2020

WATER QUALITY REPORT

City of Healdsburg

UTILITY DEPARTMENT

CITY OF HEALDSBURG

CALIFORNIA SINCE 1867

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2020 WATER QUALITY REPORT

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This report contains important information about your drinking-water. Please contact City of Healdsburg Water Utility Department at 401 Grove Street, or call 707-431-3346 for assistance in English.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Departamento de Agua de la Ciudad de Healdsburg en 401 Grove Street, o llame a 707-431-3346 para asistirlo en Español.

Cover photo: © Cynthia Glassell

WATER SYSTEM ID#: 4910005

MESSAGE FROM THE UTILITY DIRECTOR

Welcome to the 2020 water quality report. This report summarizes testing results from many water quality samples collected throughout the 2020 calendar year. As within past years, the City's water continues to provide a safe and drinkable source of water for the community. The information included in this report is just one part of the City's ongoing effort to supply safe and clean drinking water and answer the most common questions regarding the City's water quality. We hope the report provides you the facts and information you need to have confidence that your tap water is safe for your public health needs.

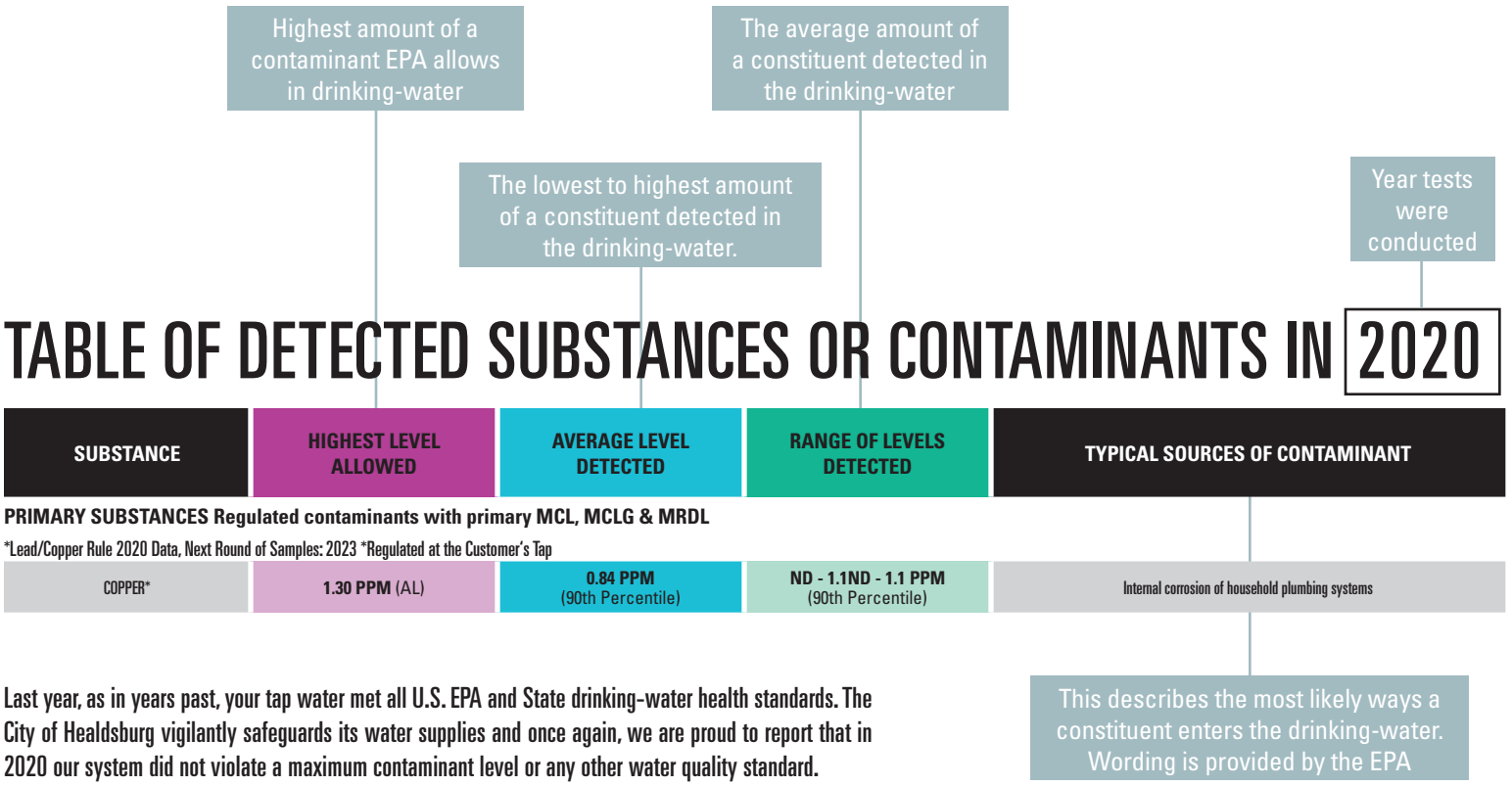
2020 has been anything but normal for all of us. With the pandemic affecting us through most of 2020, we had to adjust our daily routines to slow the spread of COVID. Important to reducing this spread of COVID was the ability to wash our hands and clean the areas around us. Understanding the importance of clean and safe drinking water, City staff continued to work throughout the pandemic to assure Healdsburg could rely on safe drinking water each and every time they turned on the tap. City staff are proud of what they accomplish over the last year; overcoming the challenges of COVID, need for social distancing, and changes to our normal routines at work and at home.

As we enter the summer of 2021, we have new challenge to face: a very limited water supply. Due to the extreme drought that has hit Sonoma and Mendocino Counties, the City and surrounding areas are faced with an extremely limited water supply. For all of us living in Sonoma County this will mean significant reductions in outdoor irrigation if not a complete stop to the use of drinking water for outdoor irrigation. This short supply will also mean that we pay attention, more than ever, to how we are using water indoors and try to find ways to reuse water from the shower and kitchen sink. As with any challenge we cannot overcome the current drought as individuals and will need to work collective as a community to conserve water, sharing our success stories along the way.

Sincerely,

Terry Crowley
UTILITY DIRECTOR

HOW TO READ THE WATER QUALITY TABLE



Last year, as in years past, your tap water met all U.S. EPA and State drinking-water health standards. The City of Healdsburg vigilantly safeguards its water supplies and once again, we are proud to report that in 2020 our system did not violate a maximum contaminant level or any other water quality standard.

DEFINITIONS:

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 is 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.

MCLG: Maximum Contaminant Level Goal is the level of contaminant in drinking-water below which there is no known or expected risk to health. The U.S. EPA sets MCLGs.

MRDL: Maximum Residual Disinfectant Level is the level of disinfectant added for water treatment that my not be exceeded at the customers tap.

MRDLG: Maximum Residual Disinfectant Level Goal is the level of disinfectant added for water treatment below which there is no known or expected risk to health. The U.S. EPA sets MRDLGs.

NA: Not Applicable.

ND: Not Detected. Constituent was below the detection level of the analytical method.

NS: No Standard. Officials have not developed a Public Health Goal or MCLG standard.

NTU: Nephelometric Turbidity Unit is a measure of the clarity of water. 5 NTU is when the average person can begin to detect turbidity.

pCi/L: Picocuries per Liter. Measures naturally occurring radioactivity from erosion of mineral deposits.

PDWS: Primary Drinking-water Standard. MCLs and MRDLs for contaminants and disinfectants that affect health along with their monitoring and reporting requirements and water treatment requirements.

pH: A measure of a solution's acidity.

PHG: Public Health Goal is the level of contaminant in drinking-water below which there is no known or expected risk to health. The U.S. EPA sets PHG's.

PPB: Parts per Billion (or micrograms per liter). One PPB is equal to 1 teaspoon in 1.3 million gallons.

PPM: Parts per Million (or milligrams per liter). One PPM is equal to 1 teaspoon in 1,300 gallons.

TT: Treatment Technique is a required process intended to reduce the level of contaminant in water.

umhos/cm: Micromhos per centimeter. A measure of substances that form ions when in water.

TABLE OF DETECTED SUBSTANCES OR CONTAMINANTS IN 2020

2020 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 those 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 255 samples for coliform during 2020 with no positive samples. The City of Healdsburg had no water system violations in 2020.

SUBSTANCE	YEAR SAMPLED	HIGHEST LEVEL ALLOWED (AL)	90th PERCENTILE LEVEL DETECTED	RANGE OF LEVELS DETECTED	PUBLIC HEALTH GOALS (MCLG) or (MRDLG)	TYPICAL SOURCES OF CONTAMINANT	HIGHEST LEVEL DETECTED
*Lead/Copper Rule 2020 Data, Next Round of Samples: 2023 *Regulated at the Customer's Tap							
REGULATED AT THE CUSTOMERS TAP							
COPPER	2020 (30 samples taken)	1.30 PPM	0.84 PPM	ND-1.1 PPM	0.3 PPM	Internal corrosion of household plumbing systems.	1.1 PPM
LEAD	2020 (30 samples taken)	15 PPB	ND	ND	0.2 PPB	Internal corrosion of household plumbing systems.	ND
SUBSTANCE	**YEAR SAMPLED**	**HIGHEST LEVEL ALLOWED (EPA'S MCL, MCLG & MRDL)**	**AVERAGE LEVEL DETECTED**	**RANGE OF LEVELS DETECTED**	**PUBLIC HEALTH GOALS (MCLG) or (MRDLG)**	**TYPICAL SOURCES OF CONTAMINANT**	**HIGHEST LEVEL DETECTED**
REGULATED SUBSTANCES							
TOTAL HALOACETIC ACIDS	2020	60 PPB	9.23	< 1.0- 31.4 PPB	NS	Byproduct of drinking water disinfection.	31.4 PPB
TOTAL TRIHALOMETHANES	2020	80 PPB	15.9 PPB	1.00 - 40.96 PPB	NS	Byproduct of drinking water disinfection.	40.96 PPB
CHLORINE	2020	4 PPM	0.975 PPM	0.37 - 1.58 PPM	4 PPM	Disinfectant added for drinking water treatment	1.58 PPM
FLUORIDE	2020	2 PPM	0.74 PPM	0..22- 1.30 PPM	1 PPM	Leaching from natural deposits. Our water system treats your water by adding fluoride in order to help prevent dental caries. The fluoride levels in the treated water are maintained within a range of 0.60 to 1.20 ppm as required by Department regulations.	1.30 PPM
NITRATE (as NO3)	2020	10 PPM	1.0 PPM	<0.40 -1.6 PPM	10 PPM	Runoff and leaching from fertilizer use, septic tanks, and erosion of natural deposits	1.6 PPM
GROSS ALPHA EMITTERS	2018	15 pCi/L	3.0 pCi/L	3.0 pCi/L	0 pCi/L	Erosion of natural deposits.	3.0 pCi/L
TURBIDITY-Dry Creek Well Field (Groundwater)	2020	TT =95% of samples <1.0 NTU	0.06 NTU	0.05 - 0.20 NTU	N/A	Turbidity is the measure of the cloudiness of the water. We monitor it because it is an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.	0.20 NTU
TURBIDITY-Fitch Mtn. Well Field (Groundwater Under Surface Water Influence)	2020	TT =95% of samples <0.30 NTU	0.06 NTU	0.01 - 0.21 NTU	N/A	Turbidity is the measure of the cloudiness of the water. We monitor it because it is an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.	0.21 NTU
TURBIDITY-Gauntlett/Micro-Filtration Facility	2020	TT =95% of samples <0.10 NTU	0.05 NTU	0.01 - 0.09 NTU	N/A	Turbidity is the measure of the cloudiness of the water. We monitor it because it is an indicator of the effectiveness of our filtration system.	0.09 NTU
SECONDARY SUBSTANCES AND OTHERS SAMPLED IN 2020							
ALKALINITY (TOTAL)	2020	NS	130 PPM	71 - 130 PPM	Not regulated	Natural geology	130 PPM
ALUMINUM	2020	200 PPB	<50 PPB	<50 PPB	200 PPM	Erosion of natural deposits.	< 50 PPB
ARSENIC	2020	10 PPB	<2 PPB	<2 PPB	0.004 PPB	Erosion of natural deposits, runoff from orchards, and glass and electronics production wastes	<2 PPB
BARIUM	2020	1 PPM	<1.0 PPM	<0.11 - 0.12 PPM	2 PPM	Erosion of natural deposits.	0.12 PPM
BICARBONATE	2020	NS	27.5 PPM	87 - 550 PPM	Not regulated	Natural geology	550 PPM
CALCIUM	2020	NS	20.5 PPM	15 - 26 PPM	Not regulated	Natural geology	26 PPM
CHLORIDE	2020	500 PPM	5.8 PPM	4.3 - 7.3 PPM	500 PPM	Runoff / Leaching from natural deposits.	7.3 PPM
HARDNESS	2020	NS	142 PPM	75- 209 PPM	Not regulated	Natural geology	209 PPM
IRON	2020	300 PPB	323 PPB	<100 - 970 PPB	300 PPB	Leaching from natural deposits	970 PPB
MANGANESE	2020	50 PPB	80PPB	<20 - 160 PPB	50 PPB	Leaching from natural deposits	160 PPB
MAGNESIUM	2020	NS	26.5 PPM	16 - 37 PPM	Not regulated	Natural geology	37 PPM
pH units	2020	6.5 to 8.5 pH units	7.30 pH units	7.04 - 7.49 pH units	6.5 to 8.5 pH units	A measure of the acidity of water	7.49 pH Units
SODIUM	2020	NS	9.6	7.2 - 12 PPM	Not regulated	Natural geology	12 PPM
SPECIFIC CONDUCTANCE	2020	1600 umhos/cm	340 umhos/cm	280- 400 umhos/cm	1000 umhos/cm	A measure of substances that form ions when in water.	400 umhos/cm
SULFATE	2020	500 PPM	12.4 PPM	8.8- 16 PPM	500 PPM	Runoff / Leaching from natural deposits.	16 PPM
TOTAL DISSOLVED SOLIDS	2020	1000 PPM	175 PPM	110 - 240 PPM	1000 PPM	Runoff / Leaching from natural deposits.	240 PPM

MANGANESE: The concentration in some production wells exceeds the secondary MCL. Manganese in excess of the secondary MCL can chemically react with the chlorine added to disinfect the water and form a dark-colored precipitate. This precipitate can stain plumbing fixtures such as sinks and toilet bowls, and may cause staining of light-colored laundry. By blending water from a number of sources, the average manganese concentration was <20 PPB in 2020. The MCL for Manganese is 50 PPB.

We add three substances directly to drinking-water following State guidelines:

CHLORINE: a highly effective disinfectant that prevents the spread of waterborne diseases, and kills any microbes or bacteria entering the water supply.

SODIUM FLUORIDE: added for the prevention of tooth decay and promotion of dental health.

CORROSION CONTROL INHIBITOR: an orthophosphate compound that reduces pipeline corrosion by laying a microfilm along interior surfaces of pipelines and plumbing fixtures to prevent corrosion and the leaching of copper and lead in residential plumbing.

TABLE OF UNREGULATED CONTAMINANTS

Every five years the US EPA implements the Unregulated Contaminant Monitoring Rule (UCMR). The purpose is to collect data from across the country on contaminants that may be present in drinking water. The EPA uses this data to decide if the contaminants occur at concentrations high enough to regulate. The City of Healdsburg was required to monitor for 10 Cyanotoxins and 20 additional chemical contaminants in 2020, which are listed in the UCMR 4 table below.

CYANOTOXINS	MINIMUM REPORTING LEVEL	RANGE	HIGHEST LEVEL DETECTED
UCMR 4 CHEMICAL CONTAMINANTS AND INDICATORS			
TOTAL MICROCYSTIN	0.3 PPB	ND	ND
MICROCYSTIN-LA	0.008 PPB	ND	ND
MICROCYSTIN-LF	0.006 PPB	ND	ND
MICROCYSTIN-LR	0.02 PPB	ND	ND
MICROCYSTIN-LY	0.009 PPB	ND	ND
MICROCYSTIN-RR	0.006 PPB	ND	ND
MICROCYSTIN-YR	0.02 PPB	ND	ND
NODULARIN	0.005 PPB	ND	ND
ANATOXIN-A	0.03 PPB	ND	ND
CYLINDROSPERMOPSIN	0.09 PPB	ND	ND

ADDITIONAL CHEMICALS	MINIMUM REPORTING LEVEL	RANGE	HIGHEST LEVEL DETECTED
ADDITIONAL CHEMICALS			
GERMANIUM	0.3 PPB	ND	ND
MANGANESE	0.4 PPB	ND - 22 PPB	22 PPB
ALPHA-HEXACHLOROCYCLOHEXANE	0.01 PPB	ND	ND
CHLORPYRIFOS	0.03 PPB	ND	ND
DIMETHIPIN	0.2 PPB	ND	ND
ETHOPROP	0.03 PPB	ND	ND
OXYFLUORFEN	0.05 PPB	ND	ND
PROFENOFOS	0.3 PPB	ND	ND
TEBUCONAZOLE	0.2 PPB	ND	ND
TOTAL PERMETHRIN (cis- & trans-)	0.04 PPB	ND	ND
TRIBUFOS	0.07 PPB	ND	ND
HAA5	N/A	ND - 25 PPB	25 PPB
HAA6Br	N/A	ND - 15 PPB	15 PPB
HAA9	N/A	ND - 37 PPB	37 PPB
1-BUTANOL	2.0 PPB	ND	ND
2-METHOXYETHANOL	0.4 PPB	ND	ND
2-PROPEN-1-ol	0.5 PPB	ND	ND
BUTYLATED HYDROXYANISOLE	0.03 PPB	ND	ND
O-TOLUIDINE	0.007 PPB	ND	ND
QUINOLINE	0.02 PPB	ND	ND
TOTAL ORGANIC CARBON (TOC)	N/A	0.45 PPB - 0.77PPB	0.77 PPB
BROMIDE	N/A	32 PPB - 59 PPB	59 PPB

NOTICE FROM THE EPA: CONTAMINANTS

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.

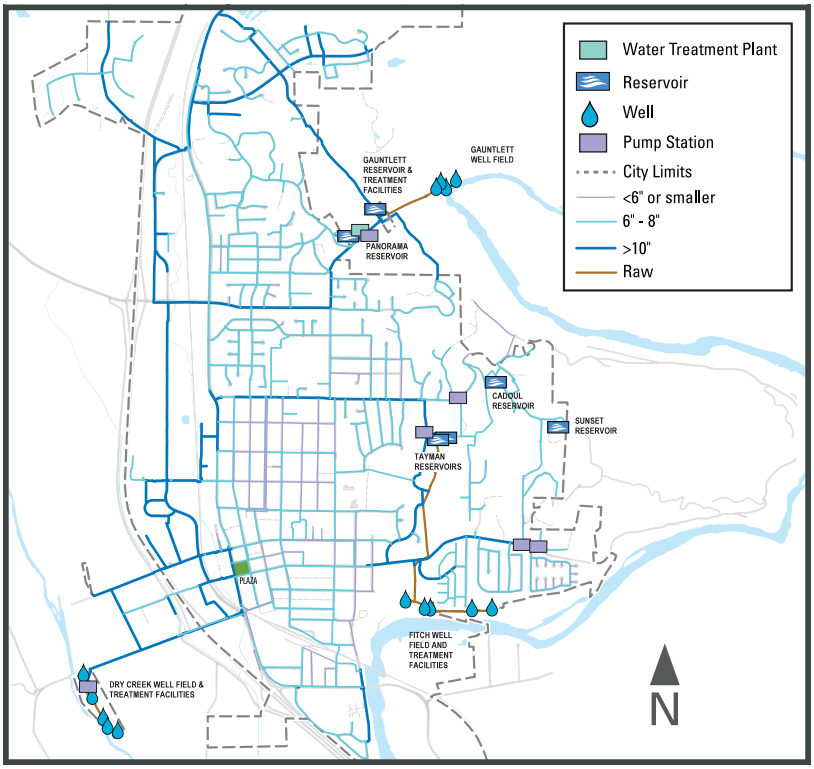
Contaminants that may be present in source water include:

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

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the California State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800.426.4791).

WATER SYSTEM MAP



WATER SOURCES

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.

Due to inadequate rain this winter, both Lake Mendocino and Lake Sonoma storage levels are alarmingly low. We need to be keenly conservative of our water usage since we do not have enough supply. According to the U.S. Drought Monitor, Sonoma County is experiencing extreme and exceptional 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 reusing greywater.

CRYPTOSPORIDIUM

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. Our monitoring indicates the presence of these organisms in our source water. 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, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing a life-threatening illness. We encourage immuno-compromised 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.

PRECAUTIONS FOR VULNERABLE POPULATIONS

Some people may be more vulnerable to contaminants in drinking-water than the general population. Immuno-compromised persons such as those: undergoing chemotherapy; who have undergone organ transplants; with HIV/AIDS or other immune system disorders; as well as some elderly and infants, may have an increased risk of infections. These people should seek advice about drinking-water from their healthcare providers. The U.S. EPA/CDC (Environmental Protection Agency/Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available online at *epa.gov/safewater* or from the U.S. EPA's Safe Drinking-water Hotline at 800.426.4791.

FLUORIDE

Fluoride is added to Healdsburg's water for dental benefits pursuant to a 1952 City of Healdsburg voter initiative (Ordinance No. 1952-14) the 2014 voter initiative, and the 2016 ballot measure. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6 to 1.20 PPM with an optimum level of 0.70 PPM. The City of Healdsburg's average level of fluoride in 2020 was 0.74 PPM. For info on fluoridation, oral health, and current issues visit: *waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html*

COVID-19

Our highest priority is to provide safe and clean drinking water. In light of COVID-19, here is some key information about the virus as it relates to our water systems.

According to CDC, the virus that causes COVID-19 has not been detected in drinking water. Conventional water treatment methods use filtration and disinfection, such as those used by the City of Healdsburg, should remove or inactivate the virus that causes COVID-19.

The California State Water Board determined California's comprehensive safe drinking water standards include disinfection processes for drinking water which are extremely effective against viruses, including coronaviruses such as COVID-19. The City complies with these drinking water standards.

For more information on drinking water and COVID-19, visit *waterboards.ca.gov*

ORTHOPHOSPHATE BLEND

Orthophosphate is a proprietary liquid blend that is added to the water to reduce pipeline corrosion and plumbing fixture corrosion. This is added to the water to comply with the EPA's "Lead and Copper Rule" (LCR).

NOTICE FROM THE EPA: LEAD AND COPPER

The "lead and copper rule" or LCR was introduced by the Environmental Protection Agency in 1991 to limit the concentration of lead and copper allowed in public drinking-water at the consumer's tap as well as limit the corrosivity of plumbing due to the water itself. Lead originates from the solder used to connect plumbing fittings inside the home, and copper is used widely in small diameter plumbing pipe. Lead and copper levels are consistently below the action level in Healdsburg.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking-water comes primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking-water but cannot control the variety of materials used in plumbing components. If you are concerned about lead in your water, you may want to test the water in your home. Information on lead in drinking-water, testing methods, and steps you can take to minimize exposure is available online at *epa.gov/safewater/lead* or you may call the EPA's Safe Drinking-water Hotline at 800.426.4791.

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.

Copper: 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.

2020 WATER QUALITY REPORT

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FOR UP-TO-DATE INFORMATION ON CONSERVATION:
/smartlivinghealdsburg

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PARTICIPATE!

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 by calling 707.431.3346.

You may also send comments directly to the Healdsburg City Council, by emailing citycouncil@ci.healdsburg.ca.us. City Council meetings are held virtually in light of COVID-19 and physical distancing policies, and can be live-streamed. For meeting dates and agendas, visit *cityofhealdsburg.org*.

VIEW AND PAY YOUR UTILITY BILL FROM HOME OR WHEREVER IS CONVENIENT

- Receive email notifications of new bills
- Make one-time payments or setup automatic payments with a credit/debit card or a bank account
- Save paper and the environment by going paperless with your utility bill

SIGN UP for online bill pay:
onlinebiller.com/healdsburg

24-HOUR UTILITY RESPONSE HOTLINE

707.431.7000 or
Toll-Free 855.755.6586

CONSERVATION NEEDED

MANDATORY WATER CONSERVATION

- Reduce irrigation watering days & duration
- Routinely inspect irrigation systems for leaks & repair within 72 hours
- Replace shower heads with low flow showerheads

PROHIBITED WATER USES

- Washing sidewalks or driveways with drinking-water
- Washing personal vehicles at home
- Watering landscapes during & within 48 hours to measurable rainfall