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City of Buckley & Rainier State School

2019 Annual Drinking Water Quality Report

Spanish (Español)

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

Is my water safe?

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services that we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Last year your tap water met all U.S. Environmental Protection Agency (EPA) and State drinking water health standards. The City vigilantly safeguards its water supply and once again is proud to report that our system has not violated a maximum contaminant level.

10 WAYS TO SAVE WATER

When it comes to conserving water, small adjustments can have a big impact. There are a number of ways to save water, and they all start with you.

1 When running a bath, plug the bathtub before turning on the water. Adjust the temperature as the tub fills.	2 Cook food in as little water as possible. This also helps it retain more nutrients.
3 When the kids want to cool off, use the sprinkler in an area where your lawn needs it most.	4 While you wait for hot water, collect the running water and use it to water plants.
5 Toilet leaks can be silent! Be sure to test your toilet for leaks at least once a year.	6 Timing is everything when it comes to irrigation. Learn how to set your controller properly.
7 Don't overfill the pool. Lower water levels will reduce water loss due to splashing.	8 Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
9 For more immediate hot water and energy savings, insulate hot water pipes.	10 When doing laundry, match the water level to the size of the load.

Do I need to take special precautions?

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/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 (800-426-4791).

In 2004 the State initiated a Disinfection Byproducts Sampling requirement. Systems that use continuous chlorination must collect a sample for total trihalomethanes (TTHM) and a sample for haloacetic acids (HAA5) for each chlorination treatment facility identified in their disinfection byproducts (DB) monitoring plan. The City's plan identifies two locations within the system where samples are taken on a quarterly basis. Federal Maximum Contaminant Levels (MCLs) for disinfection byproducts are based on an annual running average combining the quarterly samples from each specific sampling location. While a single sample may exceed the MCL in an individual quarter, the running total when averaged may be within the MCL. During 2018 no contaminate levels were exceeded and test results were satisfactory and within allowable limits based on the running average as established by regulation.

The United States Environmental Protection Agency (EPA) and the City of Buckley are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 0.015 milligrams of lead per liter of water. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Under Federal law we are required to have a program in place to minimize lead in your drinking water. This program includes corrosion control treatment, source water treatment and public education. Buckley Water Department personnel regularly monitor water quality parameters and make adjustments to the system to achieve and maintain an appropriate Ph+ level to reduce the occurrence of lead levels above the EPA action level. Since the City implemented the new program of corrosion control, lead and copper levels have decreased. If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at 360-761-7801.

Where does my water come from?



The City of Buckley's water sources are derived from surface water from South Prairie Creek and five groundwater wells located in and around the City. The Buckley Water Department routinely monitors for contaminants in your drinking water according to Federal and State law. As part of our water quality monitoring in 2017 we tested for Synthetic Organic Chemicals (SOCs), Inorganic Chemicals (IOCs), Volatile Organic Chemicals (VOCs) and Coliform. The EPA and/or the State require us to monitor for certain

contaminants less than once per year because the concentrations of these contaminants do not change frequently. All City of Buckley 2018 samples met EPA microbiological standards for drinking water; there were no detected contaminants. Water samples are taken from various sources, both at the wells and at the tap, throughout the City on an average of twenty samples per month. These samples are tested for the presence of coliform and e-coli, nitrate, radium, herbicides, insecticides and arsenic, as well as many other lesser known contaminants. The City also has an emergency intertie connection to the Tacoma Water pipeline that passes through the City, which was constructed in 2013. However, to date water from this source is only used 4 times a year for a limited time to test our emergency pumps, so if an emergency arises with the City's regular water system, we have the ability to use water from Tacoma. Although Tacoma's water was not used for distribution in 2018 within Buckley's system, Tacoma Public Utilities has provided the City a copy of their water quality information for file and is available upon request. The City of Buckley has high quality drinking water that consistently tests well within allowable limits for these contaminants.

Source water assessment and its availability.

The City is required under State law to develop and maintain a Comprehensive Water System Plan, which was updated and adopted in March 2018, that provides detailed information about the water system. One of the primary elements of this Plan is source water protection to control to the best extent possible all adverse effects to the water we derive from the various sources. A copy of this Plan and/or information is available at City Hall. Please contact the City at (360) 761-7801 for additional information.



Why are there contaminants in my 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (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: 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, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Federal Maximum Contaminant Levels (MCLs) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

How can I get involved?

If you have any questions about this report, or concerns about your water utility, please contact City Hall at (360) 761-7801. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of the City's regularly scheduled Council meetings. They are held at 7 PM on the 2nd and 4th Tuesday of each month at the Multi-Purpose Center located at 811 Main Street.

You can consult a variety of sources for additional information regarding your drinking water. State and local government agencies that can be contacted include:

- ◆ Local laboratory certified by EPA for testing water quality: Water Management Laboratories, Inc., 1515 80th St. E., Tacoma, WA 98404, 253-531-3121.
- ◆ The Washington State Department of Health at 1-800-521-0323, or the Pierce County Health Department at 253-798-2987, can provide you with information about the health effects of lead and how you can have your child's blood tested.

Other Information

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Thank you for allowing us to continue providing your family with clean, quality water this year. Please call our office if you have questions.

We at the City of Buckley work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



Water Quality Data Tables:

The tables below list all of the drinking water contaminants that we detected during the calendar year of this report which is for the 2018 year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in 2018. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Water Quality Data Table

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range Low - High</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
28233 - SR410 E (Sampling Station)								
Haloacetic Acids (HAA5) (ppb)	N/A	60	17.31	11.67	21.45	2019	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	27.08	10.75	36.71	2019	No	By-product of drinking water disinfection
240 River Avenue (PW Shop)								
Haloacetic Acids (HAA5) (ppb)	N/A	60	9.86	8.09	12.22	2019	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	18.85	12.05	24.98	2019	No	By-product of drinking water disinfection
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	1.08	<0.2	2.85	2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	1.3	.137	.02	.356	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
<u>Lead - action level at consumer taps (ppb)</u>	.015	.015	.003	.0098	.0168	2019	No	<u>Corrosion of household plumbing systems; Erosion of natural deposits</u>

<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
N/A	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.
Important Drinking Water Definitions	
<u>Term</u>	<u>Definition</u>
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.
Variations and Exemptions	Variations 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

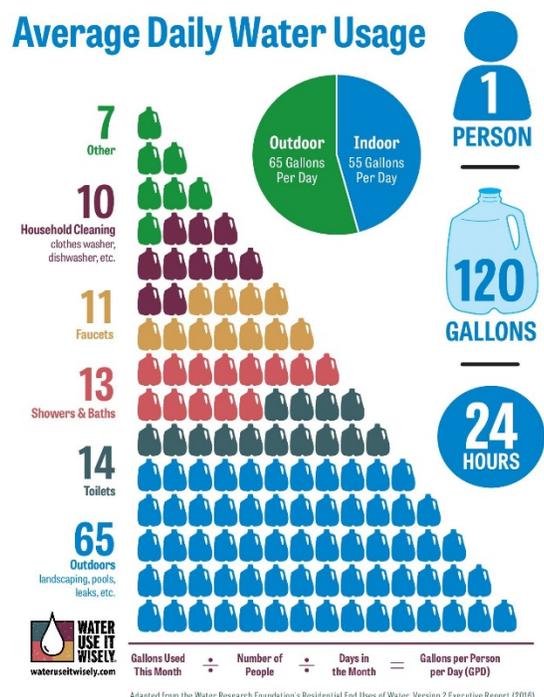
How water conscious are you?

The U.S. Environmental Protection Agency's Water Sense Program estimates that:

- The average person **unknowingly wastes up to 30 gallons of water every day.**
- Indoors you can save about 30 gallons of water per person per day by upgrading your house with water efficient fixtures and appliances.
- If one out of every 100 American homes were retrofitted with water-efficient fixtures, we could save about 100 million kWh of electricity per year and avoid adding 80,000 tons of greenhouse gas to the atmosphere.

Did you know?

- 97% of the water on earth is in the oceans
- Only 3% of the water on earth is freshwater
- About 2.4% of the water on earth is permanently frozen in glaciers and at the polar ice caps
- About 1/2 of 1 % of the water on earth is groundwater
- Only about 1/100 of 1% of the water on earth is in the rivers and lakes
- It takes 39,090 gallons of water to make a new car, including the tires
- A person can live about a month without food, but can live only about 1 week without water



For more information please contact cityofcleveland.com

Water saving ideas - additional resources

- 100+ Ways to Conserve - Water Use it Wisely has nearly 200 water-saving tips, for a variety of settings (indoor, outdoor, office etc.) - <http://wateruseitwisely.com/100-ways-to-conserve/>
- How to Save Water - Grace Communications Foundation has tips for saving water, including shopping smarter and food choices - <http://www.gracelinks.org/1297/how-to-save-water>