

Sallal Water Association

Water Quality Report

2019

WHY PROVIDE A WATER QUALITY REPORT?

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 naturally occurring substances as well as those resulting from the presence of animals or from human activity.

Sallal Water Association's (Sallal's) water source is groundwater which is pumped from three deep wells maintained by the Association. Over 80% of the water required by the Association is produced from two wells located on the Northwestern flank of Rattlesnake Ridge. A third well is located near the Edgewick Road interchange, north of Interstate 90; it provides additional water to residences and businesses within this area. These wells are protected from possible contamination through a Wellhead Protection Plan. The Association adds chlorine to this natural pristine water for disinfection.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- 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 Environmental Protection Agency (EPA) prescribes regulations which limit the quantity of certain contaminants in water provided by public water systems. This report is a requirement of EPA and the Washington State Department of Health (DOH).

SALLAL WATER ASSOCIATION WATER QUALITY CHANGES IN 2019

What Occurred: A water test sample collected from the Riverpoint area of the Sallal Water distribution system tested positive for E. coli on Friday, September 13, 2019. Additional samples were collected the same day to eliminate the possibility of a false positive for E. coli presence. One sample came back positive for E.coli, the other sample was satisfactory. The Department of Health (DOH) was notified on Monday, September 16 of the presence of E.coli in the water system and provided guidance to the staff and Board of Trustees throughout the event. These results prompted testing in other zones of the water distribution system while the residents of the Riverpoint area were advised to boil water for drinking and cooking purposes.

As testing continued, other zones returned positive test results for coliform bacteria and E. coli. On Wednesday, September 18, the entire Sallal Water distribution system was placed on a Boil Water Advisory. Further testing results on Friday, September 20th, showed that E. coli was found in Well #2 which was immediately taken offline. Sallal staff worked long hours and weekends to manually chlorinate the system and continue sampling water. Automatic chlorination systems were installed on both wells by Wednesday, September 25, and fully automatic chlorination began on Thursday, September 26.

Sallal employees followed the health regulations and laws carefully to ensure the safety of the Sallal water system. DOH also informed the staff and Board that sources of E. coli in deep wells are difficult to determine and advised Sallal to focus on removing coliform bacteria and E.coli from the system.

On the afternoon of Wednesday, October 2, the Boil Water Advisory was lifted as water samples were then testing negative for coliform bacteria or E. coli in the system. Members were advised to flush home systems with the treated chlorinated water before consuming water for drinking and cooking.

On-going Efforts: Sallal staff continues to monitor the presence of chlorine in the water to reduce the chlorine injection amounts down to acceptable levels. Sallal staff constructed new piping for Well #2 to create the required chlorine contact time for compliance with DOH to allow Well #2 to get back online in May of 2020, in time for the seasonal demand increase. Sallal must continue to maintain a chlorine residual in the water distribution system.

Over the years, Sallal has remained dedicated to producing drinking water that meets all state and federal standards. Sallal continually strives to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, Sallal remains vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all Sallal water users.

SAMPLING RESULTS FOR SALLAL WATER ASSOCIATION 2019

During the past year, Sallal Water Association (Sallal) has taken numerous water samples to determine the presence of any bacterial, inorganic, volatile organic, synthetic organic, or radioactive contaminants. The tables below show detectable results from Sallal's data files. The state allows water purveyors to monitor for certain substances less often than once a year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

SOURCE MONITORING

Substance	Compliant	Wells 1 & 2 Concentration	Edgewick Well Concentration	Unit Measurement	MCLG	MCL
Nitrate ¹ +Nitrite	Yes	<.20	0.84	ppm	10	10
Arsenic	Yes	<0.001	0.002	ppm	0	.010
Turbidity	Yes	0.2	<0.1	NTU	N/A	1.0
Hardness	Yes	40	88	ppm	N/A	N/A
Sodium	Yes	<5	<5	ppm	N/A	N/A
Coliform	No	Present	ND	N/A	N/A	N/A

DISTRIBUTION MONITORING

Substance	Compliant	System Concentration	Unit Measurement	MCLG	MCL
Asbestos (2019)	Yes	<0.12	MFL	N/A	7.0
Lead (2017)	Yes	Range ND- 0.002	ppm	0	AL=.015
Copper (2017)	Yes	Range 0.08- 0.19	ppm	1.3	AL=1.3

¹ Nitrate in drinking water at levels above 10ppm is a risk to 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 advice from your health care provider.

MCLG Maximum Contaminant Level Goal: The Level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MFL Million Fibers per liter. Samples above seven MFL exceed the EPA maximum contaminant level (MCL) and must be reported.

MRDLG Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 control of microbial contaminants (e.g. chlorine,

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

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

NTU Turbidity: Turbidity is a measure of the water's cloudiness. It is monitored because it provides a good indicator of the filtration system's effectiveness. Turbidity is measured in NTU's nephelometric turbidity units.

ND Not detected

EPA Environmental Protection Agency

CDC Center for Disease Control & Prevention

MESSAGE FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

Drinking water, including bottled water, may reasonable 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).

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. Sallal is responsible for providing high quality drinking water but cannot control the variety of materials used in home plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap water for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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>. For more information on tap water quality, please visit www.drinktap.org.

SALLAL ASSOCIATION PROFILE

The Sallal Water Association supplies potable water to more than 2,300 connections serving more than 6,000 people throughout our service area, including the Wilderness Rim Association. The system currently supplies approximately 186 million gallons of water each year using three wells to meet the demand of its members.

The Sallal Water Association began as a grassroots effort by residents in the spring of 1967 due to concerns about the availability of water in shallow wells during summer months. As a result of these efforts, a loan was negotiated from the Federal government in the spring of 1969, and construction began that summer for securing a water supply from the City of Seattle. Sallal was a wholesale customer of Seattle Water from 1970-1986, relying on chlorinated surface water from the Masonry Pool portion of Chester Morse reservoir. In 1983 and 1985, two deep wells were drilled near Rattlesnake Lake. During 1986, the Sallal water system converted from City of Seattle surface water to groundwater. In 1987, a third well was drilled near the Edgewick Interchange to meet the demands in this portion of the Association's service area.

The Sallal Water Association is a non-profit, member-owned corporation, which is administered by a seven-member Board of Trustees, two or three of whom are elected each year. A "Water Distribution Manager III" serves as Sallal's Water System Superintendent and General Manager. Two more Certified Water Operators provide maintenance and day-to-day operations of the system. Licensed professional engineers, a professional hydrologist, a rate specialist, an accounting firm, and an attorney provide engineering and consulting services on a contractual basis. The General Manager, Utility Customer Administrator and part-time Bookkeeper manage the Association's North Bend Office at 44021 S.E. Tanner Road, Suite #E in North Bend.

YOUR VIEWS ARE WELCOMED!

You are invited to attend Sallal's regular Board Meetings and voice your concerns about your drinking water. The Board of Trustees meet the 3rd Tuesday of every month, beginning at 6:00 p.m., at the Sallal Business Office, located at 44021 S.E. Tanner Road, Suite E, in North Bend.