



2022

Water Quality Report

CITY OF BURLINGAME

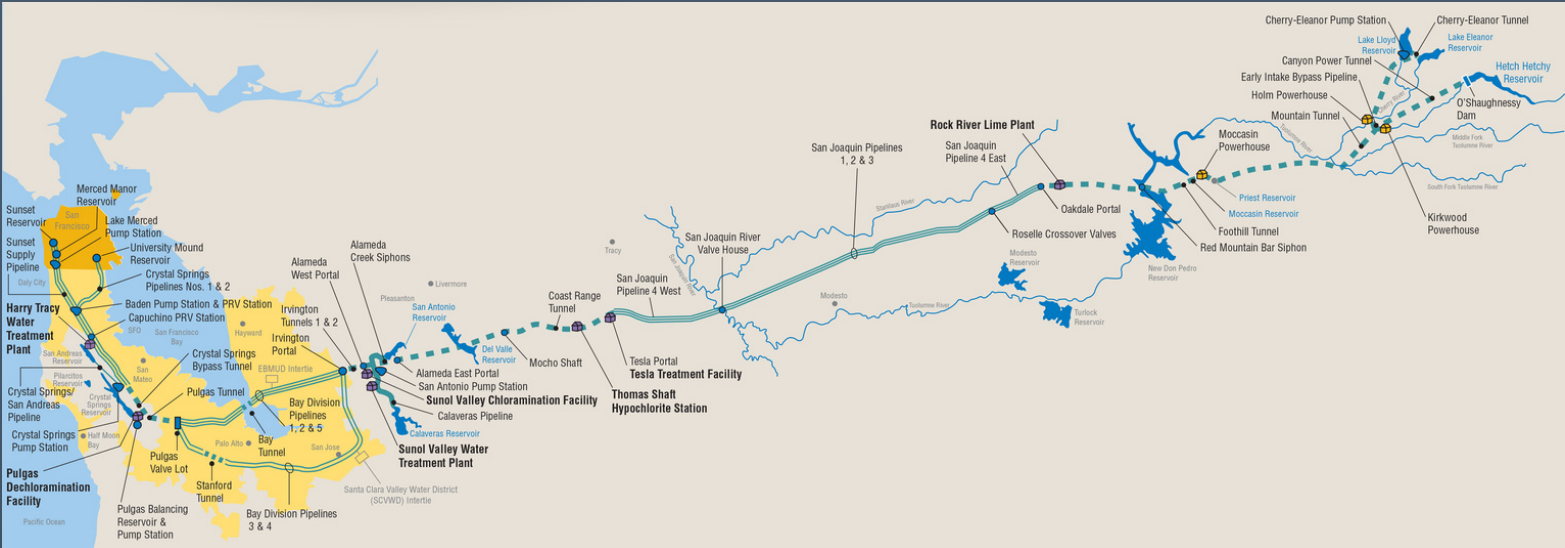
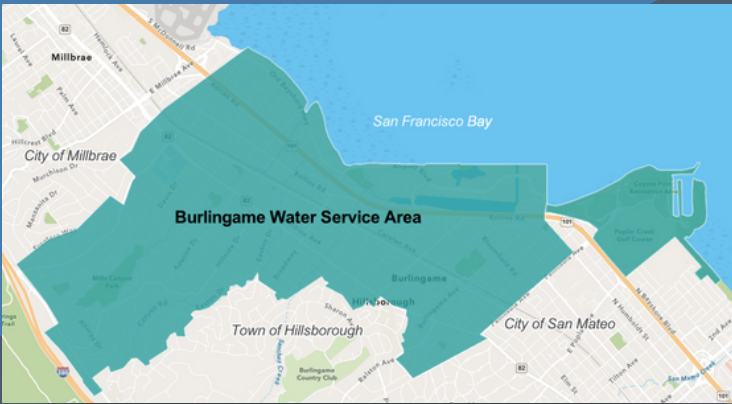


OUR MISSION: High-Quality Water

The City of Burlingame is pleased to present our 2022 Annual Water Quality Consumer Confidence Report. We want our customers to know where their water comes from and how it is treated to ensure it is top quality. The City of Burlingame provides high-quality, reliable water service to the residents of Burlingame, rain or shine, as the results of decades of proactive planning. The City of Burlingame is 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. The San Francisco Regional Water System has several large pipelines running through town. We have several metered connections at various locations throughout the city. Water is pumped to the higher elevations by booster pump stations and to storage reservoirs. The City of Burlingame has several pressure reducing valves to regulate the water pressure in higher elevation areas.



OUR DRINKING WATER SOURCES AND TREATMENT

All of our drinking water comes from the San Francisco Regional Water System (SFRWS), which is a wholesaler owned and managed by the San Francisco Public Utilities Commission (SFPUC). The supply consists of surface water and groundwater that are well protected and carefully managed by the SFPUC. These sources are diverse in both the origin and the location with the surface water stored in reservoirs located in the Sierra Nevada, Alameda County and San Mateo County, and groundwater stored in a deep aquifer located in the northern part of San Mateo County. Maintaining this variety of sources is an important component of the SFPUC's near- and long-term water supply management strategy. A diverse mix of sources protects us from potential disruptions due to emergencies or natural disasters, provides resiliency during periods of drought, and helps us ensure a long-term, sustainable water supply as we address issues such as climate uncertainty, regulatory changes, and population growth.

To meet drinking water standards for consumption, all surface water supplies including the upcountry non-Hetch Hetchy sources undergo treatment by the SFRWS before it is delivered. While the water from the Hetch Hetchy Reservoir is exempt from state and federal filtration requirements due to its exception quality, it receives the following treatment: ultraviolet light and chlorine disinfection, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation of regulated disinfection byproducts. Water from local Bay Area reservoirs in Alameda County and upcountry non-Hetch Hetchy sources are delivered to Sunol Valley Water Treatment Plant; whereas water from local reservoirs in San Mateo County is delivered to Harry Tracy Water Treatment Plant. Water treatment at these plants consist of filtration, disinfection, fluoridation, optimum corrosion control, and taste odor removal.

In 2022, SFPUC did not use non-Hetch Hetchy sources of water. However, a small amount of groundwater was added to surface water supplies through blending in the transmission pipelines.

WATERSHED PROTECTION

The SFPUC conducts watershed sanitary surveys for the Hetch Hetchy source annually and for non-Hetch Hetchy surface water sources every five years. The latest sanitary surveys for the non-Hetch Hetchy watersheds were completed in 2021 for the period of 2016-2020. All these surveys, together with the SFPUC's stringent watershed protection management activities, were completed with support from partner agencies including National Park Service and US Forest Service. The purposes of the surveys are to evaluate the sanitary conditions and water quality of the watersheds and to review results of watershed management activities conducted in the preceding years. Wildfire, wildlife, livestock, and human activities continue to be the potential contamination sources. You may contact the San Francisco District office of the State Water Resources Control Board's Division of Drinking Water at (510) 620-3474 for more information.



WATER QUALITY

The City of Burlingame collected 578 water quality health samples from designated sampling points throughout the water system to ensure the water delivered to you meets or exceeds federal and State drinking water standards.

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 the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.





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. For more information about water main flushing, go to www.burlingame.org/watermainflushing

DRINKING WATER AND LEAD

Exposure to lead, if present, can cause serious health effects in all age groups, especially for pregnant women and young children. Infants and children who drink water containing lead could have decreases in IQ and attention span and increases in learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

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 and removing any lead pipes or fittings if discovered, but we cannot control the variety of materials used in plumbing components in your home. In accordance with the EPA, the City of Burlingame is currently conducting a survey to identify possible lead material on the private-side of the service line. This survey is due in October 2024.

You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your pipes for several minutes, such as running your tap, taking a shower, doing laundry or a load of dishes, before using water for drinking and cooking. You can also use a filter certified by an American National Standards Institute accredited certifier to remove lead from drinking water. Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

Lead and Copper Tap Sampling Results

We conducted the triennial Lead and Copper Rule (LCR) monitoring in 2022 where we collected 30 water samples from our customers' taps. The sampling results are shown in the Water Quality Data table and accessible at www.burlingame.org/waterquality. The next round of LCR monitoring will be conducted in 2025.

CITY OF BURLINGAME – WATER QUALITY DATA FOR 2022⁽¹⁾

This report is a snapshot of last year's water quality health sampling results. The tables below list detected contaminants in our drinking water in 2022 and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance.

DETECTED CONTAMINANTS	UNIT	MCL/TT	PHG OR (MCLG)	RANGE OR LEVEL FOUND	AVERAGE OR [MAX]	TYPICAL SOURCES IN DRINKING WATER
TURBIDITY						
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.4 ⁽²⁾	[3.4]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 ⁽³⁾	N/A	-	[2.2]	Soil runoff
	-	Min 95% of samples ≤ 0.3 NTU ⁽³⁾	N/A	99.3% - 100%	-	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 ⁽³⁾	N/A	-	[0.1]	Soil runoff
	-	Min 95% of samples ≤ 0.3 NTU ⁽³⁾	N/A	100%	-	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	15 - 48	[37] ⁽⁴⁾	Byproduct of drinking water disinfection
Five Haloacetic Acids	ppb	60	N/A	9.7 - 44	[29.2] ⁽⁴⁾	Byproduct of drinking water disinfection
Bromate	ppb	10	0.1	ND - 1.7	[1.3] ⁽⁵⁾	Byproduct of drinking water disinfection
Total Organic Carbon ⁽⁶⁾	ppm	TT	N/A	1.3 - 3.9	2.3	Various natural and man-made sources
MICROBIOLOGICAL						
Fecal coliform and <i>E. coli</i> ⁽⁷⁾	-	0 PS	(0)	-	[0]	Human or animal fecal waste
<i>Giardia lamblia</i>	cyst/L	TT	(0)	0 - 0.04	0.01	Naturally present in the environment
INORGANICS						
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	0.07 - 3.38	[2.79] ⁽⁶⁾	Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS						
Chloride	ppm	500	N/A	<3 - 15	8.7	Runoff/leaching from natural deposits
Color	Unit	15	N/A	<5 - 5	<5	Naturally-occurring organic materials
Iron	ppb	300	N/A	<6 - 24	11	Leaching from natural deposits
Manganese	ppb	50	N/A	<2 - 2.4	<2	Leaching from natural deposits
Specific Conductance	µS/cm	1600	N/A	37 - 210	140	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.1 - 29	15	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	<20 - 104	61	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	Typical Sources in Drinking Water
Copper	ppb	1300	300	1.5 - 217 ⁽¹⁰⁾	49.1	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1.0 - 5.8 ⁽¹¹⁾	2.5	Internal corrosion of household water plumbing systems
NON-REGULATED WATER QUALITY PARAMETERS						
	UNIT	ORL	RANGE	AVERAGE	KEY	
Alkalinity (as CaCO ₃)	ppm	N/A	7.1 - 166	41	< / ≤ = 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	
Boron	ppb	1000 (NL)	28 - 105	56		
Calcium (as Ca)	ppm	N/A	3.2 - 15	9.3		
Chlorate	ppb	800 (NL)	45 - 650	147		
Chromium (VI)	ppb	N/A	0.22 - 0.27	0.25		
Hardness (as CaCO ₃)	ppm	N/A	9.1 - 49	32		
Magnesium	ppm	N/A	0.2 - 4.2	2.9		
pH	-	N/A	8.2 - 9.6	9.2		
Potassium	ppm	N/A	0.3 - 1	0.7		
Silica	ppm	N/A	5 - 5.9	5.5		
Sodium	ppm	N/A	3.5 - 21	14		
Strontium	ppb	N/A	16 - 159	79		

FOOTNOTES

- (1) All results met State and Federal drinking water health standards.
- (2) These are monthly average turbidity values measured every 4 hours daily.
- (3) This is a TT requirement for filtration systems.
- (4) This is the highest locational running annual average value.
- (5) This is the highest 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 MCL was changed to E. coli based starting on July 1, 2021 when the State Revised Total Coliform Rule became effective.
- (8) The SWRCB recommended an optimal fluoride level of 0.7 ppm be maintained in the treated water. In 2021, the range and average of the fluoride levels were 0.6 ppm - 0.9 ppm and 0.7 ppm, respectively.
- (9) Natural fluoride in the Hetch Hetchy source was ND. Elevated fluoride levels in raw water at the SVWTP and HTWTP were attributed to the transfer of fluoridated Hetch Hetchy water into the local reservoirs.
- (10) The most recent Lead and Copper Rule monitoring was in 2022. Zero of 30 site samples collected at consumer taps had copper concentrations above the action level.
- (11) The most recent Lead and Copper Rule monitoring was in 2022. Zero of 30 site samples collected at consumer taps had lead concentrations above the action level.

Note: Data shown in the table are based on Hetch Hetchy water and effluents from both SVWTP and HTWTP. Additional water quality data may be obtained by calling the City of Burlingame at 650-558-7670.

WATER QUALITY TERMS

The 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.



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. The fluoride target level in the water is 0.7 milligram per liter (mg/L, or part per million, ppm), consistent with the May 2015 State regulatory guidance on optimal fluoride level. Infants fed formula mixed with water containing fluoride at this level may still have a 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. The Centers of Disease Control (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 healthcare provider or SWRCB if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the SWRCB website www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html, or the CDC website www.cdc.gov/fluoridation.

SPECIAL HEALTH NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 healthcare 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 or at www.epa.gov/safewater.

CONTAMINANTS AND REGULATIONS

Generally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, 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 from human activity. Such substances are called contaminants, and may be present in source water as:

- **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.

More information about contaminants and potential health effects can be obtained by calling the US Environmental Protection Agency's Safe Drinking Water Hotline 800-426-4791, or at www.epa.gov/safewater.



CRYPTOSPORIDIUM

Cryptosporidium is a parasitic microbe found in most surface water. SFRWS regularly tests for this waterborne pathogen and found it at very low levels in source water and treated water in 2022. 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.

BORON DETECTION ABOVE NOTIFICATION LEVEL IN SOURCE WATER

In 2022, boron was detected at a level of 1.3 ppm in the raw water stored in Pond F3 East, one of the SFRWS's approved sources in the Alameda Watershed. Similar levels were also detected in the same pond in 2017 and 2019. Although the detected value is above the California Notification Level of 1 ppm for source water, the corresponding level in the treated water from the SWWTP was only 0.11 ppm due to blending with water from San Antonio Reservoir in the influent pipeline to the treatment plant. Boron is an element in nature, and is typically released into air and water when soils and rocks naturally weather.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS is a group of approximately 5,000 man-made, persistent chemicals used in a variety of industries and consumer products. In 2021, the SFPUC conducted a second round of voluntary monitoring using a newer analytical method adopted by the USEPA for some other PFAS contaminants. No PFAS were detected above the SWRCB's Consumer Confidence Report Detection Levels in surface water and groundwater sources.

For additional information about PFAS, you may visit the SWRCB website www.waterboards.ca.gov/pfas, SFPUC website at www.sfpuc.org/TapWater, and/or USEPA website www.epa.gov/pfas.



WATER CONSERVATION IS A CALIFORNIA WAY OF LIFE



PROGRAMS AND RESOURCES



Lawn Be Gone! and Rain Garden Rebate

By transforming all or part of your water-intensive lawn into a drought-tolerant landscape, you can receive a rebate of \$2 per square foot. Add a Rain Garden to your project and earn an additional \$300 rebate!



Smart Irrigation Controller Program

Single-family residential customers can claim a discount on the Rachio Smart Sprinkler Controller. This device helps you manage watering your lawn by creating tailored schedules and making automatic weather adjustments.



Rain Barrel Rebate

Capture rainwater to use later for watering your plants and save up to \$200 off a qualifying barrel.



Free Gardening Classes

Learn how to garden beautifully while saving water. Visit www.bawsca.org/classes for a list of workshops or watch workshop recordings.

WATER-SAVING TIPS



Test your toilets for leaks by dropping a dye tablet or food coloring in the toilet tank.



Use a WaterSense labeled showerhead, toilet, or irrigation controller.



When upgrading your clothes washing machine, choose an Energy Star model.



Spread a 3-inch layer of organic mulch on your plants to reduce evaporation.



Replace all or part of your turf lawn with a California native plant since they are adapted to this climate.



Monitor your water bill for unusually high water use.

Burlingame residents and property owners are eligible for a range of water conservation rebates and resources. For more information on these programs, visit www.burlingame.org/waterconservation



1361 N. Carolan Avenue
Burlingame, CA 94010
dpw@burlingame.org
www.burlingame.org/waterquality



FOR MORE INFORMATION

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. For upcoming and previous agendas, meeting recordings, or instructions on how to provide a public comment, visit www.burlingame.org. To speak to someone from the City of Burlingame Public Works Department, call (650) 558-7670 or email dpw@burlingame.org.

The San Francisco Public Utilities Commission 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 visiting their website at www.sfpuc.org

Additional Contacts

State Water Resources Control Board | www.swrcb.ca.gov
District 17 - Santa Clara/San Mateo | (510) 620-3474
US Environmental Protection Agency | www.epa.gov
Safe Drinking Water Hotline | (800) 426-4791

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

Este informe contiene información muy importante sobre su agua para beber. 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。