EMWD

EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

WATER QUALITY

CONSUMER CONFIDENCE REPORT 2002

Issued June 2003

This Report Explains

This brochure is a snapshot of the water quality we provided during calendar year 2002. We want you to have this information because informed customers make better decisions as regulations change. For more information about your water from Eastern Municipal Water District (EMWD), call Amy Mora, Environmental Compliance Analyst II, (909) 928-3777, ext. 6337.

This report explains:

- EMWD's drinking water sources and quality
- Regulations that protect our health
- Detected substances listed in tables
- Programs that protect the high quality of our supply sources

Eastern Municipal Water District is committed to providing a reliable supply of high-quality drinking water. Drinking water supplied by EMWD meets high standards established by state and federal agencies.

During 2002, EMWD staff collected 4,500 drinking water samples. EMWD's lab staff and contract laboratories tested for over 179 substances, in nearly 28,000 tests on those samples.

In addition, nearly 11,000 wastewater samples were taken and more than 58,000 tests performed to protect the health and safety of the communities and groundwater resources within EMWD's service area.

The operations budget for EMWD's laboratory is about $1 million for the 2002-03 fiscal year. Highly trained microbiologists, chemists and water analysts work hard to make sure EMWD customers can depend on high-quality water.

Results of freshwater monitoring during 2002 are found in the tables of this report.

Knowing the Source of Your Tapwater

As an EMWD customer, your tapwater comes from one of three service areas: the Mills Service Area in the northwest portion of the District, the Skinner Service Area in the southern portion of the District, and the East Valley Service Area in the northeast portion of the District. To find your service area, see the map on the back cover.

In the Mills and Skinner service areas, the water is primarily imported surface water treated at regional treatment plants or water from wells that tap EMWD's own groundwater resources. Menifee and Sun City typically receive their tapwater from either the Skinner or Mills plants, or from EMWD's new Menifee Desalination Plant. This additional new supply draws on groundwater that is high in salts—specifically Total Dissolved Solids. Data in tables represent well water before treatment (see tables). However, through reverse osmosis, any contaminants that exceed their maximum contaminant levels (MCLs) are removed. The product water from desalination is similar in quality to distilled water. That water is blended with other local supplies to create drinking water that is comparable to imported water supplies.

The Henry J. Mills Filtration Plant and the Robert F. Skinner Filtration Plant are owned and operated by The Metropolitan Water District of Southern California. Treated water from these plants is purchased by EMWD and delivered to its customers through the areas listed above.

In the East Valley Service Area, the water is mostly from EMWD wells. Groundwater is pumped, then treated with chlorine prior to delivering it to customers.

Mills Service Area

Mills Filtration Plant (Water supplied solely from Northern California through the State Water Project)
Serves Moreno Valley, Menifee, Perris, Sun City, Good Hope, Mead Valley, Lakeview, Nuevo, Romoland, North Canyon Lake and Quail Valley.

Sunnymead Wells (Moreno Valley area, blended with Mills water)
Two wells serve only a small area in Moreno Valley.
Of these wells, Well 49 served water only briefly in 2002.

New Perry Well (Located within Perris city limits, blended with Mills water)
Service is limited to the immediate surrounding neighborhood.

New Follico Well (Located in Perris, blended with Mills water)
Water service includes a limited area of Perris.

Menifee Desalter Well (Located in Sun City, blended with Mills water)
Desalter Well 75 is treated by reverse osmosis and serves parts of Menifee and Sun City.
Data in tables represent well water before treatment.

Skinner Service Area

Skinner Filtration Plant (Generally 80% Colorado River and 20% Northern California)
Serves Murrieta, Murrieta Hot Springs, and occasionally Menifee and southern Sun City. This source is available to supplement supply in the East Valley area.

East Valley Service Area

This system of 13 wells serves most of the San Jacinto Valley, including much of Hemet and San Jacinto, Soboba Hot Springs, Valle Vista, Homeland, Juniper Flats, Green Acres, Diamond Valley and Winchester.

The Water We Drink

The U.S. Congress has directed the Environmental Protection Agency (EPA) to require public water systems to report annually on the quality of the drinking water they serve. Eastern Municipal Water District enthusiastically supports this requirement and has provided consumer confidence reports and other water quality data to all of its customers for many years.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Microbial Water Quality and Disinfection

Coliform bacteria, as such, are not generally considered harmful. They are used, however, as indicators of potential problems because they are easily monitored and analyzed. It is not at all unusual for a system to have an occasional positive sample for total coliform bacteria. And it is difficult–if not impossible–to assure that a system will never get a positive sample.

The Maximum Contaminant Level (MCL) for total coliform bacteria is based on a monthly percent (5.0%) of positive samples. The Maximum Contaminant Level Goal (MCLG) is 0%.

In 2002, the District's monthly percent of positive total coliform test results ranged from 0.0% to 1.4%. No samples tested positive for *E. coli* in 2002, and no **Giardia** or **Cryptosporidium** were detected in any surface water supply.

Disinfection is typically accomplished using chlorine at wells prior to delivery to customers. **Chloramine**, a chlorine compound, is used for surface water that is treated at the Mills and Skinner plants. Ozone, an alternative form of disinfection, will soon be used in the treatment process at the Mills and Skinner plants.

High turbidity, or the measure of the cloudiness of water, can hinder the effectiveness of disinfectants. Surface water must comply with the Primary MCL of 0.5 Nephelometric Turbidity Units (NTU) and groundwater must comply with the Secondary MCL of 5.0 NTU. All surface water samples were in compliance with the primary turbidity standard. All groundwater samples were in compliance with the Secondary MCL of 5.0 NTU, except well 49 and well 75. During the times of high turbidity, these wells were not placed into the distribution system.

See Where Your Water Comes From!
Look at the map on the back cover

Important Health Information

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 (1-800-426-4791).

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/Center 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 (1-800-426-4791).

Arsenic—While your drinking water meets the current standard for arsenic, local supplies in the East Valley did contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The California Department of Health Services continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate in drinking water at levels above 45 parts per million (ppm) is a health risk for infants of less than 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. Untreated well water from the Sunnymead Wells exceeds the nitrate MCL of 45 ppm. Under strict state guidelines, EMWD blends low nitrate water from the Mills system with this supply to meet acceptable levels below the MCL.

Perchlorate is an oxygen-rich salt known in high concentrations to affect the thyroid gland. The California Office of Environmental Health Hazard Assessment (OEHHA) has revised the draft action level from 18 parts per billion (ppb) down to 4 ppb.

EMWD has monitored for perchlorate since 1999. Three wells have perchlorate detected at 5, 7.5 and 13 ppb. However, when these wells are operated, blending facilities dilute the well water with water from the Mills plant to reduce the perchlorate levels to less than 4 ppb.

Parameter	Units	State MCL (SMCL) [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Mills Service Area: Mills Filtration Plant Average (Range)	Mills Service Area: Sunnymead Well 44 Average (Range)	Mills Service Area: Sunnymead Well 49 Average (Range)	Mills Service Area: New Perry Well Average (Range)	Mills Service Area: New Follico Well Average (Range)	Mills Service Area: Menifee Desalter Well 75 (a) Average (Range)	Skinner Service Area: Combined Skinner Plants Average (Range)	East Valley Service Area: East Valley Wells Average (Range)	Major Sources in Drinking Water
Percent State Project Water	%	—	—	—	100 (100)	NA	NA	NA	NA	NA	27 (22-32)	NA	
PRIMARY STANDARDS—MANDATORY HEALTH-RELATED STANDARDS													
CLARITY													
Combined Filter Effluent Turbidity	highest NTU	0.3 (b)	NA	—	0.10	NA	NA	NA	NA	NA	0.11	NA	Soil runoff
	% < 0.3 NTU	95 (b)	NA	—	100	NA	NA	NA	NA	NA	100	NA	
Turbidity (Source Water)	NTU	(5)	NA	—	0.06 (0.05-0.07)	0.09	6.9 (1.6-12.2)	NA	NA	1.6 (0.2-5.1)	0.06 (0.05-0.08)	0.84 (ND-4.12)	Soil runoff
Distribution System Turbidity	NTU	(5)	NA	—	0.1 (ND-0.5)	NA	NA	NA	NA	NA	0.07 (ND-1.5)	0.1 (ND-0.5)	Soil runoff
MICROBIOLOGICAL													
Total Coliform Bacteria	%	5.0 (c)	(0)	—	System-wide monthly average for Total Coliform for 2002: 0.44%. Range: 0 - 1.4%								Naturally present in the environment
Fecal Coliform and *E. coli*	%	(d)	(0)	—	System-wide monthly average for Fecal Coliform Positive (*E. coli*) for 2002: 0.0%. Range: 0.0%								Human and animal fecal waste
Heterotrophic Plate Count (HPC) (e)	CFU/mL	500 (e)	NA	—	<1 (<1)	NA	NA	NA	NA	NA	<1 (<1-8)	NA	Naturally present in the environment
INORGANIC CHEMICALS													
Aluminum (f)	ppb	1000	600	50	ND (ND)	ND (ND)	ND (ND)	NA	NA	120 (ND-240)	ND (ND)	37 (ND-89)	Residue from water treatment process; natural deposits; erosion
Arsenic	ppb	50	NA	2	ND (ND)	ND (ND)	ND (ND)	NA	NA	2.95 (2.9-3.0)	ND (ND)	1.0 (ND-8.1)	Natural deposits erosion, glass and electronics production wastes
Barium	ppm	1	(2)	0.1	ND (ND)	0.1	0.2	NA	NA	0.125 (0.12-0.13)	ND (ND)	ND (ND)	Oil and metal refineries discharges; natural deposits erosion
Total Chromium	ppb	50	(100)	10	ND (ND)	ND (ND)	ND (ND)	NA	NA	15 (ND-30)	ND (ND)	ND (ND)	Discharge from steel and pulp mills; natural deposits erosion
Copper (f,g)	ppm	AL=1.3	0.17	0.05	90th percentile of 50 samples: 0.23 ppm								Internal corrosion of household pipes; natural deposits erosion
Fluoride	ppm	2	1	0.1	0.10 (ND-0.11)	0.4	0.3	0.5	0.4	0.47	0.24 (0.19-0.26)	0.4 (0.2-0.8)	Erosion of natural deposits; water additive for tooth health
Lead (g)	ppb	AL=15	2	5	90th percentile of 50 samples: 7 ppb								House pipes internal corrosion; erosion of natural deposits
Nitrate (as N) (h)	ppm	10 (h)	10	0.4	0.7 (ND-1.3)	13.5 (12.9-14.3)	23 (21.9-23.8)	4.7 (4.5-4.9)	5.6 (5.4-5.8)	2.75 (ND-2.9)	ND (ND)	2 (ND-6.3)	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrate and Nitrite (as N)	ppm	10	10	0.4	0.7 (ND-1.3)	13.5 (12.9-14.3)	23 (21.9-23.8)	4.7 (4.5-4.9)	5.6 (5.4-5.8)	2.75 (ND-2.9)	ND (ND)	2 (ND-6.3)	Runoff and leaching from fertilizer use; sewage; natural erosion
Selenium	ppb	50	(50)	5	ND (ND)	5.1	6.7	NA	NA	20 (19-21)	ND (ND)	4.3 (ND-17)	Refineries, mines, and chemical waste discharges; runoff
ORGANIC CHEMICALS													
Pesticides/PCB's													
Dibromochloropropane (DBCP)	ppt	200	1.7	10	ND (ND)	60 (50-70)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	Banned nematocide that may still be present in soils
Volatile Organic Compounds													
Methyl-*tert*-butyl ether (MTBE) (f,i)	ppb	13	13	3	0.7 (ND-2.1)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	0.6 (ND-1.4)	ND (ND)	Leaking underground gasoline storage tanks and pipelines
Tetrachloroethylene (PCE)	ppb	5	0.06	0.5	ND (ND)	0.66 (ND-1.2)	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	ND (ND)	ND (ND)	ND (ND)	1.1 (0.8-1.3)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	Metal degreasing site discharges and other factories
RADIOLOGICALS (j)													
Gross Alpha Particle Activity	pCi/L	15	NA	1	ND (ND-2.12)	NA	4.39	NA	4.04 (1.26-5.93)	13.9 (9.28-18.6)	3.99 (ND-5.53)	3.49 (1.32-14.1)	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	NA	4	ND (ND-4.25)	NA	6.62	NA	NA	9.61	5.24 (ND-7.48)	NA	Decay of natural and man-made deposits
Combined Radium (k)	pCi/L	5	NA	0.5	1.24 (0.64-2.08)	NA	NA	NA	NA	NA	1.01 (ND-2.36)	NA	Erosion of natural deposits
Uranium	pCi/L	20	0.5	2	ND (ND)	NA	ND (ND)	NA	NA	8.96	2.61 (ND-3.18)	NA	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCT PRECURSORS													
Total Trihalomethanes (TTHM) (l) Source Water	ppb	80	NA	0.5	58 (46-84)	ND (ND)	ND (ND)	ND (ND)	NA	ND (ND)	49 (37-58)	ND (ND)	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) Dist'n System	ppb	80	NA	0.5	59 (12-94)	NA	NA	NA	NA	NA	54 (37-63)	24 (ND-57)	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) Dist'n System	ppb	80	NA	0.5	Systemwide 4 quarter running average (highest): 43 ppb.			Systemwide 4 quarter range of all samples: ND-94					By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (l,m) Source Water	ppb	60	NA	1 (m)	25 (12-48)	NA	NA	NA	NA	NA	20 (14-29)	NA	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) Dist'n System	ppb	60	NA	1 (m)	47.7 (4.2-56)	NA	NA	NA	NA	NA	32.4 (14.6-35.4)	10 (ND-23.1)	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) Dist'n System	ppb	60	NA	1 (m)	Systemwide 4 quarter running average (highest): 30.6 ppb. Range of all samples: ND-56								By-product of drinking water chlorination
Total Chlorine Residual Dist'n System	ppm	[4]	[4]	—	1.93 (ND-2.9)	NA	NA	NA	NA	NA	2.25 (ND-2.9)	1.09 (ND-2.9)	Drinking water disinfectant added for treatment

UNDERSTANDING THE DATA

Our water is tested in accordance with a water quality monitoring plan approved by the California Department of Health Services (CDHS). The results of tests performed in 2002 are presented in the accompanying tables. Substances that are regulated with a primary standard and detected in the water are listed in the table on this page. Substances that are regulated with a secondary standard and unregulated substances that were detected in the water are listed in the table on pages 6-7.

ABBREVIATIONS/LEGENDS

AL	=California Action Level
CFU/mL	=Colony Forming Units per milliliter
DBP	=Disinfection By-Products
DLR	=Detection Limits for purposes of Reporting
HAA5	=Haloacetic Acids (five)
ICR	=Information Collection Rule
MCL	=Maximum Contaminant Level
MCLG	=Maximum Contaminant Level Goal
µmhos/cm	=Micromhos per centimeter
MRDL	=Maximum Residual Disinfectant Level
MRDLG	=Maximum Residual Disinfectant Level Goal
NA	=Not Applicable
ND	=None Detected
NTU	=Nephelometric Turbidity Units
pCi/L	=picoCuries per Liter
PHG	=Public Health Goal
ppb	=parts per billion
ppm	=parts per million
ppt	=parts per trillion
SI	=Saturation Index
SMCL	=Secondary MCL

Exceeds MCL
Exceeds PHG
Exceeds SMCL
Exceeds AL

DEFINITIONS

Maximum Contaminant Level or 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 or 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 or MRDL: The level of a disinfectant added for water treatment that may not be exceeded at the customer's tap.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U. S. Environmental Protection Agency.

Public Health Goal or 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.

Primary Drinking Water Standard or PDWS: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

FOOTNOTES

(a) See more discussion of desalination on page 2.

(b) The turbidity level of filtered surface water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance.

(c) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all water sources. In 2002, 2,366 samples were analyzed. The MCL was not violated.

(d) Fecal coliform/*E. coli* MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/*E. coli*, constitutes an acute MCL violation. The MCL was not violated in 2002.

(e) Monthly averages. The disinfectant residual entering the distribution system shall not be less than 0.2 ppm, or the HPC shall be less than or equal to 500 CFU/mL. In 2002, all total chlorine residuals entering the distribution system were above 0.2 ppm. HPCs are controlled by Treatment Technique.

(f) Aluminum, copper, and MTBE have both primary and secondary standards.

(g) Data for Copper and Lead distribution system samples are from 2001.

(h) State MCL is 45 ppm as nitrate, which equals 10 ppm as N.

(i) MTBE reporting level is 0.5 ppb.

(j) Results for the Mills and Skinner plants 1998/99 4-quarter radiological monitoring program.

(k) Standard is for Radium-226 and -228 combined.

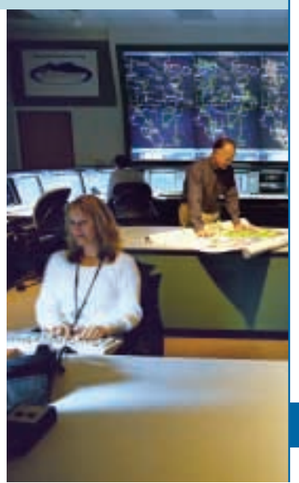
(l) Calculated from the filtration plant effluent samples taken weekly for TTHM and monthly for HAA5. In 2002, Mills and Skinner plants were in compliance with all provisions of the Stage 1 Disinfection/Disinfection By-Products (D/DBP) Rule, and with the DBP precursor control portion of the Stage 1 regulation.

(m) 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.

(n) A sequestering agent is added to the wells in East Valley to control the corrosivity of the water. All other wells listed as "Corrosive" are blended with the "Non-Corrosive" waters either from Mills or Skinner Filtration Plants. Evidence of corrosion control is compliance with the lead and copper Action Levels, listed above. The sequestering agents also are used in East Valley to hold iron and manganese in solution.

(o) Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information, contact MWD at (213) 217-6850.

(p) Total Organic Carbon samples (TOCs) at the filtration plants were taken at the filter effluents.
TOCs are controlled by Treatment Technique.



Parameter	Units	State MCL (SMCL) [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Mills Service Area: Mills Filtration Plant Average (Range)	Mills Service Area: Sunnymead Well 44 Average (Range)	Mills Service Area: Sunnymead Well 49 Average (Range)	Mills Service Area: New Perry Well Average (Range)	Mills Service Area: New Follico Well Average (Range)	Mills Service Area: Menifee Desalter Well 75 (a) Average (Range)	Skinner Service Area: Combined Skinner Plants Average (Range)	East Valley Service Area: East Valley Wells Average (Range)	Major Sources in Drinking Water
SECONDARY STANDARDS–AESTHETIC STANDARDS													
Chloride	ppm	(500)	NA	—	95 (79-127)	140	240	230	230	574 (560-589)	83 (78-92)	25 (7.5-82)	Runoff/leaching from natural deposits; seawater influence
Source Water Color	Units	(15)	NA	—	2 (1-3)	NA	10 (5.0-15)	NA	NA	1.25 (ND-2.5)	2 (1-3)	0.8 (ND-5.0)	Naturally occurring organic materials
Distribution System Color	Units	(15)	NA	—	1.6 (ND-5)	NA	NA	NA	NA	NA	1.4 (0-10)	1.7 (0-7.5)	Naturally occurring organic materials
Corrosivity	SI	(non-corrosive)	NA	—	non-corrosive (-0.02-0.08)	non-corrosive	NA	corrosive (n)	corrosive (n)	corrosive (n)	non-corrosive (0.25-0.42)	corrosive (n)	Elemental balance in water; affected by temperature, other factors
Iron	ppb	(300)	NA	100	ND (ND)	ND (ND)	290	ND (ND)	ND (ND)	315 (270-350)	ND (ND)	94 (ND-550) (n)	Leaching from natural deposits; industrial wastes
Manganese	ppb	(50)	NA	20	ND (ND)	ND (ND)	ND (ND)	ND (ND)	ND (ND)	266 (250-280)	ND (ND)	47 (ND-490) (n)	Leaching from natural deposits
Source Water Odor Threshold (o)	Units	(3)	NA	—	(o)	NA	1	NA	NA	1	(o)	1	Naturally occurring organic materials
Distribution System Odor Threshold	Units	(3)	NA	—	1 (1-2)	NA	NA	NA	NA	NA	1	1	Naturally occurring organic materials
Specific Conductance	µmhos/cm	(1600)	NA	—	551 (490-643)	780	1210	1100	1531 (1500-1600)	3490 (3460-3530)	852 (830-902)	510 (264-930)	Substances that form ions in water; seawater influence
Sulfate	ppm	(500)	NA	0.5	38 (27-47)	16	31	29	36	602	179 (162-191)	66 (9.7-207)	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	(1000)	NA	—	295 (262-345)	630	750	740	922 (829-1100)	2300	509 (495-543)	300 (160-600)	Runoff/leaching from natural deposits; seawater influence
UNREGULATED CHEMICALS REQUIRING MONITORING													
Boron	ppb	AL=1,000	NA	100	170 (130-200)	ND (ND)	ND (ND)	470 (450-490)	460 (440-470)	240 (230-240)	130 (110-140)	ND (ND)	Runoff/leaching from natural deposits; industrial wastes
Chromium VI	ppb	NA	NA	1	ND (ND)	1.1	NA	1.1	ND (ND)	ND (ND)	ND (ND)	ND (ND-1.3)	Industrial waste discharge
Perchlorate	ppb	AL=4	NA	4	ND (ND)	7.5	11.5 (10-13)	ND (ND)	5.0 (4.7-5.2)	ND (ND)	ND (ND-5)	ND (ND)	Industrial waste discharge
Total Organic Carbon (TOC) (p)	ppm	(p)	NA	—	2.1 (1.7-3.0)	ND (ND)	0.5	ND (ND)	ND (ND)	1.0	2.4 (2.1-2.8)	1.2 (0.8-2.5)	Various natural and man-made sources
Vanadium	ppb	AL=50	NA	3	ND (ND)	13	NA	21	18	12	ND (ND)	14 (<3-46)	Naturally-occurring; industrial waste discharge
ADDITIONAL PARAMETERS													
ICR DISINFECTION BY-PRODUCTS (DATA IS FROM 8/97 TO 12/98)													
Chloral Hydrate	ppb	NA	NA	0.5	4.4 (2.4 - 8.2)	NA	NA	NA	NA	NA	5.1 (3.5 - 7.0)	NA	By-product of drinking water chlorination
Chloropicrin	ppb	NA	NA	0.5	ND (ND - 1.1)	NA	NA	NA	NA	NA	ND (ND)	NA	By-product of drinking water chlorination
Cyanogen Chloride	ppb	NA	NA	0.5	4.4 (2.7 - 7.2)	NA	NA	NA	NA	NA	3.4 (2.3 - 5.5)	NA	By-product of drinking water chlorination
Haloacetonitriles	ppb	NA	NA	0.5	8.7 (6.2 - 13)	NA	NA	NA	NA	NA	8.7 (5.6 - 17)	NA	By-product of drinking water chlorination
Haloketones	ppb	NA	NA	0.5	1.5 (0.6 - 2.9)	NA	NA	NA	NA	NA	1.6 (1.3 - 2.2)	NA	By-product of drinking water chlorination
Total Organic Halides	ppb	NA	NA	50	194 (166 - 250)	NA	NA	NA	NA	NA	138 (115 - 157)	NA	By-product of drinking water chlorination
OTHER PARAMETERS													
Alkalinity	ppm	NA	NA	—	74 (66-79)	690	77	87	140	520	119 (114-123)	130 (99-180)	
Calcium	ppm	NA	NA	—	21 (17-24)	54	98	74	110	330 (320-340)	57 (54-59)	48 (22-82)	
Hardness	ppm	NA	NA	—	110 (98-120)	210	400	270	380	1300 (1200-1300)	241 (230-250)	140 (60-260)	
Magnesium	ppm	NA	NA	—	14.0 (12.5-16.0)	18	38	20	23	110	24.0 (23.0-25.0)	5.4 (1.4-14)	
Source Water pH	pH Units	NA	NA	—	8.32 (8.23-8.39)	7.2	6.8	7.4	7.2	6.0	8.06 (8.02-8.08)	7.5 (6.7-8.4)	
Distribution System pH	pH Units	NA	NA	—	8.2 (7.5-8.8)	NA	NA	NA	NA	NA	8 (7.5-8.2)	7.9 (7.4-8.5)	
Potassium	ppm	NA	NA	—	3.1 (2.7-3.6)	2.8	3.6	2.9	3.4	8.3	3.9 (3.9-4.1)	3.8 (1.8-7.4)	
Radon	pCi/L	NA	NA	100	ND (ND)	1310 (1250-1370)	606	841 (779-914)	989 (918-1090)	235	ND (ND)	220 (8.68-293)	
Sodium	ppm	NA	NA	—	63 (55-80)	54	60	98	140	320	79 (76-86)	42 (12-93)	

Exceeds MCL
Exceeds PHG
Exceeds SMCL
Exceeds AL

RADON

Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tapwater from showering, washing dishes, and other household activities.

Compared to radon entering the home through soil, radon entering the home through tapwater will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer.

If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

WHAT ELSE SHOULD I KNOW ABOUT WATER REGULATIONS?

The sources of drinking water (both tapwater and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or soaks down through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.
- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

In order to ensure that tapwater is safe to drink, USEPA and the CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that provide the same protection for public health. EMWD's lab and water quality personnel are dedicated to ensuring that these substances do not exceed MCLs in your drinking water.

VULNERABILITY ASSESSMENTS

In December 2002, EMWD completed a source water assessment of its potable production well supplies. The assessments evaluated 18 groundwater wells within the District's service area. Groundwater supplies are considered vulnerable to pollution from various urban and agricultural land uses.

Urban land uses that can pollute the water supply include automobile gas stations and repair shops, transportation corridors, furniture repair and manufacturing facilities, sewer collection systems, and sand and gravel mining operations. Agricultural land uses include irrigated crops and application of pesticides and herbicides. A copy of the assessments may be obtained by contacting EMWD by phone at (909) 928-3777 extension 6337.

Also in December 2002, Metropolitan Water District of Southern California completed a source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment may be obtained by contacting Metropolitan by phone at (213) 217-6850.

POLLUTION PREVENTION

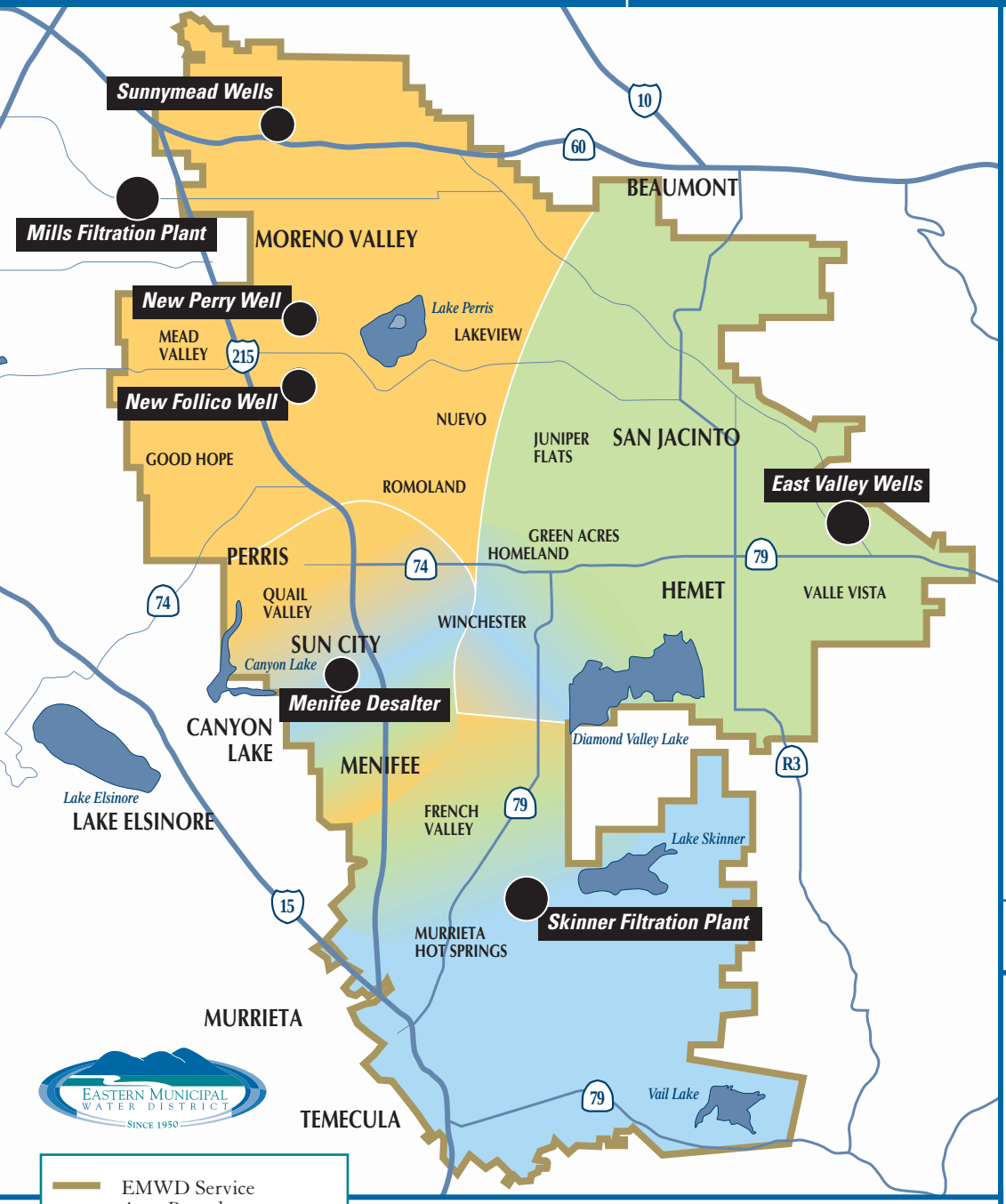
Some of our drinking water comes from groundwater sources. Homes and businesses can protect groundwater by careful use of cleaning, automotive, and insect control products. Make sure to follow label directions, use products completely and avoid spilling anything on the ground. For homeowners, the County of Riverside provides Household Hazardous Waste Collection Events. For a time in your city call (909) 358-5256 or check www.rivcoeh.org/hhhw.htm.

If you have questions about how you can prevent pollution, call Judy Lankey, Senior Source Control Inspector at (909) 928-3777 ext. 6203 or send email to pollutionprevent@emwd.org.

PUBLIC MEETINGS

Regular public meetings of the EMWD Board of Directors are generally held on the 1st and 3rd Wednesdays of each month. Work sessions begin at 9:00 a.m. and the board meetings start at 1:00 p.m.

If you wish to attend a meeting, please call the board secretary during normal work hours at (909) 928-3777, ext. 4205 to be certain the meeting is being conducted on the normal date.



FOR MORE INFORMATION CONTACT

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