

WHAT YOU SHOULD KNOW ABOUT DRINKING WATER SAFETY

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. We are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. It is possible that lead levels at your home may be higher than at others because of plumbing materials used in your property.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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 levels in your water, you may wish

to have your water 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.

CRYPTOSPORIDIUM

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.

CONSERVATION ALERT:

Following one of the driest winters in California history, we have requested all customers to voluntarily reduce water use by 10%. See www.burlingame.org/departments/publicworks/water/droughtemergency for tips on how to cut back water use, ranging from simple shifts in routine habits to replacement of inefficient appliances and toilets.

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.

UCMR3 SAMPLING RESULTS

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range	Average	Typical Sources in Drinking Water
Chlorate	ppb	800 (NL)	NA	51 - 180	103	Degradation of disinfectant
Chromium-total	ppb	50	(100)	<0.2 - 1.3	<0.2	Erosion of natural deposits; industrial discharges
Chromium 6	ppb	10	0.02	0 - 13	0.34	Erosion of natural deposits; industrial discharges
Strontium	ppb	NA	N/A	14 - 100	40	Erosion of natural and pipe deposits
Vanadium	ppb	50 (NL)	N/A	<0.2 - 0.27	<0.2	Erosion of natural and pipe deposits



City of Burlingame
501 Primrose Road
Burlingame, CA 94010

WATER QUALITY REPORT 2013

FOR MORE INFORMATION

If you would like additional information or if you have any questions concerning the City of Burlingame's testing data or water system, please call the Public Works Department at (650) 558-7670, or write to City Hall, Public Works Department, Water Quality Report, 501 Primrose Road, Burlingame, CA 94010. You may also wish to visit the City's website at www.burlingame.org The City of Burlingame City Council meets twice a month on the first and third Monday at 7:00 p.m. in the Council Chambers at City Hall.

Decisions about water quality issues are made from time to time in public meetings of the San Francisco Public Utilities Commission (SFPUC). The SFPUC meets twice a month on the second and fourth Tuesday at 1:30 p.m. Meetings are held at San Francisco City Hall, Room 400. Inquiries about these meetings can be made by calling the office of the Commission Secretary at (415) 554-3165 or visit their website at www.sfwater.org

Do you want to learn more about drinking water regulations? Visit the California Department of Health Services at www.dhs.ca.gov or the U.S. Environmental Protection Agency website at www.epa.gov

City of Burlingame	Rob Mallick – Public Works Superintendent	(650) 558-7670
	City of Burlingame website	www.burlingame.org
San Francisco Public Utilities Commission	Water Quality Bureau	(650) 872-5950
	Customer Service Bureau	(415) 551-3000
	Website	www.sfwater.org
California Department of Public Health	District 17 - Santa Clara/San Mateo	(510) 620-3474
	Home Treatment Device Certification Unit	(916) 327-1140
	Website	www.dhs.ca.gov
	Safe Drinking Water Hotline	(800) 426-4791
	Website	www.epa.gov

BURLINGAME

2013 Water Quality Report



OUR MISSION: Quality Water

The City of Burlingame in coordination with the San Francisco Public Utilities Commission (SFPUC) is pleased to present our 2013 Annual Water Quality Consumer Confidence Report. We want our customers to know where their water comes from, how it is treated to ensure it is top quality and the results of water quality monitoring performed by the City of Burlingame and the SFPUC. With this knowledge, consumers can make health decisions concerning their water use. During 2013 the SFPUC and the City of Burlingame monitored the water quality by collecting health samples. The City of Burlingame collected 945 water quality samples and we are very pleased to announce that the City of Burlingame has met all Federal (USEPA) and State drinking water health standards in 2013. The City of Burlingame and the SFPUC is committed to customer service and providing you with high quality water.

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。

OUR DRINKING WATER SOURCES AND TREATMENT

All drinking water delivered by the Burlingame Water Division was purchased from the San Francisco Public Utilities Commission(SFPUC). Their sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells.

For The San Francisco Regional Water system, the major water source originates from spring snowmelt flowing down the Tuolumne River to storage in Hetch Hetchy Reservoir. This 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.

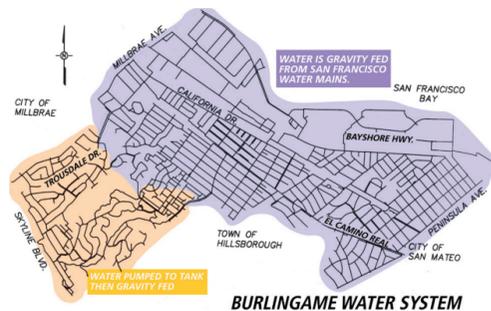
Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the 35,000-acre Alameda Watershed spanning in Alameda and Santa Clara counties—are collected in the Calaveras Reservoirs and San Antonio Reservoir for filtration and disinfection at the Sunol Valley 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.

As in the past, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the two local watersheds in 2013.



BURLINGAME WATER SYSTEM SERVICE AREA

The City of Burlingame purchases all of its water from the San Francisco Public Utilities Commission (SFPUC). The SFPUC has several large pipelines running through town. We have six metered connections at various locations throughout the city. These connections feed directly into the Aqueduct zone (Purple area on map). Water is pumped to the higher elevations by booster pump stations and to storage reservoirs. To regulate the pressure in the higher elevations we have several pressure reducing valves.



WATER QUALITY

SFPUC'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 our certified operators and online instruments.

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.

CONTAMINANTS AND REGULATIONS

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 adjacent 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.

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.

CITY OF BURLINGAME - WATER QUALITY DATA FOR YEAR 2013

The table below lists all 2013 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accord with regulatory guidance. SFPUC received from the CDPH a monitoring waiver for some contaminants such that their monitoring frequencies are less than annual.

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or (Max)	Major Sources in Drinking Water
TURBIDITY						
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.3 ⁽²⁾	[3.6] ⁽³⁾	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	-	N/A	1 ⁽⁴⁾ min 95% of samples ≤0.3 NTU ⁽⁴⁾	[0.98]	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	-	N/A	1 ⁽⁴⁾ min 95% of samples ≤0.3 NTU ⁽⁴⁾	[0.13]	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	49.8 - 70.0	[60.2] ⁽⁵⁾	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	28.6 - 45.9	[42.8] ⁽⁵⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁶⁾	ppm	TT	N/A	1-3.4	2.2	Various natural and man-made sources
MICROBIOLOGICAL (City of Burlingame)						
Total Coliform ⁽⁷⁾	-	NoP ≤ 5.0% of monthly samples	[0]	-	1	Naturally present in the environment
Giardia lamblia	cyst/L	TT	[0]	<0.01 - 0.04	<0.01	Naturally present in the environment
INORGANICS						
Fluoride (source water) ⁽⁸⁾	ppm	2.0	1	ND - 0.8	0.4 ⁽⁹⁾	Erosion of natural deposits; water additive to promote strong teeth
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	1.49 - 2.85	2.26 ⁽¹⁰⁾	Drinking water disinfectant added for treatment
RADIONUCLIDES						
Gross Alpha Particle ActivityChloramine (as chlorine)	pCi/L	15	(0)	ND - 3.9	ND	Erosion of natural deposits
CONSTITUENTS WITH SECONDARY STANDARDS						
Aluminum ⁽¹¹⁾	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 (City of Burlingame)						
Copper	ppb	1300	300	5.2 - 110.8 ⁽¹²⁾	51.7	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1 - 7.1 ⁽¹²⁾	2.6	Internal corrosion of household water plumbing systems
OTHER WATER QUALITY PARAMETERS						
Alkalinity (as CaCO3)	ppm	N/A	7 - 71	46		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
Bromide ⁽¹⁴⁾	ppb	N/A	17 - 24	21		
Calcium (as Ca)	ppm	N/A	3 - 23	13		
Chlorate ⁽¹³⁾	ppb	(800) NL	39 - 690	303		
Hardness (as CaCO3)	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		

Note:

- (1) All results met State and Federal drinking water health standards.
- (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. (if your system has 4 quarters of locational DBP data obtained under Stage 2 DBPR monitoring)
- (6) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
- (7) For systems collecting <40 samples per month, report the highest number (not the percentage) of positive samples collected any one month. Also change the MCL per Section 64426.1 of Title 22. (This footnote should be deleted after City of Burlingame incorporates its own data.)

- (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 2013.
- (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 City of Burlingame water system phone number (650) 558-7670

HOW CAN WE PRESERVE OUR MOST PRECIOUS NATURAL RESOURCE?

- Don't over-water your lawn and water early in the morning or at night to avoid excess evaporation. When planting use drought tolerant vegetation.
- Fully load the dishwasher and clothes washer before running them.
- When brushing your teeth or washing dishes by hand, don't let the water run. Taking shorter showers can save 2.5 gallons per minute.
- Stop leaks. Repair dripping faucets and leaking toilets as soon as possible.
- If you have a swimming pool, use a cover. You will cut the loss of water by evaporation by 90 percent.

You can obtain a free water conservation kit and shower head retrofit kit by calling (650) 558-7670. The City of Burlingame also provides residential rebates for low flush toilet and high efficiency clothes washer purchases. Further water conservation information can be found at the following websites: <http://www.sfwater.org>, <http://www.h2ouse.org>, <http://www.bawasca.org>

BOTTLE WATER

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

STORING EMERGENCY WATER SUPPLIES

Although the SFPUC strives to ensure a reliable supply of water for our customers, a natural disaster such as a major earthquake could interrupt water delivery. Residents are encouraged to store drinking water in case of an emergency. The SFPUC recommends storing at least three days worth of water (one gallon of water per person, per day, including pets) in food-grade plastic containers, such as two-liter soda bottles, and replacing supplies every six months. To learn more about emergency preparedness for yourself and your family, visit www.72hours.org.



Hetch Hetchy Reservoir from O'Shaughnessy Dam

BURLINGAME WATER QUALITY ASSURANCE PROGRAM

Burlingame Water Quality Assurance Objectives:

- To conduct our water quality monitoring program to assure the water delivered to you meets all water quality standards as determined by the California Department of Health Services and the Federal Environmental Protection Agency.
- To maintain the existing water system infrastructure to assure that it continues to reliably deliver quality water to our customers.
- To construct capital projects that ensure the water system meets water quality standards and continues to reliably deliver quality water in the future.

PROTECTING OUR WATERSHEDS

Our annual Hetch Hetchy Watershed Sanitary Survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities with partner agencies including National Park Service and US Forest Service.

We also conduct sanitary surveys every five years to detect and track sanitary concerns for the local watersheds and the approved standby water sources in Early Intake Watershed,

which includes Cherry Lake and Lake Eleanor. The latest 5-year surveys were completed in 2011 for the period of 2006-2010. These surveys identified wildlife, stock, and human activities as potential contamination sources. The reports are available for review at the CDPH San Francisco District office, (510) 620-3474.

FLUORIDATION AND DENTAL FLUOROSIS

Mandated by State law, water fluoridation is a widely accepted practice proven to be safe and effective for preventing and controlling tooth decay. Our water is optimally fluoridated at 1.0 mg/l. Infants fed formula mixed with water containing fluoride at the optimal level may have an increased chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis, and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. CDC considers it safe to use optimally fluoridated water for preparing infant formula. To lessen this chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste and dental products. Contact your health provider or CDPH if you have concerns about dental fluorosis. Additional information can be found at CDPH website www.cdph.ca.gov/certlic/drinkingwater/pages/fluoridation.aspx or CDC website www.cdc.gov/fluoridation.