

EAGLE LAKE WATER & SEWER DISTRICT



Quality on Tap

CONSUMER CONFIDENCE REPORT 2022 DRINKING WATER QUALITY REPORT “THE WATER WE DRINK”

General Information:

Report Covering Calendar Year: Jan 1, 2022 thru Dec 31, 2022

Upcoming Regularly Scheduled Meeting(s): Quarterly Meetings posted at Town Office

Eagle Lake Water & Sewer District, Public Water System Identification #ME0090480, located at 243 Old Main Street, Eagle Lake, Maine 04739-0137, Phone: (207) 444-5441 or Fax (207) 444-5412, or email [elwsd@fairpoint.net] Monday thru Friday, 8:00 AM to 4:00 PM. Contact Gerald Raymond, Superintendent.

Source Water Information:

The **2022 Annual Quality Water Report** is provided to the ELW&SD customers to keep you informed about the water and services the District has delivered to you over the past year (January 1 thru December 31, 2022). Our goal is and always has been, to provide its customers a safe and dependable supply of drinking water. Eagle Lake’s water source is two 40ft gravel pack groundwater wells on Furlong Road, where approximately 18 million gallons of water has been chlorinated and fluoridated this past year and distributed through 6.5 miles of piping to Eagle Lake’s customers. A 240,000-gallon storage tank is situated at the south end of town and a 280,000-gallon storage tank is situated at the end of Convent Road. These reservoir tanks are used for drinking water storage, and also fire protection.

Water Treatment & Filtration Information:

Sodium Hypochlorite (Bleach) 15% is added to water as a disinfectant and Sodium Fluoride is added for dental health for our community. Sodium Hydroxide 25% is added for corrosion control treatment for lead and copper treatment.

Source Water Assessment:

The sources of drinking water include rivers, lakes, ponds, wells. As water travels over the surface of land or through the ground, it naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the **Source Water Assessment Program (SWAP)**. The assessment geology and hydrology, land uses, water testing information, and the extent of land ownership of protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at the Town Office, Water District Office. The District routinely monitors for constituents in your drinking water according to Federal and State laws. As you can see by the table on page 3, all of the constituents have met all federal and state requirements. The table shows the results of our monitoring for the period of January 1st to December 31st, 2022.

Definitions:

Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. .

Maximum Contaminant Level Goal – The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Residual Disinfection 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.

Running Annual Average (RAA) – A 12 month rolling average of all monthly or quarterly samples at all sample locations. Calculation of the RRA may contain data from the previous year.

Locational Running Annual Average (LRAA): A 12 month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of RAA may contain data from the previous year.

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

UNITS:

ppm = parts per million or milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

ppb = parts per billion or micrograms per liter (ug/L) – one part per billion corresponds to one minute in 2,000 years, or a penny in \$10,000,000.

pCi/L = picocuries per liter (a measure of radioactivity).

pos = positive samples

MFL = million fibers per liter

NOTES:

1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less 40 samples per month.

2) E. Coli: coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune system

3) Fluoride: Fluoride levels must be maintained between 0.5 to 1.2 ppm, the optimum level is 0.7 ppm.

4) Lead/Copper: Action levels are measured at consumer’s tap. 90% of the tests must be equal to or below the action level.

5) Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health provider.

6) Arsenic: While your drinking water may meet EPA’s standard for Arsenic, if it contains 5 to 10 ppb you should know that the standard balances the current understanding of arsenics possible health effects against the cost of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Quarterly compliance is based on running annual average.

7) Gross Alpha: Action level over 5 pCi/L requires testing for Radium 226 and 228. Action level over 15 pCi/L requires testing for Uranium. Compliance is based on Gross Alpha results minus Uranium results = Net Gross Alpha.

8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water , treatment is recommended. It is also advisable to test indoor air for Radon.

9) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running average.

10) PFAS: The degree of risk depends on the level of chemicals and duration of exposure. Laboratory studies of animals exposed to high doses of PFAS have shown numerous negative effects such as issues with reproduction, growth and development, thyroid function, immune system, neurology, as well as injury to the liver. Research is still relatively new, and more needs to be done to fully assess exposure effects on the human body.

2022 CONSUMER CONFIDENCE REPORT WATER TEST RESULTS					
Contaminant	Date	Results	MCL	MCLG	Source
Microbiological					
Total Coliform Bacteria And E. coli (1)	1/1/2022 Thru 12/31/2022	0 pos	1 pos/mo. Or 5%	0 pos	Naturally present in the environment. One distribution sampled tested monthly.
Inorganic Chemicals					
Barium	4/4/2022	0.0033 ppm	2 ppm	2 ppm	Discharges of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Copper 90 th % value (4)	1/1/2020 12/31/2022	0.76 ppm	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
Fluoride (3) **	12/12/2022	0.8 ppm	4 ppm	4 ppm	Water additive which promotes strong teeth.
Lead 90 th % value (4)	1/1/2020 12/31/2022	2.6 ppb	AL=15 ppb	0 ppb	Corrosion of household plumbing systems.
Nitrate Nitrogen (5)	4/4/2022	0.29ppm	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage, erosion of natural deposits
Disinfectants and Disinfection Byproducts					
Distribution system Total Halo acetic Acid (HAA5) (9)	LRAA (2022)	7.5 ppb Range 7.5-7.5	60 ppb	0 ppb	By-product of drinking water chlorination
Total Trihalomethane (TTHM) (9)	LRAA (2022)	15 ppb Range 15-15 ppb	80 ppb	0 ppb	By-product of drinking water chlorination
Chlorine Residual					
Chlorine Residual	RAA (2022)	.46 ppm Range (.20 -.70)	MRDL 4 ppm	MRDLG 4 ppm	By-product of drinking water chlorination
Radionuclide's					
Combine Radium (-226 -228)	12/13/18	0.16 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits
Radium -226	12/13/18	0.16 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits

****Fluoride** is being added to the drinking water to promote strong healthy teeth in our community. We are consistently adjusting the fluoride level to an optimum level of 0.7 ppm.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have less than one in 10,000 chance of having the described health effect.

Secondary Contaminants Tested

Chloride	6 ppm	4/4/2022
Iron	0.095 ppm	4/4/2022
Magnesium	2.5 ppm	4/4/2022
Sodium	7.0 ppm	4/4/2022
Sulfate	5 ppm	4/4/2022
Zinc	0.0044 ppm	4/4/2022

All other regulated drinking water contaminants were below detection levels

Health Information

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, 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 result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban runoff, and septic systems.

Radioactive Contaminants, which can be naturally-occurring or be, result of oil and gas production and mining activities.

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 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.

EPA/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)** or at the following link: <https://www.epa.gov/ccr/forms/contact-us-about-consumer-confidence-reports>

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. Eagle Lake Water & Sewer District is responsible for providing high quality 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. 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 1-800-426-4791** or at <http://www.epa.gov/safewater/lead>.

Violations:

No Violations in 2022

Waiver Information

In 2022, our system was granted a “Synthetic Organics Waiver.” This is a three year exemption from the monitoring / reporting requirements for the following industrial chemical (s):

TOXAPHENE/CHLORDANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, and SEMIVOLATILE ORGANICS.

This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source(s).