

**H** HAYWARD



**20** ANNUAL  
**22** WATER  
QUALITY  
REPORT





## Our Drinking Water

The City of Hayward is pleased to present the 2022 Water Quality Report (Consumer Confidence Report), which helps keep our customers informed about where their drinking water comes from, how it is treated, and details about its quality. Water quality is monitored by the SFPUC and the City of Hayward to ensure that we continue to meet and exceed all state and federal standards. In 2022, The City has met all state and federal drinking water health standards. The following sections of this report show the result of testing and monitoring for the period of January 1 to December 31, 2022 and may include earlier monitoring data.

The City of Hayward purchases its water supply from the San Francisco Public Utilities Commission (SFPUC), which delivers the water to Hayward through its Regional Water System (SFRWS), the wholesale customer system owned and operated by the SFPUC. The SFRWS supply is predominantly snowmelt from the Sierra Nevada Mountains, delivered through the Hetch Hetchy aqueducts, but it also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties.

To meet drinking water standards for consumption, all surface water supplies, including upcountry non-Hetch Hetchy sources (UNHHS), undergo treatment by the SFRWS before its delivered. Although water from the Hetch Hetchy reservoir is exempt from filtration requirements by the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board's Division of Drinking Water (SWRCB-DDW), it receives the following treatment processes: 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.

If Hetch Hetchy-sourced water is supplemented by surface water from local watersheds and upcountry non-Hetch Hetchy sources (UNHHS), then this water is subject to filtration, disinfection, fluoridation, optimum corrosion control, and taste and odor removal to ensure it meets federal and state drinking water standards.

## Watershed Protection

Watershed sanitary surveys for the Hetch Hetchy source are conducted annually, and for non-Hetch Hetchy surface water sources, every five years. The purpose 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.

The latest sanitary surveys for the non-Hetch Hetchy watersheds were completed in 2021 for the years 2016 to 2020.

With support from partner agencies, including the National Park Service and US Forest Service, the SFRWS's watershed protection management activities and surveys were completed. Wildfire, wildlife, livestock, and human activities continue to be potential contamination sources. For more information, contact the SWRCB-DDW at (510) 620-3474.



## Fluoridation & 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 SFPUC's 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 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-DDW if you have concerns about dental fluorosis. For additional information about fluoridation or oral health, visit the CDC website at [www.cdc.gov/fluoridation](http://www.cdc.gov/fluoridation).

## Who Should Seek Advice About Drinking Water?

Some people may be more vulnerable to contaminants in drinking water than the general population. Elderly, infants, and people with immune system disorders are particularly at risk from infections. These individuals and their caretakers should seek advice about drinking water from their healthcare providers. The Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to reduce the risk of infection from *Cryptosporidium* and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline, (800) 426-4791, or at [www.epa.gov/safewater](http://www.epa.gov/safewater).



## Water Quality

Together with the SFPUC, we regularly collect and test water samples from reservoirs and designated sampling points throughout the sources and the transmission system to ensure that the water delivered to customers meets or exceeds federal and State drinking water standards. In 2022, the SFPUC conducted more than 94,230 drinking water tests in the sources and the transmission system.

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-DDW 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.

Sources of drinking water (both tap and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. Water can also pick up substances from the presence of animal or 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.

## Drinking Water & Lead

Elevated levels of lead, if present, can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population.

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. The City of Hayward's policy is to remove and replace any lead user service lines promptly if it is discovered during pipeline repair and/or maintenance. Plumbing components in homes may still contain lead materials. You can minimize your risk of potential lead exposure by identifying and removing lead materials in your home. Before drinking tap water, flush your tap for several minutes (or until the water temperature has changed) before using water for drinking or cooking. You can also use a filter certified by an American National Standards Institute accredited certifier to remove lead from drinking water.

The City of Hayward regularly tests for lead in drinking water in compliance with the USEPA's Lead and Copper Rule (LCR), which requires water agencies to test for lead at customer taps every three years. If lead concentrations exceed the Regulatory Action Level (AL) of 15 parts per billion in more than 10% of customer taps sampled, the agency must take action to notify the public and reduce corrosion of lead within the distribution system. Since the LCR's inception in 1991, the City of Hayward has always been below the AL threshold for lead. The most recent lead sampling in Hayward was performed in 2019 and tested for lead in 60 residences, which were all below the AL.

## Lead Testing In Schools

In 2017, a new law required water systems to test for lead in drinking water at all public K-12 school by July 1, 2019. The City of Hayward provides water to thirty-four public K-12 schools. All public school sites in Hayward were tested and sampling was completed on schedule. All sampling sites were below the AL for lead, with the exception of one school, where a single water fountain exceeded the standard. Corrective action was immediately taken to remove the non-conforming tap from service. Complete lead testing results are available online at [www.waterboards.ca.gov/leadsamplinginschools](http://www.waterboards.ca.gov/leadsamplinginschools).

## Total Coliform Rule

This report reflects changes in drinking water regulatory requirements in which the SWRCB adopted California version of the federal Revised Total Coliform Rule. The revised rule, effective on July 1, 2021, protects 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). 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, they must be corrected. During 2022, the City of Hayward did not detect the presence of microbials within the water system.

If you are concerned about lead levels in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the USEPA's Safe Drinking Water Hotline (800) 426-4791, or at [www.epa.gov/lead](http://www.epa.gov/lead).



## Water Quality Data

The following are definitions of key terms referring to standards and goals of water quality noted on the data table on Pages 6 and 7.

- **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 disinfectant allowed in drinking water. There is convincing evidence that addition of 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.
- **Cryptosporidium** is a parasitic microbe found in most surface water. We regularly test 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 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.

The data tables in this section lists all drinking water contaminants detected in 2022 and the information about their typical sources. Contaminants below detection limits for reporting are not shown in accordance with regulatory guidance. The SFPUC holds a State Water Resources Control Board's Division of Drinking Water (SWRCB-DDW) monitoring waiver for some contaminants in its surface water supply, and therefore the associated monitoring frequencies are less than annual.

# Hayward Water System - Water Quality Data for 2022 <sup>(1)</sup>

Detected Contaminants	Unit	MCL/TT	PHG or (MCLG)	Range or Level Found	Average or [Max]	Typical Sources in Drinking Water
<b>TURBIDITY</b>						
Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.4 <sup>(2)</sup>	[3.4]	Soil runoff
Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 <sup>(3)</sup>	N/A	-	[2.2]	Soil runoff
	-	Min 95% samples ≤ 0.3 NTU	N/A	99.3% - 100%	-	Soil runoff
Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 <sup>(3)</sup>	N/A	-	[0.1]	Soil runoff
	-	Min 95% samples ≤ 0.3 NTU <sup>(3)</sup>	N/A	100%	-	Soil runoff
<b>DISINFECTON BY-PRODUCTS AND PRECURSOR</b>						
Total Trihalomethanes	ppb	80	N/A	37.1 - 59.4	46 <sup>(4)</sup>	Byproduct of drinking water disinfection
Five Haloacetic Acids	ppb	60	N/A	24.2 - 44.5	31.9 <sup>(4)</sup>	Byproduct of drinking water disinfection
Bromate	ppb	10	0.1	ND - 1.7	[1.3] <sup>(5)</sup>	Byproduct of drinking water disinfection
Total Organic Carbon <sup>(6)</sup>	ppm	TT	N/A	1.3 - 3.9	2.3	Various natural and man-made sources
<b>MICROBIOLOGICAL</b>						
Fecal coliform and <i>E. coli</i> <sup>(7)</sup>	-	0 Positive Sample	(0)	-	<5%	Human or animal fecal waste
<i>Giardia lamblia</i>	cyst/L	TT	(0)	0 - 0.04	0.01	Naturally present in the environment
<b>INORGANICS</b>						
Flouride (source water) <sup>(8)</sup>	ppm	2.0	1	ND - 0.8	0.3 <sup>(9)</sup>	Human or animal fecal waste
Chloramine (as chlorine)	ppm	MRDL=4.0	MRDLG=4	0 - 3.5	3.0 <sup>(5)</sup>	Naturally present in the environment
<b>Lead &amp; Copper</b>						
Lead & Copper	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1,300	300	<1.0 - 180 <sup>(10)</sup>	103	Internal corrosion of household
Lead	ppb	15	0.2	<1.0 - 5.9 <sup>(10)</sup>	3.1	Naturally present in the environment

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 - 24	<2	Leaching from natural deposits
Specific Conductance	µS/cm	1,600	N/A	37 - 210	140	Substances that form ions in water
Sulfate	ppm	500	N/A	1.1 - 29	15	Runoff/leaching from natural deposits
Total Dissolved Solids	ppm	1,000	N/A	<20 - 104	61	Runoff/leaching from natural deposits
Turbidity	NTU	5	N/A	0.1 - 0.2	0.1	Soil runoff

Non-Regulated Water Quality Parameters	Unit	ORL	Range	Average
Alkalinity (as CaCO3)	ppm	N/A	7.1 - 166	41
Boron	ppb	1,000 (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 Samples
µS/cm = microSiemens/centimete

#### Footnotes on Water Quality Data

- (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.
- (5) This is the highest running annual average.
- (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 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 90th percentile level of lead and copper must be less than the action level. The most recent Lead and Copper Rule monitoring was in 2019. In 2019, 0 of 60 sampled residences exceeded the Action Level at customer taps for copper and lead.





## Water Conservation & Sustainability

In response to the Governor's call for a state-wide reduction in water use and reduced available water from SFPUC, the Hayward City Council implemented Level 2 Water Shortage measures on June 28, 2022.

The City of Hayward has historically been a steward of our water resources and remains vigilant in using water wisely during drought conditions. We offer water conservation programs, rebates, and educational resources for residents and businesses to take part in water conservation.

For a full list of programs and resources, visit [www.hayward-ca.gov/water-conservation](http://www.hayward-ca.gov/water-conservation).

- **Free low-flow water fixtures:** Low-flow faucet aerators and showerheads are available for pick up at Hayward City Hall from 8 AM to 5 PM, Monday to Friday. These water fixtures are provided at no cost to residents. For bulk requests, please email [utilities.development@hayward-ca.gov](mailto:utilities.development@hayward-ca.gov) to arrange for pick-ups.
- **Free water conservation classes:** Every spring and fall, the City of Hayward hosts free workshops and classes focused on sustainable garden design, lawn conversion, water-efficient irrigation systems, and composting. For more information on upcoming classes, visit [www.bawsca.org/classes](http://www.bawsca.org/classes). To be added to an email notification list of upcoming classes, email [utilities.development@hayward-ca.gov](mailto:utilities.development@hayward-ca.gov) with your request.
- **EarthCapades:** School assemblies are offered free-of-charge to increase student awareness of water conservation. EarthCapades performances combine age-appropriate state science standards with circus skills, juggling, music, storytelling, comedy, and audience participation to teach environmental awareness, water science and conservation.
- **WaterWise Education Program:** Water Conservation Kits are distributed to 5th grade students to empower them to install water-saving devices and perform water audits in their homes. The Kits include high-efficiency shower heads, low-flow faucet aerators, energy cost calculators, flow rate test bags, toilet leak detection kits, and more. The water conservation curriculum can be easily implemented by teachers and includes methods to quantify the water savings as a result of taking the actions in the curriculum.



Department of Public Works & Utilities



777 B Street  
Hayward, CA 94541



[utilities.development@hayward-ca.gov](mailto:utilities.development@hayward-ca.gov)



(510) 583-4700



[www.hayward-ca.gov/waterquality](http://www.hayward-ca.gov/waterquality)

The Hayward City Council is the governing authority of the Hayward Water System. City Council meets the first, third, and fourth Tuesday every month at 7 PM at Hayward City Hall, 777 B Street. The public is invited to participate in these meetings.

The SFPUC is the governing authority of the Regional Water System that supplies water to Hayward. The SFPUC meets on the second and fourth Tuesdays of the month at 1:30 PM at San Francisco City Hall, Room 400. The public is invited to participate in these meetings.

This report contains important information about your drinking water. Please contact the City of Hayward at (510) 583-4700 or [utilities.development@hayward-ca.gov](mailto:utilities.development@hayward-ca.gov) for questions this regarding this report.

Este informe contiene informaci3n muy importante sobre su agua para beber. Favor de comunicarse City of Hayward, a 777 B Street, Hayward CA 94541, (510) 583-4700 para asistirlo en espa3ol.

本報告包含閣下飲用水嘅重要訊息。如需廣東話垂詢，請聯絡：City of Hayward, 777 B Street, Hayward CA 94541, (510) 583-4700。

この報告書には上水道に関する重要な情報が記されております。ご質問等ございましたら、City of Hayward, 777 B Street, Hayward CA 94541, (510) 583-4700 まで日本語でご連絡下さい。

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ City of Hayward tại 777 B Street, Hayward CA 94541, (510) 583-4700 để được trợ giúp bằng tiếng

इस रिपोर्ट में आपके पीने के जल से सम्बंधित महत्वपूर्ण जानकारी है। हिंदी में सहायता के लिए, City of Hayward को 777 B Street, Hayward CA 94541 अथवा (510) 583-4700 पर संपर्क करें।