

CITY OF MILLBRAE

2024 WATER QUALITY REPORT CONSUMER CONFIDENCE



The City of Millbrae Public Works Department is pleased to present to you the 2024 Water Quality Report. Pursuant to federal regulations mandated by the Safe Drinking Water Act, all water consumers are to be provided annual information about their water and its sources.

This report explains the origin of the drinking water supply and the specific treatment(s) it receives by the City of Millbrae, Public Works, Utilities & Operations staff, and the San Francisco Public Utilities Commission (SFPUC).

The City of Millbrae believes it is in everyone's interest to obtain a high quality and reliable water supply. It is integral to personal health, environmental integrity, and community prosperity.

FOR MORE INFORMATION:

City of Millbrae	Public Works Department	650-259-2374	www.ci.millbrae.ca.us
SF Public Utilities Commission (SFPUC)	Customer Service	415-551-3000	www.sftwater.org
SF Water Resources Control Board	Drinking Water	916-449-5577	www.swrcb.ca.gov
US Environmental Protection USEPA	Safe Drinking Water Hotline	800-426-4791	www.epa.gov
American Water Works Association	AWWA Contact Line	800-926-7337	www.aawa.org

PLEASE USE WATER WISELY

Please see the last page of this report for water use guidelines, and water-wise tips and resources.

WATER QUALITY AND YOU

Water quality is extremely important because we cannot survive without a clean and reliable source of it. The City of Millbrae, along with our water supplier, the San Francisco Public Utilities Commission (SFPUC), the California Department of Public Health (CDPH), and the United States Environmental Protection Agency (USEPA) are all working simultaneously to ensure that we provide the highest quality of water, educate water consumers, and encourage their involvement in relevant decisions. The SFPUC provides 2.7 million customers in cities and towns across the region through its San Francisco Regional Water System (SFRWS) with water so high quality that it meets all federal and state standards. Consumers who familiarize themselves with the basic drinking water information contained in this report will be able to participate more effectively in this decision-making process. Together, we can be a great force to promote programs that will aid us in continuing to deliver water that meets the highest possible standards. We are committed to providing high-quality drinking water for our customers.

MILLBRAE WATER QUALITY ASSURANCE PROGRAM

The Millbrae Water Division conducts a comprehensive water quality assurance program. We collect and report over forty samples a month throughout our system to regularly monitor water quality. We send samples to a state certified laboratory for testing and are pleased to report that all samples have tested negative for coliforms and that the City had (0) zero violations related to any maximum contaminant level (MCL) in the calendar year of 2024.

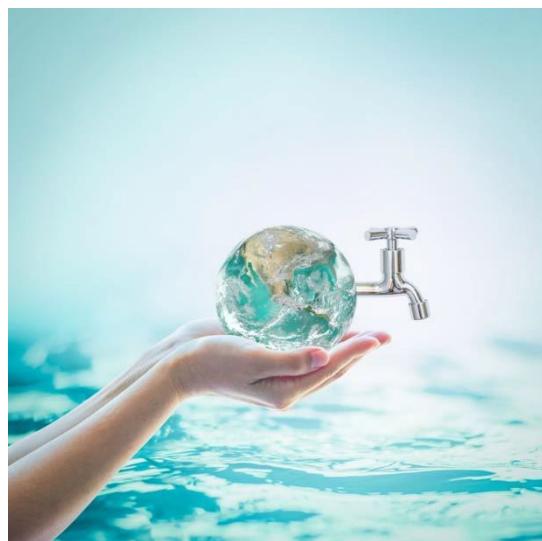
Other water samples are collected periodically to check for levels of lead and copper, disinfection by-products trihalomethanes haloacetic acids (THMs and HAAs) and general physical components as required by state and federal regulations. The City of Millbrae received a waiver of asbestos sampling.

The City of Millbrae continually monitors all five (5) main entry points to our distribution system and other key points in the distribution system such as tank sites and pump locations. These sites are monitored by our computerized SCADA (Supervisory Control and Data Acquisition) system that provides our Water Division Managers and continuous automated water quality information.

In addition, the Millbrae Water Division along with the San Mateo County Environmental Health Department administers and managers cross-connection prevention program to eliminate possible contamination to our drinking water through backflow prevention devices. The program includes yearly testing all city-owned backflow devices and monitoring of compliance on privately owned backflow devices*

**A note to residents and business owners who have backflow prevention devices: State regulations require that all backflow prevention devices be tested annually by a certified inspector.*

PROTECTION OF WATERSHEDS



The 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 2016-2020. These surveys document the SFPUC's stringent watershed protection activities that are implemented with support from partner agencies including the National Park Service and the United States Forest Service.

These surveys not only evaluate the sanitary conditions and water quality of the watersheds but also describe the 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 SWRCB Division of Drinking Water at 510-620-3474 for more information.

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 Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers.

Cryptosporidium is a parasitic microbe found in surface water. We regularly test for this waterborne pathogen and found it at very low levels in source water and treated water in 2024. However, current test methods approved by the United States Environmental Protection Agency (USEPA) do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis with 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.

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

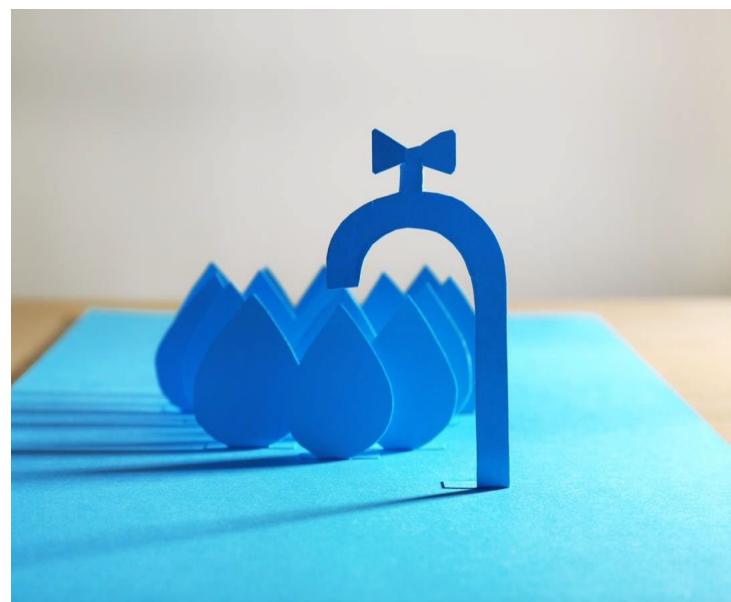


DRINKING WATER & LEAD

Exposure to lead, if present, can cause serious health effects in people of all ages, especially for pregnant women and young children. Infants and children who drink water containing lead could have decreases in intelligent quotient and attention span as well as increases in learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an 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. We are responsible for providing high-quality drinking water and removing lead pipes, but we cannot control the variety of materials used in plumbing components in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sample results do not detect lead at one point in time. You share the responsibility for protecting yourself and your family from the lead in your home plumbing by taking one or more of the following actions:

- Identify and remove lead materials within your home plumbing.
- If you use a water filter, make sure it's certified for lead to National Sanitation Foundation (NSF)/ANSI standards. Make sure to replace and maintain the filter according to the manufacturer's instructions.
- Use only cold water for drinking, cooking, and making baby formula (Do not boil your water to remove lead. Boiling water will not remove lead).
- Flush your pipes for several minutes before using your water for drinking, cooking, and preparing baby formula (this can be done by running your tap, taking a shower, doing laundry or a load of dishes, or reusing for watering plants).



- Flush for a longer period if you have pipes made of lead or galvanized material. Visit sfpuc.gov/lead to see an instructional video if you would like to test your pipes.

If you are concerned about lead in your water, you can have your water tested. Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/water/lead.

LEAD USER SERVICE LINE (LUSL)

As previously reported in 2018, we completed an inventory of lead user lines (LUSL) in our system and there are no known pipelines and connectors between water mains and meters made of lead. Our policy is to remove and replace any LUSL promptly if it is discovered during pipeline repair and/or maintenance.



LEAD AND COPPER TAP SAMPLING RESULTS

We conducted the triennial Lead and Copper Rule (LCR) monitoring in 2022, and these tap sampling results are accessible at our website link [Millbrae Consumer Confidence Report \(CCR\)](#). The next round of LCR monitoring will be conducted after June 1, 2025.

LEAD TESTING OF DRINKING WATER IN SCHOOLS

Lead testing from Millbrae Schools can be found by going to: [Millbrae School District Lead Testing Results](#)



SAN FRANCISCO REGIONAL WATER SYSTEM DRINKING WATER SOURCES AND TREATMENT

The SFRWS's drinking water supply consists of surface water and groundwater that are well protected and carefully managed. These sources are diverse in both origin and location with the surface water stored in reservoirs located in the Sierra Nevada, Alameda County and San Mateo County, and the groundwater is kept in a deep aquifer in the northern part of San Mateo County. Maintaining this variety of sources is an important component of the near- and long-term water supply management strategy of the San Francisco Public Utilities Commission (SFPUC) (or you may say San Francisco Regional Water System, if you prefer). 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 human consumption, all surface water the SFPUC supplies must undergo proper treatment. Water from Hetch Hetchy Reservoir is exempt from state and federal filtration requirements due to its exceptional quality. It undergoes disinfection using ultraviolet light and chlorine, 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 the Sunol Valley Water Treatment Plant. Water from reservoirs in San Mateo County is delivered to the Harry Tracy Water Treatment Plant. Water treatment at these plants consists of filtration, disinfection, fluoridation, taste and odor removal, and optimum corrosion control. In 2024, neither upcountry non-Hetch Hetchy sources of water nor groundwater was used.



WATER QUALITY

We regularly collect and test water samples from reservoirs and designated sampling locations throughout the systems to ensure that the water delivered to you meets all federal and state drinking water standards. In 2024, the SFRWS conducted more than 45,650 drinking water tests of samples from source and transmission system locations. This is in addition to the extensive treatment process control monitoring performed by our 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 human activity. Collectively these are called contaminants. Therefore, 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. To ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) 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 United States Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

FLUORIDATION & DENTAL FLUOROSIS

Mandated by State law, water fluoridation is a widely accepted practice proven safe and effective for preventing and controlling tooth decay. Based on the recommendation from the Centers for Disease Control and Prevention (CDC) and the State Water Resources Control Board's (SWRCB) regulatory guidance, the San Francisco Public Utilities Commission has maintained an optimal fluoride level at 0.7 milligram per liter (mg/L, or part per million, ppm), since 2015. The optimal level provides the benefits of tooth decay prevention while minimizing the chance that children develop dental fluorosis. Infants fed formula mixed with water containing fluoride at this level may still have a chance of developing mild to very mild fluorosis, which can cause tiny white lines or streaks in their teeth. These marks are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. 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 the SWRCB's website waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html, the CDC's website cdc.gov/fluoridation, or our website sfpuc.gov/TapWater.

Summary: Fluoridation

We add fluoride to our water. California law mandates fluoridation. It is proven safe. It is also effective at preventing and controlling tooth decay. Our fluoride levels match the state's optimal level.

To learn more, visit: waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html, cdc.gov/fluoridation, or sfpuc.gov/TapWater.

PER- and POLY-FLUOROALKYL SUBSTANCES (PFAS)

PFAS is a group of approximately 5,000 man-made, persistent chemicals used in a variety of industries and consumer products. In 2023, our wholesaler conducted a third 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 SWRCB website: <https://www.waterboards.ca.gov/>, SFPUC website: <https://sfpuc.org/>, and/or USEPA website: <https://www.epa.gov/> .

CONTAMINANTS and REGULATIONS

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

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**

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 at 800-426-4791, or at epa.gov/safewater.

BORON DETECTION ABOVE NOTIFICATION LEVEL IN SOURCE WATER

In 2024, boron was detected at a level of 2.3 parts per million (ppm) in the raw water stored in Pond F3 East, one of the SFRWS's approved sources in the Alameda Watershed. Similar levels were detected in the same pond in preceding years. Although the detected value was above the California Notification Level of 1 ppm, the water was typically delivered to San Antonio Reservoir where it was substantially diluted to below the Notification Level before treatment at the Sunol Valley Water Treatment Plant. Boron is an element in nature and is typically released into air and water when soils and rocks naturally weather.



STATE REVISED TOTAL COLIFORM RULE

This report reflects changes in drinking water regulatory requirements during 2021, in which the SWRCB adopted California version of the federal Revised Total Coliform Rule. The revised rule, effective on July 1, 2021, maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). Greater public health protection is anticipated, as the revised rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

KEY 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, MRDLs, and TT 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 of 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.

CITY OF MILLBRAE

WATER QUALITY DATA FOR 2024

This report is a snapshot of last year's water quality. The tables below list detected contaminants in our drinking water in 2024 and the information about their typical sources. Contaminants below detection limits for reporting are not shown, in accordance with regulatory guidance. The San Francisco Public Utilities Commission holds a State Water Resources Control Board monitoring waiver for some contaminants in our surface water and groundwater supplies, and therefore their monitoring frequencies are less than annual. Visit sfpuc.org/WaterQuality for a list of all water quality parameters monitored in both raw water and treated water in 2024.

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	0.3 - 0.5 ⁽²⁾	[2.1]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU -	TT = Max 1 TT = Min 95% of samples ≤ 0.3 NTU	N/A N/A	- 99.97%	[0.4] -	Soil runoff Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU -	TT = Max 1 TT = Min 95% of samples ≤ 0.3 NTU	N/A N/A	- 100%	[0.1] -	Soil runoff Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	16-54	[49]	Byproduct of drinking water disinfection
Five Haloacetic Acids	ppb	60	N/A	9-41	[42]	Byproduct of drinking water disinfection
Bromate	ppb	10	0.1	ND - 5.9	[3] ⁽⁴⁾	Byproduct of drinking water disinfection using ozone
MICROBIOLOGICAL						
<i>E. coli</i> ⁽⁵⁾	-	0 PS	(0)	-	[0]	Human or animal fecal waste
INORGANICS						
Chromium (VI)	ppb	10	0.02	ND - 0.2	0.1	Leaching from natural deposits
Fluoride ⁽⁶⁾ (raw water)	ppm	2.0	1	ND - 0.8	0.3	Erosion of natural deposits; water additive to promote strong teeth
Nitrate (as N)	ppm	10	10	ND - 0.4	ND	Erosion of natural deposits
Chlorine (including free chlorine and chloramine)	ppm	MRDL = 4.0	MRDLG = 4	<0.1-3.5	[2.6]	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Typical Sources in Drinking Water
Aluminum	ppb	200 (MCL = 1000)	600	ND - 59	ND	Erosion of natural deposits; some surface water treatment residue
Chloride	ppm	500	N/A	<3 - 18	9.3	Runoff / leaching from natural deposits
Iron	ppb	300	N/A	<6 - 41	14	Leaching from natural deposits
Manganese	ppb	50	N/A	<2 - 2.7	<2	Leaching from natural deposits
Specific Conductance	µS/cm	1600	N/A	31 - 317	193	Substances that form ions when in water
Sulfate	ppm	500	N/A	1 - 41	18	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	24 - 169	102	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.4	0.2	Soil runoff

LEAD AND COPPER	Unit	RAL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	ND-152	72	Internal corrosion of household water plumbing systems
Lead	ppb	15	0.2	<1-8.8	4.9	Internal corrosion of household water plumbing systems

NON-REGULATED WATER QUALITY PARAMETERS	Unit	ORL	Range	Average
Alkalinity (as CaCO ₃)	ppm	N/A	7.4 - 120	60
Bromide	ppb	N/A	<10 - 29	<10
Boron	ppb	1000 (NL)	23 - 65	41
Calcium (as Ca)	ppm	N/A	3.2 - 28	15
Chlorate ⁽⁹⁾	ppb	800 (NL)	24 - 597	144
<i>Giardia lamblia</i>	cyst/L	N/A	0 - 0.06	0.02
Hardness (as CaCO ₃)	ppm	N/A	8.4 - 106	60
Lithium	ppb	N/A	<2 - 4	<2
Magnesium	ppm	N/A	0.2 - 9.5	5.7
pH	-	N/A	8.7-9.8	9.3
Silica	ppm	N/A	4.9 - 9.9	7.5
Sodium	ppm	N/A	3.1 - 24	16
Total Organic Carbon ⁽¹⁰⁾	ppm	N/A	1.1 - 1.8	1.5

Footnotes:

(1) All results met State and Federal drinking water health standards.

(2) These are monthly average turbidity values measured every 4 hours daily at Tesla Treatment Facilities.

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

(4) This is the highest running annual average value.

(5) Natural fluoride in Hetch Hatchy water was ND. Elevated fluoride levels in raw water at both SVWTP and HTWTP were attributed to transfers of fluoridated Hetch Hatchy water into local reservoirs.
The fluoride level in our treated water ranged from 0.5 ppm to 0.8 ppm with an average of 0.7 ppm.

(6) The most recent Lead and Copper Rule monitoring was in 2022. **09** of 08 site samples collected at consumer taps had copper concentrations above the regulatory Action Level.

(7) The most recent Lead and Copper Rule monitoring was in 2022. **09** of 08 site samples collected at consumer taps had lead concentrations above the regulatory Action Level.

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

(9) The range and average values of the total organic carbon were from operational monitoring results at Tesla Treatment Facilities.

KEY:

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

Note: Additional water quality data may be obtained by calling the **City of Millbrae** phone number at 650-259-2375

Favor Comuníquese con el departamento de las Obras Públicas al 650-259-2374 para ayuda en español.

本報告包含有關我們自來水的重要信息。請致電 650-259-2374 聯系公共工程部尋求幫助。

WATER CONSERVATION

Rain or shine, the City of Millbrae continues to implement a robust water conservation program for our residents and businesses. Water customers are asked to remain vigilant, particularly regarding outdoor water use and manage water use wisely. Millbrae residents and property owners are eligible for the following water conservation rebates.

Water Conservation Rebates

[Rain barrels and cisterns:](#) Capture rainwater for watering your plants and other outdoor use. Save up to \$100 off a 50+ gallon rain barrel (up to two rebates per household).



Free Water Saving Devices

Available to residents and business owners: 7-pattern deluxe hose nozzle, frog moisture meters, shower timers, low-flow shower heads, faucet aerators, water flow-rate test, and toilet leak detection dye tablets. Devices can be picked up at City Hall 9:00 am – 4:00 pm while supplies last.

Please continue to conserve water by following the guidelines and the water saving tips below. California is prone to droughts, and we all need to do our part to conserve water.

Water Saving Tips & Resources

- Install a low flow showerhead and take a 5 minute or less shower. Free showerheads and timers are available.
- Catch water in a watering can or bucket while waiting for water to get hot.
- Replace your toilet with a high-efficiency model (1.28 gallons per flush) or place a water displacement bag in each toilet tank.
- Fix all leaky toilets, faucets, and pipes. Install low flow faucet aerators in the kitchen and bathroom. Free low flow aerators are available.
- Scrape plates and run the garbage disposal less frequently. Compost food scraps.

- Turn off water while brushing your teeth and shaving.
- Run only full loads in dishwashers and clothes washers. Replace appliances with water efficient machines.
- Use a carwash facility or use a bucket of water and one short rinse to wash your car: wash on a permeable surface such as gravel.
- Sweep (not hose) driveways patios and sidewalks.
- For more water saving tips, see: <http://saveourwater.com>

For more information, please see <https://www.ci.millbrae.ca.us/342/Water-Conservation> or call 650-259-2444.