Birch Bay Water and Sewer District

2024 Drinking Water Quality Report

Why Monitor?

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 can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants** (viruses, bacteria & parasites)
- **Inorganic Contaminants (IOC)** (salts & metals, naturally occurring)
- **Pesticides & Herbicides (SOC)** (agricultural, stormwater runoff, residential uses)
- **Organic Chemicals (VOC)** (industrial by-products, septic tanks, gas stations
- **Radioactive Contaminants** (naturally occurring or as a result of mining and /or gas production)

In order to ensure that tap water is safe to drink, the WA Department of Health and the United States Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

For questions or concerns regarding this report, contact:
Mike Kim – Operations Manager
Birch Bay Water and Sewer District
7096 Pt. Whitehorn Rd.
Birch Bay, WA 98230
360-371-7100

Overview

Birch Bay Water and Sewer District purchases water from the City of Blaine. The water comes from several deep wells within the City of Blaine's well field. Groundwater is pumped, blended and disinfected with chlorine before distribution. BBWSD coordinates with the City of Blaine to provide water, test for new sources, and protect water rights. The City of Blaine's Water Quality Report can be viewed at https://ci.blaine.wa.us/103/Water. For more information about Birch Bay's water quality, contact Mike Kim, Operations Manager, at (360) 371-7100. To learn more, please attend our regular bi-monthly Board of Commissioner meetings on the second or fourth Thursday of each month at 4:00 PM.

Your drinking water meets all water quality parameters established by State & Federal Law.

Lead and Copper

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at http://www.epa.gov/safewater/lead.

The District has *never* installed lead taps or lead service lines.

Lead and copper have been monitored every three years, since 1998. Sampling will next be conducted in 2025. BBWSD completed a lead service line inventory in 2024. Results can be viewed online at https://lead-service-line-inventory-bbwsd.hub.arcgis.com/. No lead service lines were found.

PFAs (Per- and Polyfluoralkyl Substances)

Per- and Polyfluoroalkyl substances (PFAS) are known as "forever chemicals" because they do not easily breakdown and remain persistent in the environment. PFAS are used in a wide range of consumer and industrial products. Exposure to some types PFAs have been linked to serious health effects. The EPA required PFAS testing for all public water systems in 2020 and 2023. BBWSD results were "non-detect".

Whatcom Water Alliance Rebate Program

Water conservation rebates are now available to all Whatcom County single family homes that do not reside within City of Bellingham city limits. Rebates are currently available for:

- High efficiency WaterSense toilet upgrades
- WaterSense irrigation controllers
- High efficiency Energy Star clothes washer upgrades

Rebates are limited to one per property per calendar year. Rebate application must be submitted within 60 days of purchase. Go to https://www.whatcomwateralliance.org/rebates for more 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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/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) and online at water.epa.gov/drink/hotline.

2024 Water Quality Monitoring Results

In accordance with State and Federal Standards, the following table lists the compounds that were detected or tested for in 2024. None of the compounds were above EPA limits. The City of Blaine's Water Quality Report can be viewed at https://ci.blaine.wa.us/103/Water.

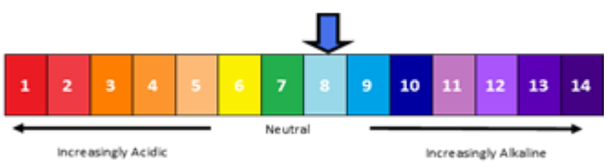
	EPA LIMITS		BIRCH BAY RESULTS		
Parameter	**Goal MCLG**	**Action Level MCL**	**Detected levels**	**In Compliance?**	**Typical Sources**
Total Coliform	0	> 1 positive sample	3 positive samples*	**Yes**	Naturally present in the environment
Fecal Coliform & E-Coli	0 mpn	0 mpn	0 mpn	**Yes**	Human and animal fecal waste
Free Chlorine residual	Detectible in 95% of samples	4.0 ppm MRDL	Range 0.02 to 0.24 ppm	**Yes**	Added by City of Blaine at well field for disinfection
HAA5	60 ppb	60 ppb	ND	**Yes**	By-product of drinking water chlorination
TTHM	80 ppb	80 ppb	5 ppb	**Yes**	By-product of drinking water chlorination
Lead (2022)	0 ppb	15 ppb	ND to 2.7 ppb *90th percentile: 1.8 ppb*	**Yes**	Erosion of natural deposits, corrosion of household plumbing
Copper (2022)	1.3 ppm	1.3 ppm	ND to 0.13 ppm *90th percentile: 0.115 ppm*	**Yes**	Erosion of natural deposits, corrosion of household plumbing
Asbestos	7 MFL	7 MFL	0.164 MFL	**Yes**	Decay of asbestos cement water mains

** BBWSD had one positive bacteriological sample in July. Operators collected repeat samples immediately and all repeat samples were satisfactory. BBWSD had two consecutive positive samples in August. Operators immediately replaced the sample station and collected repeat samples. Repeat samples were satisfactory. A Level 1 Assessment was completed and submitted to WADOH.*

Water hardness is common for groundwater sources. It is the amount of dissolved minerals in water. Water hardness is typically in the range of 50-95 mg/L. Hardness is not a health hazard, but if the water is too hard, deposits and scaling can occur and a water softener may be needed.

Water Hardness Scale		
Grain/Gal	Mg/L & pp,	Classification
Less than 1	Less than17.1	Soft
1-3.5	17.1-60	Slightly Hard
3.5	60-120	Moderately Hard
7-10	120-180	Hard
Over 10	Over 180	Very Hard

pH is the measure of acidity or basicity in a substance. Birch Bay's water pH ranges between a pH of 7.7 and 8.2, with an average of about 8.0. This higher pH helps to minimize corrosion and the leaching of metal Ions (iron, copper, lead, etc.) from plumbing fixtures into the system.



Summer Watering Schedule

Effective June 1- September 30

Based on street address

SUN	MON	TUES	WEDS	THUR	FRI	SAT
ODD	X	EVEN	ODD	EVEN	ODD	EVEN

Definitions and Acronyms:

Maximum Contaminant Level (MCL): *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.*

Maximum Contaminant Level Goal (MCLG): *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; an individual would have to drink 2 liters of water/day at the MCL level every day to have a one-in-a-million chance of having the described health effect.*

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

90th Percentile: *90% of all values were less than this amount.*

PPM: Parts Per Million; equivalent to milligram/liter .

PPB: Parts Per Billion; equivalent to microgram/liter (one thousandth of a mg/L).

Milligrams per Liter (mg/L): *A unit of concentration, representing 0.001 grams of a constituent in 1 liter of water.*

Most Probable Number Index (MPN): *The concentration of coliform bacteria in the sample (expressed as the number of bacteria per 100mL of sample).*

MFL: Million Fibers per Liter

No Detect (ND): *A compound that was analyzed and not detected at a level greater than or equal to the state reporting level (which is based on instrument & procedure accuracy and sensitivity)*

HAA5 (Haloacetic Acids-5): *Refers to a collective group of halo acetic acids which are undesirable disinfection byproducts.*

TTHM (Total Trihalomethanes): *A group of disinfection byproducts that form when chlorine compounds that are used to disinfect water react with other naturally occurring chemicals in the water.*

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

Maximum Residual Disinfectant 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.