

Sallal Water Association

water

quality report
2016





Sallal Water Association Provides **EXCEPTIONAL WATER FOR YOU!**

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2016. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Our water source is groundwater which is pumped from three deep wells maintained by the Association. Over 80 percent of the water required by the Association is produced from two wells located on the Northwestern flank of Rattlesnake Ridge within the City of Seattle watershed. 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.

Does the Sallal Water Association add anything to the water? The Association does not add anything to the groundwater. Parents may wish to inquire with their dentists about supplemental fluoride treatments or fluoride toothpastes.

YOUR VIEWS ARE WELCOMED!

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second Monday of each month, beginning at 6 p.m., at the Sallal Business Office, located at 44021 S.E. Tanner Road, Suite E, North Bend, WA 98045.

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 demands of its members.

The Sallal Water Association began as a grassroots effort by local 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 to 1986, relying on chlorinated surface water from the Masonry Pool portion of Chester Morse reservoir. In 1983 and 1985, two deep wells were drilled inside the Seattle

watershed. 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, consumer-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, who is Sallal's Water System Superintendent, and in addition another certified water operator, provides 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. A full time General Manager, Office Manager and part time administrative assistant/accountant manage the Association's North Bend Office at 44021 S.E. Tanner Rd, #E, North Bend, WA 98045.

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 substances resulting from the presence of animals or from human activity.

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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

TAP VS. BOTTLED

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/waterdrinking/bw/exesum.asp.

SAMPLING RESULTS FOR SALLAL WATER ASSOCIATION 2016

PWS# 91-0848340

During the past year, we have taken numerous water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state allows us 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. In September 2016 and again in November 2016, Sallal had Coliform violations in the Riverpoint area of our system. The situation was resolved and further samples were good.

REGULATED SUBSTANCES

Substance (units of measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low - High	Violation?	Typical Source
Nitrate-N ¹ (ppm)*	2016	10	10	ND	ND	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Turbidity ² (NTU)	2016	TT	NA	0.5	0.5 - 0.5	No	Soil runoff.

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

Substance (units of measure)	Year Sampled	AL	MCLG	Amount Detected (90th Percentile)	Sites above AL/ Total Sites	Violation?	Typical Source
Copper (ppm)*	2016	0.02	0.02	0	0/6	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) *	2016	0.002	0.002	0	0/6	No	

SECONDARY SUBSTANCES

Substance (units of measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range Low - High	Violation?	Typical Source
Manganese (ppb)	2016	50	NA	ND	<0.01 - <0.01	No	Leaching from natural deposits
Zinc (ppm)	2016	5	NA	ND	<0.2 - <0.2	No	Runoff/leaching from natural deposits; Industrial wastes

¹ Nitrate in drinking water at levels above 10ppm is a 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 advice from your health care provider. Sallal tested for Nitrate in April 2016: the results were ND.

² Turbidity is a measure of cloudiness in the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

³ Next test will be in December 2017

***Key to abbreviations used in chart: UNIT DESCRIPTIONS: ppm** (Parts per Million), **ppb** (Parts per Billion), **mg/L** (Milligrams per Liter)

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 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.

MRDLG 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 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 (e.g. chlorine, chloramines, chlorine dioxide).

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 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).

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. We are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap 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.



HOW LONG CAN I STORE DRINKING WATER?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.