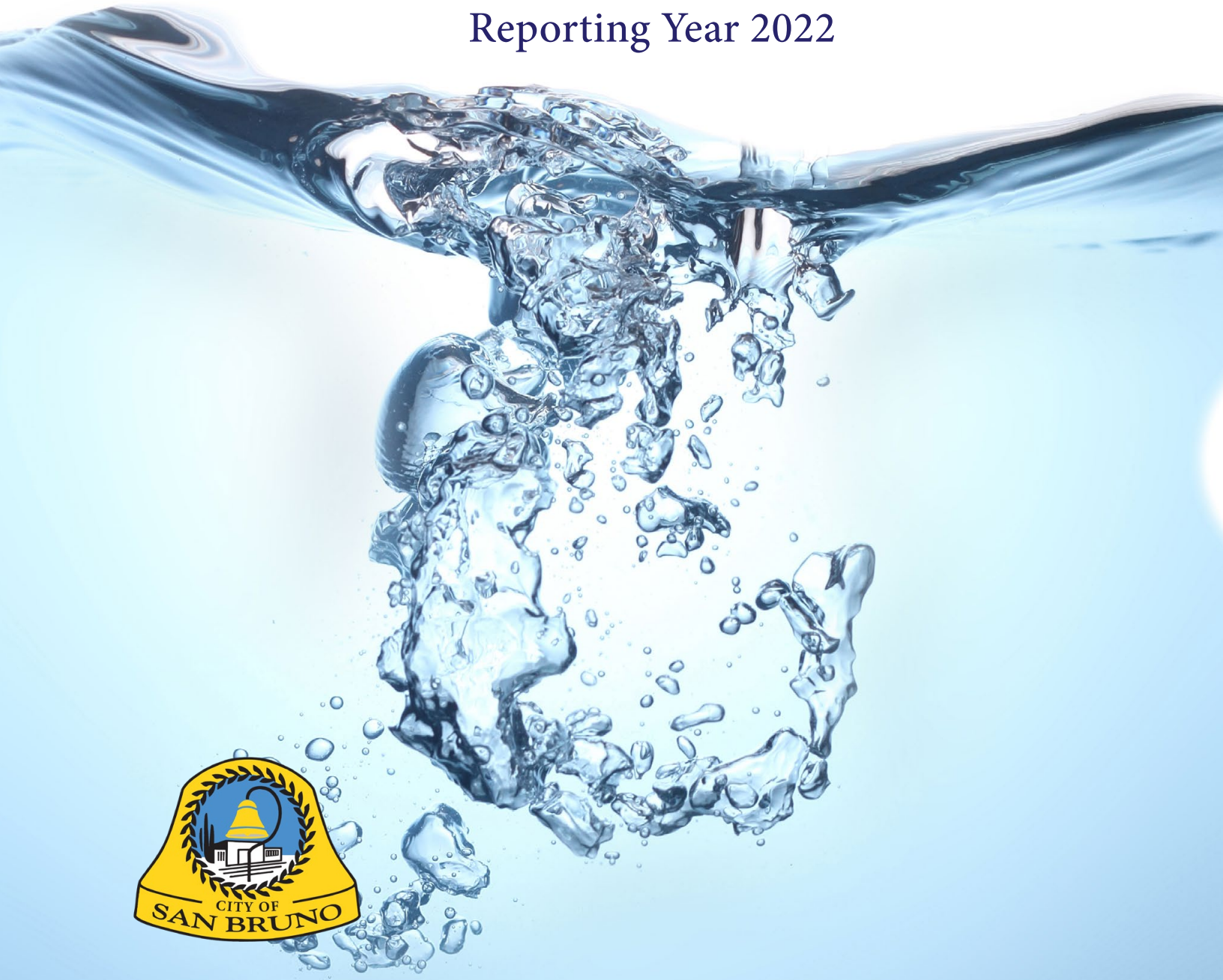
ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By

City of San Bruno

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: CA4110023

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Water Customer Portal

As part of the city's efforts to help customers manage their water usage and save money, we offer all residents and businesses the capability of monitoring their water consumption through our Water Customer Portal. Customers can use the portal to view their water consumption data online and sign up to receive email alerts. The Water Customer Portal allows customers to view up-to-date data regarding their hourly, daily, weekly, and monthly water usage and use the information to identify potential problems, manage their water use, and aid in water conservation efforts.

To get started, visit https://my-sbca.sensus-analytics.com/login.html#/signin and register. Need help? Call us at (650) 616-7086 or email webfinance@sanbruno.ca.gov.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Cryptosporidium is a parasitic microbe found in most surface water. The San Francisco Regional Water System (SFRWS) regularly tests for this waterborne pathogen and found it at very low levels in source water and treated water in 2021. However, current test methods approved by the U.S. EPA 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.

The City of San Bruno website offers automated notifications related to regular city business and important topics. Stay current on what is important to you - you can sign up for alerts when public meeting agendas are posted to the website, and much more! Subscribe at www.sanbruno.ca.gov/ContactUs.

Please note, subscribing through the City's website does not include emergency notifications. SMC Alert is San Bruno's official emergency notification system that is used for citywide and countywide emergency alerts.

Source Water Assessment

SFRWS 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 through 2020. All these surveys, together with SFRWS's stringent watershed protection management activities, were completed with support from partner agencies including the National Park Service and U.S. Forest Service. The purposes of the surveys are to evaluate the sanitary conditions and water quality of the watersheds and review results of watershed management activities conducted in the preceding years. Wildfire, wildlife, livestock, and human activities continue to be potential contamination sources. You may contact the San Francisco District office of the State Board's Division of Drinking Water at (510) 620-3474 if you'd like to review these reports.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact the City of San Bruno Water Division at (650) 616-7162.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, 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.

In order to ensure that tap water is safe to drink, the U.S. EPA and State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. 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.

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 can 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 which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants that can be naturally occurring or can 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.

Source Water Description

The City of San Bruno has two supply sources from SFRWS, a wholesaler owned and managed by the San Francisco Public Utilities Commission (SFPUC). The supply consists of surface water and local groundwater, both of which are rigorously protected and carefully managed by SFPUC and San Bruno. These sources are diverse in origin and location; the surface water is stored in reservoirs located in the Sierra Nevada and Alameda and San Mateo Counties, and groundwater is drawn from a deep underground aquifer located in the northern part of San Mateo County. Maintaining this variety of sources is an important component of San Bruno's near and long-term water supply management strategy. A diverse mix of sources protects San Bruno from potential disruptions due to emergencies or natural disasters and provides resiliency during periods of drought. This also 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 (UNHHS), undergo treatment by SFRWS before delivery. Water from Hetch Hetchy Reservoir is exempt from federal and state filtration requirements but receives the following treatment: disinfection using ultraviolet light and chlorine, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chlorination for maintaining disinfectant residual and minimizing the formation of regulated disinfection by-products. Water from local Bay Area reservoirs in Alameda County and UNHHS is delivered to Sunol Valley Water Treatment Plant (SVWTP); water from local reservoirs in San Mateo County is delivered to Harry Tracy Water Treatment Plant (HTWTP). Treatment at these plants consists of filtration, disinfection, fluoridation, optimum corrosion control, and taste and odor removal.

In 2022 no UNHHS water was used. However, local groundwater from San Bruno's wells and a small amount of groundwater from SFPUC's four wells were added to SFRWS's surface water supply through blending within the San Bruno distribution system.

Lead Testing in Schools

The San Bruno Water Division provided comprehensive lead testing at pre-kindergarten through 12th-grade schools. All public schools were sampled in 2018. The sampling results are available on the State Board website at https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.html. To learn more about the City of San Bruno School Lead Testing Program, please call the City of San Bruno Water Division at (650) 616-7162.

Community Participation

City of San Bruno Council meetings are held at 7:00 p.m. on the second and fourth Tuesday of each month except the fourth Tuesday in December. Regular city council meetings are typically aired live on Channel 1. You may receive agenda notifications via text message, email, or both. To receive notifications for city agendas, please visit https://www.sanbruno.ca.gov/list.aspx and follow the three steps at the top of the page to register.

Water Quality

The City of San Bruno and SFRWS regularly collect and test 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 2022 we conducted more than 48,320 tests from water sources and the transmission system. This is in addition to the extensive treatment process control monitoring performed by certified operators and constant online instruments.

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Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. 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 two minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) If you are concerned about lead 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 exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/lead.

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 SFRWS's approved sources in the Alameda Watershed. Similar levels were 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 level in the treated water from SVWTP was only 0.11 ppm due to blending with water from San Antonio Reservoir in the influent pipeline to the treatment plant. Boron is a natural element typically released into air and water when soils and rocks weather.

Test Results

The tables below list detected contaminants in our drinking water and information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

CITY OF SAN BRUNO GROUND WATER QUALITY DATA FOR 2022
REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2022	10	0.004	2.4	[2.4]	No	Erosion of natural deposits
Fluoride (ppm)	2022	2.0	1	0.1	ND–0.14	No	Erosion of natural deposits
Nitrate [as nitrogen] (ppm)	2022	10	10	1	ND–1.8	No	Runoff and leaching from fertilizer use; leaked wastewater

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2022	200	NS	[69]	[69]	No	Erosion of natural deposits
Chloride (ppm)	2022	500	NS	79.8	54–120	No	Runoff/leaching from natural deposits
Iron (ppb)	2022	300	NS	[120]	[120]	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2022	1,600	NS	650	510–860	No	Substances that form ions when in water
Sulfate (ppm)	2022	500	NS	48	22–93	No	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	2022	1,000	NS	368	310–500	No	Runoff/leaching from natural deposits
Turbidity[1] (NTU)	2022	5	NS	0.2	ND–0.74	No	Soil runoff

UNREGULATED SUBSTANCES[2]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity [as CaCO3] (ppm)	2022	192.5	140–240	NA
Calcium [as Ca] (ppm)	2022	44	30–73	NA
Hardness, Total [as CaCO3] (ppm)	2022	214.75	154–318	NA
Magnesium (ppm)	2022	30	18–50	NA
pH (units)	2022	7.5	6.86–8.03	NA
Silica (ppm)	2022	34	[34]	NA
Sodium (ppm)	2022	51	18–60	NA

[1] Turbidity is 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.

[2] Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

Lead and Copper Tap Sampling

In the City of San Bruno's latest lead and copper sampling results at 39 customer homes, 1 of 39 site samples collected at customers' taps had a copper concentration above the action level. All were below the action level for lead, and the 90th-percentile values were below the detection limit. Lead and copper sampling was last completed in 2022. Due to low results, the City of San Bruno Water Division samples lead and copper every three years.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

CITY OF SAN BRUNO - WATER QUALITY DATA FOR YEAR 2022 [1]

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	ND - 20.1	[14.2] [4]	Byproduct of drinking water disinfection
Five Haloacetic Acids	ppb	60	N/A	ND - 22.3	[15.5] [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 E. coli [7]	-	1 PS	(0)	-	[1]	Human or animal fecal waste
Giardia lamblia	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	2.32 - 2.89	[2.59] [5]	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	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	ND - 940 [10]	450	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	ND - 5 [11]	0	Internal corrosion of household water plumbing systems

NON-REGULATED WATER QUALITY PARAMETERS	UNIT	ORL	RANGE	AVERAGE
Alkalinity (as CaCO3)	ppm	N/A	7.1 - 166	41
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 CaCO3)	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

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
NTU	=	Nephelometric Turbidity Unit
ORL	=	Other Regulatory Level
pCi/L	=	picocurie per liter
ppb	=	part per billion
ppm	=	part per million
PS	=	Number of Positive Sample

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 requir ement 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 2022, the range and average of the fluoride levels were 0.5 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. (11) The most recent Lead and Copper Rule monitoring was in 2022.

Note: The different water sources blended at different ratios throughout the year have resulted in varying water quality. Additional water quality data may be obtained by calling the City of San Bruno phone number at 650-616-7162.

Fluoridation

Mandated by state law, water fluoridation is a widely accepted practice that has been proven safe and effective for preventing and controlling tooth decay. Fluoride is not added to our groundwater sources because it is naturally occurring in a range between 0.12 and 0.14 milligram per liter, or part per million (ppm). As part of the treatment process, fluoride is added to water supplied by SFRWS; the fluoride target level in the water is 0.7 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 on 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 CDC considers it safe to use optimally fluoridated water for preparing infant formula.

To lessen the 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 the State Board if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml or www.cdc.gov/fluoridation.