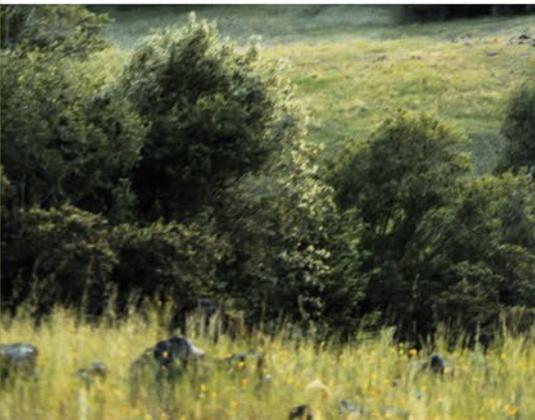
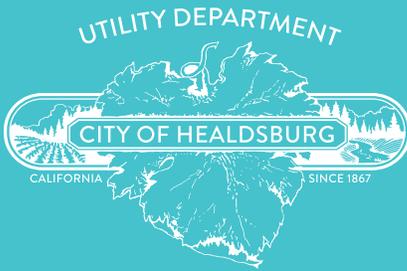


2018

# WATER QUALITY REPORT

City of Healdsburg





# 2018 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.



## MESSAGE FROM THE UTILITY DIRECTOR

Each year, the City of Healdsburg provides water customers with information about the safety and quality of their drinking-water. Again this year, the City is pleased to report that the City's drinking-water is safe and continues to meet all state and federal drinking-water standards. Constant attention and care by City staff helps assure that our drinking-water supply remains safe, healthy, and reliable.

Throughout the year, City Utility and Public Works staff monitor, inspect, and repair the City's drinking-water system. Staff's efforts range from routine testing of drinking-water to emergency response and repair. Not as apparent is staff's continued efforts to complete larger, pro-active replacements of our aging water infrastructure. These planned replacements are necessary to maintain a safe and reliable drinking-water supply and delivery system today and into the future.

Ongoing capital projects keep the City's drinking-water system from falling into disrepair and help to provide adequate water for fire suppression. Close and constant oversight by City staff assure that the investment in these projects provides the highest benefit for the community.

Many of the City's larger capital replacement projects can take several years to go through the design and construction phases. While larger projects can take years to complete and require significant financial commitment, the City must complete these replacements to maintain our drinking-water system. Planned repairs for the near-term include the replacement of an old redwood water storage tank, replacement of a dilapidated cast-iron watermain on College Street, and roof repairs to the Gauntlett Reservoir.

The 2018 water-quality report provides detailed information about the source and safety of the City's drinking-water. This information is presented to help inform you of test results from many water quality tests performed throughout the year. We hope this report is informative and answers questions you may have about the City's drinking-water supply. To learn more, visit [bit.ly/2HHELid](http://bit.ly/2HHELid).

Sincerely,

Terry Crowley  
UTILITY DIRECTOR



## MEET YOUR WATER UTILITY TEAM

Front row (l-r): *Jorge Valencia, Rob Scates, Patrick Fuss, Ryan Alves, Steve Nelson, Eric Webb, Eddie Uribe, Dustin Huse, John Sanneman, Tyler Dugan, Allen Roseberry*

Back row (l-r): *Terry Crowley, Vic Halverson, Angie Koski, David Hambly, Tyler Kettman, Charlie Jurecek, Chris Worlow, Al Ochoa, Jose Vazquez, Ken Damos-Deurloo, Brian Madeiros, Rich McMahan, Jarrod Dericco*

Not Pictured: *Rosa Gutierrez, Felicia Smith, Adolfo Espinoza*

### Who Provides Our Water?

We take it for granted that when we turn on the tap, clean water will pour out of the spout. Ever wonder how the water gets to your home?

Water travels from the Russian River via the City's treatment facilities and storage to your home. A few dozen City water treatment and distribution professionals shepherd the water as it's conveyed through approximately 65 miles of transmission and distribution piping and stored in one of seven storage tanks.

In 2018, the City of Healdsburg produced about 621 million gallons (MG) of water from the Russian River and Dry Creek under the authority of the City's water rights. In that same year, approximately 590 MG were distributed to and used by the community.

Over the past year, City employees analyzed more than 1,600 separate water samples for more than 130 constituents, such as lead, copper and chloride. In 2018, there were no exceedances or violations in any of these samples. This crew also repairs water leaks, replaces service lines, sets meters, and maintains valves, pipes and hydrants to keep water flowing 24 hours a day, seven days a week.

These men and women work as water-distribution operators, water-treatment operators, and mechanical, electrical, instrumentation and laboratory technicians. We also have a conservation analyst who compiles and analyzes water data and implements water conservation programs. Each of these state-credentialed City employees helps to ensure that the water arrives safely and reliably at your home for the lowest cost to you as a consumer.

## NOTICE FROM THE EPA

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).

# HOW TO READ THE WATER QUALITY TABLE

Highest amount of a contaminant EPA allows in drinking-water

The average amount of a constituent detected in the drinking-water

The lowest to highest amount of a constituent detected in the drinking-water.

Year tests were conducted

## TABLE OF DETECTED CHEMICALS OR CONTAMINANTS IN 2018

SUBSTANCE	HIGHEST LEVEL ALLOWED	AVERAGE LEVEL DETECTED	RANGE OF LEVELS DETECTED	TYPICAL SOURCES OF CONTAMINANT
<b>PRIMARY SUBSTANCES</b> Regulated contaminants with primary MCL, MCLG & MRDL				
<small>*Lead/Copper Rule 2017 Data, Next Round of Samples: 2020 *Regulated at the Customer's Tap</small>				
COPPER*	1.30 PPM (AL)	0.68 PPM (90th Percentile)	0.14 - 0.96 PPM (90th Percentile)	Internal corrosion of household plumbing systems

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 2018 our system did not violate a maximum contaminant level or any other water quality standard.

This describes the most likely ways a constituent enters the drinking-water. Wording is provided by the EPA

## 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 may not be exceeded at the customer's 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 CHEMICALS OR CONTAMINANTS IN 2018

2018 TREATED WATER QUALITY SUMMARY - Listed below are 22 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 than once a year. In these cases, the most recent sample data are included. The City of Healdsburg collected and analyzed 307 samples for coliform during 2018 with no positive samples. The City of Healdsburg had NO WATER SYSTEM VIOLATIONS in 2018.

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
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\*Lead/Copper Rule 2017 Data, Next Round of Samples: 2020 \*Regulated at the Customer's Tap

## REGULATED AT THE CUSTOMERS TAP

COPPER*	2017 (31 samples taken)	1.30 PPM	0.69 PPM	0.14-0.96 PPM	0.3 PPM	Internal corrosion of household plumbing systems.	0.96 PPM
LEAD*	2017 (31 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
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## REGULATED SUBSTANCES

TOTAL HALOACETIC ACIDS	2018	60 PPB	13.78 PPB	<2.0 - 32.3 PPB	NS	Byproduct of drinking-water disinfection.	32.3 PPB
TOTAL TRIHALOMETHANES	2018	80 PPB	28.4 PPB	12.6 - 46.04 PPB	NS	Byproduct of drinking-water disinfection.	46.04 PPB
CHLORINE	2018	4 PPM	0.82 PPM	0.24 - 1.58 PPM	4 PPM	Disinfectant added for drinking-water treatment.	1.58 PPM
FLUORIDE	2018	2 PPM	0.76 PPM	0.49 - 1.19 PPM	0.7 PPM	Leaching from natural deposits. Our water system treats your water by adding fluoride in order to help prevent dental cavities. The fluoride levels in the treated water are maintained within an average range of 0.60 to 1.20 ppm as required by Department regulations.	1.19 PPM
NITRATE (as NO3)	2018	10 PPM	0.09 PPM	<0.40 - 1.2 PPM	10 PPM	Runoff and leaching from fertilizer use, septic tanks, and erosion of natural deposits.	1.2 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-Fitch Mtn. Well Field (Groundwater Under Surface Water Influence)	2018	TT =95% of samples <0.30 NTU	0.06 NTU	0.02 - 0.29 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.	0.29 NTU
TURBIDITY-Gauntlett/Fitch Micro-Filtration Facility	2018	TT =95% of samples <0.10 NTU	0.04 NTU	0.02 - 0.42 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.	0.42 NTU

## SECONDARY SUBSTANCES AND OTHERS SAMPLED IN 2018

ALKALINITY (TOTAL)	2018	NS	162 PPM	110 - 260 PPM	Not regulated	Natural geology.	260 PPM
BICARBONATE	2018	NS	194 PPM	130 - 320 PPM	Not regulated	Natural geology.	320 PPM
CALCIUM	2018	NS	23 PPM	22 - 24 PPM	Not regulated	Natural geology.	24 PPM
CHLORIDE	2018	500 PPM	7.44 PPM	4.9 - 12 PPM	500 PPM	Runoff / Leaching from natural deposits.	12 PPM
HARDNESS	2018	NS	142 PPM	111- 187 PPM	Not regulated	Natural geology.	187 PPM
MANGANESE	2018	50 PPB	<20 PPB	<20 - 190 PPB	50 PPB	Leaching from natural deposits.	190 PPB
MAGNESIUM	2018	NS	20.4 PPM	14 - 32 PPM	Not regulated	Natural geology.	32 PPM
pH units	2018	6.5 to 8.5 pH units	7.21 pH units	6.86 - 7.42 pH units	6.5 to 8.5 pH units	A measure of the acidity of water.	7.42 pH Units
SODIUM	2018	NS	9.3 PPM	7.9 - 11 PPM	Not regulated	Natural geology.	11 PPM
SPECIFIC CONDUCTANCE	2018	1600 umhos/cm	286 umhos/cm	240 - 360 umhos/cm	1000 umhos/cm	A measure of substances that form ions when in water.	360 umhos/cm
SULFATE	2018	500 PPM	17.5 PPM	15- 22 PPM	500 PPM	Runoff / Leaching from natural deposits.	22 PPM
TOTAL DISSOLVED SOLIDS	2018	1000 PPM	172 PPM	140 - 220 PPM	1000 PPM	Runoff / Leaching from natural deposits.	220 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 2018. The MCL for Manganese is 50 PPB.

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

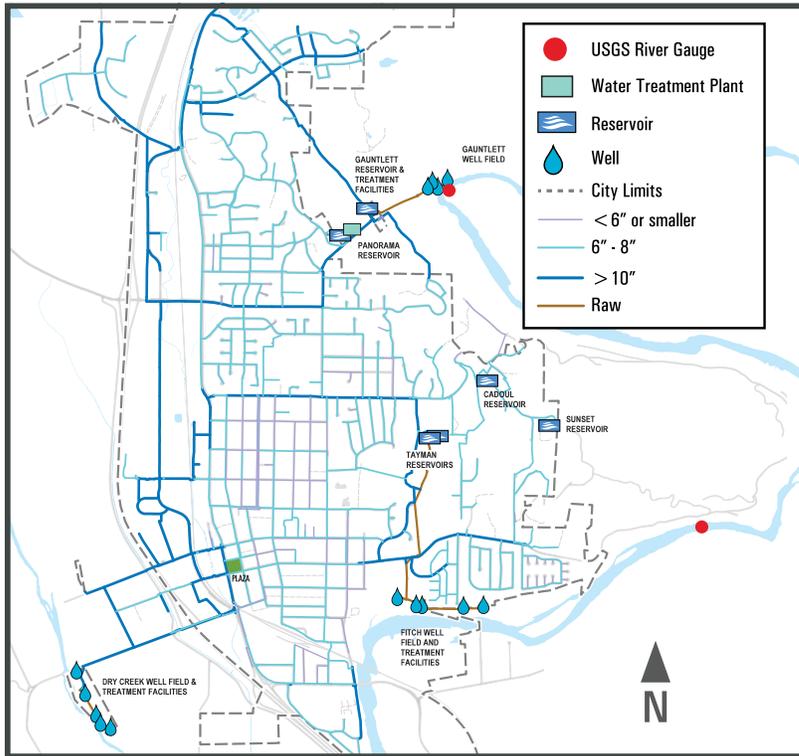
**CHLORINE:** a highly effective disinfectant that prevents the spread of waterborne diseases, and kills any microbes or bacteria entering the water supply.

**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.



# 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 consistent rain events this winter, both Lake Mendocino and Lake Sonoma storage levels are higher than last year. While this is good news, we still need to be keenly aware of our water usage as we do not know what next winter will bring. Combined with conservation efforts and watershed protection, the City's wells can supply Healdsburg's water needs for years to come. Even though the drought appears to be over, we live in a fairly arid climate; there is never enough to waste. Water is a precious resource for us and makes the good quality of life here in Healdsburg possible.

# 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](http://epa.gov/safewater) or from the U.S. EPA's Safe Drinking-water Hotline at 800.426.4791.



*Fluoride has been part of Healdsburg water since 1952 and provides dental protection for the community.*

## 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 1 PPM. The City of Healdsburg’s average level of fluoride in 2018 was .76 PPM. For info on fluoridation, oral health, and current issues visit: [waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.html](http://waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html)

## LEAD AND COPPER

The City of Healdsburg historically has experienced low incidences of lead and copper in the drinking-water system.

State regulators, in acknowledgment of this track record, require the City to sample for lead and copper only every three years. The City’s most recent sampling was in 2017. In 2017, 31 water customers were sampled for lead and copper, and none of the sites exceeded the action level.

Copper, present in most household piping and fixtures, was detected at levels from 0.14 to 0.96 parts per million, all below the action level of 1.3 parts per million required by California.

## 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

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](http://epa.gov/safewater/lead) or you may call the EPA's Safe Drinking-water Hotline at 800.426.4791.



*The City analyzes water for lead in accordance with EPA guidelines.*

**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 2017 testing performed in Healdsburg was 0.69 PPM. The MCL, or action level for copper, was 1.3 PPM. None of the 31 test sites exceeded the action level.

**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 2017 testing performed in Healdsburg was Non-Detect. The MCL, or action level for lead is 15 PPB. None of the 31 sites tested exceeded the action level.



# 2018 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 present comments directly to the Healdsburg City Council, which meets on the first and third Monday of each month at 6:00 pm, at 401 Grove Street. City Council meetings are open to the public. For meeting dates and agendas, visit [cityofhealdsburg.org](http://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](http://onlinebiller.com/healdsburg)



## 24-HOUR UTILITY RESPONSE HOTLINE

707.431.7000 or

Toll-Free 855.755.6586

## NEVER ENOUGH TO WASTE

### GOOD WATER CONSERVATION PRACTICES

- Do not apply outdoor irrigation water any day between the hours of 7 am and 8 pm
- Routinely inspect irrigation systems for leaks & repair within 72 hours
- Replace shower heads with low flow showerheads

### STATE PROHIBITED WATER USE

- Washing sidewalks or driveways with drinking-water
- Washing vehicles with a hose not fitted with a shut-off nozzle
- Watering landscapes during & within 48 hours to measurable rainfall