

2019 DRINKING WATER QUALITY REPORT

Water is a life-essential resource. Yet, at less than a penny a gallon, it costs very little compared to its value. Your water rates pay for everything it takes to operate our water system, from storage and treatment, to delivering the water to your tap. Your water rates also help pay for water system improvements that ensure that we will provide high-quality drinking water for generations to come. As this year's Drinking Water Quality Report shows, this is an exceptional value for the clean, safe, great-tasting drinking water you receive.



Silver Lake Water & Sewer District

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TASTE VALUE QUALITY

An Overview of Your Water

Where Is Your Water From?

Your drinking water comes from the Spada Lake Reservoir, located about 30 miles east of Everett, at the headwaters of the Sultan River. Created in 1964, this 50 billion gallon storage facility collects rain and snowmelt from the Cascade Mountains, via the Upper Sultan River Watershed. This 80+ square mile watershed is one of the wettest in the continental United States, with an average annual rainfall of 165 inches—five times the rainfall in Everett. To protect the naturally pristine water in Spada Lake Reservoir, water quality in the Sultan Basin is carefully monitored, the watershed is patrolled, and human activities are limited to minimize the impact on water quality; security measures are evaluated and adjusted on an ongoing basis.

Who Oversees Your Water Quality?

Your drinking water is regulated by the Environmental Protection Agency (EPA), who sets drinking water quality standards, establishes testing methods and monitoring requirements for water utilities, sets maximum levels for water contaminants, and requires utilities to give public notice whenever a violation occurs.

Who Tests Your Water?

Your drinking water is tested 365 days a year by Silver Lake Water and Sewer District to ensure that high quality water is delivered to your home. Tests are done before and after treatment, and while your water is in the distribution system.

How is Your Water Tested?

Over 200 compounds are tested and not detected; most of this monitoring occurs once every several years. The Tables on the following two pages list all contaminants detected in the most recent required water testing along with the limits and goals set by the EPA and the State of Washington to ensure your tap water is safe. Not shown are more than 200 additional contaminants that were tested for, but not detected, in your drinking water. If you have questions about your water quality, feel free to contact us at (425) 337-3647. Please note: no asbestos monitoring is required for our District because all the asbestos pipe in our system was replaced before 1991.

How Safe is Your Water?

Your water falls safely within state and federal guidelines and significantly below the EPA's levels.



Precipitation and snowmelt from the Cascade Mountains are collected in Spada Lake Reservoir.



From Spada, water travels to the City's water treatment plant at Chaplain Reservoir.



The Everett Drinking Water Treatment Plant treats the water using coagulation, flocculation, filtration, and disinfection.



Water transmission lines carry drinking water to Silver Lake Water & Sewer District.



This water serves over 570,000 people... roughly 80 percent of all homes and businesses in Snohomish County.

2019 Water Quality Analysis Results for Silver Lake Water & Sewer District

Detected Regulated Contaminants			EPA Regulations		SLWSD Water Results		
			Ideal Goal (MCLG)	Maximum Allowed (MCL)	Range or Other	Avg. or Highest	Comply?
Parameter	Major Source	Units					
Total Coliform Bacteria	Naturally present in the environment	% Positive	0	5% Positive per Month	None	0%	Yes
Total coliform bacteria monitoring tracks microbial quality in the water distribution system. SLWSD collects 70 samples per month. No more than 5% of monthly tests can be positive. No total coliforms were detected in 2019.							
Fluoride	Dental health additive	ppm	2	4	0.03–0.7	0.7	Yes
Fluoride is added to your water in carefully controlled levels for dental health. The minimum value of 0.03 ppm was due to a maintenance-related feed outage that lasted no more than one day in duration.							
Residual Disinfectant Level (free chlorine)	Added as a disinfectant to drinking water	ppm	4.0 (MRDLG)	4.0 (MRDL)	0.2–1.2 ¹	0.79	Yes
Haloacetic Acids (5) (HAA5)	By-product of drinking water chlorination	ppb	N/A	60	23.9–39.3 ²	36.7 ³	Yes
Total Trihalomethanes (TTHM)	By-product of drinking water chlorination	ppb	N/A	80	18.8–53.2 ²	49.3 ³	Yes

Haloacetic acids and trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes.

¹Chlorine residuals collected from sample locations throughout the distribution system. ²Range of results. ³Highest locational running annual average.

MONITORING VIOLATION: Per WAC 246-290-71001, the District is required to provide public notification of any water quality monitoring violations. Prior to 2019, the District was required to collect samples from four sites on a quarterly basis to test for disinfection by-products. Due to population growth, the District crossed the threshold that requires eight sites be sampled each quarter. The District collected samples from the four sites for the winter and spring quarters of 2019, instead of the required eight. However, the District did collect the required samples from the eight sites for the summer and fall quarters of 2019, after receiving approval for the additional site locations from the Department of Health. The District did not exceed the maximum contaminant level for disinfection by-products in 2019, and public health was never at risk.

Turbidity	Soil erosion	NTU	N/A	TT	100%	0.07	Yes
Turbidity is a measure of the number of particulates in water expressed in Nephelometric Turbidity Units (NTU). Particulates in water can include bacteria, viruses and protozoans that can cause disease. Turbidity measurements are used to determine the effectiveness of the treatment processes in removing these particulates. The EPA turbidity limit is 0.3 NTU. The values reported are the lowest monthly percentage of samples that met the EPA limit and the highest four-hour combined water turbidity measurement obtained during the year. In 2019, no filtered water turbidity results were above the EPA limit, so the lowest percentage was 100 percent. The plant targets production of filtered water turbidities of 0.10 NTU or less.							

Detected Unregulated Contaminants			SLWSD Results	
Parameter	Units	Ideal Level / Goal (MCLG)	Range Detected	Average Value
Bromodichloromethane	ppb	0	0.9–2.1	1.6
Chloroform (trichloromethane)	ppb	70	17.9–51.4	33.0
Dichloroacetic Acid	ppb	0	5.1–15.6	12.1
Trichloroacetic Acid	ppb	20	14.3–26.3	19.3
Monochloroacetic Acid	ppb	70	2.4–3.3	0.6

These substances are disinfection by-products for which no MCL standard has been set, but which must be monitored to determine compliance with the USEPA Stage 2 Disinfection By-products Rule MCLs for Total Trihalomethanes and Haloacetic Acids (5).

Detected Contaminants from Unregulated Contaminant Monitoring Rule 4 (UCMR4)			SLWSD Results	
Parameter	Major Source	Units	Range Detected	Average Value or Highest Result
Manganese	Naturally present in the environment	ppb	0.7–5.8	2.6
Dichloroacetic Acid	By-product of drinking water chlorination	ppb	2.7–14.6	10.8
Monochloroacetic Acid	By-product of drinking water chlorination	ppb	<2.1–3.4	1.0
Trichloroacetic Acid	By-product of drinking water chlorination	ppb	15.6–26.9	20.9
Bromochloroacetic Acid	By-product of drinking water chlorination	ppb	<0.3–0.5	0.4
Bromodichloroacetic Acid	By-product of drinking water chlorination	ppb	<0.5–0.6	0.2
HAA(5)	By-product of drinking water chlorination	ppb	25.9–39.6	32.7
Brominated Haloacetic Acids (HAA6Br)	By-product of drinking water chlorination	ppb	<0.4–1.1	0.5
Haloacetic Acids (9) (HAA9)	By-product of drinking water chlorination	ppb	25.9–40.1	33.2

All samples were taken in the distribution system.

Lead, Copper, and pH

			EPA Regulations			Everett Water Results	
			Ideal Level/ Goal (MCLG)	Action Level (AL)	90th % Level	Homes Exceeding the Action Level	Comply?
Parameter	Major Source	Units					
Lead	Plumbing, erosion of natural deposits	ppb	0	15	2	0 of 108 (0.0%)	Yes
Copper	Plumbing, erosion of natural deposits	ppm	1.3	1.3	0.141	0 of 108 (0.0%)	Yes
<p>USEPA and state regulations require water systems to monitor for the presence of lead and copper at household taps every three years. Lead and copper monitoring is conducted by Everett and many of the water systems that it supplies including Silver Lake in the combined service area as a regional group. The above data was collected in 2018. The next required round of sampling will be in 2021. The 90th% level is the highest result obtained in 90 percent of the samples collected when the results are ranked in order from lowest to highest. In the past, the results for water tested before it enters household plumbing were even lower than the tap results. This indicates that there is virtually no lead or copper in the water and that household plumbing may contribute to lead and copper at the tap.</p>							
pH	Soda ash is added to reduce water corrosivity by increasing pH and alkalinity	s.u.	Daily Avg 7.6	Min. Daily Avg. 7.3	Avg. 7.6	Min. 7.0	Yes

The Washington State Department of Health requires Everett to operate corrosion control treatment at or above a minimum daily average pH of 7.4. Everett measures pH six times per day (once every four hours). The average daily pH cannot be below 7.4 for more than nine days every six months. In 2019, the average daily pH dropped below 7.4 for one day.

Lead and Copper Monitoring Results

Our regional water supply does not contain lead or copper. However, it is possible that lead levels at your home may be higher than other homes in the community as a result of your home's plumbing materials.

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. Silver Lake Water & Sewer District is 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 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 at 1.800.426.4791 or at www.epa.gov/safewater/lead.

People With Special Concerns

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 microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Required Polymer Statement

During water treatment, organic polymer coagulants are added to improve the coagulation and filtration processes that remove particulates from water. The particulates that are removed can include viruses, bacteria and other disease causing organisms. The USEPA sets limits on the type and amount of polymer that a water system can add to the water. In addition to the EPA limits, the State of Washington requires that all polymers used be certified safe for potable water use by an independent testing organization (NSF International). During treatment, Everett adds only NSF approved polymers and the levels used are far below the safe limits set by the USEPA.

Table Definitions

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 allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

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.

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

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

NTU: Nephelometric Turbidity Unit

Nephelometric Turbidity Unit - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Spada Lake Reservoir supply in 2019 is 0.06 NTU.

NA - Not applicable: the EPA has not established MCLGs for these substances.

ND - Not detected.

ppm - 1 part per million = 1 mg/L
= 1 milligram per liter.

ppb - 1 part per billion = 1 ug/L
= 1 microgram per liter

1 ppm = 1000 ppb.

How the EPA Monitors Water Quality

All water sources (both tap water and bottled water) contain impurities. As water flows 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 surface water, 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 surface water and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may 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 U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount 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.

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 any of the following:

EPA Safe Drinking Water Hotline

1-800-426-4791 • [www.https://www.epa.gov/ground-water-and-drinking-water](https://www.epa.gov/ground-water-and-drinking-water)

Silver Lake Water & Sewer District

425-337-3647 • www.slwsd.com

City of Everett Water Quality Office

425-257-8800 • www.everettwa.gov/water

State Department of Health

1-800-521-0323 • www.doh.wa.gov/ehp/dw

Ensuring Adequate Supply

Water is a precious resource. Conservation helps ensure adequate supply to meet the needs of people, industries, businesses and farms, while also keeping fish and other aquatic life alive and well.

As a member of the Everett Water Utility Committee (EWUC), Silver Lake Water & Sewer District participates in a regional water conservation program, planned and developed collaboratively with the water systems we serve, and funded from water system revenues.

More than \$7.9 million has been invested in regional water conservation activities since 2001. This includes such activities as school education, indoor and outdoor water conservation kits, rebates for water efficient clothes washers and toilets, leak detection, business water audits and school irrigation audits. Through these efforts, we have saved more than 5.6 million gallons per day (MGD)—enough water to fill more than 132,704 bathtubs a day.

Conservation planning occurs in six-year cycles as part of Everett's comprehensive water system plan. The first plan covered the period from 2001 through 2006, the second from 2007 through 2012. Everett's current plan covers the period from 2013 through 2019. Like the previous programs, it includes school education and conservation kits, along with new activities to assist large water users.

In 2019, the following activities helped us save an estimated 0.67 million gallons per day (MGD) regionally:

- 544 water conservation workshops conducted in classrooms throughout Snohomish County, reaching more than 12,153 students;
- 2,900 indoor conservation kits and 4,300 outdoor conservation kits delivered throughout Snohomish County.

5 Ways to Conserve Water

1. Check your toilet for leaks (#1 cause of high water bills)—limited quantities of Indoor/Outdoor Conservation Kits available at the District's Office.
2. Turn off the water while brushing your teeth, shaving, or scrubbing a dirty pan.
3. Install water-saving shower heads.
4. Check indoor faucets, outdoor faucets, hoses, and hoze nozzles for leaks.
5. Deep-soak your lawn vs daily watering, and apply mulch around plants and trees to hold moisture.



Your Water is Safe from Coronavirus (COVID-19)

According to the World Health Organization (WHO) and the Center for Disease Control (CDC) the virus that causes COVID-19 has not been detected in drinking water.

Conventional water treatment methods that use filtration and disinfection, as is the case with your water, should remove or inactivate the virus that causes COVID-19. The Silver Lake Water and Sewer District also maintains a chlorine residual that is above the state minimum of .2 ppm and in line with the suggested .5 ppm that is shown to be effective in keeping viruses like COVID-19 out of the water system.

According to the WHO, water, sanitation and hygienic conditions are essential for protecting human health during infectious disease outbreaks; we take pride in providing you these essential services. We are also taking steps to keep our customers and employees safe to prevent any disruption of these services. While we have closed our office to the public until further notice, we are still here to serve you. You may still contact us during business hours by phone at (425) 337-3647 or email at service@slwsd.com. After hours, you can reach us at (425) 337-3647 for emergencies.

Why Tap Water is Better than Bottled (and not just in an emergency)

Four Reasons to Stop Buying Bottled Water:

1. The COVID-19 virus has not been detected in tap water. Standard procedures for tap water filtration, disinfection, and treatment removes or inactivates the virus.
2. Each year, 17 million barrels of oil are used to produce the plastic for bottled water (equivalent to 340 million gallons of gasoline).
3. Only 1 in 5 of these plastic water bottles gets recycled.
4. Bottled water is much more expensive than tap water.



Tap water is the safest, most environmentally sound, and least expensive way to remain hydrated.

CONSERVE BE INFORMED GET INVOLVED

We at Silver Lake Water & Sewer District encourage public interest and participation in the decisions that affect our drinking water. If you would like to learn more about water quality, or would like to know what you can do to help keep our water supply clean, safe and abundant, please don't hesitate to contact us.

Silver Lake Water & Sewer District

(425) 337-3647
www.slwsd.com

City of Everett Water Quality Office

(425) 257-8800
www.everettwa.gov/water

State Department of Health

1-(800) 521-0323
www.epa.gov/safewater

YOUR OPINION MATTERS

In addition to calling or emailing us, you are welcome to attend and comment at District Commissioner meetings, held on the 2nd and 4th Thursdays of each month. Currently these meetings are being held by telephone conference, rather than at our Administration Office, until Washington state's Governor gives the "all clear" for in-person meetings post-COVID-19. Visit our webpage at www.slwsd.com for more information.

Silver Lake Water & Sewer District Board of Commissioners:

- Anne Backstrom
- John Warner
- Shauna Willner



**Silver Lake
Water & Sewer District**

