



**Your EWUA
water is
tested and
safe!**

2016 WATER QUALITY REPORT

Eastsound Water Users Association
Public Water System ID# 221704

This report is your annual update on the quality of water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to stringent Environmental Protection Agency (EPA) and Washington State Department of Health standards (WSDOH).

INFORMATION ABOUT YOUR DRINKING WATER

In 2016 we performed almost 8,700 water quality related tests and procedures using in-house facilities or state-certified laboratories. Some of these tests were required by WSDOH and others were done by our own initiative to insure the proper operation of the system or to help guide future decisions. Of the EPA-regulated compounds or parameters that we tested for, 9 were EPA-regulated and could be detected above the concentrations that WSDOH requires laboratory equipment to go down to when looking for a specific chemical (or the "State Reporting Level") but all were below the EPA's standards for drinking water.

We are providing you with this information because you deserve to know about your water quality. We believe that informed consumers can help us make the best choices about the future of our water system. For more information about your water, call (360) 376-2127 and ask for the General Manager – Paul Kamin

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, WADOH 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).

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 we treat it 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 stormwater 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 stormwater runoff, and septic systems.

MEMBER PARTICIPATION

The Board of Directors of the Eastsound Water Users Association meets on the third Tuesday of each month at our 286 Enchanted Forest Rd. office. Members are welcome to participate in these meetings.

SOURCES OF YOUR WATER

Source #	Type of water	Source Name	Location	Treatment <i>(purpose of treatment)</i>
S-02	Ground	Well #2	Terrill Beach well field	chlorination <i>(distribution system residual)</i>
S-05	Ground	Well #5	Blanchard Rd. well field	manganese removal, chlorination <i>(distribution system residual)</i>
S-07	Ground	Well #7	Blanchard Rd. well field	manganese removal, chlorination <i>(distribution system residual)</i>
S-08	Ground	Well #8	Terrill Beach well field	chlorination <i>(distribution system residual)</i>
S-11	Surface	Purdue Lake	Buck Mtn.	conventional rapid sand filtration <i>(turbidity reduction)</i> , disinfection <i>(microbial inactivation)</i>
S-12	Ground	Well #12	Blanchard Rd. well field	manganese removal, chlorination <i>(distribution system residual)</i>
S-13	Ground	Well #13	Nina Lane	aeration, chlorination <i>(distribution system residual)</i>

WSDOH’s Source Water Assessment Program has compiled data for your water system including a brief summary of each source’s susceptibility to potential sources of contamination and the source’s susceptibility rating. For more information about this program go to www.doh.wa.gov/ehp/dw/sw/assessment.htm

WATER QUALITY DATA

The table below lists the compounds that were detected above the State Reporting Level (SRL) during the 2016 calendar year. The SRL is the concentration that the state requires laboratory equipment to be able to go down to when looking for a specific chemical. The SRL is lower, usually much lower, than the allowable limit of a compound that is allowed in drinking water. Therefore, reporting the presence of these compounds in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain compounds less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Terms and abbreviations used in water quality reporting:

MCLG or 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 or 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.

AL or Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For example, meeting the AL for lead and copper means that out of every 10 homes tested, at least 9 were below the AL.

TT or Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

MRDLG or Maximum Residual Disinfectant 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 or 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.

RAA or Running Annual Average; Results are compliant if they are below this level for the last 4 quarters of testing in the reporting period.

n/a: not applicable; **nd**: not detectable; **ppb**: parts/billion; **ppm**: parts/million; **µS/cm**: a measure of electrical conductivity; **pCi/L**: a measure of radiation; **NTU**: a measure of water clarity; **MFL**: Million Fibers per Liter

Results: Numbers in the Results column represent the highest concentration that our system’s compliance is based on and not necessarily the highest concentration detected.

Inorganic Compounds

Compound (units)	MCLG	MCL	High Result	Range of samples	Sample Date	Meets MCL	Typical source of compound
Nitrate (ppm)	10	10	1.49	nd-1.49	Mar	Yes	fertilizer, septic systems, natural deposits

About 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 for advice from your health care provider.

Disinfection Byproducts

Compound (units)	MCLG	RAA Limit	RAA	Range of samples	Sample Date	Meets MCL	Typical source of compound
Total Trihalomethanes (ppb)	n/a	80	33.2	12.7 – 64.6	Quarterly	Yes	byproducts of drinking water disinfection
Total Haloacetic Acids (ppb)	n/a	60	30.6	15.5 – 43.3	Quarterly	Yes	byproducts of drinking water disinfection

Other Compounds and Characteristics

Compound (units)	MCLG or MRDLG	MCL, TT or MRDL	High Result	Range of samples	Sample Date	Meets MCL	Typical source of compound
Hardness (ppm)	n/a	n/a	100	80-100	Monthly	n/a	expressed as calcium carbonate. (Purdue WTP)
Turbidity (NTU)	n/a	1.0	0.22	.03 - .22	Daily	Yes	soil runoff. 100% of samples met the turbidity limits. (Purdue WTP)
Disinfectant residuals (ppm)	4	4	2.0	1.0 - 2.0	Continuous	Yes	chlorine is a water additive used to control microbes. (Purdue WTP)

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.

EWUA 2016 Water Quality Report Distribution Plan

The Environmental Protection Agency (EPA) requires water systems to provide their customers an annual review of water quality, which is often called a “Consumer Confidence Report” (CCR). **In 2016 EWUA once again had no violations or contaminants that exceeded safe drinking water levels to report.**

The EPA recently approved electronic distribution of CCR’s and EWUA is incorporating electronic distribution of this year’s report. Our strategy is as follows –

#1 EWUA will email a PDF copy of the EWUA 2016 Water Quality Report to all members for whom we have confirmed emails. (You can send us your email to ewua@rockisland.com)

#2 EWUA will post the EWUA 2016 Water Quality Report on our website at www.eastsoundwater.org.

#3 EWUA will mail a hardcopy to any member requesting one. You may call the office and request that a copy be sent. (360-376-2127)

#4 Copies can also be picked-up at our 286 Enchanted Forest Road office.