

# ANNUAL WATER QUALITY REPORT

Reporting Year 2021



*Presented By*  
**City of Healdsburg**



This report contains important information about the City's drinking water. Please contact City of Healdsburg Water Utility Department 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 Utility Director

Again, the City's Water Department is proud to present the annual water quality report covering the 2021 calendar year. We hope the report provides you with the facts and information to give you confidence that the City's tap water is safe for your public health needs. The water produced and delivered to the community's homes and businesses in 2021 complied with State health and safety requirements. Our exceptional staff continues to work hard every day—at all hours—to deliver this safe, reliable drinking water service.

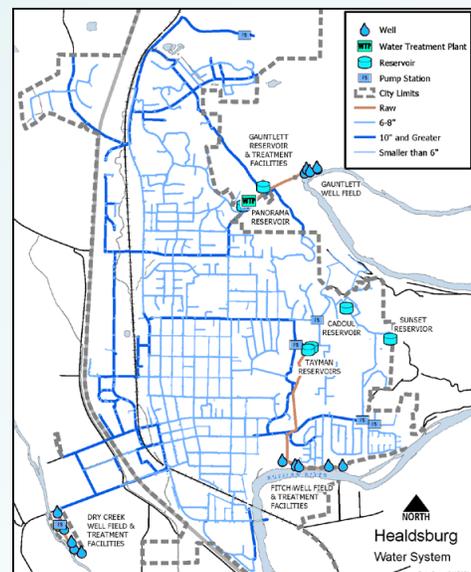
2021 was not without its challenges, most notably an unprecedented restriction in water supply. We are thankful and applaud the community's diligence and fortitude in water conservation last summer. Healdsburg led the entire State in water conservation and demonstrates what can be achieved when we all work together! While rainfall this year has improved storage levels in Lake Mendocino, we are still in a multi-year drought. Continued cautious use of our precious water resource will once again be necessary. Simple actions such as brooming off sidewalks rather than hosing them off, irrigating outdoors only when needed and in small amounts, as well as using water conservation measures / tips-and-tricks available from the City ([www.smartlivinghealdsburg.org](http://www.smartlivinghealdsburg.org)) are just a few ideas. The events of 2021 prove that Healdsburg as a community can meet the challenges this summer may bring.

Sincerely,

Terry Crowley, Utility Director

## 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 treated water be maintained within a range of 0.6 to 1.2 ppm, dosed to maintain an optimal level of 0.70 ppm. Our monitoring showed that the fluoride levels in treated water ranged from 0.62 to 1.10 ppm, with an average of 0.78 ppm. Information about fluoridation, oral health, and current issues is available from [http://www.swrcb.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.shtml](http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml).



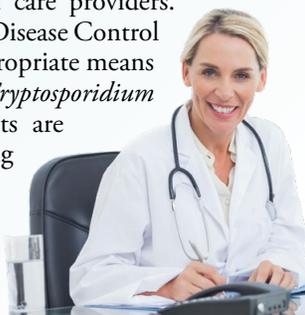
## Where Does My Water Come From?

The City of Healdsburg's drinking-water is sourced from three well fields: two located along the Russian River and one located on Dry Creek. Before entering the water distribution system, the water is chemically treated and ultra-filtered to improve its quality and remove most contaminants. 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 flows 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.

Because of inadequate rain this winter, both Lake Mendocino and Lake Sonoma storage levels are alarmingly low once again. We need to be keenly aware of our water usage since we do not have enough supply. According to the U.S. Drought Monitor, Sonoma County is experiencing severe drought conditions. With this in mind, water conservation is critical this year. We can all contribute to preserve this precious resource by being water-smart, such as repairing water leaks, installing drought-resistant plants, and using water-efficient appliances and low-flow toilets.

## 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>.



## Testing for *Cryptosporidium*

Monitoring of our Russian River and Dry Creek water sources indicates the presence of *Cryptosporidium* at levels below 0.0075 oocysts (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 whether the organisms are dead or whether 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, 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.



## Smart Living Healdsburg

### REBATES & INCENTIVE PROGRAMS

- Lawn Conversion
- Rain Barrels and Cisterns
- Clothes Washers
- Low-Flow Toilets
- Greywater Systems
- Irrigation System Upgrades
- Free in-home water saving items

For more information, please visit [Smartlivinghealdsburg.org](http://Smartlivinghealdsburg.org).

### DROUGHT RESPONSE

**SUCCESS!** The City of Healdsburg met water conservation targets during the historic 2021 drought, with an overall system-wide reduction exceeding 50 percent! Residents and businesses alike did their part to be water-wise and reduce water consumption. This included replacing turf with no- and low-water use landscaping, replacing inefficient appliances, installing low-flow aerators and showerheads, using recycled water to place on landscaping, and, in general, being conscious of and using only as much water as they need to be happy and healthy.

### WATER RESTRICTIONS CONTINUE

We are still in a drought, which means we still need to be diligent about saving water. Outdoor irrigation is one of the biggest opportunities to save water. Take these actions to reduce water needed for irrigation:

- Routinely inspect irrigation systems for leaks & repair within 72 hours
- Reduce irrigation watering days & duration
- Irrigate during evening hours and early morning only (8:00 p.m. to 7:00 a.m.)
- Refrain from watering landscapes during & within 48 hours following measurable rainfall
- Consider drip instead of overhead sprinklers
- Consider converting your lawn to a beautiful and water smart landscape

Outdoor and indoor water rebates and free water saving items are available to help at [Smartlivinghealdsburg.org](http://Smartlivinghealdsburg.org).



## 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 2 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 at [www.epa.gov/safewater/lead](http://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.

## 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.

## Community Participation

You are invited to participate in City Council's public forum and voice your concerns about the City's drinking water. The Council meets the 1st and 3rd Monday of each month, beginning at 6 p.m. at City Hall, 401 Grove Street, Healdsburg, CA. You may also send comments directly to the Healdsburg City Council, by emailing [citycouncil@healdsburg.gov](mailto:citycouncil@healdsburg.gov).



## Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

## 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 at (707) 431-3346.



## 2021 TREATED WATER QUALITY SUMMARY

Listed below are 25 substances or water-quality characteristics detected in Healdsburg's drinking water. There are nearly 100 organic and inorganic substances that the City tested for but did not detect. Only substances with detectable amounts are required to be included in this report. For certain substances with concentrations that do not change frequently, the State allows the City to monitor less frequently than once a year. In these cases, the most recent sample data are included. The City of Healdsburg collected and analyzed 252 distribution system samples for coliform during 2021 with no positive samples. **The City of Healdsburg had no water system violations in 2021.**

**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.**

The governing regulation to determine whether copper 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 0.84 ppm. The MCL, or action level, for copper was 1.3 ppm. None of the 30 test sites exceeded the action level.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2021	10	0.004	<2	<2-<2	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2021	1	2	<1	<1-<1	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2021	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	0.76	0.39-1.68	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2021	2.0	1	0.78	0.62-1.1	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
HAA5 [Sum of 5 Haloacetic Acids]-Stage 1 (ppb)	2021	60	NA	13.5	<1-20.8	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2021	45	45	nd	nd-<0.40	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
pH (units)	2021	6.5 to 8.5	6.5 to 8.5	7.15	6.89-7.32	No	Measure of acidity of the water
TTHMs [Total Trihalomethanes]-Stage 1 (ppb)	2021	80	NA	13.5	1.00-38.9	No	By-product of drinking water disinfection

### TURBIDITY

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Dry Creek Well Field		Fitch Mountain Well Field		Gauntlet Well Field		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Turbidity (NTU)	2021	TT	NA	0.13 <sup>1</sup>	0.01-0.13	0.26 <sup>2</sup>	0.01-0.26	0.2 <sup>3</sup>	0.01-0.2	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2021	TT = 95% of samples meet the limit	NA	NA	NA	NA	NA	100	NA	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)	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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2021	200	NS	<50	<50–<50	No	Erosion of natural deposits; residual from some surface water treatment processes
Iron (ppb)	2021	300	NS	24	<100–140	No	Leaching from natural deposits
Manganese (ppb)	2021	50	NS	13.2	<20–30	No	Leaching from natural deposits
Specific Conductance (µmho/cm)	2021	1,600	NS	243	190–400	No	Substances that form ions when in water
Sulfate (ppm)	2021	500	NS	13	8.5–18	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2021	1,000	NS	150	100–220	No	Runoff/leaching from natural deposits

## UNREGULATED AND OTHER SUBSTANCES<sup>4</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bicarbonate (ppm)	2021	165	93–230	Natural geology
Calcium (ppm)	2021	21.5	16–27	Natural geology
Hardness, Total [as CaCO <sub>3</sub> ] (ppm)	2021	119	80–196	Natural geology
Magnesium (ppm)	2021	13.6	9.5–18	Natural geology
Sodium (ppm)	2021	13.2	7.8–20	Natural geology
Total Alkalinity (ppm)	2021	126	76–190	Natural geology

<sup>1</sup> Groundwater

<sup>2</sup> 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.

<sup>3</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

<sup>4</sup> Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

## Definitions

**90th percentile:** 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.