ANNUAL WATER OUALITY REPORT 2023



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 Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. 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.

When the well is dry, we

know the worth of water."

-Benjamin Franklin

Protection of Watersheds

FRWS conducts watershed sanitary surveys for its Hetch Hetchy source annually and every five years for its local water sources and UNHHS. The latest sanitary surveys for the non-Hetch Hetchy watershed were completed in 2021 for the period of 2016 to 2020. All these surveys and our 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 these surveys

are to evaluate the sanitary conditions and water quality of the watersheds and review the 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 SWRCB's Division of Drinking Water at (510) 620-3474 for more information.

Important Health Information

Come 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 (EPA)/

Centers for Disease Control and Prevention (CDC) guidelines 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 water.epa.gov/drink/ hotline.



Fluoridation

andated by state law, water fluoridation is a widely accepted Mpractice proven safe and effective for preventing and controlling tooth decay. Fluoride is not added to water produced from the city's groundwater, but it is naturally occurring in the groundwater supply between 0.12 and 0.14 part per million (ppm). As part of the treatment process, fluoride is added to water supplied by SFRWS; the target level 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 develop 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 SWRCB if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit waterboards.ca.gov/drinking water/ certlic/drinkingwater/Fluoridation. shtml or cdc.gov/fluoridation.



Water Quality

The City of San Bruno and SFRWS regularly collect I 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 2023 we conducted more than 50,000 drinking water tests from water sources and the transmission system. This is in addition to the extensive treatment process control monitoring performed by certified operators and constantly online instruments.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact the Water Quality and Production Supervisore at (650) 616-7174.

Lead Testing in Schools

The San Bruno Water Division completed comprehensive lead testing at prekindergarten through 12th-grade schools in 2018. The sampling results are available to the public at waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.html. To learn more about the School Lead Testing Program, please call 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 the State Water Resources Control Board (SWRCB) 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.

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

Source Water Description

The City of San Bruno has two supply sources from San Francisco Regional Water System (SFRWS), a wholesaler owned and managed by the San Francisco Public Utilities



Commission (SFPUC). The supply consists of surface water and local groundwater that are rigorously protected and carefully managed by the SFPUC and San Bruno. These sources are diverse in both origin and location; the surface water is stored in reservoirs located in the Sierra Nevada, Alameda County, San Mateo County, and the groundwater is stored in a deep aquifer 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 resilience 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, including the upcountry non-Hetch Hetchy sources (UNHHS), undergoes treatment by SFRWS before it is delivered. 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 reservoirs in Alameda County and UNHHS is delivered to Sunol Valley Water Treatment Plant (SVWTP), and water from 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 2023 neither UNHHS nor groundwater was used by SFRWS.

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Public Meetings

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 San Bruno City Council meetings are held at the San Bruno Senior Center, 1555 Crystal Springs Road. Regular meetings are aired live on Zoom, the City of San Bruno YouTube channel, and San Bruno CityNet Services Channel 1 (SD)/Channel 10 (HD). Meeting video is archived with the agenda packet material.





Unregulated Contaminant Monitoring Rule

The SFRWS conducted four consecutive quarters of monitoring at designated locations approved by the U.S. EPA in 2023, and all results were below the detection limit.

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 2023 boron was detected at a level of 1.7 ppm in the raw water stored in Pond F3 East, one of the SFRWS-approved sources in the Alameda watershed. Similar levels were previously detected in the same pond. Although the detected value was above the California notification level (NL) of 1 ppm, the water was typically delivered to San Antonio Reservoir, where it was substantially diluted to below the NL before treatment at the Sunol Valley Water Treatment Plant. Boron is a natural element typically released into air and water when soils and rocks naturally weather.

Lead and Copper Tap Sampling

During the City of San Bruno's latest lead and copper sampling at 39 customers' homes, 1 of 39 samples had a copper concentration above the action level (AL). All were below the AL 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 for lead and copper every three years.

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Test Results

The tables below list detected contaminants in our drinking water in 2023 and information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance. The wholesaler (SFPUC) holds a SWRCB monitoring waiver for some contaminants in the surface water supply, and their monitoring frequencies are less than annual.

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 Groundwater Quality Data

In 2023 a total of 306 million gallons of groundwater from the City of San Bruno's four wells was intermittently delivered to the system; 29 percent of the total water supply was groundwater.

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 Water Division at (650) 616-7162.

REGULATED SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	I VIOLATIO	IOLATION TYPICAL SOURCE		
Arsenic (ppb)	2023	10	0.004	2.9	ND-4.8	3 No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
Fluoride (ppm)	2023	2.0	1	0.1	ND-0.1	4 No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
Nitrite [as nitrogen] (ppm)	2023	1	1	1	ND-1.7	7 No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
SECONDARY SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)	YEA SAMP	NR LED SN	PHG MCL (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Aluminum (ppb)	202	23 2	00 NS	69	NA	No	Erosion of natural deposits; residual from some surface water treatment processes		
C(1) (1) (1)	200	12 5		00.2	54 120	NT			

Chloride (ppm)	2023	500	NS	80.3	54-120	No	Runoff/leaching from natural deposits; seawater influence
Manganese (ppb)	2023	50	NS	40.3	ND-83	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2023	1,600	NS	618	480-820	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2023	500	NS	48.2	24–91	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2023	1,000	NS	375	290–520	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity [as CaCO3] (ppm)	2023	162.5	140–190	NA
Calcium [as Ca] (ppm)	2023	41	30–62	NA
Hardness [as CaCO3] (ppm)	2023	215.6	158–324	NA
Magnesium (ppm)	2023	28	19–41	NA
pH (units)	2023	7.27	6.86–7.55	NA
Silica (ppm)	2022	34	[34]	NA
Sodium (ppm)	2023	51	44–60	NA

¹Unregulated contaminant monitoring helps U.S. EPA and the SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

CITY OF SAN BRUNO - WATER QUALITY DATA FOR YEAR 2023 1							
DETECTED CONTAMINANTS	UNIT	MCL/TT	PHG OR (MCLG)	RANGE OR LEVEL FOUND	AVERAGE OR [MAX]	TYPICAL SOURCES IN DRINKING WATER	
JRBIDITY							
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.3 - 0.9 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	100%	-	Soil runoff	
Filtered Water from Harry Tracy Water	NTU	1 ³	N/A	-	[0.6]	Soil runoff	
Treatment Plant (HTWTP)	-	Min 95% of samples ≤ 0.3 NTU ³	N/A	99.4% - 100%	-	Soil runoff	
DISINFECTION BYPRODUCTS AND PRECURS	OR						
Total Trihalomethanes	ppb	80	N/A	8.5 - 43.6	[23.6] 4	Byproduct of drinking water disinfection	
Five Haloacetic Acids	ppb	60	N/A	2.8 - 48.2	[20.3] 4	Byproduct of drinking water disinfection	
Bromate	ppb	10	0.1	ND - 1.7	[1] 5	Byproduct of drinking water disinfection	
Total Organic Carbon ⁶	-	TT (Removal Ratio)	N/A	1.2 - 1.8	[1.5] 5	Various natural and man-made sources	
MICROBIOLOGICAL							
Fecal coliform and E. coli ⁷	-	0 PS	(0)	-	[1]	Human or animal fecal waste	
Giardia lamblia	cyst/L	TT	(0)	0 - 0.13	0.03	Naturally present in the environment	
INORGANICS							
Fluoride (source water) ⁸	ppm	2.0	1	0.4 - 2.6	0.6 °	Erosion of natural deposits; water additive to promote strong teeth	
Nitrate (as N)	ppm	10	10	ND - 0.6	ND	Erosion of natural deposits	
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	2.36 - 3.06	[2.86] 5	Drinking water disinfectant added for treatment	
CONSTITUENTS WITH SECONDARY STANDARDS	UNIT	SMCL	PHG	RANGE	AVERAGE	TYPICAL SOURCES IN DRINKING WATER	
Alumninum ⁹	ppb	200	600	ND - 82	ND	Erosion of natural deposits; some surface water treatment residue	
Chloride	ppm	500	N/A	<3 - 17	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 - 42	19	Leaching from natural deposits	
Manganese	ppb	50	N/A	<2 - 4.6	2.6	Leaching from natural deposits	
Specific Conductance	µS/cm	1600	N/A	32 - 289	175	Substances that form ions when in water	
Sulfate	ppm	500	N/A	1.2 - 36	17	Runoff / leaching from natural deposits	
Total Dissolved Solids	ppm	1000	N/A	<20 - 153	84	Runoff / leaching from natural deposits	
Turbidity	NTU	5	N/A	0.1 - 0.2	0.3	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	3.1 - 103	46
Boron	ppb	1000 (NL)	22 - 65	40
Calcium (as Ca)	ppm	N/A	2.9 - 24	13
Chlorate	ppb	800 (NL)	30 - 749	141
Chromium (VI)	ppb	N/A	0.11 - 0.35	0.23
Hardness (as CaCO3)	ppm	N/A	7.5 - 86	46
Magnesium	ppm	N/A	0.2 - 8.4	4.7
pН	-	N/A	8.4 - 9.8	9.2
Potassium	ppm	N/A	0.3 - 1.7	1
Silica	ppm	N/A	4.4 - 9.4	6.2
Sodium	ppm	N/A	2.7 - 20	14
Strontium	ppb	N/A	14 - 331	139

KEY: < / <

AL

ND

NL

NTU

- = less than / less than or equal to
- = Action Level
- Max = Maximum
- Min = Minimum N/A
 - = Not Available
 - = Non-detect
 - = Notification Level
 - = Nephelometric Turbidity Unit
- ORI = Other Regulatory Level
- = part per billion ppb ppm
 - = part per million
- PS = Number of Positive Sample
- µS/cm = microSiemens/centimeter

Footpotes:

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 (TOC) is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only. In 2023, the range of the SVWTP effluent TOC levels were 0.6 ppm - 3.3 ppm.
- 8 Natural fluoride in the Hetch Hetchy source was ND. Elevated fluoride levels in raw water to the water treatment plants were attributed to
- the transfer of fluoridated Hetch Hetchy water into the local reservoirs. In 2023, the average fluoride level in raw water sources was 0.3 mg/L

9 Aluminum also has a primary MCL of 1,000 ppb.

- 10 The most recent Lead and Copper Rule monitoring was in 2022. 1 of 39 site samples collected at consumer taps had copper concentrations above the Al
- 11 The most recent Lead and Copper Rule monitoring was in 2022.0 of 39 site samples collected at consumer taps had lead concentrations above the AI.
- (12) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFRWS for water disinfection.

Note: Additional water quality data may be obtained by calling the City of San Bruno phone number at 650-616-7162.

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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.

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.