



2022 Water Quality Report

This Water Quality Report is the annual update on our quality of water from January through December 2022. 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 standards (WSDOH).





Information About Your Drinking Water

Congratulations! Your drinking water meets or exceeds all water quality parameters established by State and Federal Law.

In 2022, Eastsound Water performed water quality related tests using state-certified laboratories and in-house field procedures. Some of these tests were required by WSDOH and others were done by us to ensure the proper operations of the system, or to help guide future decisions.

Sources of Your Drinking Water

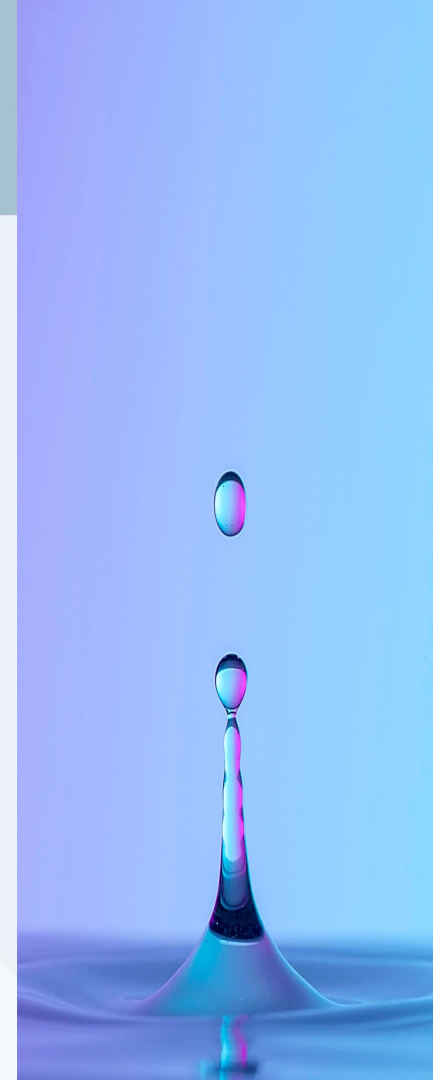
After coming online in the mid-1980s, the Purdue Lake Reservoir Treatment Plant has produced about half of EWUA's water. The other half has come from two groups of ground wells in the Eastsound area. One group of these wells is on Terrill Beach Road at the corner of Mt Baker; the other is on the north 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

- Source Water Assessment Program
<https://doh.wa.gov/community-and-environment/drinking-water/source-water/gis-mapping-tool/related-links-and-information>
- Drinking Water System Data
<https://doh.wa.gov/data-statistical-reports/environmental-health/drinking-water-system-data>
- Sentry Internet Database
<https://fortress.wa.gov/doh/eh/portal/odw/si/Intro.aspx>
- Source Water Assessment Interactive GIS Mapping
<https://fortress.wa.gov/doh/swap/index.html>





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)	7/12/2022	1.19	Below
S-05, S-07, S12 (Blanchard Well Field)	7/12/2022	1.71	Below
S-13	5/25/2022	1.29	Below
Purdue Lake	9/13/2022	ND	Below

ND = Not Detected
mg/L = Micrograms per Liter, also known as parts per million (ppm)

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 0.23 mg/L. Our results continue to be considerably lower than the maximum contaminant level.

QUARTERLY DISINFECTION BYPRODUCTS

SOURCE	SAMPLE DATE	LRAA (µG/L)	LRAA LIMIT (µG/L)	RANGE OF SAMPLES (µG/L)	MEET MCL ?	TYPICAL SOURCE OF COMPOUND
TOTAL Haloacetic Acids	Quarterly	30.57	60	20.8 - 50.1	Yes	Byproducts of drinking water disinfection
TOTAL Trihalomethanes	Quarterly	27.67	80	14.0 - 54.8	Yes	Byproducts of drinking water disinfection

LRAA = Locational running annual average
µg/L = micrograms per Liter, also known as parts per billion (ppb)



Water Quality Data Table



FINISHED WATER PARAMETERS

SOURCE	SAMPLE DATE	MCLG OR MRDLG	HIGH RESULT	RANGE OF SAMPLES	MEET MCL ?	TYPICAL SOURCE OF COMPOUND
Arsenic (ppm)	5/25/2022	0.01	0.0039	N/A	Yes	Natural rock formations. (S-13)
Copper	5/25/2022	1.3	ND	N/A	Yes	Corrosion of household plumbing systems. Erosion of natural deposits. (S-13)
Hardness (ppm)	5/25/2022	N/A	192	N/A	N/A	Expressed as calcium carbonate. (S-13)
Turbidity (NTU)	Daily	< 1	0.4	0.02 - 0.4	Yes	Soil runoff. 100% of samples met the turbidity limits. (Purdue WTP)
Disinfectant residuals (ppm)	Continuous	< 4	2.1	0.9 - 2.1	Yes	Chlorine is a water additive used to control microbes. (Purdue WTP)

MCLG = Maximum Contaminant Level Goal

MRDLG = Maximum Residual Disinfectant Level Goal

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

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.



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, WDOH 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 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).





Special Risk Populations

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.



Member Participation

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

Please contact us at
(360) 376-2127 or info@eastsoundwater.org
for access information.

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



EASTSOUND WATER

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