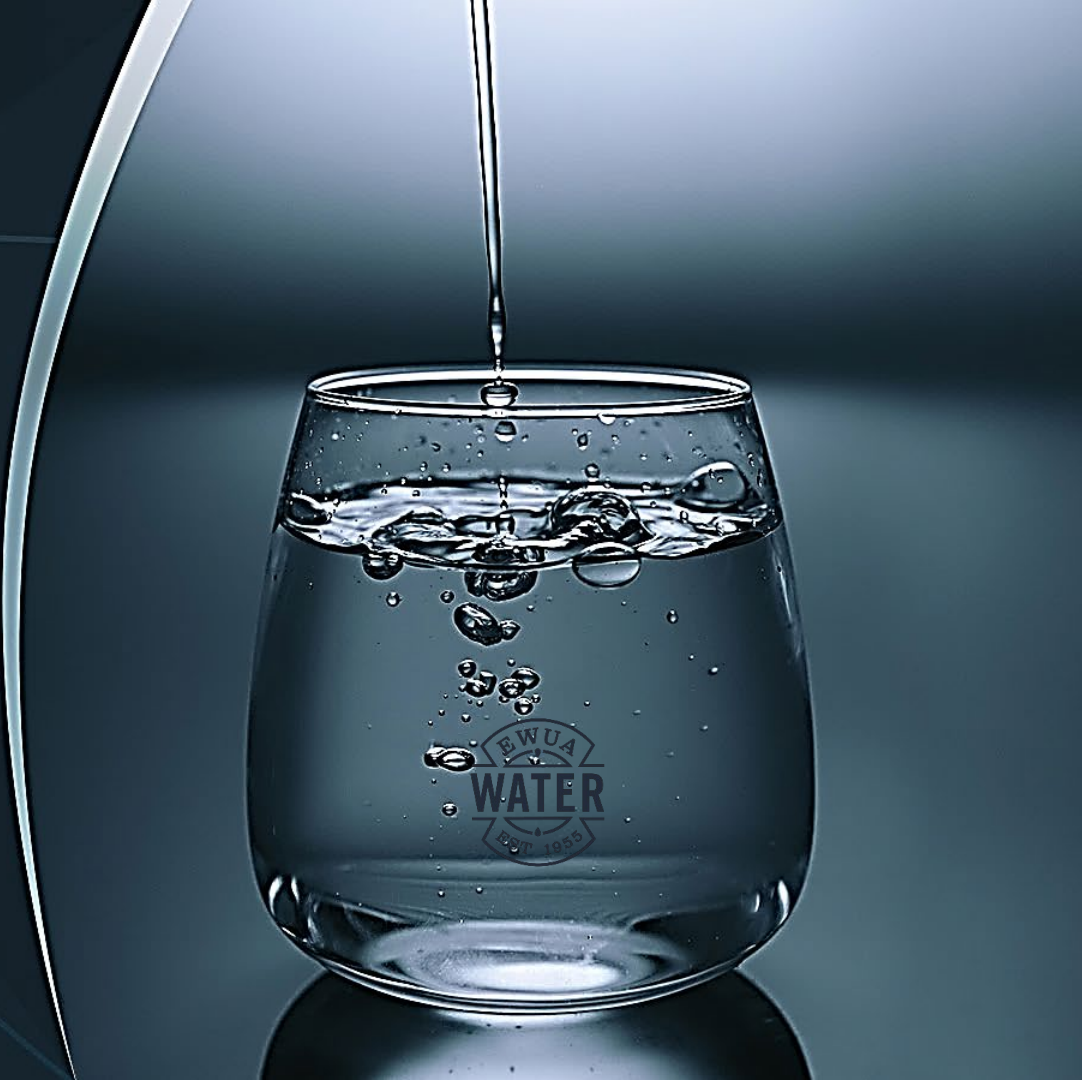
2023 Water Quality Report

This Water Quality Report is the annual update on our quality of water from January through December 2023. As required by the Safe Drinking Water Act (SDWA), this report included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Washington State Department of Health (DOH) standards.

PWS #22170



Information About Your Drinking Water

Congratulations! Your drinking water meets or exceeds all water quality parameters established by State and Federal Law. In 2023, Eastsound Water performed water quality related tests using state-certified laboratories and in-house field procedures. Some of these tests were required by DOH and others were done by us to ensure the proper operations of the system, or to help guide future decisions.

In 2023, Eastsound Water Operators took daily Chlorine residuals at different sample locations, tested Coliform samples monthly along with other analytes required by DOH on the Water Quality Monitoring Schedule. Some analytes are not tested annually but we are required to inform our customers the last sampling period and results. Below is a summary of what analytes were tested before 2023.

- Complete Inorganic (IOC) – sampled in 2021 and 2022 – below MCL or non-detected.
- Volatile Organics (VOC) – sampled in 2018, 2019, 2020, and 2021 – below MCL or non-detected.
- Copper – sampled in 2022 – non-detected.
- Herbicides – sampled in 2019, 2021 and 2022 – below MCL or non-detected.
- Pesticides – sampled in 2016, 2019, 2021 and 2022 – below MCL or non-detected.
- Gross Alpha / Radium 228 – sampled in 2021 – non-detected.
- PFAS – sampled n 2021 and 2022 – below MCL or non-detected.

Among 42 coliform samples taken from various distribution locations in 2023, there was one location sampled on 12/12/2023 was present with coliform. We immediately followed the DOH protocol to resampled at the location that showed positive, plus additional four locations which were upstream and downstream from the impacted origin. All results came back negative—coliform absent in the water. Also, we sampled Manganese (EPA Regulated) as Secondary contaminant from the Finished Water at the Water Treatment Plant, it was non-detected. In addition, we sampled Chloride and Conductivity for all sources from the groundwater, all results were below MCL.

Special Risk Populations

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. To insure that tap water is safe to drink, DOH and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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. EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, potential health effects, and other microbial contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791).

Contaminants in Drinking 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. Before treatment, such substances may include:

- Microbial contaminants, such as viruses, parasites, and bacteria. These may come from sewage disposal methods, agricultural livestock operations, and wildlife.
- Inorganic contaminants such as salts and metals which can occur naturally or result from urban storm water runoff, industrial or wastewater discharges, or farming.
- Pesticides and herbicides that may come from such sources such as agriculture, urban storm-water runoff, and residential uses.
- Radioactive contaminants, which can occur naturally.
- Organic chemical contaminants including synthetic and volatile organic chemicals, which are byproducts of industrial processes and can also come from gas stations, urban storm-water runoff, and septic systems.

Sources of Your Drinking Water

After coming online in the mid-1980s, the Purdue Lake Reservoir Treatment Plant has produced about half of EWUA's water. The other half has come from two groups of ground wells in the Eastsound area. One group of these wells is on Terrill Beach Road at the corner of Mt Baker; the other is on the north end of Blanchard Road. We prioritize the protection of our water sources and are currently updating our well sites and water service plans to ensure that we have safe, clean drinking water for decades to come.

Source Name	Water Type	Location	Treatment & Purpose Of Treatment
Purdue Lake	Surface	Buck Mountain Purdue Lake Rd	Conventional rapid sand filtration for turbidity reduction, disinfection for microbial inactivation
Well #2	Ground	Terrill Beach Well Field	Chlorination for distribution system residual
Well #5	Ground	Blanchard Well Field	Manganese removal, chlorination for distribution system residual
Well #7	Ground	Blanchard Well Field	Manganese removal, chlorination for distribution system residual
Well #8	Ground	Terrill Beach Well Field	Chlorination for distribution system residual
Well #12	Ground	Blanchard Well Field	Manganese removal, chlorination for distribution system residual
Well #13	Ground	Nina Lane	Aeration, chlorination for distribution system residual

Source Water Assessment and its Availability

- Drinking Water System Data
- Sentry Database
- Source Water Assessment Program
- Source Water Assessment Program (SWAP) Mapping

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

Boiler/ Radiant heater (water heaters not included)	Underground lawn sprinkler system	Decorative pond
Additional source(s) of water on the property	Pool or hot tub (whirlpool tubs not included)	Watering trough

Required Polymer Statement

During water treatment, organic polymer coagulants are added to improve the coagulation and filtration processes that remove particulates from water. The particulates that are removed can include viruses, bacteria and other disease-causing organisms. The EPA sets limits on the type and amount of polymer that a water system can add to the water. In addition to the EPA limits, the State of Washington requires that all polymers used be certified safe for potable water use by an independent testing organization (NSF International). During treatment, EWUA adds only NSF approved polymers and the levels used are far below the safe limits set by the EPA.

Additional Information for Lead

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. Eastsound Water 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. 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 or at http://www.epa.gov/safewater/lead.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace.
  To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Water Quality Data Table

ANNUAL NITRATE

Source	Sample Date	Nitrate (Mg/L)	MCL = 10 Mg/L
S-02 and S0-8 (Terrill Beach Well Field)	3/28/2023	0.98	Below
S-05, S-07, S12 (Blanchard Well Field)	3/28/2023	1.2	Below
S-13	9/19/2023	ND	NA
Purdue Lake	9/12/2023	0.30	Below

NA = Not Applicable
ND = Not Detected

- Sources of nitrate include fertilizers, septic systems and natural deposits. 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.
- If you are caring for an infant, you should ask for advice from your health care provider.
- Since 2013, nitrate levels at Purdue Lake have ranged from 0.15 mg/L to 0.42 mg/L for an average of 0.207 mg/L. Our results continue to be considerably lower than the maximum contaminant level.

Water Quality Data Table

QUARTERLY DISINFECTION BYPRODUCTS

Source	Sample Date	LRAA (µg/L)	LRAA Limit (µg/L)	RANGE OF SAMPLES (µg/L)	Below MCL ?	Typical Source Of Compound
TOTAL Haloacetic Acids	Quarterly	28.92	60	19.9 – 35.1	Yes	Byproducts of drinking water disinfection
TOTAL Trihalomethanes	Quarterly	29.52	80	17.1 – 45.4	Yes	Byproducts of drinking water disinfection

LRAA = Locational running annual average

µg/L = micrograms per Liter, also known as parts per billion (ppb)

FINISHED WATER PARAMETERS

Source	Sample Date	MCLG Or MRDLG	High Result	Range Of Samples	Below MCL ?	Typical Source Of Compound
Arsenic (ppm)	5/25/2022	0.01	0.0039	N/A	Yes	Natural rock formations. (S-13)
Hardness (ppm)	5/25/2022	N/A	192	N/A	N/A	Expressed as calcium carbonate. (S-13)
Turbidity (NTU)	Daily	< 1	0.12	0.02 – 0.12	Yes	Soil runoff. 100% of samples met the turbidity limits. (Purdue WTP)
Disinfectant residuals (ppm)	Continuous	< 4	1.07	0.2 – 1.07	Yes	Chlorine is a water additive used to control microbes. (Purdue WTP)

mg/L = Micrograms per Liter, also known as parts per million (ppm)

NTU = Nephelometric Turbidity Unit

Important Drinking Water Definitions

TERM	DEFINITION
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
Turbidity	Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Member Participation

The Board of Directors of the Eastsound Water Users Association meets on the third Tuesday of each month. Members are welcome to participate in these meetings.

Please contact us at

(360) 376-2127 or info@eastsoundwater.org

for more information.

The EWUA Annual Membership Meeting is held each year in the Fall. Members will be notified of the time and place by email, utility bill notification, or posting in advance of the meeting.

EASTSOUND WATER

Proudly Delivering Clean Drinking Water to its Members Since 1955