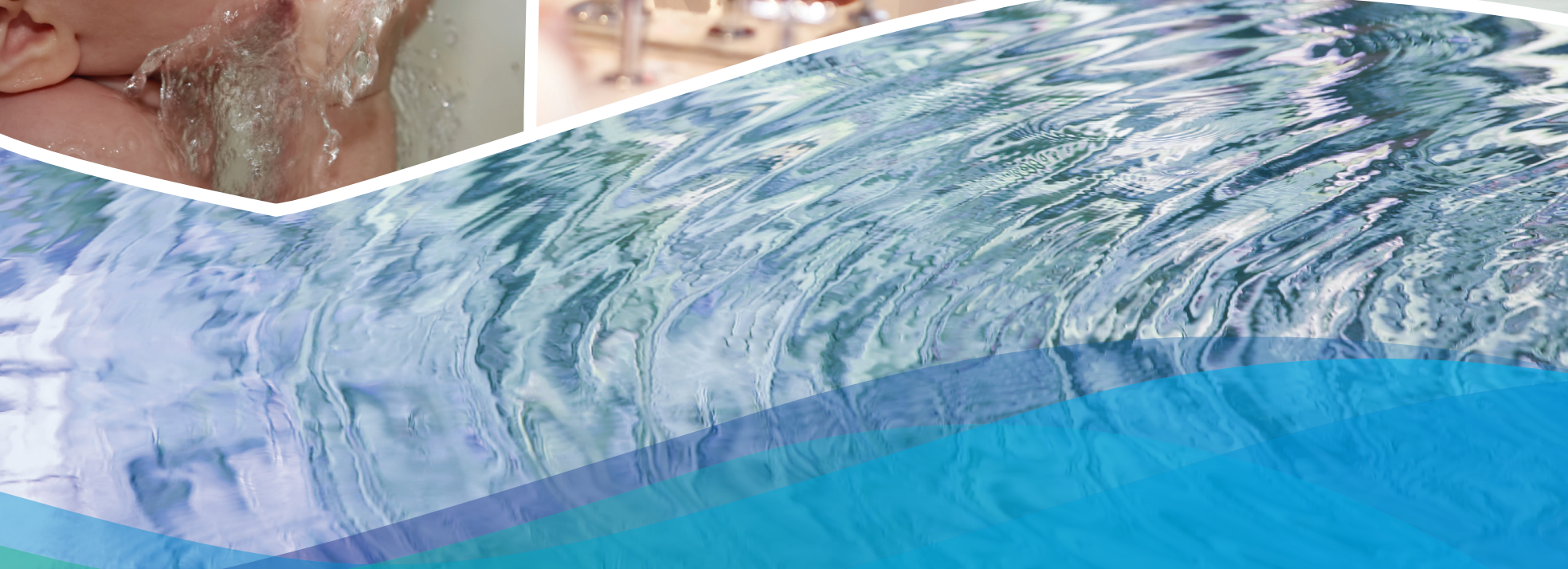




Your 2016 Water Quality

CONSUMER CONFIDENCE REPORT

Issued July 2017



www.emwd.org

Eastern Municipal Water District

INSIDE THIS REPORT

..... PAGE 3

Regulations
Contaminants
Nitrate
Sensitive populations
Arsenic
Unregulated contaminants
Lead and copper

..... PAGE 4

Source water map

..... PAGE 5

The communities we serve
Protecting your drinking water

..... PAGE 6

Facts about total coliform bacteria
Abbreviations and definitions

..... PAGE 7

Distribution system data

..... PAGES 8-11

Water quality tables

..... BACK PAGE

Get your report electronically
Public meeting and contact information

OUR MISSION

To deliver value to our customers and the communities we serve by providing safe, reliable, economical and environmentally sustainable water, wastewater and recycled water services.

OUR VISION

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

EMWD wants you, our valued customer, to be confident your drinking water is safe.

This annual water quality report provides important information about the source(s) of your water and the tests used to ensure your tap water is safe and healthy to drink.

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 "Español" or call (951) 928-3777 ext. 4221 for a Spanish copy by mail.

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

Dear Valued EMWD Customer,

We are happy to report that Eastern Municipal Water District (EMWD) has once again continued to provide you with consistently high quality drinking water throughout 2016. This annual water quality report shows how EMWD met or surpassed all drinking water quality standards established by the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board).

Protecting public health with a high quality water supply is our top priority. EMWD achieves such high quality tap water by managing our water sources, using state-of-the-art water treatment processes, efficiently maintaining and operating our facilities, and conducting rigorous monitoring and testing of the water we serve. Water samples are collected throughout the year from EMWD's 29 drinking water sources to carefully test for 200 contaminants and impurities. In 2016, EMWD's laboratory personnel collected 6,134 water samples and performed 38,910 tests to monitor and ensure quality.

EMWD supports science-based standards that provide health benefits to the public in an economically balanced manner. While groundwater or surface waters can have trace measurable contaminants, EMWD protects your health and safety by treating or otherwise ensuring the water we deliver meets or surpasses all regulated drinking water standards.

The State Board requires that EMWD customers receive an annual copy of this report which summarizes the results of water quality tests and provides specific details about sources and quality of the water served in your community. The guidelines for distributing this report allow for electronic delivery of the report instead of a paper copy in the mail. By delivering these reports electronically, we are able to reduce costs and eliminate unwanted paper waste associated with printing and mailing the full report to our more than 146,000 accounts.

Please note that you may change your delivery preference at any time. We will be happy to provide you with a paper copy of this report upon request through our web site at www.emwd.org/ccr or by calling us at (951) 928-3777, extension 3430.

We strongly encourage you to read this report and if you have any water quality questions, please feel free to contact Amy Mora, Senior Environmental Analyst, or any of our Water Quality staff at (951) 928-3777, extension 3327. We also encourage you to get the latest news and information from EMWD through our website at www.emwd.org.

Thank you for being part of the EMWD family – we're here to serve you.



Paul D. Jones II, P.E.
GENERAL MANAGER
EASTERN MUNICIPAL WATER DISTRICT

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 (USEPA) and enforced by the State Water Resources Control Board (State Board).

About Regulations

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- **MICROBIAL CONTAMINANTS**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock, and wildlife.
- **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.
- **ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile organic chemicals 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.
- **PESTICIDES AND HERBICIDES** may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **RADIOACTIVE CONTAMINANTS** can be naturally-occurring or be the result of oil and gas production and mining activities.



ABOUT NITRATE

Nitrate in drinking water at levels above 10 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 an infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 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 seek advice from your health care provider.

SENSITIVE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as those 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 their drinking water from their health care providers. USEPA and Centers for Disease Control and Prevention (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**.

ARSENIC

While your drinking water meets the federal and state standard for arsenic, some of our sources do contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA 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.

UNREGULATED CONTAMINANTS

Unregulated contaminant monitoring helps USEPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

ABOUT LEAD AND COPPER

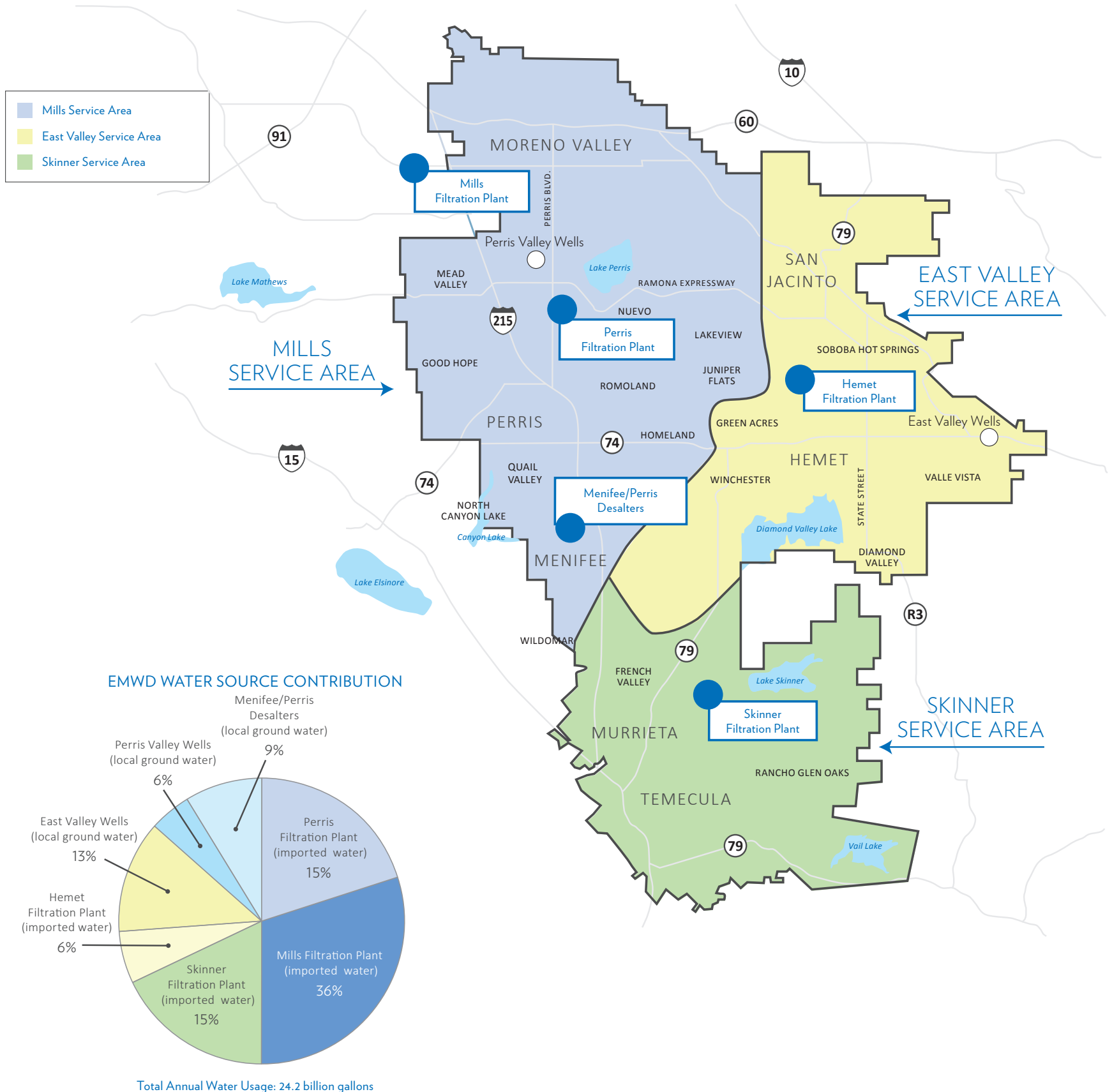
Lead and copper are rarely found in source waters; however, both of these metals can enter drinking water by leaching from household plumbing and fixtures. Water that sits in your pipes for long periods of time may dissolve tiny amounts of lead and/or copper (parts per billion levels) into household water. The USEPA has developed a rule to minimize the levels of these metals in drinking water.

The Lead and Copper Rule was developed to protect public health by establishing an action level of 15 parts per billion (ppb) for lead and 1300 ppb for copper at the tap.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. EMWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If your water has been sitting in your household plumbing for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. *If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.* If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at **1(800) 426-4791** or at www.epa.gov/lead.

THE SOURCES 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.



THE COMMUNITIES WE SERVE...

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**.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or 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. 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.

EMWD uses several sources of water to serve its customers, including surface water from the Colorado River and the State Water Project (SWP), as well as local groundwater.

An initial assessment of all the watersheds, both surface water and groundwater, was completed in 2002. The Colorado River, a surface water source, was reassessed in 2010 and found 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 reassessed in 2011 and found to be most vulnerable to urban and storm water runoff, wildlife, agriculture, recreational activities, and wastewater.

An assessment of all EMWD wells was completed in 2013. Two sources were considered vulnerable to airports and airplane maintenance associated with a contaminant detected in the water supply. In addition, other EMWD wells were considered most vulnerable to the following due to proximity (not associated with any contaminants): commercial and industrial activities, residential activities, agriculture, and other activities such as recreation and transportation.

You can learn more about vulnerability assessments online at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.shtml For copies of the EMWD vulnerability assessments, please call (951) 928-3777 ext. 3327.

Protecting the sources of drinking water helps protect our health. It's everyone's responsibility, and here are a few ways you can help:

- **Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.**
- **Pick up after your pets.**
- **Dispose of chemicals properly; take used motor oil to a recycling center.**

COMMUNITIES SERVED

Good Hope
 Homeland
 Juniper Flats
 Lakeview
 Mead Valley
 Menifee**
 Moreno Valley
 North Canyon Lake
 Nuevo
 Perris
 Quail Valley
 Romoland
 Wildomar

MILLS SERVICE AREA | Water for 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). The Mills Filtration Plant adjusts the fluoride levels in the water to an optimal level recommended by the Centers for Disease Control and Prevention (CDC) for oral health, and uses chloramine for final disinfection.

WATER FROM THE MILLS FILTRATION PLANT IS BLENDED WITH SEVERAL OTHER EMWD WATER SOURCES:

- Three Perris Valley Wells serve a limited area of Perris – along Perris Boulevard south of the Ramona Expressway.
- The Perris Water Filtration Plant (PWFP) treats both Colorado River and SWP waters. However, due to the drought, the PWFP received only Colorado River water in 2016. This plant uses the latest ultrafiltration technology to remove particulate contaminants to produce quality, potable water. The PWFP serves Lakeview, Nuevo, Romoland, Homeland, and Juniper Flats. This plant uses chloramine for final disinfection.
- The Menifee and Perris Desalters convert salty groundwater into potable water using a reverse osmosis process. Menifee, North Canyon Lake, and Quail Valley are the only communities within the Mills Service Area to receive blended water from this desalination plant. The Menifee and Perris Desalters use chloramine for final disinfection.

WEST COMMUNITIES SERVED

Diamond Valley
 Green Acres
 Hemet
 San Jacinto
 Winchester***

EAST COMMUNITIES SERVED

Hemet
 San Jacinto
 Soboba Hot Springs
 Valle Vista

EAST VALLEY SERVICE AREA | This service area is split into two regions:

WEST OF STATE STREET:

- The Hemet Water Filtration Plant (HWFP) treats both Colorado River and SWP waters. Due to the drought, the HWFP received only Colorado River water in 2016. This plant uses the latest ultrafiltration technology to remove particulate contaminants and produce quality, drinking water. This treatment plant uses chloramine for final disinfection. Local groundwater also supplies this area.

EAST OF STATE STREET:

- A system of deep groundwater wells serves these communities. These wells are treated by adding free chlorine for final disinfection.

COMMUNITIES SERVED

French Valley
 Menifee**
 Murrieta
 Rancho Glen Oaks****
 Temecula
 Winchester***

SKINNER SERVICE AREA | Water for this service area comes from:

- The Robert A. Skinner Filtration Plant* treats water from the Colorado River and from the SWP. The Skinner Plant adjusts the fluoride levels in the water to an optimal level recommended by the CDC for oral health, and uses chloramine for final disinfection.

* The Mills and Skinner Filtration Plants are owned and operated by The Metropolitan Water District of Southern California (Metropolitan). ** Typically served by the Mills Filtration Plant and occasionally served by the Skinner Filtration Plant. *** Typically served by the Hemet Water Filtration Plant and occasionally served by the Skinner Filtration Plant. **** This area is served water produced by Rancho California Water District. (RCWD). You may view RCWD's Consumer Confidence Report on their website at www.ranchowater.com.

Facts about Total Coliform Bacteria

Water agencies test for the presence of coliform bacteria as an indicator of drinking water quality.

Coliform bacteria are naturally present in the environment and are generally not harmful. Coliform bacteria may occur in soil, vegetation, animal waste, sewage, and surface waters.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e. total coliform and E. coli bacteria). The USEPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

Eastern Municipal Water District routinely tests for the presence of coliform bacteria as an indicator of the sanitary quality of drinking water. EMWD analyzed 3,056 coliform samples in 2016, four of which were total coliform positive. The maximum allowed by EPA for coliforms is no more than 5 percent in any month. The highest monthly coliform result was 0.7 percent, which complies with this standard. EMWD also tests for *E. coli* bacteria, which indicate fecal or sewage contamination. Zero samples tested positive for *E. coli* in 2016.

A positive 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 EPA's Safe Drinking Water Hotline at **1 (800) 426-4791** or at <https://www.epa.gov/ground-water-and-drinking-water>.



ABBREVIATIONS

| | | | | | |
|----------------------|---|--------------|--|--------------|--|
| AL | Action Level | MRDLG | Maximum Residual Disinfectant Level Goal | ppm | parts per million or milligrams per liter (mg/L) |
| CFU/mL | Colony-Forming Units per milliliter | MRL | Minimum Reporting Level: set by EPA for unregulated contaminant monitoring | ppt | parts per trillion or nanograms per liter (ng/L) |
| DLR | Detection Limits for purposes of Reporting: State-determined level that a test can detect the chemical | NA | Not Applicable: no State or Federal standards are established | RAA | Running Annual Average |
| grains/gallon | grains per gallon: a measure of water hardness. One grain/gallon equals 17.1 ppm or mg/L | ND | None Detected: sample was taken and chemical was not detected | TON | Threshold Odor Number |
| HPC | Heterotrophic Plate Count: a bacteriological test that counts the number of bacteria per milliliter of sample | NL | Notification Level | TT | Treatment Technique |
| LRAA | Locational Running Annual Average | NR | No Range: all result(s) were the same value | µS/cm | microSiemens per centimeter; or micromhos per centimeter (µmho/cm) |
| MCL | Maximum Contaminant Level | NTU | Nephelometric Turbidity Units | — | Samples not required |
| MCLG | Maximum Contaminant Level Goal | pCi/L | picoCuries per Liter | = | Equal |
| MRDL | Maximum Residual Disinfectant Level | PHG | Public Health Goal | > | Greater than |
| | | ppb | parts per billion or micrograms per liter (µg/L) | < | Less than |
| | | | | ≤ | Less than or equal to |
| | | | | # | Number |
| | | | | % | Percent |

DEFINITIONS

90th Percentile: The value in a data set in which 90 percent of the set is less than or equal to this value.

Disinfection By-Product: Compounds which are formed from mixing of organic or mineral precursors in the water with ozone, chlorine or chloramine. Bromate, Total Trihalomethanes, and Haloacetic Acids are disinfection by-products.

Locational Running Annual Average (LRAA): The Running Annual Average (RAA) at one sample location.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals (PHGs) or Maximum Contaminant Level Goals (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 USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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 do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL): Notification levels are health-based advisory levels established by the State Board for chemicals in drinking water that lack MCLs.

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.

Running Annual Average (RAA): The yearly average which is calculated every 3 months using the previous 12 months' data.

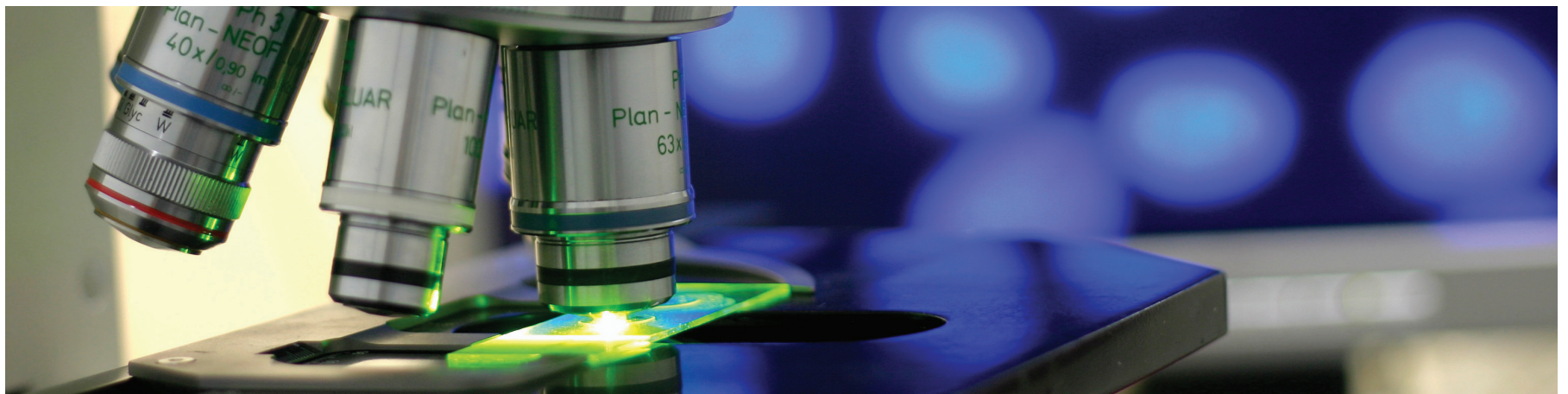
Secondary Drinking Water Standard (Secondary Standard): MCLs for contaminants that do not affect health but are used to monitor the aesthetics of the water.

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



EASTERN MUNICIPAL WATER DISTRICT DISTRIBUTION SYSTEM DATA FOR 2016

| Parameter | Units | State or Federal Maximum Contaminant Level (MCL) | California Public Health Goal (PHG) | State Detection Limit for Reporting (DLR) | Range / Average | EMWD's Entire Distribution System | SERVICE AREA | | |
|--|---------------------------|--|-------------------------------------|---|--|---|--------------|-------------|-------------|
| | | | | | | | Mills | East Valley | Skinner |
| PRIMARY STANDARDS - MANDATORY HEALTH-RELATED STANDARDS | | | | | | | | | |
| MICROBIOLOGICAL | | | | | | | | | |
| Total Coliform Bacteria | # positive coliforms | A | MCLG = 0 | NA | # positives in 2016 Highest monthly % | 4 0.7 | 2 --- | 1 --- | 1 --- |
| Fecal Coliform Bacteria (<i>E. coli</i>) | # positive <i>E. coli</i> | B | MCLG = 0 | NA | # positives in 2016 | 0 | 0 | 0 | 0 |
| Heterotrophic Plate Count (HPC) | # HPCs > 500 CFU/mL | TT C | NA | NA | # HPC>500 in 2016 Lowest monthly % | 9 98.6 | 7 --- | 0 --- | 2 --- |
| DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS | | | | | | | | | |
| Bromate (Mills & Skinner plants only) D | ppb | RAA = 10 | 0.1 | 1.0 | Range | --- | ND - 7 | --- | ND - 9.1 |
| | | | | | Highest RAA | --- | 4.5 | --- | 4.2 |
| Haloacetic Acids (5) (HAA5s) E | ppb | LRAA = 60 | NA | E | Range | 0 - 20 | 0 - 15 | 0 - 20 | 0 - 12 |
| | | | | | Highest LRAA | 29.5 | 29.5 | 21.3 | 14.2 |
| Total Trihalomethanes (TTHMs) F | ppb | LRAA = 80 | NA | 1 | Range | 3.2 - 60 | 6.6 - 41 | 3.2 - 60 | 5.9 - 30 |
| | | | | | Highest LRAA | 49.5 | 37 | 49.5 | 20.3 |
| Total Chlorine Residual Chlorine and Chloramines | ppm | MRDL = 4.0 as Cl ₂ | MRDLG = 4.0 as Cl ₂ | NA | Range | ND - 3.5 | ND - 3.5 | ND - 3.4 | ND - 3.3 |
| | | | | | Average | 1.5 | 1.4 | 1.9 | 1.7 |
| METALS AS A BY-PRODUCT OF CORROSION OF CONSUMER'S PLUMBING G | | | | | | | | | |
| Copper | ppb | AL = 1300 | 300 | 50 | NA | 90th percentile of 50 samples: 210 ppb Zero samples exceeded the Action Level | | | |
| Lead | ppb | AL = 15 | 0.2 | 5 | NA | 90th percentile of 50 samples: <5 ppb Zero samples exceeded the Action Level | | | |
| SECONDARY STANDARDS - AESTHETIC STANDARDS H | | | | | | | | | |
| PHYSICAL PARAMETERS | | | | | | | | | |
| Color | Units | 15 | NA | NA | Range | 0 - 25 | 0 - 9 | 0 - 25 | 0 - 7.5 |
| | | | | | Average | 0.7 | 0.6 | 0.8 | 0.9 |
| Odor Threshold | TON | 3 | NA | 1 | Range | NR | NR | NR | NR |
| | | | | | Average | 1 | 1 | 1 | 1 |
| pH | pH unit | 6.5 - 8.5 | NA | NA | Range | 6.9 - 8.8 | 6.9 - 8.7 | 7.4 - 8.8 | 7.2 - 8.3 |
| | | | | | Average | 8.0 | 8.0 | 8.1 | 8.0 |
| Turbidity | NTU | 5 | NA | 0.1 | Range | 0.1 - 1.8 | 0.1 - 1.1 | 0.1 - 1.8 | 0.1 - 0.8 |
| | | | | | Average | 0.2 | 0.2 | 0.2 | 0.2 |
| UNREGULATED CONTAMINANT MONITORING I | | | | | | | | | |
| Chlorate | ppb | NL = 800 | NA | MRL = 20 | Range | ND - 1800 | ND - 1800 | 37 - 190 | 34 - 88 |
| | | | | | Average | 120 | 150 | 95 | 62 |
| Total Chromium I | ppb | 50 | NA | MRL = 0.2 DLR = 10 | Range | ND - 1.0 | ND - 1.0 | ND - 0.2 | NR |
| | | | | | Average | 0.2 | 0.3 | ND | ND |
| Chromium-6 I | ppb | 10 | 0.02 | MRL = 0.03 DLR = 1 | Range | ND - 1.3 | ND - 1.3 | ND - 0.38 | 0.06 - 0.12 |
| | | | | | Average | 0.35 | 0.49 | 0.16 | 0.08 |
| Molybdenum | ppb | NA | NA | MRL = 1 | Range | ND - 9.9 | ND - 9.9 | 3.5 - 7.2 | 3.4 - 4.5 |
| | | | | | Average | 4.8 | 4.5 | 5.7 | 3.8 |
| Strontium | ppb | NA | NA | MRL = 0.3 | Range | 200 - 860 | 270 - 830 | 200 - 360 | 680 - 860 |
| | | | | | Average | 440 | 460 | 290 | 780 |
| Vanadium | ppb | NL = 50 | NA | MRL = 0.2 | Range | ND - 18 | 3.3 - 18 | 2.6 - 13 | ND - 4.6 |
| | | | | | Average | 7.4 | 8.4 | 7.8 | 1.2 |



The State Board allows EMWD to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of EMWD's data, though representative, are more than one year old.

EMWD supports science-based standards that provide health benefits to the public in an economically balanced manner. Should more stringent standards be set, EMWD will meet them. EMWD's water has met and will continue to meet all regulations.

Unregulated contaminant monitoring helps USEPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

EASTERN MUNICIPAL WATER DISTRICT 2016 WATER QUALITY TABLE

WE ARE REQUIRED TO MONITOR YOUR DRINKING WATER FOR SPECIFIC CONTAMINANTS ON A REGULAR BASIS. RESULTS ARE AN INDICATOR OF WHETHER OR NOT YOUR DRINKING WATER MEETS HEALTH STANDARDS.

| Parameter | Units | State or Federal Maximum Contaminant Level (MCL) | California Public Health Goal (PHG) | State Detection Limit for Reporting (DLR) | MENIFEE, MORENO VALLEY, NORTH CANYON LAKE, PERRIS & WILDOMAR | | | | | | | | Major Sources in Drinking Water |
|---|---------------|--|-------------------------------------|---|--|---------|---------------------|---------|-------------------------|---------|------------------------------|---------|---|
| | | | | | Mills Filtration Plant | | Perris Valley Wells | | Perris Filtration Plant | | Menifee and Perris Desalters | | |
| Percent of total water delivered by EMWD | % | | | | 36% | | 6% | | 15% | | 9% | | |
| | | | | | Range | Average | Range | Average | Range | Average | Range | Average | |
| PRIMARY STANDARDS-MANDATORY HEALTH-RELATED STANDARDS | | | | | | | | | | | | | |
| CLARITY | | | | | | | | | | | | | |
| Combined Filter Effluent Turbidity | NTU and % | K | NA | NA | Highest NTU | % ≤ 0.3 | | | Highest NTU | % ≤ 0.1 | | | Soil runoff |
| | | | | | 0.10 | 100 | --- | --- | 0.14 | 99.97 | --- | --- | |
| ORGANIC CHEMICAL | | | | | | | | | | | | | |
| Trichloroethylene (TCE) | ppb | 5 | 1.7 | 0.5 | NR | ND | ND - 0.8 | ND | NR | ND | NR | ND | Discharge from metal degreasing sites and other factories |
| INORGANIC CHEMICALS | | | | | | | | | | | | | |
| Aluminum | ppb | 1000 L 200 | 600 | 50 | 93 - 150 | 120 | NR | ND | ND - 94 | ND | NR | ND | Residue from water treatment process; natural deposits erosion |
| Arsenic M | ppb | 10 | 0.004 | 2 | NR | 2.5 | NR | ND | NR | 2.2 | NR | ND | Natural deposits erosion; runoff from orchards; glass and electronics production wastes |
| Barium | ppm | 1 | 2 | 0.1 | NR | ND | 0.2 - 0.4 | 0.3 | NR | ND | NR | ND | Discharges of oil drilling wastes and from metal refineries; natural deposits erosion |
| Fluoride (Naturally-occurring) | ppm | 2.0 | 1.0 | 0.1 | --- | --- | 0.3 - 0.5 | 0.4 | ND - 0.4 | 0.2 | NR | ND | Erosion of natural deposits; discharge from fertilizer and aluminum factories |
| Fluoride (Treatment related) N | ppm | 2.0 | 1.0 | 0.1 | 0.5 - 0.8 | 0.7 | --- | --- | --- | --- | --- | --- | Water additive to promote strong teeth |
| Nitrate (as N) | ppm | 10 | 10 | 0.4 | 0.4 - 1.1 | 0.8 | 5.1 - 7.5 | 6.1 | ND - 1.0 | 0.6 | 2.2 - 4.6 | 3.7 | Runoff/leaching from fertilizer use; septic tank and sewage; natural deposits erosion |
| Perchlorate | ppb | 6 | 1 | 4 | NR | ND | NR | ND | NR | ND | NR | ND | Rocket propellant, fireworks, explosives, and industrial discharge; runoff/leaching from fertilizer use |
| Selenium | ppb | 50 | 30 | 5 | NR | ND | NR | ND | NR | ND | NR | ND | Runoff/leaching from livestock lots (feed additive), discharge from petroleum, glass and metal refineries; discharge from mines and chemical manufacturers; erosion of natural deposits |
| RADIOLOGICALS | | | | | | | | | | | | | |
| Gross Alpha Particle Activity | pCi/L | 15 | MCLG = 0 | 3 | ND - 4 | ND | ND - 6 | 4 | NR | 3.4 | NR | ND | Erosion of natural deposits |
| Gross Beta Particle Activity | pCi/L | 50 | MCLG = 0 | 4 | NR | ND | NR | ND | NR | ND | NR | ND | Decay of natural and man-made deposits |
| Uranium | pCi/L | 20 | 0.43 | 1 | ND - 4 | 2 | 1 - 4 | 2 | NR | 2.2 | NR | ND | Erosion of natural deposits |
| SECONDARY STANDARDS-AESTHETIC STANDARDS | | | | | | | | | | | | | |
| Chloride | ppm | 500 | NA | NA | 78 - 89 | 84 | 200 - 410 | 310 | 79 - 130 | 110 | 140 - 230 | 190 | Runoff/leaching from natural deposits; seawater influence |
| Color | Units | 15 | NA | NA | 1 - 2 | 2 | <2.5 - 2.5 | <2.5 | NR | ND | NR | ND | Naturally-occurring organic materials |
| Iron | ppb | 300 | NA | 100 | NR | ND | NR | ND | NR | ND | NR | ND | Leaching from natural deposits |
| Manganese | ppb | 50 | NL = 500 | 20 | NR | ND | NR | ND | NR | ND | ND - 22 | ND | Leaching from natural deposits |
| Odor Threshold | TON | 3 | NA | 1 | NR | 2 | NR | 1 | NR | 1 | NR | 1 | Naturally-occurring organic materials |
| Specific Conductance | µS/cm | 1600 | NA | NA | 475 - 570 | 520 | 1140 - 1530 | 1290 | 470 - 1170 | 870 | 610 - 1010 | 800 | Substances that form ions in water; seawater influence |
| Sulfate | ppm | 500 | NA | 0.5 | 29 - 72 | 50 | 53 - 63 | 57 | 32 - 240 | 150 | 14 - 34 | 22 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) | ppm | 1000 | NA | NA | 260 - 330 | 290 | 750 - 890 | 810 | 230 - 670 | 500 | 300 - 610 | 470 | Runoff/leaching from natural deposits; seawater influence |
| Turbidity O | NTU | 5 | NA | 0.1 | NR | ND | 0.1 - 1.4 | 0.5 | 0.1 - 0.3 | 0.1 | NR | 0.1 | Soil runoff |
| UNREGULATED CONTAMINANT MONITORING I | | | | | | | | | | | | | |
| Chlorate | ppb | NA | NL = 800 | MRL = 20 | ND - 33 | 22 | ND - 170 | 55 | 110 - 150 | 120 | 68 - 620 | 340 | Agricultural defoliant or desiccant; disinfection by-product; used in production of chlorine dioxide |
| Chromium-6 I | ppb | 10 | 0.02 | MRL = 0.03 DLR = 1 | 0.18 - 0.57 | 0.34 | 0.44 - 1.3 | 0.97 | 0.06 - 0.11 | 0.08 | 0.12 - 0.16 | 0.14 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Molybdenum | ppb | NA | NA | MRL = 1 | 2 - 3 | 2 | ND - 11 | 6 | 3 - 4 | 3 | ND - 2 | 1 | Naturally-occurring element found in ores and present in plants, animals and bacteria; used in a chemical reagent |
| Perfluoroheptanoic Acid (PFHpA) | ppt | NA | NA | MRL = 10 | NR | ND | ND - 22 | ND | NR | ND | NR | ND | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorohexanesulfonic Acid (PFHxS) | ppt | NA | NA | MRL = 30 | NR | ND | ND - 120 | 38 | NR | ND | NR | ND | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorooctanesulfonic Acid (PFOS) | ppt | NA | NA | MRL = 40 | NR | ND | ND - 82 | ND | NR | ND | NR | ND | Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide |
| Perfluorooctanoic Acid (PFOA) | ppt | NA | NA | MRL = 20 | NR | ND | ND - 53 | ND | NR | ND | NR | ND | Used as surfactant or emulsifier in Teflon, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films |
| Strontium | ppb | NA | NA | MRL = 0.3 | 190 - 330 | 260 | 340 - 820 | 550 | 250 - 280 | 260 | 240 - 340 | 290 | Naturally-occurring element; historically used in production of cathode-ray tube televisions |
| Vanadium | ppb | NA | NL = 50 | MRL = 0.2 | 3.6 - 5.4 | 4.2 | 4.4 - 16 | 12 | 3.3 - 5.3 | 4.5 | 2.7 - 4.4 | 3.6 | Naturally-occurring; industrial waste discharge |
| OTHER PARAMETERS | | | | | | | | | | | | | |
| Alkalinity (Total) | ppm | NA | NA | NA | 64 - 78 | 71 | 120 - 180 | 150 | 66 - 190 | 110 | 45 - 85 | 57 | Naturally-occurring carbonates; measures water's ability to neutralize acid |
| Boron | ppb | NL = 1000 | NA | 100 | NR | 240 | 390 - 610 | 500 | 100 - 260 | 180 | 130 - 900 | 340 | Runoff/leaching from natural deposits; industrial wastes |
| Calcium | ppm | NA | NA | NA | 17 - 27 | 22 | 86 - 170 | 120 | 22 - 83 | 56 | 25 - 55 | 43 | Naturally-occurring mineral |
| Hardness as Calcium Carbonate P | grains/gallon | NA | NA | NA | 5.1 - 6.5 | 5.8 | 19 - 35 | 26 | 5.7 - 19 | 13 | 5.0 - 11 | 8.5 | Naturally-occurring; the sum of calcium and magnesium in the water |
| Magnesium | ppm | NA | NA | NA | NR | 10 | 25 - 40 | 31 | 10 - 27 | 21 | 5.6 - 13 | 9.3 | Naturally-occurring mineral |
| Sodium | ppm | NA | NA | NA | 62 - 75 | 68 | 97 - 140 | 120 | 53 - 110 | 95 | 83 - 140 | 100 | Naturally-occurring mineral |

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Unregulated contaminant monitoring helps EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

2014 data ND - none detected NR - no range

EASTERN MUNICIPAL WATER DISTRICT 2016 WATER QUALITY TABLE

WE ARE REQUIRED TO MONITOR YOUR DRINKING WATER FOR SPECIFIC CONTAMINANTS ON A REGULAR BASIS. RESULTS ARE AN INDICATOR OF WHETHER OR NOT YOUR DRINKING WATER MEETS HEALTH STANDARDS.

| Parameter | Units | State or Federal Maximum Contaminant Level (MCL) | California Public Health Goal (PHG) | State Detection Limit for Reporting (DLR) | MURRIETA Skinner Filtration Plant | Major Sources in Drinking Water |
|---|---------------|--|-------------------------------------|---|--------------------------------------|---|
| Percent of total water delivered by EMWD | % | | | | 15% | |
| PRIMARY STANDARDS-MANDATORY HEALTH-RELATED STANDARDS | | | | | | |
| CLARITY | | | | | | |
| Combined Filter Effluent Turbidity | NTU and % | K | NA | NA | Range: 0.09 - 100 Average: 100 | Soil runoff |
| ORGANIC CHEMICAL | | | | | | |
| Trichloroethylene (TCE) | ppb | 5 | 1.7 | 0.5 | NR | Discharge from metal degreasing sites and other factories |
| INORGANIC CHEMICALS | | | | | | |
| Aluminum | ppb | 1000 L 200 | 600 | 50 | NR | Residue from water treatment process; natural deposits erosion |
| Arsenic M | ppb | 10 | 0.004 | 2 | NR | Natural deposits erosion; runoff from orchards; glass and electronics production wastes |
| Barium | ppm | 1 | 2 | 0.1 | NR | Discharges of oil drilling wastes and from metal refineries; natural deposits erosion |
| Fluoride (Naturally-occurring) | ppm | 2.0 | 1.0 | 0.1 | --- | Erosion of natural deposits; discharge from fertilizer and aluminum factories |
| Fluoride (Treatment related) N | ppm | 2.0 | 1.0 | 0.1 | 0.6 - 0.9 | Water additive to promote strong teeth |
| Nitrate (as N) | ppm | 10 | 10 | 0.4 | NR | Runoff/leaching from fertilizer use; septic tank and sewage; natural deposits erosion |
| Perchlorate | ppb | 6 | 1 | 4 | NR | Rocket propellant, fireworks, explosives, and industrial discharge; runoff/leaching from fertilizer use |
| Selenium | ppb | 50 | 30 | 5 | NR | Runoff/leaching from livestock lots (feed additive), discharge from petroleum, glass and metal refineries; discharge from mines and chemical manufacturers; erosion of natural deposits |
| RADIOLOGICALS | | | | | | |
| Gross Alpha Particle Activity | pCi/L | 15 | MCLG = 0 | 3 | ND - 5 | Erosion of natural deposits |
| Gross Beta Particle Activity | pCi/L | 50 | MCLG = 0 | 4 | NR | Decay of natural and man-made deposits |
| Uranium | pCi/L | 20 | 0.43 | 1 | 1 - 2 | Erosion of natural deposits |
| SECONDARY STANDARDS-AESTHETIC STANDARDS | | | | | | |
| Chloride | ppm | 500 | NA | NA | NR | Runoff/leaching from natural deposits; seawater influence |
| Color | Units | 15 | NA | NA | 1 - 2 | Naturally-occurring organic materials |
| Iron | ppb | 300 | NA | 100 | NR | Leaching from natural deposits |
| Manganese | ppb | 50 | NL = 500 | 20 | NR | Leaching from natural deposits |
| Odor Threshold | TON | 3 | NA | 1 | NR | Naturally-occurring organic materials |
| Specific Conductance | µS/cm | 1600 | NA | NA | 960 - 1030 | Substances that form ions in water; seawater influence |
| Sulfate | ppm | 500 | NA | 0.5 | 230 - 240 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) | ppm | 1000 | NA | NA | 620 - 630 | Runoff/leaching from natural deposits; seawater influence |
| Turbidity O | NTU | 5 | NA | 0.1 | NR | Soil runoff |
| UNREGULATED CONTAMINANT MONITORING I | | | | | | |
| Chlorate | ppb | NA | NL = 800 | MRL = 20 | 34 - 77 | Agricultural defoliant or desiccant; disinfection by-product; used in production of chlorine dioxide |
| Chromium-6 I | ppb | 10 | 0.02 | MRL = 0.03 DLR = 1 | 0.05 - 0.08 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Molybdenum | ppb | NA | NA | MRL = 1 | NR | Naturally-occurring element found in ores and present in plants, animals and bacteria; used in a chemical reagent |
| Perfluoroheptanoic Acid (PFHpA) | ppt | NA | NA | MRL = 10 | NR | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorohexanesulfonic Acid (PFHxS) | ppt | NA | NA | MRL = 30 | NR | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorooctanesulfonic Acid (PFOS) | ppt | NA | NA | MRL = 40 | NR | Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide |
| Perfluorooctanoic Acid (PFOA) | ppt | NA | NA | MRL = 20 | NR | Used as surfactant or emulsifier in Teflon, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films |
| Strontium | ppb | NA | NA | MRL = 0.3 | 750 - 1000 | Naturally-occurring element; historically used in production of cathode-ray tube televisions |
| Vanadium | ppb | NA | NL = 50 | MRL = 0.2 | NR | Naturally-occurring; industrial waste discharge |
| OTHER PARAMETERS | | | | | | |
| Alkalinity (Total) | ppm | NA | NA | NA | 120 - 130 | Naturally-occurring carbonates; measures water's ability to neutralize acid |
| Boron | ppb | NL = 1000 | NA | 100 | NR | Runoff/leaching from natural deposits; industrial wastes |
| Calcium | ppm | NA | NA | NA | 70 - 74 | Naturally-occurring mineral |
| Hardness as Calcium Carbonate P | grains/gallon | NA | NA | NA | 16 - 17 | Naturally-occurring; the sum of calcium and magnesium in the water |
| Magnesium | ppm | NA | NA | NA | 24 - 25 | Naturally-occurring mineral |
| Sodium | ppm | NA | NA | NA | NR | Naturally-occurring mineral |

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2014 data ND – none detected NR – no range

EASTERN MUNICIPAL WATER DISTRICT 2016 WATER QUALITY TABLE

WE ARE REQUIRED TO MONITOR YOUR DRINKING WATER FOR SPECIFIC CONTAMINANTS ON A REGULAR BASIS. RESULTS ARE AN INDICATOR OF WHETHER OR NOT YOUR DRINKING WATER MEETS HEALTH STANDARDS.

| Parameter | Units | State or Federal Maximum Contaminant Level (MCL) | California Public Health Goal (PHG) | State Detection Limit for Reporting (DLR) | HEMET & SAN JACINTO | | | | Major Sources in Drinking Water |
|---|---------------|--|-------------------------------------|---|---------------------|---------|------------------------|---------|---|
| | | | | | East Valley Wells | | Hemet Filtration Plant | | |
| Percent of total water delivered by EMWD | % | | | | 13% | | 6% | | |
| | | | | | Range | Average | Range | Average | |
| PRIMARY STANDARDS-MANDATORY HEALTH-RELATED STANDARDS | | | | | | | Highest NTU | % ≤ 0.1 | |
| CLARITY | | | | | | | | | |
| Combined Filter Effluent Turbidity | NTU and % | K | NA | NA | --- | --- | 0.1 | 100 | Soil runoff |
| ORGANIC CHEMICAL | | | | | | | | | |
| Trichloroethylene (TCE) | ppb | 5 | 1.7 | 0.5 | NR | ND | NR | ND | Discharge from metal degreasing sites and other factories |
| INORGANIC CHEMICALS | | | | | | | | | |
| Aluminum | ppb | 1000 L 200 | 600 | 50 | NR | ND | ND - 200 | 62 | Residue from water treatment process; natural deposits erosion |
| Arsenic M | ppb | 10 | 0.004 | 2 | ND - 3.7 | ND | NR | 2.4 | Natural deposits erosion; runoff from orchards; glass and electronics production wastes |
| Barium | ppm | 1 | 2 | 0.1 | ND - 0.1 | ND | NR | ND | Discharges of oil drilling wastes and from metal refineries; natural deposits erosion |
| Fluoride (Naturally-occurring) | ppm | 2.0 | 1.0 | 0.1 | 0.2 - 0.9 | 0.3 | ND - 0.4 | 0.1 | Erosion of natural deposits; discharge from fertilizer and aluminum factories |
| Fluoride (Treatment related) N | ppm | 2.0 | 1.0 | 0.1 | --- | --- | --- | --- | Water additive to promote strong teeth |
| Nitrate (as N) | ppm | 10 | 10 | 0.4 | ND - 3.5 | 1.0 | ND - 0.4 | ND | Runoff/leaching from fertilizer use; septic tank and sewage; natural deposits erosion |
| Perchlorate | ppb | 6 | 1 | 4 | NR | ND | NR | ND | Rocket propellant, fireworks, explosives, and industrial discharge; runoff/leaching from fertilizer use |
| Selenium | ppb | 50 | 30 | 5 | ND - 12 | ND | NR | ND | Runoff/leaching from livestock lots (feed additive), discharge from petroleum, glass and metal refineries; discharge from mines and chemical manufacturers; erosion of natural deposits |
| RADIOLOGICALS | | | | | | | | | |
| Gross Alpha Particle Activity | pCi/L | 15 | MCLG = 0 | 3 | ND - 4 | ND | NR | ND | Erosion of natural deposits |
| Gross Beta Particle Activity | pCi/L | 50 | MCLG = 0 | 4 | ND - 11 | ND | NR | ND | Decay of natural and man-made deposits |
| Uranium | pCi/L | 20 | 0.43 | 1 | ND - 1 | ND | NR | 1.2 | Erosion of natural deposits |
| SECONDARY STANDARDS-AESTHETIC STANDARDS | | | | | | | | | |
| Chloride | ppm | 500 | NA | NA | 10 - 88 | 24 | 65 - 120 | 100 | Runoff/leaching from natural deposits; seawater influence |
| Color | Units | 15 | NA | NA | NR | ND | ND - 5 | ND | Naturally-occurring organic materials |
| Iron | ppb | 300 | NA | 100 | ND - 370 | ND | NR | ND | Leaching from natural deposits |
| Manganese | ppb | 50 | NL = 500 | 20 | NR | ND | NR | ND | Leaching from natural deposits |
| Odor Threshold | TON | 3 | NA | 1 | NR | 1 | NR | 1 | Naturally-occurring organic materials |
| Specific Conductance | µS/cm | 1600 | NA | NA | 450 - 1040 | 580 | 350 - 1090 | 720 | Substances that form ions in water; seawater influence |
| Sulfate | ppm | 500 | NA | 0.5 | 11 - 200 | 55 | 25 - 240 | 100 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) | ppm | 1000 | NA | NA | 150 - 570 | 250 | 180 - 680 | 400 | Runoff/leaching from natural deposits; seawater influence |
| Turbidity O | NTU | 5 | NA | 0.1 | 0.1 - 0.7 | 0.2 | 0.1 - 0.8 | 0.2 | Soil runoff |
| UNREGULATED CONTAMINANT MONITORING I | | | | | | | | | |
| Chlorate | ppb | NA | NL = 800 | MRL = 20 | ND - 760 | 200 | 82 - 170 | 140 | Agricultural defoliant or desiccant; disinfection by-product; used in production of chlorine dioxide |
| Chromium-6 I | ppb | 10 | 0.02 | MRL = 0.03 DLR = 1 | ND - 1.4 | 0.23 | 0.06 - 0.09 | 0.07 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Molybdenum | ppb | NA | NA | MRL = 1 | 3 - 15 | 7 | 2 - 3 | 2 | Naturally-occurring element found in ores and present in plants, animals and bacteria; used in a chemical reagent |
| Perfluoroheptanoic Acid (PFHpA) | ppt | NA | NA | MRL = 10 | NR | ND | NR | ND | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorohexanesulfonic Acid (PFHxS) | ppt | NA | NA | MRL = 30 | NR | ND | NR | ND | Manmade chemical; used in products to make them stain, grease, heat and water resistant |
| Perfluorooctanesulfonic Acid (PFOS) | ppt | NA | NA | MRL = 40 | NR | ND | NR | ND | Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide |
| Perfluorooctanoic Acid (PFOA) | ppt | NA | NA | MRL = 20 | NR | ND | NR | ND | Used as surfactant or emulsifier in Teflon, fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films |
| Strontium | ppb | NA | NA | MRL = 0.3 | 220 - 390 | 310 | 240 - 290 | 260 | Naturally-occurring element; historically used in production of cathode-ray tube televisions |
| Vanadium | ppb | NA | NL = 50 | MRL = 0.2 | 2.7 - 20 | 7.2 | 2.1 - 2.9 | 2.5 | Naturally-occurring; industrial waste discharge |
| OTHER PARAMETERS | | | | | | | | | |
| Alkalinity (Total) | ppm | NA | NA | NA | 110 - 150 | 130 | 57 - 140 | 94 | Naturally-occurring carbonates; measures water's ability to neutralize acid |
| Boron | ppb | NL = 1000 | NA | 100 | ND - 200 | ND | ND - 260 | 190 | Runoff/leaching from natural deposits; industrial wastes |
| Calcium | ppm | NA | NA | NA | 29 - 87 | 49 | 14 - 81 | 38 | Naturally-occurring mineral |
| Hardness as Calcium Carbonate P | grains/gallon | NA | NA | NA | 4.8 - 16 | 8.3 | 4.2 - 18 | 9.5 | Naturally-occurring; the sum of calcium and magnesium in the water |
| Magnesium | ppm | NA | NA | NA | 2.4 - 16 | 5.1 | 8.8 - 27 | 16 | Naturally-occurring mineral |
| Sodium | ppm | NA | NA | NA | 24 - 88 | 40 | 47 - 110 | 86 | Naturally-occurring mineral |

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2014 data 2014 & 2015 data 2015 data ND – none detected NR – no range

FOOTNOTES

- A** Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on distribution system samples. EMWD analyzed 3,056 coliform samples in 2016, four of which were total coliform positive. The highest monthly coliform result was 0.7%. The MCL was not violated in 2016.
- B** Fecal coliform/*E. coli* MCLs: An MCL violation is the occurrence of two (2) consecutive total coliform-positive samples, one of which contains fecal coliform or *E. coli*. There were zero detected fecal coliforms. The MCL was not violated in 2016.
- C** HPCs were tested only in distribution system samples which had no detectable chlorine residual. No less than 95% of all distribution system samples in one month may have no detectable chlorine residual and an HPC greater than 500 colony forming units per mL. The HPC results were no less than 98.6% in any month in 2016.
- D** Bromate is a disinfection by-product resulting from the use of ozone. Currently, the Mills and Skinner Filtration plants use ozone.
- E** DLR = 1.0 ppb for each Haloacetic Acid 5 (HAA5) analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb. Locational running annual averages and ranges are calculated from 12 sample sites collected quarterly throughout the distribution system. HAA5s are a by-product of drinking water chlorination.
- F** Total Trihalomethanes (TTHMs) are the sum of the following analytes: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. Locational Running Annual Averages (LRAA) and ranges are calculated from 12 sample sites collected quarterly throughout the distribution system. TTHMs are a by-product of drinking water chlorination.
- G** Lead and Copper are regulated as a Treatment Technique under the Lead and Copper Rule, which requires systems to take 50 water samples at the consumers' tap every three years. Results are from 2016. Neither lead nor copper are typically found in the source waters but can get into water by way of internal corrosion of household plumbing.
- H** Compliance for physical parameters is determined by the average, however all samples are reviewed and any values outside the compliance range are noted and corrected if possible. Values above the MCL may be acceptable so long as the average complies with the MCL.
- I** Unregulated contaminant monitoring spanned four consecutive quarters from 2013 to 2014. Total Chromium and Chromium-6 are regulated contaminants, however they were tested using reporting limits that were much lower than regulation as part of an unregulated contaminant rule.
- J** Values are from blended Well 57 and raw well values from other wells in area. Well 57 is blended on site with Mills water to improve Total Dissolved Solids. Well 59 data is from 2015 since we discontinued its use early in 2016 due to a new USEPA health advisory exceedance of PFOA and PFOS.
- K** The turbidity level of the combined filter effluent at the Mills and Skinner Filtration plants 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. For the Perris and Hemet Filtration plants, the turbidity level of the combined filter effluent shall be less than or equal to 0.1 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.
- L** Aluminum has both primary (1,000 ppb) and secondary (200 ppb) standards (MCLs).
- M** While your drinking water meets the federal and state standard for arsenic, some of our sources do contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA 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.
- N** Metropolitan began fluoride treatment of water at Mills and Skinner Filtration plants in 2007. Fluoride is not added to the water in the East Valley Area.
- O** Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. Secondary standards were based either on the treatment plant effluent or raw well water.
- P** Water hardness, measured in grains per gallon as calcium carbonate, is characterized by the following scale: 0 – 4.4 is soft, 4.4 – 8.8 is moderately hard, 8.8 – 17.5 is hard and greater than 17.5 is very hard.

ONE PART PER MILLION (PPM) IS LIKE

- 1 second in 11.6 days
- 1 teaspoon in 1,302 gallons
- 1 drop in 13.6 gallons

ONE PART PER BILLION (PPB) IS LIKE

- 1 second in 31.7 years
- 1 teaspoon in 1.3 million gallons
- 1 drop in 13,563 gallons

ONE PART PER TRILLION (PPT) IS LIKE

- 1 second in 31,710 years
- 1 teaspoon in 1.3 billion gallons
- 1 drop in 13,563,368 gallons



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Your 2016 Water Quality

CONSUMER CONFIDENCE REPORT

Issued July 2017

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If you wish to attend a meeting, please call the Board Secretary during normal business hours at (951) 928-3777, extension 4235 to confirm meeting dates or check the Board Meeting Calendar online at www.emwd.org/BoardMeetings.

For more information on this report, contact: Water Quality (951) 928-3777, extension 3327 or visit www.emwd.org/WaterQuality.

Why You Should Read This Report

THIS YEAR'S DRINKING WATER QUALITY REPORT...

- Examines how EMWD ensures your drinking water is safe, high quality, and reliable.
- Provides science-based data and facts about the sources, quality, and safety of your drinking water.
- Explains how customers can always choose how they wish to receive future water quality reports.

Our Continuing Commitment to You

EMWD AND ITS TRAINED, CERTIFIED WATER QUALITY PROFESSIONALS ARE COMMITTED TO...

- Providing high quality, safe drinking water at the lowest price possible.
- Monitoring and testing the water we serve to optimize quality and ensure it is always safe to drink.
- Finding and developing new water supply sources to ensure continued reliability for our customers.
- Providing educated staff to answer any questions from our customers.