

REDUCING LEAD FROM PLUMBING FIXTURES

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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. Information on lead in drinking water, testing methods, and steps you can take to minimize

CRYPTOSPORIDIUM

WATER QUALITY REPORT 2012

POSTAL CUSTOMER
Burlingame, CA 94010



City of Burlingame
501 Primrose Road
Burlingame, CA 94010

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BURLINGAME

2012 Water Quality Report



OUR MISSION: Quality Water

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。

BURLINGAME'S WATER SOURCES

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed - within the greater 128,424-acre Southern Alameda Creek Watershed and spanning more than 35,000 acres in Alameda and Santa Clara counties - are collected in the Calaveras Reservoir and San Antonio Reservoir for subsequent treatment at the Sunol Valley Water Treatment Plant, where filtration and disinfection are provided.

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 treated at the Harry Tracy Water Treatment Plant. Similar treatment processes to Sunol plant are used for treating this local source.

In 2012, the Hetch Hetchy Watershed provided the majority of the total water supply, with the remainder contributed by the two local watersheds.



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

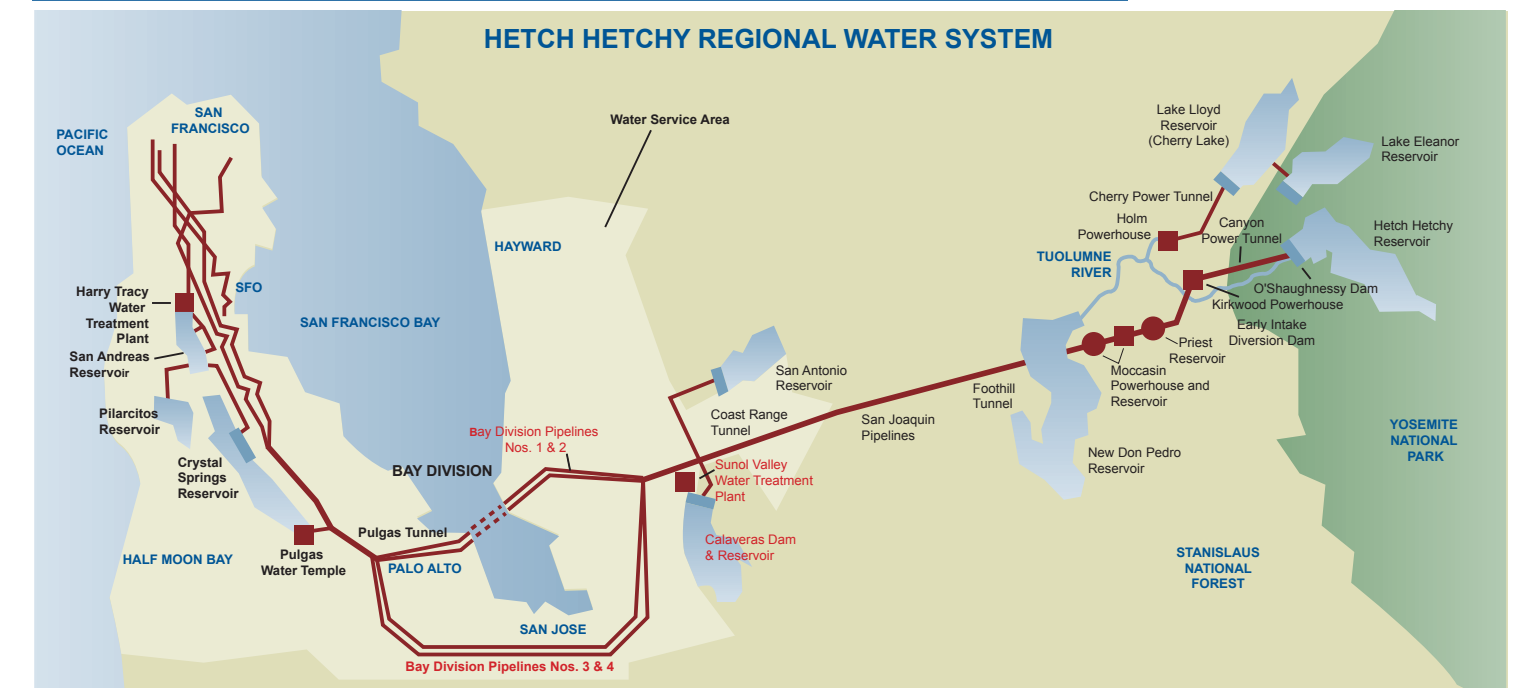
Safe Drinking Water Hotline (800) 426-4791
Website www.epa.gov

EMERGING CONTAMINANT MONITORING

Unregulated microorganisms and synthetic or naturally-occurring chemicals that are not commonly monitored by the water utilities are termed contaminants of emerging concern (CEC). More than 100,000 chemicals are registered in the US. New chemicals are registered and new microorganisms are identified everyday. Some of these contaminants can be detected at extremely low levels in the environment by ever-improving laboratory methods. The health significance of these trace contaminants is typically unknown. The WQD has been proactive in addressing CEC through participation in national research projects and conducting independent monitoring of our source waters. To help focus the resources, WQD developed its own approach to organize and prioritize work on the CECs in drinking water and enhance public engagement in CEC issues. Evaluation is conducted every three years and reviewed by the San Francisco Department of Public Health, SFPUC Citizens' Advisory Committee and the Commission. By virtue of its pristine drinking water sources, the SFPUC water has not been vulnerable to many CECs that may concern other water suppliers; e.g., pesticides and pharmaceutical products. Periodic review will allow WQD to adjust priorities based on new information and conditions; e.g., new information on the health significance, occurrence and treatment of CECs. See the link below for SFPUC's CEC approach <http://sfwater.org/modules/showdocument.aspx?documentid=1691>.



The San Francisco Public Utilities Commission (SFPUC) uses an extensive water sample collection and testing protocol at its various water sources throughout their transmission system. During 2012 over 60,640 water samples were collected and analyzed by the SFPUC Water Quality division. The City of Burlingame also collects and analyzes samples throughout our distribution system including our storage reservoirs. The SFPUC Water Quality Bureau performed our microbiology & general chemistry analysis at their water quality lab located in Millbrae. The results of the water sample analyses are provided in this report.



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.

ENSURING THE HIGHEST WATER QUALITY

WATER QUALITY: CONTAMINANTS AND REGULATIONS

SFPUC's Water Quality Division (WQD) regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the water delivered to you meets or exceeds federal and state drinking water standards. In 2012, WQD staff conducted more than 60,640 drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

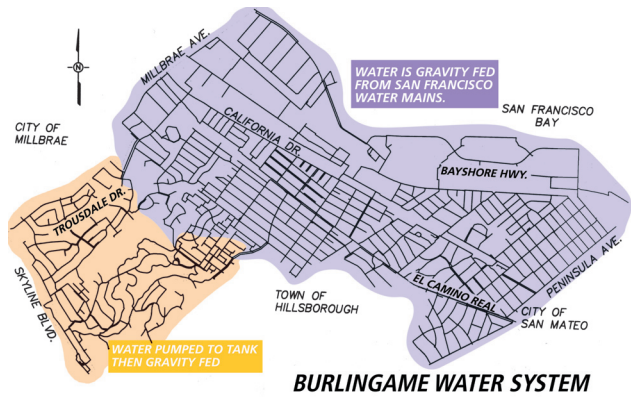
As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including 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 United States Environmental Protection Agency (USEPA) and California Department of Public Health (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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

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.
- 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.

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Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

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.

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.

REGULATORY ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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 (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 800-426-4791 or at www.epa.gov/safewater.

2012 WATER QUALITY DATA FOR WHOLESALE CUSTOMERS' CCR USE

The attached table lists all 2012 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with the California Department of Public Health (CDPH) guidance. The CDPH allows the SFPUC to monitor for some contaminants less than once per year because their concentrations do not change frequently. SFPUC received from the CDPH a monitoring waiver for some contaminants that were absent in the water.

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 - 0.5 ⁽²⁾	[2.8] ⁽³⁾	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU -	1 ⁽⁴⁾ min 95% of samples ≤0.3 NTU ⁽⁴⁾	N/A N/A	- 100%	[0.26] -	Soil runoff Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU -	1 ⁽⁴⁾ min 95% of samples ≤0.3 NTU ⁽⁴⁾	N/A N/A	- 100%	[0.17] -	Soil runoff Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes	ppb	80	N/A	18 - 63	[46] ⁽⁵⁾	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	8 - 45	[36] ⁽⁵⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁶⁾	ppm	TT	N/A	2.3 - 3.7	2.7	Various natural and man-made sources
DISINFECTION BYPRODUCTS AND PRECURSOR (City of Burlingame)						
Total Trihalomethanes	ppb	80	N/A	32 - 53	50.6 ⁽⁵⁾	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	24 - 47	43.7 ⁽⁵⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁶⁾	ppm	N/A	N/A	2.3- 2.7	2.7	Various natural and man-made sources
MICROBIOLOGICAL (City of Burlingame)						
Total Coliform ⁽⁷⁾	-	NoP ≤ 5.0% of monthly samples	[0]	-	0	Naturally present in the environment
Giardia lamblia	cyst/L	TT	[0]	<0.01 - 0.06	<0.01	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) ⁽⁸⁾	ppm	2.0	1	ND - 0.8	0.3 ⁽⁹⁾	Erosion of natural deposits; water additive to promote strong teeth
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	2.05 -2.07	2.28 ⁽¹⁰⁾	Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS						
Aluminum ⁽¹¹⁾	ppb	200	600	ND - 90	ND	Erosion of natural deposits; some water treatment residue
Chloride	ppm	500	N/A	2 - 20	12.3	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 7	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	31 - 344	202	Substances that form ions when in water
Sulfate	ppm	500	N/A	0.9 - 40	20	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	<20 - 195	108	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.2	0.1	Soil runoff
LEAD AND COPPER (City of Burlingame)						
Copper	ppb	1300	300	3.5 - 188	60.6	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1 - 19.6 ⁽¹⁰⁾	2.1	Internal corrosion of household water plumbing systems
OTHER WATER QUALITY PARAMETERS						
Alkalinity (as CaCO3)	ppm	N/A	10 - 111	61	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 ppb = part per billion ppm = part per million µS/cm = microSiemens / centimeter	
Bromide	ppb	N/A	<10 - 24	<10		
Calcium (as Ca)	ppm	N/A	3 - 28	15		
Chlorate ⁽¹⁴⁾	ppb	(800) NL	53 - 399	221		
Hardness (as CaCO3)	ppm	N/A	8 - 114	62		
Magnesium	ppm	N/A	0.2 - 10.8	6.1		
pH	-	N/A	6.7 - 9.7	8.5		
Silica	ppm	N/A	3.2 - 5.3	4.1		
Sodium	ppm	N/A	3 - 25	15.7		

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 2012 was 2.9 NTU but the water was not served to customers. The brief turbidity spike indicated in the table was not observed upstream in San Joaquin Pipelines.
(4) There is no turbidity MCL for filtered water. The limits are based on the TT requirements for filtration systems in the State drinking water regulations.
(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) For systems collecting <40 samples per month, report the highest number (not the percentage) of positive samples collected in any one month. Also change the MCL per Section 64426.1 of Title 22.
(8) The SFPUC adds fluoride to an optimum level of 1.0 ppm to help prevent dental caries in consumers. The CDPH specifies the fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2012, the range and average of the fluoride levels were 0.4 ppm - 1.3 ppm and 1.0 ppm, respectively.
(9) The fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.2 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.6 ppm - 0.8 ppm attributed to the transfer of fluoridated, Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.
(10) This is the highest quarterly running annual average value.
(11) Aluminum also has a primary MCL of 1000 ppb.
(12) The detected chlorate in the treated water is a degradation byproduct 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.

WATERSHEDS PROTECTION

The SFPUC actively protects the water resources entrusted to its care. It's annual update of Hetch Hetchy Watershed Sanitary Survey evaluates the sanitary conditions, water quality,

potential contamination sources, and the results of watershed management activities with partner agencies (such as the National Park Service and US Forest Service). The SFPUC also conducts sanitary surveys every five years to detect and track sanitary concerns for the Bay Area 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. They are available for review at the CDPH San Francisco District office, 510-620-3474.

FLUORIDE: NATURE'S CAVITY FIGHTER

San Francisco has been adding fluoride to the City's drinking water for more than 50 years to protect dental health. For more information in English, Spanish, or Chinese, call the toll-free SFPUC fluoride information line at 866-668-6008 or visit the SFPUC website at www.sfwater.org/fluoride.