

Consumer Confidence Report 2023



PWS ID# CA1710003

Our Mission

We are most pleased to present to you our annual water quality report covering all required and completed testing between January 1 and December 31, 2023. Since the start of your company in 1925, we have remained committed to the task of producing drinking water that meets all state and federal standards. As new drinking water safety regulation challenges emerge, we will continue to focus and remain dedicated in our effort to meet the goals of source water protection, water conservation, and community education while serving the needs of all our water users. Please know that we are always available should you ever have any questions or an issue concerning your drinking water.

Further Mission Commitment

Under the auspice of the water company board of directors financial planning and the dedication and guidance of the company's general manager, your water company will soon be in the process of moving ahead with treatment and distribution infrastructure maintenance and replacement projects.

During the past couple of years, your company engaged the services of EBA Engineering Group in a movement towards assessment reviews and planning of your water company infrastructure needs. Even though a lot of maintenance and infrastructure replacement projects have already been completed due to immediate necessity during that time, your company management still has a great deal more that they wish to see accomplished, such as newer recent technology and state-of-the-art treatment facility upgrades and the consideration already in process concerning an auxiliary source of water supply during seasons of extended periods of drought.

In addition, your company plans to implement a periodic newsletter that will be posted on the company website at www.highlandswater.com for the purpose of keeping you informed about the progress of the improvements being made to your company water system.

COMMUNITY PARTICIPATION

You are welcome to participate in our public forum and voice your concerns about your drinking water. Our regular meetings are held on the last Wednesday of each month at 4:00 PM at our business office, 14580 Lakeshore Drive in Clearlake. An annual shareholders' meeting is held at the same location on the second Wednesday in April at 6:00 PM. Again, you are more than welcome to attend!

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:



Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.



Turn off the tap when brushing your teeth.



Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.



Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.



Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

About this report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2023 and may include earlier monitoring data. It is important to note that our state certified treatment operators are most pleased in knowing that the water they produce and deliver to our customers continues to meet or exceed all current federal and state quality standards established to protect public health and safety.



Water Source Assessment

The source water assessment of our system was recently completed in August 2023. The purpose of this assessment is to remain aware of the susceptibility of the source of our drinking water with the regard to potential contaminant sources. The report gives insight as to a great deal of background information including a relative high susceptibility rating due to the polymictic nature of the lake source. Please feel free to contact our office during regular business hours at (707) 994-2393 if you would like a copy of the most recent drinking water assessment

(Specific Reference Section: 6-Clear Lake Surface Water Purveyor Individual Assessments;6.1 General-6.1(j); 6.10 Highlands Mutual Water Company-Figure(6.10.7).

Clear Lake watershed is vulnerable to potential contaminating activities (PCAs). The following is a list of the most prevalent concerns:

- harmful algal bloom
- herbicides and pesticides
- agricultural activities
- recreation on the lake
- septic and sewer systems

Specific water quality issues that are associated with each PCA include the following:

- haloacetic acids
- total trihalomethanes
- taste and odor



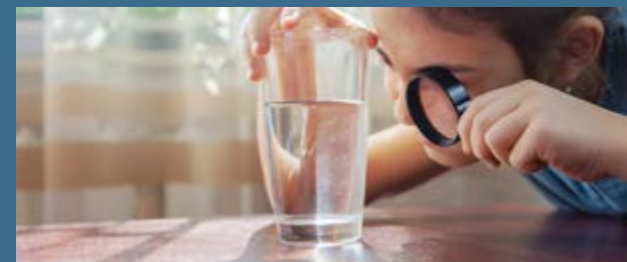
Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. Highlands Mutual Water Company is responsible for providing high quality drinking water but 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. [Optional: 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

All water systems are required to comply with the state Lead and Copper Rule (LCR). Water systems are also required to comply with the federal LCR, included mandatory language requirements that have not yet been adopted by the State Water Board.



Sources of Drinking Water and Contaminants that May Be Present in Source 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.

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 byproducts 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.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the 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.

2023 TEST RESULTS • DRINKING WATER CONTAMINANTS DETECTED

The tables that follow list all the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once

per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Sampling Results Showing the Detection of Coliform Bacteria

There were no detections of Coliform bacteria found in treated water samplings during the year

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli (State Revised Total Coliform Rule)	Year 2023 0	0	(a) NA	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

Sampling Results Showing the Detection of Lead and Copper

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	6/15/2023	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/15/2023	20	1.2	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	6/06/2023	17.02		None	None	Salt present in the water generally naturally occurring
Total Hardness (ppm)	6/06/2023	152.17		None	None	Sum of polyvalent cations presenting water, generally magnesium and calcium, and are usually naturally occurring

Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride (mg/L)	6/06/2023	0.10		2.0	1	Erosion of natural deposits; water additive promotes strong teeth; discharge from fertilizer and aluminum factories
Bromate (ug/L)	2/08/2023 5/17/2023 8/18/2023 11/08/2023	1.3 ND ND 1.2	ND - 1.3	10	0.10	Byproduct of drinking water disinfection process
*HAA5 (ug/L) [Sum of 5 Haloacetic Acids]	Quarterly 2023 20th St Tank Lower Spruce	*63.90 31.00	31.70 - 63.90 ND - 31.00	60	NA	Byproduct of drinking water disinfection process
THMS (ug/L) [Total Trihalomethanes]	Quarterly 2023 20th St Tank Lower Spruce	9.94 36.65	5.92 - 9.94 2.01 - 36.65	80	NA	Byproduct of drinking water disinfection process
Gross Alpha (pCi/L) Next Sampling April, 2024	4/26/2015	0.067	NA	15	0	Decay of natural deposits

Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (mg/L)	6/06/2023	20		500	NA	Runoff/Leaching from natural deposits, seawater influence
Odor (T.O.N.)	6/06/2023	1.7		3	NA	Naturally-occurring organic materials
Specific Conductance (EC) (umhos/cm)	6/06/2023	350		1,600	NA	Substances that form ions when in water, seawater influence
Sulfate as SO4 (mg/L)	6/06/2023	3.4		500	NA	Runoff/Leaching from natural deposits, industrial waste
Total Dissolved Solids (mg/L)	6/06/2023	180		1,000	NA	Runoff/Leaching from natural deposits

Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Boron (mg/L)	6/06/2023	1.2	NA	1	Decreased fetal development in rats
Aggressive Index (NU)	6/06/2023	11.78	NA	NA	Corrosive tendency of water to its effect on asbestos cement pipe
Bicarbonate Alkalinity as CaCO3 (mg/L)	6/06/2023	150	NA	NA	No health concerns associated with alkalinity
Calcium (mg/L)	6/06/2023	28	NA	NA	There are no serious health concerns associated with drinking hard water. However, studies suggest long-term consumption of high amounts can lead to constipation, diarrhea and bloating
pH (pH Units)	6/06/2023	7.76	NA	NA	High levels can cause dry, itchy skin and upset stomach, best range sits around 7 (scale 0-14)
Total Alkalinity as CaCO3 (mg/L)	6/06/2023	150	NA	NA	No health concerns associated with alkalinity
Magnesium (mg/L)	6/06/2023	20	NA	NA	No health concerns associated with Magnesium

FOR SYSTEMS PROVIDING SURFACE WATER AS A SOURCE OF DRINKING WATER

Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique (a) (Type of approved filtration technology used)	#1 Multi-Media Pressure Conventional Surface Water
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 - Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 - Not exceed 0.3 NTU for more than 30 consecutive minutes. 3 - Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.277
Number of violations of any surface water treatment requirements	1

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Explanation	Violation	Duration	Actions Taken to Correct Violation	Health Effects
Operational Evaluation Level (OEL) exceeded only a time during the 2nd quarter. Exceedance did not go over the Locational Running Annual Average (LRAA)	Exceeded *HAA5 MCL at 20th Street Tank Location	2nd Quarter	Flushed and Turn Over of Tank	Over many years may increase risk of cancer

Terms Used in This Report

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Maximum Contaminant Level (MCL): 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 are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): 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. Environmental Protection Agency (U.S. EPA).

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Operational Evaluation Levels (OEL): The sum of the two previous quarters' HAA5 results plus twice the current quarter's HAA5 result, divided by 4 to determine an average.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): 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 Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique

(TT): A required process intended to reduce the level of a contaminant in drinking water.

Variations and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: Not detectable at testing limit.

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Jeff Davis, General Manager and Water Department Superintendent at (707) 994-2393.

