

# Water Quality Report 2023

PWS ID# 809158



The City of Snohomish Is Delivering

## Safe Reliable Drinking Water for *Your Family*

The City of Snohomish is proud to share the 2023 Water Quality Report. This report explains where City water comes from, how we manage quality control, and facts about your drinking water. This is a part of our commitment to provide excellent drinking water to your homes and businesses every day. Sourced from protected watersheds, our water far surpasses all federal and state water quality standards.

Affordably delivering hundreds of millions of gallons of safe, clean water every day doesn't just happen automatically. The quality and reliability of your drinking water is the result of the dedication and expertise of the City's Public Works water staff, who work tirelessly to ensure that our customers have access to high-quality tap water whenever they need it. Our employees go above and beyond to protect our most precious resource so that everyone in Snohomish has access to safe drinking water.

Many residents may have noticed emergency repairs over the last year, especially in the older portions of town. Our

water system was primarily installed in the 1920's and 30's and is reaching the end of its expected life. We are currently establishing a water distribution improvement plan that will systematically rebuild our aging underground infrastructure based on condition, priority and need. The maintenance and improvements we have planned require major work and investment but will insure safe and reliable benefits for the residents of Snohomish today and long into the future.

In 2023 improvements to the water distribution system included 2 new sample stations and 3 existing stations where updated. Sample stations are used to verify water quality in various locations throughout the water distribution system. More sample stations will be installed in 2024. Staff collected over 1300 chlorine samples for water quality compliance. In addition to the sample stations, 1,410 LF of 8" ductile iron pipe was replaced due to age of pipe.

Nova Heaton, Public Works Director

## TABLE DEFINITIONS

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

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

**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 contamination.

**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.

**NA:** Not applicable

**ND:** Not detected

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water.

**Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)** form as by-products of the chlorination process that is used to kill or inactivate disease causing microbes.

**Turbidity:** A measurement of the amount of particulates in water 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 used to remove these particulates.

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.

### Unregulated Contaminant Monitoring Rule 5 (UCMR5)

The City collected quarterly samples at the entry point to the water distribution system according to the Fifth Unregulated Contaminant Rule (UCMR5). These samples were tested for 29 per- and polyfluoroalkyl substances (PFAS) and lithium. No PFAS or lithium were detected. The full results for the UCMR5 are available at [everettwa.gov/WQsummary](http://everettwa.gov/WQsummary).

The City of Snohomish will be executing the same testing beginning in 2025. We are not expecting any variance from Everett results, and our findings will be included in next year's report.

### Message from the EPA

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 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. The City of Snohomish 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 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://water.epa.gov/drink/info/lead>.

## WATER USE EFFICIENCY UPDATE 2023

Everett provides water to the majority of water systems in Snohomish County and administers a regional water use efficiency program. The program is planned and developed with the water systems they serve, and funded from water system revenues. More than \$8.8 million has been invested in regional water conservation activities since 2001. Our current water use efficiency program includes such activities such as school education, indoor and outdoor water conservation kits, leak detection kits and support, and commercial indoor/outdoor water audits. Through these efforts, we have saved more than 8.27 million gallons per day - enough to fill more than 195,277 bathtubs daily.

In 2023, 546 workshops were conducted with school classes throughout Snohomish County, reaching 14,355 students. Water systems provided 2,200 conservation kits, 675 kitchen aerators and 4,296 outdoor conservation items.

These activities saved an estimated 0.68 million gallons per day regionally.

### City of Snohomish Programs

#### The City of Snohomish School participants were:

1. Cascade View Elementary -Lesson: Water You Know
2. Emerson Intermediate Center-Lessons: Water You Know
3. Water You Share
4. Machias Elementary-Lesson: Water you Know
5. Cascade View Elementary-Lesson: Water You Share
6. Reaching out to a total of 455 students

### Simple Ways to Make Your Home More Water Efficient:

1. Install low-flow bathroom fixtures. According to the USGS water science school, the average American uses about 80 to 100 gallons of water per day! Toilets and showers are the two biggest sources of consumption.
2. Collect water from your roof for plants
3. Drive to the car wash
4. Install a shower timer
5. Wash full loads of dishes or laundry

### 5 Ways To Save Water (and Money)



Fix Water Leaks



Use a Garden Hose Nozzle



Take Shorter Showers



Install Efficient Toilets



Wash Full Loads

Snohomish has high quality water,

# Where does it come from?

The City of Snohomish has two sources for providing drinking water: the City of Everett and Snohomish County PUD #1.

Approximately 90% of our water is purchased from the City of Everett with the remainder purchased from Snohomish County PUD. The City of Snohomish is still responsible for operation and maintenance of 35 miles of pipe in the water distribution system.

## CITY OF EVERETT (City of Snohomish Customers)

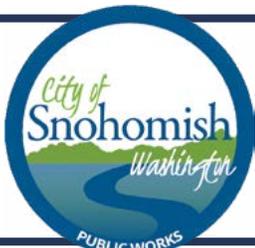
City of Everett water is supplied from Spada Reservoir, which was created in 1965. The reservoir holds about 50 billion gallons of water and is located about 30 miles east of Everett in the Sultan Basin Watershed. From Spada Lake the water flows through about 7 miles of tunnels and pipelines to Chaplain Reservoir where the City of Everett water treatment facility is located. Chaplain Reservoir holds about 4.5 billion gallons of water. City of Everett water is supplied to the City of Snohomish through four connections to Everett's No. 5 transmission line across the north end of town.

**SNOHOMISH COUNTY PUD #1 SUPPLY:** (Transmission Line Customers) Snohomish County PUD #1 water is produced from two wells located at their treatment facility located northeast of downtown Lake Stevens. The water from these wells receives treatment for iron and manganese removal and is chlorinated. Fluoride is added to match levels found in the City of Everett drinking water. The water from this treatment facility is then blended with water received from the City of Everett in the distribution system. Snohomish PUD water is supplied to the City of Snohomish through a system intertie located on Robe Menzel Road & North Carpenter Road.



## IT MAY BE TIME TO RE-THINK BOTTLED WATER

Microscopic pieces of plastic are everywhere. Now, they've been found in bottled water in concentrations 10 to 100 times more than previously estimated. Water bottles can be susceptible to contamination because of the prolonged contact between the water and the plastic packaging material.



### COMMUNITY PARTICIPATION

You are invited to participate in our public City Council meetings and voice your compliments or concerns about our drinking water. We meet on the first and third Tuesday of each month, beginning at 6:00 p.m. at 105 Cedar Avenue, Snohomish, Washington 98290, in the downstairs meeting room of the historic Carnegie Building.

**SAMPLING RESULTS:** During the past year, hundreds of water samples have been taken in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

**CITY OF SNOHOMISH**

Analyte	Year	MCL	MCLG	Average	Range	Violation
Chlorine (ppm)	2023	4	4	0.55	0.05-1.29	No
Haloacetic Acids (ppb)	2023	60	NA	28.7	20.6 - 49.8	No
Total Trihalomethanes (ppb)	2023	80	NA	40.7	26.9 - 67.2	No
Total Coliform (% Positive)	2023	5% month	0	1*	NA	No

Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The City of Snohomish collects 12 coliform samples per month from dedicated sites within our service area. In 2023, total coliform was detected in 1 sample, however all repeat samples were satisfactory and no fecal coliform or E. coli were detected.

Analyte	Year	Action Level (AL)	MCLG	90th Percentile	Homes Exceeding AL	Violation
Copper (ppm)	2021	1.3	1.3	0.093	0/108	No
Lead (ppb)	2021	15	0	2.0	0/108	No

Analyte (Unregulated)	Year	MCL	MCLG	Average	Range <sup>1</sup>	Violation
Bromodichloromethane (ppb)	2023	NA	NA	1.9	1.2 - 2.6	No
Chloroform (ppb)	2023	NA	70	38.8	19.6 - 64.6	No
Monochloroacetic Acid (ppb)	2023	NA	20	2.1	0.0 - 2.4	No
Dichloroacetic Acid (ppb)	2023	NA	NA	9.8	2.5 - 25.3	No
Trichloroacetic Acid (ppb)	2023	NA	20	18.4	12.5 - 22.4	No

These substances are individual disinfection by products for which no MCL or MCLG standard may have been set, but must be monitored to determine compliance with the USEPA Stage 2 Disinfection by-products Rule MCL's for Total Trihalomethanes and Haloacetic Acids (5).

**SNOHOMISH COUNTY PUD #1**

Analyte	Year	MCL	MCLG	Average	Range <sup>1</sup>	Violation
Turbidity (NTU)	2023	TT	NA	0.02	0.01 - 0.04	No
Fluoride (ppm)	2023	4	2	0.7	0.50-0.89	No

Analyte	Year	Daily Avg	Min Daily Avg	Average	Range	Violation
pH (SU)	2023	7.4	NA	7.34	6.0-10.6	No

**CITY OF EVERETT**

Analyte	Year	MCL	MCLG	Average	Range	Violation
Turbidity (NTU)	2023	TT	NA	0.02	0.01-0.04	No
Fluoride (ppm)	2023	4	2	0.7	0.50 - 0.89	No

Fluoride is added to your water in carefully controlled levels for dental health.

Analyte	Year	Daily Avg	Min Daily Avg	Average	Minimum	Violation
pH (SU)	2023	7.4	NA	7.34	6.0 - 10.06	No

Soda ash is added to reduce water corrosivity by increasing pH and alkalinity. 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 2023, the average daily pH was below 7.4 for one day from the east clearwell discharge point.

# We Need Your Help!

There is no detectable lead or copper in the water supply, however lead is a serious contaminant and may be found in the water of some homes due to older plumbing. If present, elevated lead levels can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily introduced from materials and components associated with private service lines and household plumbing and fixtures.

By October 2024, water systems must submit a service line inventory to the State of Washington, Department of Health. The purpose is to identify and eliminate any lead piping in our plumbing systems.

Through extensive records research, the City has identified most of the materials used between the water main and the meter. Unfortunately, our records usually didn't include the private line from the meter to the structure. If you know what type of material your water line is, please email your address along with the type. Typical lines are made of plastic or copper.

It is important to note that with all our research, we have not identified any lead service lines and lead is not typically used in this part of the State.

**If the pipe appears corroded, it can be challenging to identify immediately. If you're uncertain, use a scraping tool and gently scrape a small section of the pipe:**

- **Lead Pipe:** If the scraped area appears shiny and silver, your service line is made of lead.
- **Copper Pipe:** If the scraped area is copper color, like a penny, your service line is copper.
- **Galvanized Steel Pipe:** If the scraped area remains a dull gray, and magnet sticks to the surface, your service line is composed of galvanized steel.

If you can determine the material used in your supply line and/or internal plumbing, please let us know at [caldwell@snohomishwa.gov](mailto:caldwell@snohomishwa.gov) or call Kathy at 360.282.3165.

Copper



Galvanized Steel



Plastic



Lead



## Fats Oils and Grease (FOG)

**Never pour FOG down your drain.**

Instead, cool it, can it and put it in the trash. FOG in your pipes can solidify, backup, and cause costly repairs and damage to your house and the public sewer system.





## What does it mean to flush a water main and why are you doing it?

Last year, the city water department flushed nearly five miles of water main. Water main flushing is the process of cleaning or “scouring” the interior of water distribution mains (pipes) by sending a rapid flow of water through the mains. Distribution mains convey water to homes, businesses and hydrants in your neighborhood.

Flushing helps maintain water quality. The water entering distribution mains is of very high quality; however, water quality can deteriorate in distribution mains if the mains are not properly managed. Flushing the lines removes sediments from the mains and helps to remove water that can get caught in dead ends.

When you see a ‘Water Main Flushing in Progress’ sign in your neighborhood, it means that some part of the area is being flushed.

Sometimes during flushing, some sediment may get into your home’s plumbing. If this happens, please be patient and allow your cold water to run for a few minutes at full velocity. During this time, you should avoid using hot water to prevent sediment accumulation in your hot water tank.

We are environmentally responsible by de-chlorinating the water before it enters our storm drains, streams, lakes and rivers.



## Cross Connections and You!

**Did you know common hazards in and around your house can contaminate your drinking water as well as your neighbors’?**

**These hazards are known as cross-connections, and can result in contaminated water back-flowing into your home’s drinking supply without you even knowing.**

### **TWO COMMON CROSS-CONNECTIONS ARE:**

Any hose is a cross-connection when left submerged in a swimming pool, laundry sink, or car wash bucket.

To protect your water from these cross connections, make sure to have air vacuum breakers installed on each of your hose bibs.

These simple devices are inexpensive and can be purchased from your local hardware store. They are easy to install; you just screw them on.

Your in-ground irrigation system is also a cross connection so make sure to do the following:

1. Confirm your irrigation system has a back flow assembly device, if not, get one installed.
2. Test the backflow prevention device annually.
3. Turn in your test results to the City of Snohomish Water Department.

**If you have any questions, please contact Kathy Caldwell, Water Quality Control Specialist at 360-282-3165 or [caldwell@snohomishwa.gov](mailto:caldwell@snohomishwa.gov)**