

# WATER QUALITY REPORT

## 2018

Este Informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

### THE CITY OF SNOHOMISH PROVIDES

# Exceptional water to you!

Once again we are proud to present our annual water quality report. This edition covers all testing completed from January through December 2018. We are pleased to tell you that our compliance with state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users. For more information about this report, or for any questions relating to your drinking water, please call Ann Ray, Water Quality Control Specialist at 360-282-3165.



### WATER USE EFFICIENCY UPDATE 2018

Over the course of 2018 and as part of the Regional Water Use Efficiency (WUE) program, our education outreach program within our water service area provided 16 presentations at three schools reaching 312 students and families. The regional program had a savings of 660,000 gallons per day, our contribution to the regional goal is 9,702 gallons per day.

Over 2019, we will be updating our WUE Program in conjunction with the Regional Program administered by the City of Everett.

Purveyors are required to update their programs every six years, our last update was 2014. Through the update process there will be an

opportunity for public input and comment on the proposed next six year plan, later this year during a City Council meeting.

We have available for our water customers, indoor and outdoor conservation kits. They are available for pick up or delivery to your residence. Indoor kits may contain: a low flow shower head, moisture meter for soil, and faucet aerators. Outdoor kits may contain: hose nozzle, watering timer, and moisture meter for soil. Conservation kits are available for pick up at City Hall, 116 Union Avenue or contact Ann Ray at [ray@snohomishwa.gov](mailto:ray@snohomishwa.gov) for delivery.

# Fight F.O.G.

(Fats, Oils & Grease)

Keep Fats, Oils and Grease Out of Your Drain and Prevent Clogged Pipes and Sewer Back-ups!

- 1 Pour cold fats, oils and grease into a covered, disposable container and throw it into your garbage. Never pour fats, oil or grease down sink drains or toilets.
- 2 Soak up spilled oils and grease with an absorbent material such as paper towels or kitty litter and throw into your garbage.
- 3 Before you wash dishes: scrape food scraps, fats, oils and grease into your garbage.
- 4 Use sink strainers to catch any remaining food waste while washing dishes.



## PREVENTION, REDUCTION AND ELIMINATION OF FATS, OILS AND GREASE

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## 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 wastewater 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.

## 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 Ann Ray, Water Quality Control Specialist at 360-282-3165.



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.

In January 2017, the City of Snohomish stopped operations of its own Water Treatment Plant located in Granite Falls on the bank of the Pilchuck River. Until then about 65% of our water was purchased from the City of Everett. Now about 90% our water comes from the City of Everett with the remainder 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 five 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 interconnection located on Robe Menzel Road in Granite Falls.



## What is the Unregulated Contaminant Monitoring Rule?

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years the EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). This rule benefits public health by providing EPA and other interested parties with scientifically valid data on the national occurrence of selected contaminants in drinking water. This dataset is one of the primary sources of information on occurrence, levels of exposure and population exposure the EPA uses to develop regulatory decisions for contaminants in the public drinking water supply.

The fourth Unregulated Contaminant Monitoring Rule (UCMR4) was published in the Federal Register on December 20, 2016. UCMR4 requires monitoring for 30 chemical contaminants between 2018 and 2020. This monitoring provides a basis for future regulatory actions to protect public health. Under UCMR4, all community water systems and non-transient, non-community water systems serving more than 10,000 persons must participate.

During UCMR4, we will conduct sampling for nine cyanotoxins, one cyanotoxin group, three brominated halo-acetic acids, disinfection byproducts groups, and seventeen additional contaminants including two metals, eight pesticides plus one pesticide manufacturing byproduct, three alcohols and three semi-volatile organic chemicals

EPA's selection of contaminants for a particular UCMR cycle is largely based on a review of the Contaminant Candidate List (CCL). The UCMR program was developed in coordination with the CCL.

The CCL is a list of contaminants that:

- Are not regulated by the National Primary Drinking Water Regulations
- Are known or anticipated to occur at public water systems
- May warrant regulation under the SDWA

If you have questions, please contact Ann Ray at 360-282-3165 or ray@snohomishwa.gov. Additional information can be found at: [www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule](http://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule)



## **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 the Snohomish School District Resource Center in the George Gilbertson Room, 1601 Avenue D, Snohomish, Washington 98290.

**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

Contaminant	Year	MCL	MCLG	Amt Detect	Range <sup>1</sup>	Violation
Chlorine (ppm)	2018	4	4	0.54	0.1 - 1.1	No
Haloacetic Acids (ppb)	2018	60	NA	32.5 <sup>2</sup>	6.2 - 54.8 <sup>3</sup>	No
Total Trihalomethanes(ppb)	2018	80	NA	40.9 <sup>2</sup>	28.1 - 63.4 <sup>3</sup>	No
Total Coliform (% Positive) <sup>4</sup>	2018	5% month	0	1	NA	No

<sup>1</sup> Range of results when more than one sample taken per year

<sup>2</sup> Highest Locational Running Annual Average of all four monitoring locations

<sup>3</sup> Range of results taken from all four monitoring locations

<sup>4</sup> Total Coliform bacteria monitoring tracks the microbial quality of the water in the distribution system. Snohomish collects 132 samples per year. One routine sample collected in November 2018 was positive. The follow up samples at this location and in the area were negative.

Contaminant	Year	Action Level (AL)	MCLG	90th Percentile	Homes Exceeding AL	Violation
Copper (ppm)	2018	1.3	1.3	0.061	0/31	No
Lead (ppb)	2018	15	0	0.8	0/31	No

USEPA and State regulations require water systems to monitor for the presence of lead and copper at household taps every three years. Snohomish in conjunction with the City of Everett participate in a regional monitoring program. The above data was collected in 2018. 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.

Contaminant (Unregulated)	Year	MCL	MCLG	Amt Detected	Range <sup>1</sup>	Violation
Bromodichloromethane (ppb)	2018	NA	NA	1.7	1.1 - 2.7	No
Chloroform (ppb)	2018	NA	70	39.3	26.9 - 61.4	No
Monochloroacetic Acid (ppb)	2018	NA	20	2.7	2.2 - 3.1	No
Dichloroacetic Acid (ppb)	2018	NA	NA	10.9	2.2 - 19.1	No
Trichloroacetic Acid (ppb)	2018	NA	20	21.3	2.8 - 37.7	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 MCLs for Total Trihalomethanes and Haloacetic Acids (5).

### Detected Contaminants from Unregulated Contaminant Monitoring Rule 4 (UCMR4) Sampling

Contaminant (UCMR4)	Year	Units	MCLG	Amt Detected	Range <sup>1</sup>	Violation
Manganese	2018	ppb	N/A	0.86	0.86 - 0.86	No
Bromochloroacetic Acid	2018	ppb	N/A	0.5	0.5 - 0.5	No
Bromodichloroacetic Acid	2018	ppb	N/A	0.8	0.7 - 0.9	No
Chlorodibromoacetic Acid	2018	ppb	N/A	0.9	0.9 - 0.9	No
Brominated Haloacetic Acid	2018	ppb	N/A	1.3	0.7 - 2.3	No
Haloacetic Acids (HAA9)	2018	ppb	N/A	23.9	7.9 - 34.3	No

### 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).

### CITY OF EVERETT

Contaminant	Year	MCL	MCLG	Amt Detect	Range <sup>1</sup>	Violation
Turbidity (ntu)	2018	TT	NA	0.06	100%	No
Fluoride (ppm) <sup>5</sup>	2018	4	2	0.7	0.03 - 0.9	No

Contaminant	Year	Daily Avg	Min Daily Avg	Average	Minimum	Violation
pH (s.u.)	2018	7.6	7.4	7.6	7.3	No

Everett is required to operate corrosion control treatment at or above a minimum daily average pH of 7.4. The average daily pH cannot be below 7.4 for more than nine days every six months. In 2018, the average daily pH dropped below 7.4 for two days.

### SNOHOMISH COUNTY PUD #1

Contaminant	Year	MCL	MCLG	Amt Detect	Range <sup>1</sup>	Violation
pH (s.u.)	2018	7.4	NA	7.4	6.8 - 8.2	No
Turbidity (NTU)	2018	TT	NA	0.09	100%	No
Fluoride (ppm) <sup>5</sup>	2018	4	2	0.7	0.5 - 0.9	No

<sup>5</sup> Fluoride is added in carefully controlled levels for dental health

### 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.

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>.