

ANNUAL WATER QUALITY REPORT

Reporting Year 2022

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 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

As we exit a multi-year drought, City staff applauds the community's effort to conserve water when needed. Statewide, Healdsburg's water conservation accomplishments continue to be held as a benchmark. There is no question conservation was needed during the extended drought. However multiple years of reduced water usage has strained the water department's budget and resulted in many tough choices in funding needed infrastructure replacements.

While funding continues to strain the department, test data collected throughout the past year shows Healdsburg's drinking water continues to be safe. The continuation of the City's long track record of providing safe drinking water and meeting regulatory obligations depends upon a well-functioning water system which in turn is reliant on adequate funding. To stay within budgets, staff is selectively accomplishing projects to maintain water quality and reliability, and when possible seeking federal and state grants for large infrastructure projects.

Going forward into 2023, the 14th wettest year on record, staff are now focused on building resilience and water security for the community. With state and federal grant funding to complete leading projects such as the aquifer storage and recovery (ASR) wells and extension of a recycled water pipeline into City limits, staff are building water security for Healdsburg's future.

The ASR wells will go deep into the earth to reach isolated aquifers not impacted by cyclical weather events. To sustain this supply of water for years to come, the City will store water when surface water is plentiful and later recover this water when surface water is scarce. While this project is still pending final funding approval from the Federal Emergency Management Agency (FEMA), staff expects final approval will come and progress will continue in 2024.

Additionally, the City received Department of Water Resources (DWR) grant funding to extend a recycled water pipeline into city limits. This pipeline will provide irrigation water to several public parks, Healdsburg's cemetery, golf course, and school athletic fields. While recycled water cannot be used for drinking water, the use of recycled water for irrigation offsets and makes available more drinking water to Healdsburg's residents. This is critical during dry years and will help reduce the City's overall need to conserve while also maintaining outdoor activity areas.

With tight funding and projections indicating it will take several years to recover financially from the drought, City staff, -your staff-, will continue to prioritize the need for safe drinking water and reliable water service. Healdsburg has come to expect this level of service and we are ready to meet that challenge.

Sincerely,

Terry Crowley, Utility Director

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). Before entering the water 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 the 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.

Our water supply from the Russian River relies on Lake Mendocino, and our water supply from Dry Creek relies on Lake Sonoma. Thanks to our 2022-2023 winter storms, both of these reservoirs exceeded their storage targets. This is great news for the reservoirs' recovery after reaching historically low levels. Conservation will continue to be important to help the aquifers recover as well. Recent years have shown how we can work together as a community to conserve water, which will be important as we become more resilient and prepare for the next drought. We are grateful for the much-needed rain. Thank you to the community for your water conservation efforts!



Smart Living Healdsburg

Rebates and Incentive Programs

- Lawn conversion
- Rain barrels and cisterns
- Clothes washers
- Low-flow toilets
- Graywater systems
- Irrigation controllers
- Free in-home water-saving items

For more information, please visit [Smartlivinghealdsburg.org](https://www.smartlivinghealdsburg.org).

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. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 0.48 to 0.9 ppm, with an average of 0.72 ppm. Information about fluoridation, oral health, and current issues is available at http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

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. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

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. You can minimize the potential for lead exposure from water used for drinking or cooking by flushing your tap for 30 seconds to two minutes, after the water has sat for several hours or overnight. (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 online at: www.epa.gov/safewater/lead.

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 2020 testing performed in Healdsburg was Non-Detect. The MCL, or action level, for lead is 15 ppb. None of the 30 sites tested exceeded the action level.

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.

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, Healdsburg 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.



Testing for *Cryptosporidium*

Monitoring of our Russian River and Dry Creek water sources indicated the presence of *Cryptosporidium* at levels of less than 0.0075 oocyst (*Cryptosporidium* egg) 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 2022 the city engaged a consultant to design improvements to treat *Cryptosporidium* at the Fitch and Dry Creek well fields. The Gauntlett well field has existing filtration treatment. These improvements will be implemented after the design is complete in 2023.



Drought Response Success

The City of Healdsburg met water conservation targets during the multiyear drought! Residents and businesses alike did their part to reduce water consumption. This included replacing turf with no- and low-water landscaping, replacing inefficient appliances, installing rainwater capture systems to use for landscaping, and in general using only as much water as needed to be happy and healthy.

Water Restrictions Rescinded

Thanks to our winter rains and recovered reservoir storage, city mandatory water restrictions have been lifted. It is still always important to avoid water waste. Therefore, the state drought emergency regulations still prohibit wasteful water activities, such as:

- Outdoor watering that lets water run onto sidewalks and other areas
- Washing vehicles without an automatic shutoff nozzle
- Washing hard surfaces like driveways or sidewalks that do not absorb water
- Street cleaning or construction site preparation
- Filling decorative fountains, lakes, or ponds without a recirculation pump
- Outdoor watering within 48 hours after rainfall
- Watering decorative grass on public medians

For more information and updates on water restrictions, please visit healdsburg.gov/Water2023.

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. **The City of Healdsburg had no water system violations in 2022.**

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)	2022	10	0.004	<2	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2022	1	2	<1	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2022	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.91	0.2–1.56	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2022	2.0	1	0.72	0.48–0.9	No	Leaching from natural deposits
Gross Alpha Particle Activity (pCi/L)	2018	15	(0)	3	3–3	No	Erosion of natural deposits
pH (units)	2022	6.5–8.5	6.5–8.5	7.33	7.13–7.41	No	Measure of acidity of the water
Total Haloacetic Acids (ppb)	2022	60	NS	7.68	<1.0–21.5	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2022	80	NA	22.8	2.25–59.05	No	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
				City of Healdsburg			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	0.3	0.84	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2020	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)	2022	200	NS	<50	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2022	500	500	8.6	5.3–11	No	Runoff/leaching from natural deposits
Iron (ppb)	2022	300	300	107.5	<100–430	No	Leaching from natural deposits
Manganese (ppb)	2022	50	50	<20	<20–34	No	Leaching from natural deposits
Specific Conductance (µmho/cm)	2022	1,600	NS	310	200–430	No	Substances that form ions when in water
Sulfate (ppm)	2022	500	NS	19.2	11–29	No	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	2022	1,000	NS	186	130–230	No	Runoff/leaching from natural deposits

TURBIDITY

				Dry Creek Well Field		Fitch Mountain Well Field		Gauntlett Well Field			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE TURBIDITY	RANGE LOW-HIGH	AVERAGE TURBIDITY	RANGE LOW-HIGH	AVERAGE TURBIDITY	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Turbidity ¹ (NTU)	2022	TT	NA	0.07	0.04–0.2	0.08	0.01–0.21	0.03	0.01–0.07	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2022	TT = 95% of samples meet the limit	NA	100%	100%	100%	100%	100%	100%	No	Soil runoff

UNREGULATED SUBSTANCES²

City of Healdsburg				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2022	127.4	82–180	Natural geology
Bicarbonate (ppm)	2022	127.4	82–180	Natural geology
Calcium (ppm)	2022	26.8	19–33	Natural geology
Magnesium (ppm)	2022	20.4	12–34	Natural geology
Hardness, Total [as CaCO ₃] (ppm)	2022	150	95–218	Natural geology
Sodium (ppm)	2022	11.1	8.7–13	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 State Board 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.

pCi/L (picocuries per liter): A measure of radioactivity.

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.

Source Water Assessment

A source water assessment, the Sonoma County Water Agency 2018 Watershed Sanitary Survey, has been completed 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 (PCS). The report includes background information and a relative vulnerability rating of higher, moderate, or lower. It is important to understand that a vulnerability rating of higher does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The vulnerability rating for the PCS 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 viewed at bit.ly/SonomaCountyWSS2018.