



2012 Annual

# Water Quality Report

San Marino

PWS ID: 1910139



CALIFORNIA  
AMERICAN WATER

## A Message from California American Water President, Rob MacLean

To Our Valued Customer:

California American Water is proud to be your local water service provider and I am pleased to share good news with you about the quality of the water we deliver to your home. Each year, we provide you with our Annual Water Quality Report – and like so many years prior – we continue to supply water that meets or surpasses all state and federal water quality regulations. This means the water we provide to your home, for about a penny a gallon, is high quality and an exceptional value.

This is no small task. Getting water from the source, to treatment and to your home is more complicated than many people imagine. It includes the miles of pipeline hidden below the ground, the facilities that draw water from the source and the treatment and testing of the water.

Our treatment plant operators, water quality experts, engineers, and maintenance crews work around the clock to make sure that water is always there when you need it. Delivering high-quality, reliable water service to your tap also requires significant investment in our water infrastructure to upgrade aging facilities. In 2012 alone, we invested more than \$46 million in water system improvements statewide. These investments are made directly into infrastructure in your community, to upgrade local facilities.

We do this because we believe we're delivering more than just water service. We deliver a key resource for public health, fire protection, the economy and overall quality of life. Our job is to ensure that quality water keeps flowing not only today, but well into the future. It's part of our commitment to you and the communities we serve.

We hope you agree, it's worth every penny and worth learning more about. Please, take the time to review this report. It provides details about the sources and quality of your drinking water using the data from water quality testing conducted in your water system through December

2012. For an electronic copy of this report, visit us on line at: [www.amwater.com/caaw/](http://www.amwater.com/caaw/). Thanks for allowing us to serve you.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

이 보고서는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다.  
만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.

この情報は重要です。  
翻訳を依頼してください。

## Our Commitment to Quality

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). This CCR covers compliance testing completed through December 2012. We are pleased to tell you that our compliance with state and federal drinking water regulations remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.



American Water Works Company, Inc., together with its subsidiaries, is referred to as American Water. "California American Water" and the star logo are the registered trademarks of American Water Works Company, Inc. All rights reserved.

WE CARE ABOUT WATER. IT'S WHAT WE DO.®

## About California American Water

California American Water, a wholly owned subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to approximately 600,000 people. California American Water, with the support of American Water, has the technical support of a global network and the local knowledge to provide the highest quality water with personal service.

## About American Water

Founded in 1886, American Water is the largest publicly traded U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs approximately 6,700 dedicated professionals who provide drinking water, wastewater and other related services to an estimated 14 million people in more than 30 states, and parts of Canada. More information can be found by visiting [www.amwater.com](http://www.amwater.com).

## What is a Consumer Confidence Report (CCR)?

The Consumer Confidence Report (CCR) is an annual water quality report containing data that California American Water and all associated water purveyors collected during the past year. CCRs are intended to let consumers know what contaminants, if any, are in their drinking water. They also provide possible health effect information on all of the contaminants that are detected. The CCR helps consumers make informed choices about the water they drink. CCRs are also intended to educate customers on what it takes to deliver safe drinking water, raise understanding of drinking water contaminants in the water supply and need to protect drinking water sources.

In 2012, we collected numerous samples for contaminants at various sampling points in your water system; all of which were below state and federal maximum allowable levels. This report provides an overview of last year's (2012) water quality data. It also includes the details about where your water comes from, how it is treated and what it contains. The water quality data presented in this report is derived from multiple sources and is a combination of data compiled from our nationally recognized main water quality laboratory and local commercial laboratories; all certified in drinking water testing by the California Department of Public Health.

If you have any questions about this report or your drinking water, please contact our Customer Service Center at (888) 237-1333.

## About Your Water

The San Marino Water System is primarily served by groundwater sources in the Main San Gabriel and Raymond Basins. Because both basins have adjudicated groundwater usage, additional supplies are necessary to meet seasonal/annual demand. These additional water supplies are purchased from Metropolitan Water District of Southern California (MWD). The San Marino Water System receives treated surface water from MWD's Weymouth

Treatment Plant. MWD's sources of raw surface water are the Sacramento River Delta and Colorado River. Water is conveyed to Southern California via the California Aqueduct (also known as the State Water Project) and Colorado River Aqueduct. Drinking water treatment technologies used for this imported water included conventional treatment (coagulation, filtration, and disinfection). Groundwater supplies are disinfected with chlorine to ensure the bacteriological quality.

The 2012 San Marino Water System supply consisted of 93% well water and 7% purchased water from MWD. In October 2007, MWD began adding fluoride to its treated water at an optimized level of 0.7 ppm. The naturally occurring fluoride levels in the San Marino groundwater sources are close to optimal levels and with MWD's fluoride addition, the fluoride levels are consistent year-round. If you have any questions on fluoride, please call California American Water's Customer Service Center at (888) 237-1333.

California American Water distributes water for residential and commercial use throughout San Marino, portions of the cities of Rosemead, Temple City, San Gabriel, El Monte and Pasadena; and unincorporated areas of Los Angeles County.

For more information, please refer to the websites listed in the Water Information Sources section for California American Water and the Metropolitan Water District of Southern California.

## Notice of Source Water Assessment

An assessment of the drinking water sources for the California American Water San Marino water system was completed in February 2003. The sources are considered vulnerable to the following activities (associated with contamination detected in the water supply): known contaminant plumes; historic waste dumps/landfills; high-density housing; apartments and condominiums; home manufacturing; parks; parking lots/malls; office buildings/complexes; schools; medical/dental/veterinary offices/clinics; low and high density septic systems; sewer collection systems; waste transfer/recycling station; wastewater treatment plants; fertilizer, pesticide/herbicide application; irrigated/non-irrigated crops; golf courses; automobile repair shops and gas stations; fleet/truck/bus terminals; utility station maintenance areas; motor pools; historic gas stations; machine shops; electrical/electronic manufacturing; chemical/petroleum processing/storage; metal plating/finishing/fabricating; plastics/synthetics producers; photo processing/printing; chemical/petroleum pipelines; food processing; construction/demolition staging areas; appliance/electronic repair; hotels and motels; agricultural/irrigation wells; oil, gas, geothermal wells; water supply wells; monitoring/test wells; injection wells/dry wells/sumps; research laboratories; hospitals; contractor or government agency equipment storage yards; hardware/lumber/parts stores; historic and active mining operations; boat services/repair/refinishing; sand/gravel



mining; wood/pulp/paper processing and mills; and underground storage tanks: decommission-inactive tanks, upgraded/registered-active tanks, non-regulated tanks, and not yet upgraded or registered tanks. A copy of the completed assessment may be viewed at: California American Water; 8657 Grand Avenue; Rosemead, CA 91770-1221. You may request a summary of the assessment be sent to you by contacting: Joe Marcinko, Water Quality & Environmental Compliance Director at (805) 498-1266 x2807 or joseph.marcinko@amwater.com.

Large water utilities are required by the Department to conduct a Watershed Sanitary Survey every five years to examine possible sources of drinking water contamination. Metropolitan's 2010 update to the surveys were completed and submitted to the California Department of Public Health in March (Colorado River) and May 2012 (State Water Project) and include suggestions for how to better protect these source waters. EPA also requires utilities to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. Metropolitan completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed.

### **Cryptosporidium**

*Cryptosporidium* is a microbial pathogen found in surface waters throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring does not indicate the presence of these organisms in either the source or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. You can obtain more information on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791.

### **Radon**

*Radon* is a radioactive gas that you cannot 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 tap water from showering, washing dishes, and other household activities. Compared to *radon* entering the home through soil, *radon* entering the home

through tap water 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. You should pursue *radon* removal for your home if the level of *radon* in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a *radon* problem that are not too costly. For additional information, call your State *radon* program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-SOS-RADON).

### **Nitrate Statement**

Nitrate in drinking water at levels above 45 mg/L 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 mg/L 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.

### **How to Contact Us**

If you have any questions about this report, your drinking water, or service, please call California American Water Customer Service toll free: (888) 237-1333.

### **Water Information Sources**

#### **California American Water**

[www.californiaamwater.com](http://www.californiaamwater.com)

#### **California Department of Public Health**

[www.cdph.ca.gov/programs/Pages/DDWEM.aspx](http://www.cdph.ca.gov/programs/Pages/DDWEM.aspx)

#### **United States Environmental Protection Agency**

[www.epa.gov/safewater](http://www.epa.gov/safewater)

#### **Safe Drinking Water Hotline: (800) 426-4791**

#### **Centers for Disease Control and Prevention**

[www.cdc.gov](http://www.cdc.gov)

#### **American Water Works Association**

[www.awwa.org](http://www.awwa.org)

#### **Metropolitan Water District of Southern California**

<http://www.mwdh2o.com>

#### **Water Quality Association**

[www.wqa.org](http://www.wqa.org)

#### **National Library of Medicine/National Institute of Health**

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)





## What Are the Sources of Contaminants?

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 human activity.

### Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and Herbicides**, which 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, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

## Educational Information – Special 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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline (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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800) 426-4791.

## Notice of Unregulated Contaminant Monitoring (UCMR)



WE CARE ABOUT WATER. IT'S WHAT WE DO.®

The Federal Unregulated Contaminants Monitoring Rule First Cycle (UCMR1) testing was completed in 2003 for a list of contaminants specified by the USEPA. UCMR2 testing was conducted between November 2008 and August 2009 for the assessment monitoring of 10 chemical contaminants under List 1 and the screening survey of 15 contaminants under List 2. All List 1 and List 2 contaminants from the MWD treatment plant effluent were not detected except for NDMA.

These results were reported directly to the USEPA. Unregulated contaminants are those for which the USEPA has not established drinking water standards.

The purpose of unregulated contaminant monitoring is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at (888) 237-1333.

## Chloramine Statement

Chloramines are a California and federally approved alternative to free chlorine for water disinfection. Chloramines minimize disinfection by-product formation. Another benefit of chloramines is improved taste of the water as compared with free chlorine. Chloramines are also used by many American Water systems and many other water utilities nationally. Chloramines have the same effect as chlorine for typical water uses with the exception that chloramines must be removed from water used in kidney dialysis and fish tanks or aquariums. Treatments to remove chloramines are different than treatments for removing chlorine. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life. You may also contact our Customer Service Center at (888) 237-1333 for more chloramine information.

## Lead Statement

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

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. California American Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When

your water has been sitting 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 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 or at <http://www.epa.gov/safewater/lead>.

## How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2012, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the Definitions of Terms section.

It is important to note that the water quality data presented in the table represents the overall data obtained from all of the source and distribution samples that were collected. This data represents analyses of source and distribution samples that directly contributed to the total amount of water we delivered to our customers (mostly in 2012). As such, this data does not reflect the water quality at a specific residence due to the large area we serve and differences in the individual sources that influence specific areas within the entire distribution system. Because we have many source wells and the water quality varies from well to well, the data presented in the table is mostly intended to demonstrate compliance with the state and federal regulations rather than being representative of the specific water quality data that you actually receive at your tap. The individual data from specific sources cannot be presented with respect to the individual area they serve due to the fact that we are required by statute to tabulate and present the water quality data for the entire distribution system.

Starting with a **Substance**, read across. **Year Sampled** is usually in 2012, or year prior. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **Average Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **No** under **Violation** indicates government requirements were met. **Major Sources in Drinking Water** tells where the substance usually originates.

Unregulated substances are measured, but maximum allowed contaminant levels have not been established by the government.

## Definitions of Terms Used in This Report

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

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MFL:** Million fibers per liter

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of drinking water disinfectant 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 contamination.

**NA:** Not applicable

**ND:** Not detected

**NL (Notification Level):** The concentration of a contaminant, which, if exceeded, requires notification to CDPH and the consumer. Not an enforceable standard.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of the water.

**pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

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

**pH:** A measurement of acidity, 7.0 being neutral.

**PHG (Public Health Goal):** 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 EPA.

**ppm (parts per million):** One part substance per million parts water, or milligrams per liter.

**ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.

**ppt (parts per trillion):** One part substance per trillion parts water, or nanograms per liter.

**TON:** Threshold Odor Number



**Total Dissolved Solids:** An overall indicator of the amount of minerals in water.

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


**Variances and Exemptions:** State or USEPA permission not to meet an MCL or utilize a treatment technique under certain conditions.

**µmhos/cm (micromhos per centimeter):** A measure of electrical conductance.

**%:** means percent


## Water Quality Statement

Last year, as in years past, your tap water met all USEPA and state drinking water health standards. California American Water vigilantly safeguards its water supplies, and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.



**There's a lot more to your water bill than just water.**

When you turn on the tap, it's easy to see what your water bill buys. What's not as easy to see is what it takes to bring that water to your home. The miles of pipeline hidden below the ground. The facilities that draw water from the source. The plant where it's treated and tested. The scientists, engineers, and maintenance crews working around the clock to make sure that water is always there when you need it. Your water payments are helping to build a better tomorrow by supporting needed improvements that will keep water flowing for all of us—today and well into the future. All for about a penny a gallon.

 **AT ABOUT A PENNY PER GALLON WATER IS A GREAT VALUE.**™

**WE CARE ABOUT WATER. IT'S WHAT WE DO.**  
**FIND OUT WHY YOU SHOULD, TOO, at [amwater.com](http://amwater.com).**

© 2012 American Water. "American Water" and the star logo are the registered trademarks of American Water Works Company, Inc. All rights reserved.



**WE CARE ABOUT WATER. IT'S WHAT WE DO.®**

## Water Quality Results

### Regulated Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	MCL	PHG (MCLG)	San Marino		MWD – Weymouth Plant		Violation	Major Sources in Drinking Water
				Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High		
Gross Alpha Particle Activity (pCi/L)	2009/2011	15	(0)	6.6	6.6	ND	ND – 3	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2011	50	(0)	NA	NA	4	ND – 6	No	Decay of natural and man-made deposits
Uranium (pCi/L)	2011	20	0.43	NA	NA	2	1 – 2	No	Erosion of natural deposits
Arsenic (ppb)	2012	10	0.004	ND	ND – 2	ND	ND	No	Erosion of natural deposits; runoff from orchards; Glass and electronics production wastes
Fluoride (ppm)	2012	2	1	0.8	0.6 – 1.0	0.8	0.6 – 1.1	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as NO3 (ppm)	2012	45	45	22	ND – 38	ND	ND	No	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Trichloroethylene (TCE) (ppb)	2012	5	0.8	0.9	ND – 1.4	ND	ND	No	Discharge from metal degreasing sites and other factories
Tetrachloroethylene (PCE) (ppb)	2012	5	0.06	1.1	ND – 1.5	ND	ND	No	Discharge from factories, dry cleaning, and auto shops
Total Trihalomethanes (TTHM) (ppb)	2012 (RAA)	80	NA	11.2	ND – 37	35	7.6 - 70	No	By-product of drinking water chlorination
Haloacetic Acids (ppb)	2012 (RAA)	60	NA	8.3	ND – 29	16	1.3 – 23	No	By-product of drinking water chlorination
Total Chlorine (ppm)	2012 (RAA)	MRDL = 4.0 (as Cl <sub>2</sub> )	MRDLG = 4.0 (as Cl <sub>2</sub> )	1.1	0.91 – 1.38	2.3	1.5 – 2.8	No	Drinking water disinfectant added for treatment
Perchlorate (ppb)	2012	6	6	ND	ND – 5.6	ND	ND	No	Inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries

### Bacterial Results (from the San Marino Distribution System)

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Highest Percentage Detected	Violation	Typical Source
Total Coliform Bacteria	2012	More than 5% of monthly samples are positive	(0)	1.2%	No	Naturally present in the environment





## Secondary Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	MCL	PHG (MCLG)	San Marino Data		MWD – Weymouth Plant		Violation	Typical Source
				Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High		
Chloride (ppm)	2012	500	NS	17	7 - 43	90	85 - 95	No	Runoff/leaching from natural deposits; Seawater influence
Color (color units)	2012	15	NS	ND	ND	1	1	No	Naturally-occurring organic materials
Aluminum (ppb)	2012	1.0	0.6	118	ND - 29	120	ND - 210	No	Erosion of natural deposits; residual from some surface water treatment processes
Odor (units)	2012	3	NS	ND	ND - 1	2	2	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2010 / 2012	1,600	NS	454	360 - 730	740	350 - 930	No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2012	500	NS	43	14 - 114	140	130 - 160	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2012	1,000	NS	145	141 - 148	470	450 - 490	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2012	5	NS	2.5	ND - 5	ND	ND	No	Soil runoff

## Turbidity – A Measure of the Clarity of the Water (at the MWD – Weymouth Plant Treatment Facility)

Plant	Year Sampled	MCL	PHG (MCLG)	Level Found	Violation	Typical Source
Turbidity (NTU)	2012	TT = 1 NTU	NA	0.04	No	Soil runoff
		TT = percentage of samples < 0.3 NTU		100%		

## Unregulated Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	Notification Level (NL)	San Marino		MWD – Weymouth Plant	
			Average Amount Detected	Range Low - High	Average Amount Detected	Range Low-High
Boron (ppb)	2012	1000	191	90 - 426	130	130
N-Nitrosodimethylamine (NDMA) (ppt)	2012	10	NA	NA	ND	ND – 8

## Tap Water Samples: Lead and Copper Results (from the San Marino Distribution System)

Substance (units)	Year Sampled	Action Level	PHG (MCLG)	Number of Samples	Amount Detected at the 90 <sup>th</sup> Percentile	Number of Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2011	1.3	0.17	40	0.243	0	No	Internal corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2011	15	2	40	3	2	No	Internal corrosion of household water plumbing system; Discharges from industrial manufacturers; Erosion of natural deposits





## Additional Water Quality Parameters of Interest

This table shows average levels of additional water quality parameters, which are often of interest to consumers. Values shown here are averages of operating data for 2012. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

## Additional Constituents (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	San Marino		MWD – Weymouth Plant	
		Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High
Alkalinity as CaCO <sub>3</sub> (ppm)	2010 / 2012	150	94 – 190	95	61 – 120
Calcium (ppm)	2012	49	20 – 80	46	45 – 48
Magnesium (ppm)	2012	13	1.0 – 23	20	19 – 20
Potassium (ppm)	2012	ND	ND	3.9	3.7 – 4.1
pH	2012	7.6	7.2 – 8.1	8.1	7.9 – 8.6
Radon	2012	352	163 – 586	ND	ND
Sodium (ppm)	2012	36	22 – 72	78	74 – 82
Hardness as CaCO <sub>3</sub> (ppm)	2012	145	141 – 148	200	80 – 270
as (Grains per gallon)	2012	8.5	8.2 – 8.7	11.7	4.7 – 15.8

