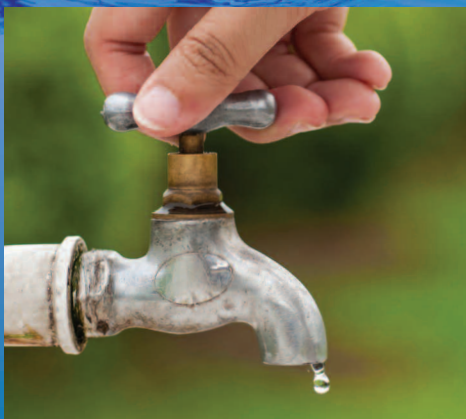




MID-PENINSULA  
WATER DISTRICT

# 2013

## Consumer Confidence ..... REPORT



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.  
此份水質報告，內有重要資訊。請找他人為你翻譯和解說清楚。

## ABOUT MPWD

### MID-PENINSULA WATER DISTRICT

3 Dairy Lane  
Belmont, CA 94002  
650-591-8941  
[www.midpeninsulawater.org](http://www.midpeninsulawater.org)

### BOARD OF DIRECTORS

The Board of Directors meets every fourth Thursday of the month at 6:30 p.m. at 3 Dairy Lane, Belmont.

Louis J. Vella  
*President*

Betty L. Linvill  
*Vice President*

Matthew P. Zucca  
*Director*

Al Stuebing  
*Director*

Dave Warden  
*Director*

### OFFICERS

Tammy Rudock  
*General Manager*

Candy Piña  
*District Secretary*

Joan L. Cassman  
*District Counsel*

Joubin Pakpour  
*District Engineer*

Jeff Ira  
*District Treasurer*



# It's the MPWD'S 85th Service Anniversary



Since 1929, the MPWD has provided safe, high quality, and reliable water to its customers. We are pleased to report that in 2013 we once again met and surpassed all federal and state water quality regulations. Enclosed is the 2013 Consumer Confidence Report detailing the information.

While your water conservation efforts are much appreciated, the statewide drought continues and it is very important that you consider more ways to save water. The 10 WAYS to SAVE 10% are included below as a reminder.

Your satisfaction is our top priority. Please contact us with any questions or concerns.

Sincerely,



– Tammy Rudock, *General Manager, MPWD*



1. Turn off the faucet when you are brushing your teeth or doing the dishes.
2. Take shorter showers with high-efficiency showerheads.
3. Operate washers with full loads.
4. Use a broom to clean sidewalks and pavement instead of a hose.
5. Replace your turf with drought-resistant and native plants.
6. Water during the cool part of the day.
7. Detect and fix plumbing leaks.
8. Install aerators on bathroom/ kitchen sinks.
9. Replace your old toilet.
10. Replace your clothes washer with a high-efficiency model.

Rebate programs are also available to MPWD customers.

For more information, please visit [www.midpeninsulawater.org/rebates](http://www.midpeninsulawater.org/rebates).

## DID YOU KNOW?

It can take hundreds of thousands of gallons of water to control a large wildfire. Visit [www.ReadyForWildfire.org](http://www.ReadyForWildfire.org) for tips on how to prepare your home and family for wildfires.

## Water Quality

San Francisco's Water Quality Division (WQD) regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure the water delivered to you meets or exceeds federal and state drinking water standards. In 2013, WQD staff conducted more than 102,650 drinking water tests in the transmission and distribution systems. This is in addition to the extensive treatment process control monitoring performed by certified operators.

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. Such substances are called contaminants.

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. In order to ensure that tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



## Drinking Water Sources and Treatment

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells.

For our system, the major water source originates from spring snowmelt flowing down the Tuolumne River to storage in Hetch Hetchy Reservoir. Our pristine, well protected Sierra water source is approved by the United States Environmental Protection Agency



(USEPA) and California Department of Public Health (CDPH) so that no filtration is required. Water treatments including disinfections by ultraviolet light and chlorine, pH adjustment for corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing disinfection byproduct formation are in place to meet the drinking water regulation requirements.

Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the 35,000-acre Alameda Watershed spanning Alameda and Santa Clara counties are collected in the Calaveras Reservoir and San Antonio Reservoir for filtration and disinfection at the Sunol Valley Water Treatment Plant. Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in the Crystal Springs Reservoir, San Andreas Reservoir, and Pilarcitos Reservoir, and are filtered and disinfected at the Harry Tracy Water Treatment Plant.

## Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control 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 or at [www.epa.gov/safewater](http://www.epa.gov/safewater).



**THERE'S A DROUGHT ON,  
TURN THE WATER OFF!**

## Unregulated Contaminant Monitoring Rule (UCMR3)

In May 2012, USEPA published the third Unregulated Contaminant Monitoring Rule (UCMR3) that lists a total of 28 chemical contaminants and two viruses for monitoring by some public water systems between 2013 and 2015. USEPA uses the UCMR to collect data for contaminants suspected to be present in drinking water to help determine if drinking water standards need to be developed in the future. SFPUC is required to monitor the 28 chemical contaminants, and completed four quarters of UCMR3 monitoring in 2013. Only 5 of the 28 contaminants were detected at very low levels as reported in the following table. In the absence of identifiable industrial sources other than chlorate, these contaminants are naturally occurring in our watersheds. Chlorate is a degradation product of the disinfectant used by SFPUC for water disinfection, and is a common contaminant found in water treatment facilities throughout the nation.

TURBIDITY	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Typical Sources in Drinking Water
Chlorate	ppb	800 (NL)	NA	30 - 270	150	Degradation of disinfectant
Chromium-total <sup>2</sup>	ppb	50	(100)	<0.2 - 0.35	<0.2	Erosion of natural deposits; industrial discharges
Chromium-6 <sup>3</sup>	ppb	10	0.02	<0.03 - 0.15	0.09	Erosion of natural deposits; industrial discharges
Strontium	ppb	NA	NA	15 - 170	74	Erosion of natural and pipe deposits
Vanadium	ppb	50 (NL)	NA	<0.2 - 0.48	<0.2	Erosion of natural and pipe deposits

<sup>1</sup>For definitions of these water quality terms see the listing below. <sup>2</sup>This MCL was established by CDPH. USEPA has a MCL of 100 ppb. <sup>3</sup>CDPH has proposed a MCL of 10 ppb for chromium-6.

## Regional Water System Treatment Plant Improvements

In 2013, SFPUC completed a \$62.6 million Phase II improvement project for the Sunol Valley Water Treatment Plant. The upgrades increase the plant's reliability at the permitted capacity of 160 MGD and will allow it to maintain production in the event of emergency or prolonged maintenance activities. Major enhancements include the addition of a new 3 MG chlorine contact tank, a 17.5 MG treated water reservoir, and improvements to the filtration, chemical treatment and disinfection facilities.



The Harry Tracy Water Treatment Plant Long-Term Improvements Project is currently under construction to improve delivery reliability and provide seismic upgrades. Construction started in March 2011 and has reached 70% completion. This \$280 million project, which includes significant upgrades to the ozonation system, five new filters, and a new treated water reservoir, will ensure that the plant can produce 140 MGD of water within 24 hours of a major earthquake.

## Reducing Lead from Plumbing Fixtures

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. There are no known lead service lines in our water distribution system. It is possible that lead levels at your home may be higher than others because of plumbing materials used on your property.

If you are concerned about lead levels in your water, you may wish to have it tested. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the USEPA's Safe Drinking Water Hotline 800-426-4791, or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

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

**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.

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

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

## Key Water Quality Terms

*Following are definitions of key terms referring to standards and goals of water quality noted on the data table.*

**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.

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

**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 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 contaminants.

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

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

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

**Turbidity:** A water clarity indicator that measures cloudiness of the water, and is also used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.

**Cryptosporidium** is a parasitic microbe found in most surface water. We regularly test for this waterborne pathogen, and found it at very low levels in source water and treated water in 2013. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

# Consumer Confidence Report

The following tables list all 2013 detected drinking water contaminants and information about their typical sources.

## DETECTED CONTAMINANTS<sup>1</sup>

<b>TURBIDITY</b>	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.3 <sup>(2)</sup>	[3.6] <sup>(3)</sup>	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 <sup>(4)</sup>	N/A	-	[0.98]	Soil runoff
	-	Min 95% of samples ≤ 0.3 NTU <sup>(4)</sup>	N/A	99.9%	-	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 <sup>(4)</sup>	N/A	-	[0.13]	Soil runoff
	-	Min 95% of samples ≤ 0.3 NTU <sup>(4)</sup>	N/A	100%	-	Soil runoff
<b>DISINFECTION BYPRODUCTS AND PRECURSOR</b>						
Total Trihalomethanes	ppb	80	N/A	33 - 69	49.9 <sup>(5)</sup>	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	30.6 - 48.7	38.5 <sup>(5)</sup>	Byproduct of drinking water disinfection
Total Organic Carbon <sup>(6)</sup>	ppm	N/A	N/A	1 - 3.4	2.2	Various natural and man-made sources
<b>MICROBIOLOGICAL</b>						
Total Coliform <sup>(7)</sup>	-	NoP ≤ 5.0% of monthly samples	(0)	-	0	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	<0.01 - 0.04	<0.01	Naturally present in the environment
<b>INORGANICS</b>						
Fluoride (source water) <sup>(8)</sup>	ppm	2.0	1	ND - 0.8	0.4 <sup>(9)</sup>	Erosion of natural deposits; water additive to promote strong teeth
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	1.90 - 2.43	2.13 <sup>(10)</sup>	Drinking water disinfectant added for treatment
<b>RADIONUCLIDES</b>						
Gross Alpha Particle Activity	pCi/L	15	(0)	ND - 3.9	ND	Erosion of natural deposits

### KEY

< / ≤ = less than / less than or equal to  
 AL = Action Level  
 Max = Maximum  
 Min = Minimum

N/A = Not Available  
 ND = Non-detect  
 NL = Notification Level  
 NoP = Number of Coliform-Positive Sample  
 NTU = Nephelometric Turbidity Unit

ORL = Other Regulatory Level  
 pCi/L = picocurie per liter  
 ppb = part per billion  
 ppm = part per million  
 µS/cm = microSiemens / centimeter

## DETECTED CONTAMINANTS

### CONSTITUENTS WITH SECONDARY STANDARDS

	Unit	SMCL	PHG	Range	Average	Typical Sources of Contaminant
Aluminum <sup>(11)</sup>	ppb	200	600	ND - 52	ND	Erosion of natural deposits; some water treatment residue
Chloride	ppm	500	N/A	<3 - 18	10.2	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	N/A	29 - 258	169	Substances that form ions when in water
Sulfate	ppm	500	N/A	0.8 - 33	16.6	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	<20 - 109	71	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.3	0.1	Soil runoff

### LEAD AND COPPER

	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	<1.0 - 82.2 <sup>(12)</sup>	60.1	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1.0 - 8.1 <sup>(12)</sup>	3.4	Internal corrosion of household water plumbing systems

### OTHER WATER QUALITY PARAMETERS

	Unit	ORL	Range	Average
Alkalinity (as CaCO <sub>3</sub> )	ppm	N/A	7 - 71	46
Bromide	ppb	N/A	17 - 24	21
Calcium (as Ca)	ppm	N/A	3 - 23	13
Chlorate <sup>(13)</sup>	ppb	(800) NL	39 - 690	303
Hardness (as CaCO <sub>3</sub> )	ppm	N/A	7 - 89	53
Magnesium	ppm	N/A	< 0.2 - 8.3	5.3
pH	-	N/A	6.5 - 9.4	8.4
Silica	ppm	N/A	4.8 - 5.2	5
Sodium	ppm	N/A	3 - 18	12



MPWD Water Quality  
Sampling Station

#### FOOTNOTES:


- (1) All results met Federal and State drinking water standards and were confirmed by the MPWD.
- (2) Turbidity is measured every four hours. These are monthly average turbidity values.
- (3) The highest turbidity of the unfiltered water in 2013 was 3.6 NTU.
- (4) There is no turbidity MCL for filtered water. The limits are based on the TT requirements for filtration systems.
- (5) This is the highest locational running annual average value.
- (6) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
- (7) The Mid-Peninsula Water District had zero positives for 2013.
- (8) The SFPUC adds fluoride to an optimum level of 0.9 ppm to help prevent dental caries in consumers. The CDPH specifies the fluoride levels in the treated water be maintained within a range of 0.8 ppm - 1.5 ppm. In 2013, the range and average of the fluoride levels were 0.7 ppm - 1.4 ppm and 0.9 ppm, respectively.
- (9) The natural fluoride level in the Hetch Hetchy supply was ND. Elevated fluoride levels in the SVWTP and HTWTP raw water are attributed to the transfer of fluoridated Hetch Hetchy water into the reservoirs.
- (10) This is the highest running annual average value.
- (11) Aluminum also has a primary MCL of 1000 ppb.
- (12) The most recent Lead and Copper Rule monitoring was in 2012. 0 of 33 site samples collected at consumer taps had copper concentrations above the AL.
- (13) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.

**Note:** Additional water quality data may be obtained by calling the Mid-Peninsula Water District phone number at (650) 591-8941.



MID-PENINSULA  
WATER DISTRICT

3 Dairy Lane  
Belmont, CA 94002

 Produced with eco-friendly printing and paper.

# 2013 Consumer Confidence ..... REPORT



*If Everyone Saves a Little,  
We Can All Save a Lot!*

**THERE'S A DROUGHT ON. TURN THE WATER OFF!**

