

BURLINGAME

2014 Water Quality 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。

OUR DRINKING WATER SOURCES AND TREATMENT

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

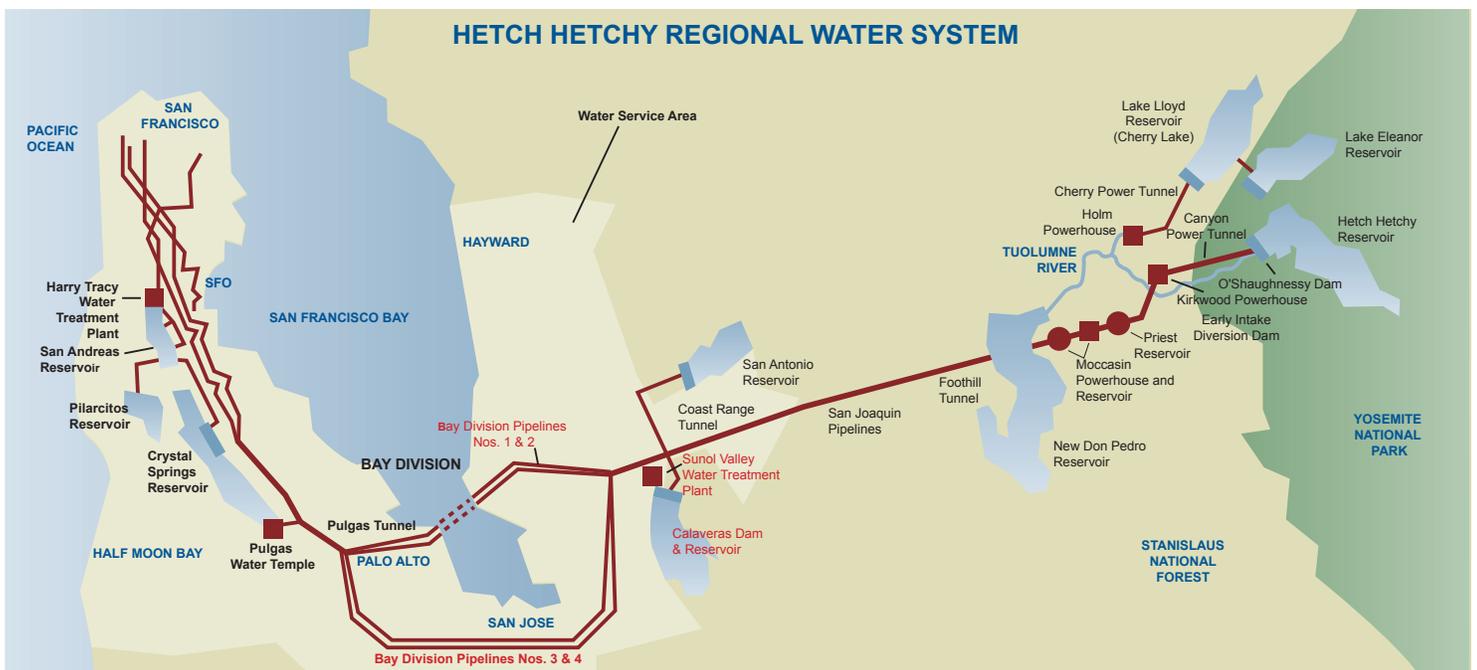
The drinking water delivered by the Burlingame Water Division is supplied by the San Francisco Regional Water System (SFRWS), our major water source originates from spring snowmelt flowing down the Tuolumne River to storage in Hetch Hetchy Reservoir. The pristine, well protected Sierra water source is exempt from filtration requirements by the United States Environmental Protection Agency (USEPA) and State Water Resources Control Board's Division of Drinking Water (SWRCB). Water treatments provided by the SFRWS, including disinfection by ultraviolet light and chlorine, corrosion control by adjustment of the water pH value, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing disinfection byproduct formation, are in place to meet the drinking water regulatory requirements.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the 35,000-acre Alameda Watershed in Alameda and Santa Clara counties are collected in the Calaveras and San Antonio reservoirs 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, San Andreas, and Pilarcitos reservoirs, 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 2014.

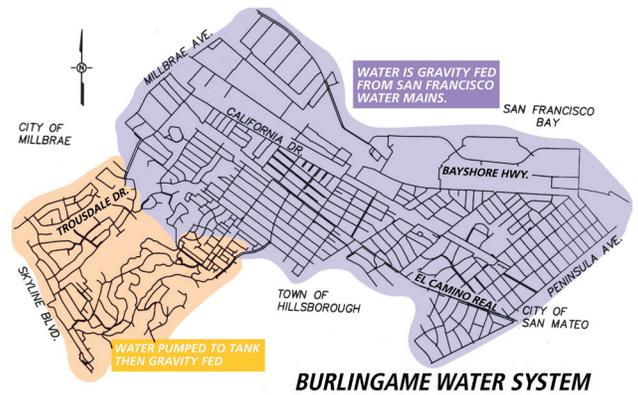
OUR MISSION: Quality Water

The City of Burlingame in coordination with the San Francisco Public Utilities Commission (SFPUC) is pleased to present our 2014 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. The SFPUC supplied an average of 205 million gallons per day (MGD) of water via its Regional Water System to serve 2.6 million people in the Bay Area in 2014. The City of Burlingame and the SFPUC are committed to customer service and providing you with high quality water.



BURLINGAME WATER SYSTEM SERVICE AREA

The City of Burlingame purchases all of its water from the San Francisco Public Utilities Commission (SFPUC). The San Francisco Regional Water System (SFRWS) 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

The 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 2014, WQD staff conducted more than 52,000 drinking water tests in the transmission and distribution systems. This is in addition to the extensive treatment process control monitoring performed by the SFPUC's 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 SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB 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.
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- 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 2014

The table below lists all 2014 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance. The SFRWS received from the SWRCB 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 - 0.6 ⁽¹⁾	[2.8]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU -	1 ⁽²⁾ min 95% of samples ≤0.3 NTU ⁽²⁾	N/A N/A	- 97-100%	[0.98] -	Soil runoff Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU -	1 ⁽²⁾ min 95% of samples ≤0.3 NTU ⁽²⁾	N/A N/A	- 100%	[0.07] -	Soil runoff Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	18-53	[51.7] ⁽³⁾	Byproduct of drinking water disinfection
Haloacetic Acids	ppb	60	N/A	5.5 - 39	[36.8] ⁽³⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁴⁾	ppm	TT	N/A	1.3-2.8	1.9	Various natural and man-made sources
MICROBIOLOGICAL (City of Burlingame)						
Total Coliform	-	NoP ≤ 5.0% of monthly samples	[0]	0 - 9.1% ⁽¹¹⁾	[9.1%]	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) ⁽⁵⁾	ppm	2.0	1	ND - 0.8	0.4 ⁽⁶⁾	Erosion of natural deposits; water additive to promote strong teeth
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	0.1-3.2	[2.25] ⁽⁷⁾	Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS						
	Unit	SMCL	PHG	Range	Average	Typical Sources in Drinking Water
Chloride	ppm	500	N/A	<3 - 15	9	Runoff / leaching from natural deposits
Odor Threshold	TON	3	N/A	ND-1	ND	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	32-222	151	Substances that form ions when in water
Sulfate	ppm	500	N/A	0.9-32	17	Substances that form ions when in water
Total Dissolved Solids	ppm	1000	N/A	31-120	81	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.2	0.1	Soil runoff
LEAD AND COPPER						
	Unit	AL	PHG	Range	90th Percentile	Major Sources in Drinking Water
Copper	ppb	1300	300	5.2 - 110.8 ⁽⁸⁾	51.7	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1 - 7.1 ⁽⁸⁾	2.6	Internal corrosion of household water plumbing systems
OTHER WATER QUALITY PARAMETERS						
	Unit	ORL	Range	Average		
Alkalinity (as CaCO ₃)	ppm	N/A	8 - 94	37		
Bromide ⁽⁹⁾	ppb	N/A	ND-27	5		
Calcium (as Ca)	ppm	N/A	3 - 20	11		
Chlorate ⁽¹⁰⁾	ppb	(800) NL	34 - 740	314		
Hardness (as CaCO ₃)	ppm	N/A	7 - 77	46		
Magnesium	ppm	N/A	<0.2 - 6.4	3.9		
pH	-	N/A	6.9 - 10.2	9.3		
Potassium	ppm	N/A	0.2 - 1	0.6		
Silica	ppm	N/A	2 - 5	4		
Sodium	ppm	N/A	2.4 - 16	10		

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
TON	= Threshold Odor Number
TT	= Treatment Technique
µS/cm	= microSiemens / centimeter

Note:

(1) These are monthly averaged turbidity values measured every 4 hours daily.

(2) There is no turbidity MCL for filtered water. The limits are based on the TT requirements for filtration systems.

(3) This is the highest locational running annual average value.

(4) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.

(5) The SWRCB specifies the fluoride levels in the treated water be maintained within a range of 0.8 ppm - 1.5 ppm. In 2014, the range and average of the fluoride levels were 0.6 ppm - 1.2 ppm and 0.9 ppm, respectively.

(6) 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.

(7) This is the highest running annual average value

(8) The most recent Lead and Copper Rule monitoring was in 2013. 0 of 30 site samples collected at consumer taps had lead or copper concentrations above the AL.

(9) Bromide was detected in HTWTP effluent only.

(10) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.

(11) The City of Burlingame exceeded the MCL Level for Total Coliform in the months of May and July of 2014.

PROTECTING OUR WATERSHEDS

The SFPUC's 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 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 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 San Francisco District office of SWRCB (510) 620-3474.



Hetch Hetchy Reservoir from O'Shaughnessy Dam

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 the Burlingame 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.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR3)

The Burlingame Water Division conducted monitoring as required by the USEPA's third Unregulated Contaminant Monitoring Rule (UCMR3) in 2013. The monitoring results were included in the 2013 Annual Water Quality Report, which is accessible at www.Burlingame.org/drinkingwater.

CRYPTOSPORIDIUM

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2014. 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.

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 has been fluoridated at 0.9 milligram per liter until May 2015, when the new State regulatory guidance was issued. The water is now fluoridated at a new optimal level of 0.7 mg/L. Infants fed formula mixed with water containing fluoride at this 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 SWRCB if you have concerns about dental fluorosis. For additional information visit the SWRCB website (www.swrcb.ca.gov/) and search for fluoride, or the CDC website (www.cdc.gov/fluoridation).

WATER CONSERVATION OPPORTUNITIES

The City Council declared a 'water shortage condition' on May 18, 2015 to formally implement water conservation restrictions to meet the State mandate. For more information on City restrictions and resources available to residential and commercial customers, go to www.Burlingame.org/drought. For questions or concerns, call Burlingame's Water Conservation Hotline at (650) 558-7612 or email waterconservation@burlingame.org.

WATER IS PRECIOUS — PLEASE USE IT WISELY!

A few easy lifestyle shifts that save water to address drought conditions:

-  Turn off the faucet when you are brushing your teeth or doing dishes
-  Wash fruits/vegetables in a bowl of water instead of running a tap; then use the leftover water for your plants.
-  Compost vegetable food waste instead of using the garbage disposal.
-  Time your shower to keep it under 5 minutes.
-  Use a broom to clean sidewalks or driveways.
-  Operate your washing machine and dishwasher with full loads.
-  Irrigate sparingly and only during early morning and evening hours.



WATER MAIN FLUSHING PROGRAM

The Burlingame Public Works Water division routinely flushes water mains throughout the City in order to maintain water quality and remove sediment that may be present. Tuberculation (a form of corrosion inside iron pipes) and sediment can discolor water, and over time, impede the flow of water through the distribution system. The mains are flushed through a systematic opening and closing of valves to force the flow of water in one direction. This technique, known as unidirectional flushing, allows section by section of pipeline to be cleaned, which reduces the amount of water required to effectively clean the pipeline distribution system.

The Public Works Department is very aware of current drought conditions and is doing everything possible to reduce flushing throughout the City; however, there will be occasions that the Water Division will need to perform flushing. The Division is committed to doing everything possible to investigate secondary uses for the discharged water. For more information about water pipeline flushing or water conservation, call Burlingame's Water Conservation Hotline at (650) 558-7612 or email waterconservation@burlingame.org.



City of Burlingame
501 Primrose Road
Burlingame, CA 94010

WATER QUALITY REPORT 2014



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 distribution system, please call the Public Works Department at (650) 558-7670, or write to Public Works Corporation Yard, Attn: Water Quality Report, 1361 N. Carolan, Burlingame, CA 94010. You may also wish to visit **www.burlingame.org/**.

Decisions about our drinking water are made from time to time in public meetings. 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. The San Francisco Public Utilities Commission (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 State Water Resources Control Board at **www.dhs.ca.gov**, or the U.S. Environmental Protection Agency website at **www.epa.gov**.

City of Burlingame

Public Works Department (650) 558-7670
 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

State Water Resources Control Board

District 17 - Santa Clara/San Mateo (510) 620-3474
 Home Treatment Device Certification Unit (916) 327-1140
 Website www.SWRCB.ca.gov

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