

## Water Conservation

In 2021 over one billion gallons of water were purchased from Humboldt Bay Municipal Water District by the City of Eureka. Water Conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. The City's water conservation efforts have resulted in a 21.1% reduction in water use for 2021. Here are a few suggestions;

- Water lawns and gardens in the mornings and evenings to reduce evaporation.
- Adjust sprinklers so the lawn is watered, not the house or the sidewalk.
- Fix leaky faucets. A small leak can use up to 2000 gallons a year.
- Run your clothes washer and dishwasher only when they are full and save up to 1000 gallons a month.
- Use a broom instead of a hose to clean your driveway or sidewalk.
- Upgrade toilets with water efficient models.
- Turn the water off while shaving or brushing your teeth to save about 300 gallons per month.
- Install faucet aerators to save 10-20 gallons per day.
- Limit your showers to 5 minutes to save up to 1000 gallons per month.
- Don't use running water to thaw food.
- When doing laundry match the water level to the size of the load.

Consider purchasing energy star appliances. They save energy, water, and may qualify for a rebate from the City of Eureka and other utilities.



## Introduction and Background

This report represents the City of Eureka's 2021 Consumer Confidence Report (CCR). It is a summary of the quality of the water that we provided last year. The CCR includes details about where your water comes from, what it contains, and how it compares to State standards.

**Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entiende bien.**

Please note that tenants, employees, and students may not receive this report since they are not direct customers of the City. Please make this report available by distributing copies or posting it in a conspicuous location. It may also be viewed on the City's website at [www.ci.eureka.ca.gov](http://www.ci.eureka.ca.gov).

## Water Quality in General

Typical sources of drinking water (both tap and bottled) 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 including radioactive materials, and additionally it can pick-up substances resulting from animal or human activity. Drinking water, including bottled water, may reasonably be expected to contain at least minute amounts of some contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people who are undergoing chemotherapy, have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly people, and infants may be particularly at risk from infections. These people should seek advice regarding drinking water from their health care providers.

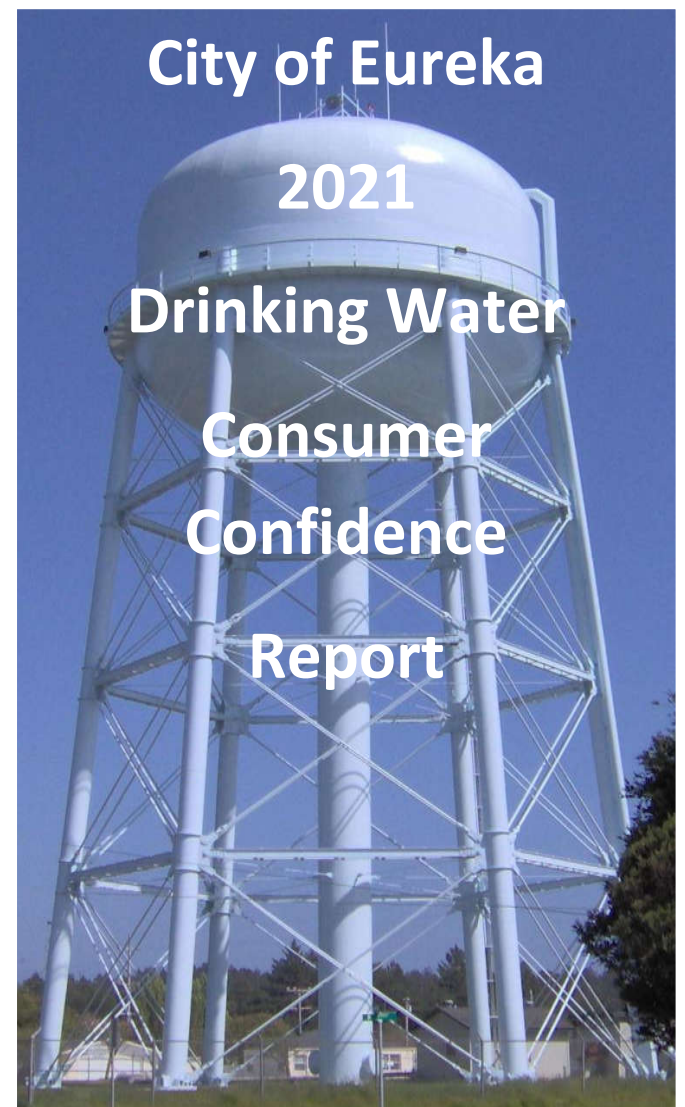
Furthermore, the Center for Disease Control has guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants. This information may be obtained by calling the Safe Drinking Water Hotline at 800-426-4791.

## Source Water Contaminants

Contaminants that may be present in source water include:

- Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally occurring or results from urban storm water runoff, or industrial processes.
- Pesticides and herbicides that may come from a variety of sources such as agricultural and residential uses.
- Radioactive contaminants which are naturally occurring.
- Organic chemical contaminants which are by-products of industrial processes such as petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

The presence of these contaminants does not necessarily indicate that the 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 at 800-426-4791.



## Our Mission Statement

*It is the mission of the City of Eureka to provide high quality services to our community. Included in these services is the efficient delivery of healthful and wholesome drinking water. To ensure that we provide you with the highest quality water, your water system is operated by State of California certified treatment and distribution system operators that oversee daily functions, as well as certified laboratory staff that perform thousands of water quality tests per year.*

## Water Quality Analysis Results

In order to ensure that tap water is safe to drink, the State Water Resources Control Board's Division of Drinking Water (DDW), formerly the California Department of Public Health(CDPH), prescribes regulations which limit contaminants in water supplied by the public water systems. The City and the Humboldt Bay Municipal Water District perform monitoring and testing, in accordance with the Department's regulations and requirements. The results from our 2021 monitoring and testing program indicate that our water quality continues to be excellent. The enclosed table lists all the drinking water contaminants that were *detected* during 2021. Additionally, the State allows that we monitor for certain contaminants less than once per year. This is because the concentrations are not expected to vary significantly from year to year. The results from prior years therefore are included if such a contaminant was detected. It is important to note that the presence of these contaminants does not necessarily indicate that the water poses a health risk. The DDW conducts source water assessments throughout the state. The purpose of the assessments is to determine the vulnerability of water sources to possible contaminating activities. In August 2002, the DDW conducted a source water assessment of the District's Ranney Wells. The source water is considered most vulnerable to low density septic systems. DDW determined that there have been no detected chemicals in this water supply. A copy of the complete assessment may be reviewed at DDW, 364 Knollcrest Dr., Suite 101, Redding, CA 96002. A summary of the assessment may be requested by calling DDW at (530) 224-4800. A summary may also be requested from the District's Eureka office (828 7<sup>th</sup> Street).

## LEAD TESTING OF DRINKING WATER IN SCHOOLS

A total of 5 schools submitted requests to be sampled for lead. Up to 5 samples were taken at each school. All samples were Non-Detect for lead (>5.0ppb).

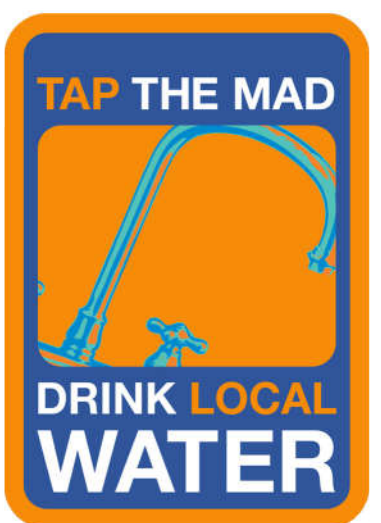
2021 City of Eureka Water Quality Table of Analytical Results					Definitions
Contaminant and Reporting Units	Level Detected (year sampled, if other than 2021)	MCL	PHG	Likely Source of Contaminants	AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>Microbiological Contaminants</b>					
Total Coliform Bacteria	Zero positive samples	More than one positive sample monthly	Zero positives	Naturally present in the environment.	
<b>Metals</b>					
Copper (ppb)	Thirty sites tested. One was above the action level. The 90 <sup>th</sup> percentile result was 940 ppb. (2021)	Action Level (AL)= 1300	1700	Internal Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.	<b>MCL (Maximum Contaminant Level):</b> The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the PHG's as feasible using the best available treatment technology.
Lead (ppb)	Thirty sites tested. None were above the action level. The 90 <sup>th</sup> percentile result was 1.7 ppb. (2021)	Action Level (AL)= 15	2	Internal Corrosion of household plumbing; erosion of natural deposits.	<b>Primary Drinking Water Standard (PDWS):</b> MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Aluminum (ppm)	0.011 ppm (2015)	1.0	0.6	Discharges from industrial manufacturers; erosion of natural deposits.	
<b>Hardness</b>					
Hardness (ppm)	Range = 71–110 Average = 87	n/a	n/a	Magnesium and calcium cations. Naturally found in ground water and surface water.	<b>PHG (Public Health Goal):</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the CA Environmental Protection Agency.
<b>Disinfection Byproducts and Disinfectant Residuals</b>					
TTHMs – Total	Range = 7.9–37 Average = 18	80	n/a	By- product of drinking water chlorination.	<b>N/A:</b> Not applicable.
Trihalomethanes (ppb)	Range = 3.0 – 18 Average = 8.2	60	n/a	By- product of drinking water chlorination.	<b>N/D:</b> Not detectable at test time.
HAA – Haloacetic Acids (ppb)	Range = 0.12–1.00 Average = 0.55	4	4	Drinking water disinfectant added for treatment.	<b>ppb:</b> Parts per billion or micrograms per liter.
Chlorine (ppm)	Range = 0.12–1.00 Average = 0.55	4	4	Drinking water disinfectant added for treatment.	<b>ppm:</b> Parts per million or milligrams per liter. (10,000 ppm is a 1 percent mixture)
<b>Regulated contaminants with Secondary MCLs (secondary MCLs address the aesthetic quality of water such as odor, taste and appearance)</b>					
Chloride (ppm)	Average = 3.9 (2016)	500	n/a	Runoff leaching from natural deposits or saltwater influence.	<b>NTU:</b> Nephelometric Turbidity Units (measure of water clarity)
Conductivity (umho/cm)	Range = 140 – 230 Average = 187	1600	n/a	Substances that form ions in water.	
Sulfate (ppm)	Average= 10 (2016)	500	n/a	Runoff/leaching from natural deposits; industrial wastes.	
Total Dissolved Solids (ppm)	Average = 90 (2016)	1000	n/a	Runoff/leaching from natural deposits.	
Turbidity (NTU)	Range = 0.02 – 0.39 NTU Average = 0.08 NTU	5	n/a	Soil runoff. Turbidity has no direct health effect. However, high levels of turbidity may interfere with disinfection.	
<b>Unregulated Contaminants Monitoring Rule 4* Detected Chemicals</b>					
HAA5[Sum of 5 Haloacetic Acids] (ppb)	Range=7.9–11.2				
HAA6Br [Sum of 6 Haloacetic Acids] (ppb)	Range=0–3.1				
HAA9 [Sum of 9 Haloacetic Acids] (ppb)	Range=7.9–13.9				
* During 2018 and 2019, the Humboldt Bay Municipal Water District and the City were required to test for 22 constituents as part of the Unregulated Contaminants Monitoring Rule 4. It is important to note that the presence of contaminants does not necessarily indicate that the water poses a health risk.					
<b>Other Constituents: The following constituents have been included to provide you with general information about your water's composition:</b>					
pH (standard units)	Range = 7.3 – 7.9 Average = 7.5				
Fluoride (ppm)	Range = 0.50–1.00 Average = 0.61				
Sodium (ppm)	3.7 (Sample taken in 2016)				

### Appliance Rebate Program

In order to encourage more efficient use of our water resources, the City of Eureka is offering rebates to our customers for the replacement of older water wasting clothes washers and toilets with high efficiency units. For more information check the City web site at <http://www.ci.eureka.ca.gov/> or contact Abe Crow at 441-4364.

### Our Water Source

The drinking water delivered to you by the City is purchased from the Humboldt Bay Municipal Water District (the District). This water is drawn from Ranney wells located in the bed of the Mad River just northeast of Arcata along Hwy 299. The wells draw water from below the riverbed at depths ranging from 60 to 90 feet. The District then disinfects the water via chlorination before distributing it. In the winter the water is further treated at the regional Turbidity Reduction Facility to reduce occasional cloudiness. The water is then delivered by a pipeline to the City's water treatment complex in Eureka. Additional treatment consists of chlorination if needed, and fluoridation as mandated by a vote of the citizens of Eureka. The Ranney well system has been classified as groundwater by the SWRCB Division of Drinking Water and provides a high quality naturally filtered water. Due to the quality of our local water, the City of Eureka encourages the use of tap water over bottled water. Bottled water utilizes petroleum products in its manufacturing, results in more waste than tap water, is subject to less stringent water quality testing, and costs more than tap water. If tap water cost the same as the cheapest bottled water, monthly water bills would come to \$9,000!



### What's a Cross connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination. Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at <http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

### Tier 3 Public Notification

The City of Eureka was cited in November 2021 for failure to perform annual testing of all backflow devices during the 2020 calendar year. During the 2020 year, 175 of 370 devices were tested. Water quality testing has shown that the water the City provides is safe to drink and there is no need for alternate water sources. Staffing and software issues, exacerbated by the Covid-19 pandemic, led to the testing deficiency and the City expects to have this issue resolved by the end of 2022. For more information regarding this issue, please contact Brian Issa at 707-441-4290

If you have questions about this report or other quality issues please call the City of Eureka Water Quality Laboratory at 707-441-4363