ANNUAL WATER QUALITY REPORT

Reporting Year 2023

Presented By

City of Healdsburg

This report contains important information about the City's drinking water. Please contact the City of Healdsburg Water Utility Department, Utility Engineering Manager, at 401 Grove Street or call (707) 431-3346 for assistance.

Este informe contiene información importante sobre el agua potable de la ciudad. Favor de comunicarse con el Utility Engineering Manager del Departamento de Agua de la Ciudad de Healdsburg en 401 Grove Street, o llame a (707) 431-3346 para asistencia.

PWS ID#: CA4910005

Message from the Director

We are pleased to present to you the 2023 annual water quality report. This report is a snapshot of water quality sampling performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by both state and federal regulatory agencies. In 2023 the water in Healdsburg was once again safe, thanks to our diligent staff, and reliable, thanks to the winter rains.

In addition to day-to-day operation and maintenance (O&M) of the water system, over the past few years, staff have focused on bolstering water supplies for the entire City through the development of the Aquifer Storage and Recovery Wells Project (on hold pending funding), Municipal Recycled Water Pipeline Project (funded and moving into construction in 2024), and an ongoing petition to increase water rights at our Dry Creek well field (pending state action). Subject to funding, staff will also seek to restore pumping capacity along Dry Creek so the multiyear storage of Lake Sonoma will become available to Healdsburg.

Looking ahead to 2024 and beyond, City staff will also increase treatment to meet state requirements to reduce the possibility of cryptosporidium reaching our drinking water. Funding to remove these microscopic parasites is dependent upon utility rate increases. In 2024 we will also begin sampling City water sources for per- and polyfluoroalkyl substances (PFAS), sometimes referred to as "forever chemicals." Once PFAS testing is complete, the City will know if additional investment is required to remove these chemicals. We are also working to comply with an updated Lead and Copper Rule that requires the City to identify materials used for each customer's water service; there are over 5,000 water services in Healdsburg, each needing a visual inspection by City staff. To plan the City's water supply needs for the future, we are working to comply with the new Making Conservation a California Way of Life regulation, which requires cities to become more efficient with their indoor and outdoor water use.

These new actions fall on top of existing commitments to provide safe and reliable drinking water throughout Healdsburg. The City was established over 150 years ago, and the water department is over 100 years old, so there is a large amount of infrastructure in need of attention. Routine O&M, improving the water supply portfolio, replacement of aging infrastructure, and compliance with ever increasing regulation require staff to not only seek outside funding whenever possible but also to be strategic in which projects move forward and which get deferred. Our goal is to always provide you with a safe and dependable supply of drinking water. We want you to understand the efforts made to continually improve water treatment and protect our water resources.

Included in this report are test results regarding the quality of water provided by Healdsburg throughout 2023. As in past years, Healdsburg's water is safe and reliable, and efforts in 2024 will ensure it remains so in the future.

Sincerely,

Terry Crowley, Utility Director

Rainwater harvesting systems can help collect rain to be used for landscaping needs later in the year. Grant funds are available until September while they last, to provide you with rebates and expert support. Get ready for the next rainy season by setting up your system today!

Smart Living Healdsburg

Rebates and Incentive Programs

- Lawn conversion
- Rain barrels and cisterns
- Clothes washers
- Low-flow toilets
- Graywater systems
- Irrigation controllers
- Free do-it-yourself (DIY) toolkits at the library

For more information, please visit Smartlivinghealdsburg.org.

Community Participation

You are invited to participate in the City Council's public forum and voice your concerns about your drinking water. The Council meets the first and third Monday of each month at 6:00 p.m. at City Hall, 401 Grove Street. You may also send comments directly to the Healdsburg City Council at citycouncil@healdsburg.gov.

Testing for Radon

Our system monitored for radon and found no detectible levels. Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer.

> **"When the well is dry, we know the worth of water."**
> *–Benjamin Franklin*

If you are concerned about radon in your home, test the air. Testing is inexpensive and easy. You should pursue radon removal if the level of radon in your air is 4 picocuries per liter (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call California's Radon Program (1-800-745-7236), the U.S. EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-767-7236).

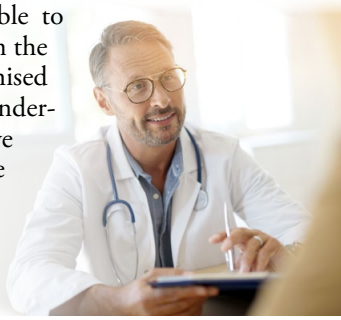
Testing for *Cryptosporidium*

Monitoring of our Russian River and Dry Creek water sources indicates the presence of *cryptosporidium* at levels of less than 0.0075 oocycst (i.e., *cryptosporidium* eggs) per liter, which is the minimum level requiring treatment.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *cryptosporidium*, the most commonly used filtration methods cannot guarantee 100-percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

In 2023 the City completed the design of improvements to treat for *cryptosporidium* for the Fitch and Dry Creek well fields, and the Gauntlett well field has existing micro-filtration treatment. The Fitch and Dry Creek well field improvements will be constructed once a funding source is established.

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 (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 water.epa.gov/drink/hotline.

QUESTIONS?

If you are interested in learning more about your water utility or water quality, you can direct your questions, concerns, or comments to the Utilities Department at 401 Grove Street or call (707) 431-3346.

If you need urgent assistance or have an issue to report, please call the Utility Hotline, available 24/7/365, at (707) 431-7000.

Where Does My Water Come From?

The City of Healdsburg's drinking water is sourced from three well fields: two located along the Russian River (approximately 80 percent of our water supply) and one located on Dry Creek (approximately 20 percent of our water supply). Our supply from the Russian River relies on Lake Mendocino, and our supply from Dry Creek relies on Lake Sonoma.

Before entering the distribution system, the water is ultrafiltered to improve its quality and remove most contaminants, then chemically treated with orthophosphate (corrosion inhibition), fluoride (dental health), and chlorine (disinfection). The water is then stored at various locations throughout the City, ready to be delivered to our homes and businesses.

Because the wells are influenced by the water quality of both Russian River and Dry Creek, it's very important for us to remain aware of the health of these watersheds and the impact we have on them. Water conservation in the community will continue to be important as we work to become more resilient and prepare for the next drought, as well as strive to meet new state water conservation targets.

The Benefits of Fluoridation

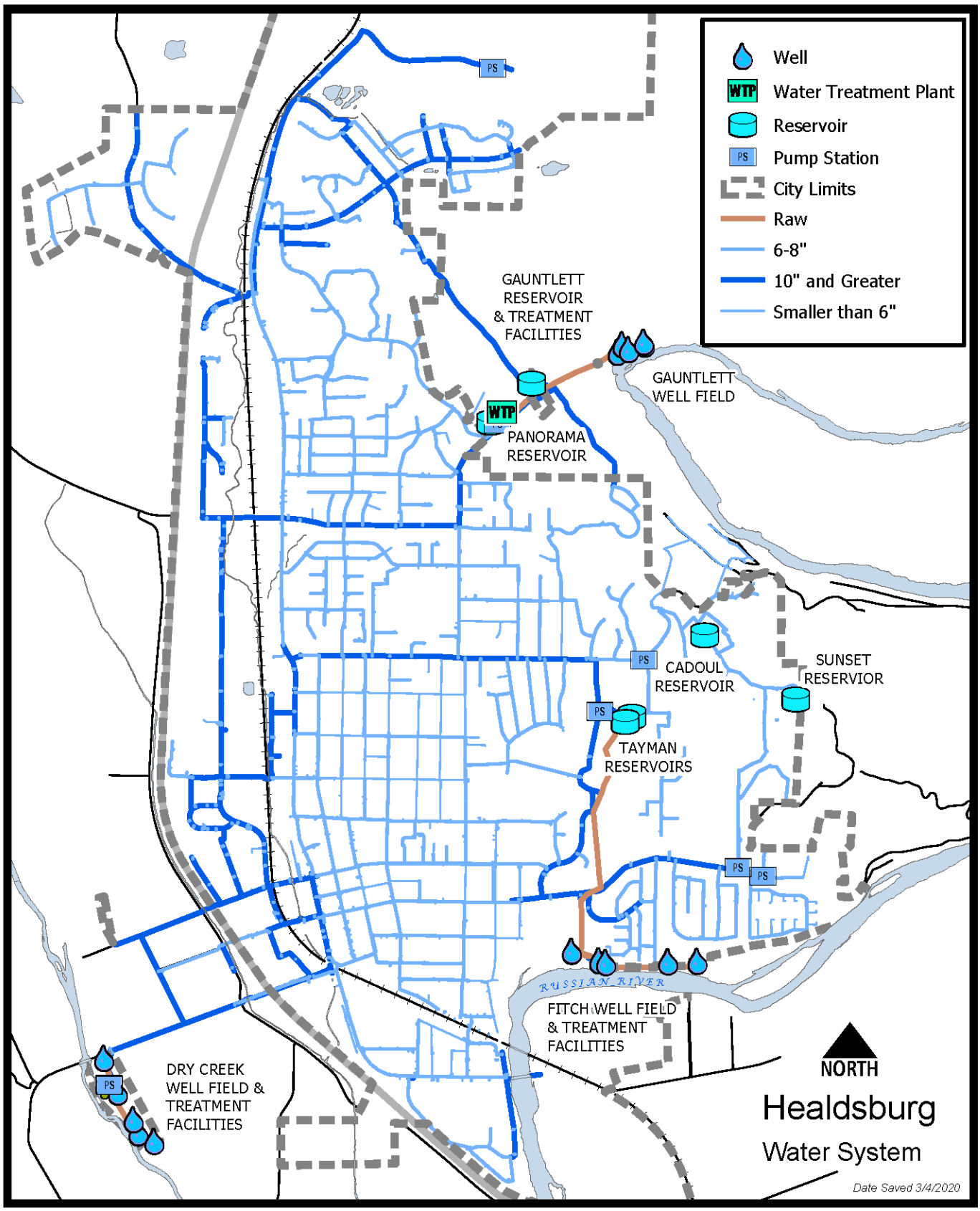
Our water system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries (i.e., cavities) in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6 to 1.2 parts per million (ppm), with an optimum dose of 0.7 ppm. Our monitoring showed that the fluoride levels in the treated water ranged from 0.43 to 0.84 ppm, with an average of 0.7 ppm. Information about fluoridation, oral health, and current issues is available from swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

Water Supply Projects

The City is working on multiple projects to diversify our water supply and make us more resilient in future droughts. These projects include:

- Aquifer storage and recovery wells, which will allow the City to augment its surface water supplies with groundwater in a sustainable manner and increase water supply by approximately 60 million gallons per year. The City has applied for funding from the Federal Emergency Management Agency (FEMA) and the state for this project and is awaiting a response.
- A municipal recycled water pipeline, which will provide recycled water to City parks, golf course, cemetery, some public school facilities, and an in-town recycled water kiosk to offset demand for potable water by approximately 27 million gallons per year. The City has received a state grant for $7.1 million to fund the project. Construction will be from June 2024 through June 2025.
- A Dry Creek water rights amendment to allow increased year-round rights, which would improve winter water supplies and allow for maintenance of the well fields along the Russian River. The state is reviewing the City's proposed water rights amendment. If approved, the Dry Creek water treatment plant will need improved infrastructure to accommodate the change in flow.

These projects, along with water conservation and efficiency, will increase Healdsburg's water resilience. For more information, please visit bit.ly/COHwaterFAQ.


Well
WTP
Water Treatment Plant
Reservoir
PS
Pump Station
City Limits
Raw
6-8"
10" and Greater
Smaller than 6"
GAUNTLETT
RESERVOIR
& TREATMENT
FACILITIES
GAUNTLETT
WELL FIELD
WTP
PANORAMA
RESERVOIR
PS
CADOUL
RESERVOIR
SUNSET
RESERVIOR
PS
TAYMAN
RESERVOIRS
PS
PS
RUSSIAN RIVER
FITCH WELL FIELD
& TREATMENT
FACILITIES
PS
DRY CREEK
WELL FIELD &
TREATMENT
FACILITIES
NORTH
Healdsburg
Water System
Date Saved 3/4/2020

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 epa.gov/safewater/lead.

Source Water Assessment

A Watershed Sanitary Survey was completed by Sonoma County Water Agency in 2018 for the watersheds that contribute to the City's water supply. The purpose of the assessment is to determine the susceptibility of each drinking water source to potential contaminant sources (PCSs). The report includes background information and a relative vulnerability rating of higher, moderate, or lower. It is important to understand that a higher vulnerability rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The vulnerably rating for the PCSs is summarized below:

VULNERABILITY ASSESSMENT RANKING FOR EACH PCS IN STUDY AREA	
CONTAMINANT SOURCE	**VULNERABILITY**
Spills	High
Wineries	Low
Agriculture	Low/Medium
Mines	Medium
Urban Runoff	Low
Wastewater	Medium
Recreation	Low
Leaking Underground Storage Tanks	Low
Fires	Medium/High

The Sonoma County Water Agency 2018 Watershed Sanitary Survey can be found at bit.ly/SonomaCountyWSS2018.

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.

Monitoring for Lead in Tap Water

The governing regulation to determine whether lead is present above or below the standard is based on the 90th-percentile value for the most recent testing. The 90th percentile is the ninth-highest value measured of 10 test results. The 90th-percentile value for the 2023 testing performed in Healdsburg was below laboratory detection limits. The action level for lead is 15 parts per billion (ppb). All 30 sites tested were below the detection limit for lead.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. **We are pleased to report that in 2023, your drinking water met all federal and state requirements.**

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.

REGULATED SUBSTANCES

				City of Healdsburg			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2023	10	0.004	< 2	< 2	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2023	1	2	< 1	< 1	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2023	[4.0 (as Cl2)]	[4 (as Cl2)]	0.82	0.33–1.51	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2023	2.0	1	0.70	0.43–0.84	No	Leaching from natural deposits
Nitrate [as nitrogen] (ppm)	2023	10	10	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
pH (units)	2023	6.5 to 8.5	6.5 to 8.5	7.28	6.96–7.43	No	Naturally occurring
Total Haloacetic Acids (ppb)	2023	60	NS	12.18	<1.0–29.4	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2023	80	NA	26.7	<1.0–49.84	No	By-product of drinking water disinfection

				Dry Creek Well Field		Fitch Mountain Well Field		Gauntlett Well Field			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Turbidity[1] (NTU)	2023	TT	NA	0.07	0.01–0.12	0.05	0.02–0.16	0.03	0.01–0.07	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	100%	100%	100%	100%	100%	100	100%	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	0.3	0.76	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2023	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				City of Healdsburg			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2023	200	NS	< 50	< 50	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2023	500	NS	7.58	5.4–14	No	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	2023	1,600	NS	266	210–370	No	Substances that form ions when in water
Sulfate (ppm)	2023	500	NS	19	15–23	No	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	2023	1,000	NS	164	120–230	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES [2]

		City of Healdsburg		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2023	123.8	81–200	Natural geology
Bicarbonate (ppm)	2023	124.75	81–200	Natural geology
Calcium (ppm)	2023	30	19–45	Natural geology
Hardness, Total [as CaCO3] (ppm)	2023	147	96–231	Natural geology
Magnesium (ppm)	2023	22.4	12–35	Natural geology
Sodium (ppm)	2023	21.5	8.2–69	Natural geology

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
[2] Unregulated contaminant monitoring helps U.S. EPA and the SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

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).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

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