organic Carbon for Mills and Skinner were taken from weekly samples collected at the combined filter effluent.

The Value of Water

Ponder for a moment...how would your life change if all the water supplies in southern California were suddenly unavailable? After all, we live in an arid, semi-desert region where natural water supplies are scarce, rivers seldom flow year-round, and few lakes flourish.

Now look around your neighborhood. How is it possible for so many people to live in a region that does not have natural water supplies? The quality of life we all enjoy is largely due to the water that we receive from the Colorado River and northern California aqueduct systems. However, our water supply is declining due to drought and environmental concerns, while the demand increases due to growth.

Eastern Municipal Water District (EMWD) has a long history of developing water sources – from groundwater management and recharge, to drilling new wells, and embracing new technologies such as ultrafiltration and desalination of brackish groundwater. We understand that safe and reliable water is critical to our very existence.

EMWD celebrated fifty years of water delivery service in 2000. To commemorate this historic anniversary, the history and value of water was captured in a book entitled “Building the Future: The Story of Eastern Municipal Water District.” This book details the story of southern California water and EMWD’s role in bringing water to the communities we serve. We encourage you to view a copy of the book at your local library or view the electronic version.

EMWD is grateful to those before us who had the vision and ability to import the water we all enjoy and depend upon today. Likewise, we appreciate those who value the importance of water and we encourage all our customers to do their part in using water wisely...helping to keep safe, reliable, and quality water flowing from our taps now and in the future.



“Building the Future: The Story of Eastern Municipal Water District”

View an electronic version at

<http://www.emwd.org/news/history-book/BuildingTheFuture.pdf>

• 1932 CONSTRUCTION OF THE COLORADO RIVER AQUEDUCT (CRA) BEGINS.



• 1933 CONSTRUCTION BEGAN ON THE SAN JACINTO TUNNEL, A KEY LINK TO THE CRA



• 1934 WITHOUT WARNING, THOUSANDS OF GALLONS OF GROUNDWATER BURST INTO THE TUNNEL



We've come a long way

Below are a few of the milestones you'll find in EMWD's 50th anniversary commemoration book:

- 1900-1930s** Local residents relied solely on available groundwater and springs for drinking water.
- Construction began on the San Jacinto Tunnel, a key link in the Colorado River Aqueduct (CRA) project.
- Underground water seeped into the tunnel, ranging from 540 to 30,000 gallons per minute (1934-1939).
-
- 1940-1960s** Due to tunnel seepage and drought, rivers and streams began drying up and the San Jacinto River Protective Committee was formed to protect local groundwater and negotiate with MWD for the water loss.
- A formal settlement with MWD was reached and EMWD was officially created to manage the area's water supply.
- Perris was the first community to receive domestic water service from EMWD's first distribution system.
- EMWD formed 11 improvement districts and added 168,000 acres to the district through annexation.
-
- 1970-1990s** Governor Ronald Reagan delivered the first drops of State Water Project water to Lake Perris.
- The District opened its present day Operation and Maintenance and Administrative Centers in Perris.
-
- 2000** EMWD celebrated its 50 year anniversary
- Today, EMWD's service area is 555 square miles. We own and operate 18 domestic production wells, 3 water treatment plants, 82 tanks, and maintain 1,750 miles of pipeline.

STOP RUNOFF!

EMWD's Water Use Efficiency Ordinance goes into effect
September 1, 2008

In May, EMWD's Board of Directors approved Water Use Efficiency Ordinance 72.23, enabling the District to assess penalties for water waste due to runoff. It also mandates water-efficient landscaping in new development.

Originally adopted in 1991, the ordinance was modified to provide long-term water reliability for existing and future customers. The revised ordinance takes proactive measures to eliminate water waste by:

- Applying penalties to all customers for water waste pertaining to runoff. Previously, penalties only applied to commercial, industrial, and institutional accounts.
- Requiring water-efficient landscaping for all new development. Previously, this applied only to large landscapes (3,000 square feet or larger).

. 1951

ONE OF THE FIRST MEETINGS OF THE EMWD BOARD OF DIRECTORS (FROM LEFT) ALECK BRUDIN, L.L. TATUM, W.M. KOLB, FLOYD BONGE, ATTORNEY EARL REDWINE, IRWIN FARRAR, ATTORNEY EUGENE BEST



. 1953

EMWD'S FIRST WATER DISTRIBUTION SYSTEM DELIVERS WATER TO PERRIS



Contaminants & Regulations

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the California Department of Public Health (CDPH) established regulations that limit the amount of certain contaminants in water provided by public water systems.

Contaminants that may be present in source water include the following:

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock, and wildlife.

Organic chemical contaminants including synthetic and volatile organic chemicals. These may be by-products of industrial processes or petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Nitrate levels in drinking water above 45 parts per million (ppm) are a health risk for infants under six months of age.

Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms include shortness of breath and blueness of the skin.

Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

. 1960 CONSTRUCTION OF CHAMBERS TANK SERVING PERRIS AND SUN CITY



. 1973 GOVERNOR RONALD REAGAN DELIVERS THE FIRST DROPS OF SWP WATER TO LAKE PERRIS



. 1980 VOTERS APPROVED A \$17.7 MILLION SMALL PROJECTS ACT LOAN TO BRING NORTHERN CALIFORNIA WATER TO EMWD'S TERRITORY

VOTE "YES" Tuesday, February 26
- for -
HIGH-QUALITY. NORTHERN CALIFORNIA WATER

EASTERN MUNICIPAL WATER DISTRICT'S Distribution Plan

(All facilities indicated connect to E.M.W.D.'s present distribution system)

Chloramines

Chloramines are a type of disinfectant that EMWD uses to prevent re-growth of potentially harmful bacteria in the water distribution system. Chloramines are a combined form of chlorine and ammonia. They are approved by the Environmental Protection Agency (EPA) as a disinfectant for drinking water, and have been used safely for years. Chloraminated water is safe to drink because the digestive process neutralizes the chloramines before they enter the bloodstream. Chloraminated water is also safe for all other daily uses, such as bathing and cooking. In addition, the treatment process that uses chloramines produces fewer disinfection by-products, such as Trihalomethanes.

Special Exceptions (Kidney Dialysis/Aquariums)

Customers who have unique water quality needs and who use specialized home treatments, such as kidney dialysis machines, should make the necessary adjustments to remove chloramines. Like chlorine, chloramines are toxic in dialysis water. Customers who have fish tanks in their homes should also take precautions to remove chloramines prior to adding water to tanks. Effective treatments include using granular-activated carbon filters or using chemicals specifically designed to remove chloramines. Allowing drinking water to stand, boiling water and chemicals that remove only chlorine, will not remove chloramines.

The facts about total coliform bacteria

Water agencies test for the presence of coliform bacteria as an indicator of drinking water quality. Coliform bacteria are common in the environment and are generally not harmful. Coliform bacteria may occur in soil, vegetation, animal waste, sewage, and surface waters.

Eastern Municipal Water District routinely tests for the presence of any coliform bacteria as an indicator of the sanitary quality of drinking water. EMWD analyzed 2,443 coliform samples in 2007, two of which were total coliform positive. The maximum allowed by EPA for total coliforms is no more than 5% in any month. The highest monthly total coliform result was 0.45%, which complies with the EPA's standard.

A positive total coliform test result does not necessarily mean a maximum contaminant level (MCL) has been exceeded, or that there is a problem in the water system. More information and general guidelines on ways to lessen the risk of infection by microbes are available from the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/dwh/health.html.

. 1996 AERIAL SHOT OF EMWD'S HEADQUARTERS



. 1998 CONSTRUCTION OF THE PERRIS DESALINATION PLANT



. 2000 NEW WELL TESTING



Protecting Your Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1(800) 426-4791.

EMWD uses several sources of water to serve its customers, including surface water from the Colorado River and the California State Water Project (SWP), as well as local groundwater. As water travels over the surface of the land, or soaks down through the ground, it dissolves naturally occurring substances, such as minerals and radioactive material; surface water can also pick up substances from the presence of animals and/or humans. The land that the water comes into contact with is called the watershed; everything that happens to or in the watershed can affect the quality of your drinking water supply.

An assessment of all EMWD's watersheds, both surface and groundwater, was completed in 2002. The Colorado River, a surface water source, was assessed to be most

vulnerable to recreational activities, urban and storm water runoff, increasing urbanization in the watershed, and wastewater.

Water from the SWP, also a surface water source, was assessed to be most vulnerable to urban and storm water runoff, wildlife, agriculture, recreational activities, and wastewater.

The assessments of the groundwater within the District were determined to be most vulnerable to urban land uses such as automobile gas stations and repair shops, transportation corridors, furniture repair and manufacturing, sewer collection systems, and sand and gravel mining operations. Groundwater wells were also considered vulnerable to agricultural uses including irrigated crops and use of pesticides and herbicides.

Protecting the sources of drinking water helps protect our health. You can view vulnerability assessments on line at <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx> and then clicking on "Summary of Assessments." You can also call (951) 928-3777, ext. 6337 for a copy of EMWD's vulnerability assessments.

. 2005 DESALTER FACILITY IN MENIFEE



. 2007 CHECKING EQUIPMENT AT THE PERRIS FILTRATION PLANT



Tips and Rebates

Use water wisely in landscaping

Most homeowners use more than half of their water outdoors and nearly half of that is often wasted on over-watering. Follow these tips to help you use water wisely in your landscape:

- ◆ Use drip irrigation for trees, shrubs, and perennials.
- ◆ Mulch around trees and shrubs to reduce runoff and evaporation.
- ◆ Irrigate between 9 p.m. and 6 a.m. and never in windy weather.
- ◆ Reduce water pressure in irrigation systems that release a fine mist that easily blows away. Open the irrigation valve box cover and look for the round "faucet type handles" on top of each valve. These are made to be turned for adjustment just like a faucet handle.
- ◆ Install a Smart Irrigation Controller.
- ◆ Use rotating nozzles for pop-up spray heads.
- ◆ Consider installing artificial turf.

Tap into EMWD's water efficiency programs and rebates*

EMWD offers numerous water efficiency programs and rebates, some of which are listed below. To learn more, call our rebate hotline at (951) 928-3777, ext. 4517

Residential Water Survey: Free indoor / outdoor water survey of your home, by conservation specialists; ask if you qualify by calling WaterWise Consulting, Inc. at 1-(888) 987-9473

Smart Controller Rebates

Rotating Nozzles for Pop-Up Spray Heads

Synthetic Turf Rebates

High Efficiency Toilet (HET) Rebate Programs:

Direct Install HET Program: Free toilets (including seats), and disposal of old toilets for replacing pre-1994 toilets; go to www.toiletprogram.com or call 1-(888) 878-6818 or (951) 956-2181

HET Rebates

High Efficiency Clothes Washer Rebates

* Programs and rebates can change; please ensure eligibility by logging onto www.emwd.org for the qualified list or call (951) 928-3777, ext. 4517.

For more information, go to www.usewaterwisely.org or call EMWD conservation staff at (951) 928-3777 ext. 4221.

2008

IN THE SUMMER OF 2008, EMWD WILL OPEN ITS CALIFORNIA FRIENDLY DEMONSTRATION GARDEN TO THE PUBLIC

ROTATING SPRAY NOZZLE

ARTIFICIAL TURF



Public Meetings

EMWD's Board of Directors generally meet on the 1st and 3rd Wednesdays of each month. Work sessions begin at 9:00 a.m. and the public board meeting starts at 1:00 p.m.

If you wish to attend a meeting, please call the board secretary during normal business hours at (951) 928-3777, ext. 4235 to confirm meeting dates.

For more information, contact:
(951) 928-3777, ext. 6337
www.emwd.org

EASTERN MUNICIPAL WATER DISTRICT

2007 Consumer Confidence Report

ISSUED JULY 2008



EMWD Focuses on Long-term Water Reliability

Diversity is key

Uncertainties with imported water supplies, infrastructure issues, regulatory requirements, environmental factors, and drought continue to challenge southern California water providers. EMWD realizes that these challenges cannot be solved by rain and conservation alone. Listed below are ways we are addressing these challenges.

- ◆ **Legislative measures** - EMWD supports legislation that will fund local, regional, and state wide supply projects.
- ◆ **Groundwater desalination** - EMWD owns and operates two plants in the Menifee/Perris area. The desalination process treats previously unusable salty groundwater and provides our customers with about 8 million gallons a day of drinking water.
- ◆ **Water Use Efficiency Ordinance** - Recently passed Ordinance 72.23 requires water efficient landscapes in new development and allows us to penalize existing customers for outdoor water waste from run-off.
- ◆ **Maximizing the use of recycled water** - EMWD is one of the top producers of recycled water within California. Our customers use recycled water for industrial processes, and to irrigate farms and large landscapes.
- ◆ **Water Shortage Contingency Plan** - EMWD has a four-stage plan for responding to water supply shortages. Currently we are in a Stage One, which calls for a voluntary reduction of 20 gallons, per person, per day.

Eastern Municipal Water District
2270 Trumble Road
PO Box 8300
Perris, CA 92572-8300



www.emwd.org