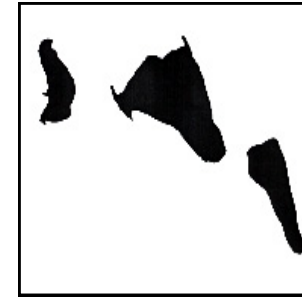
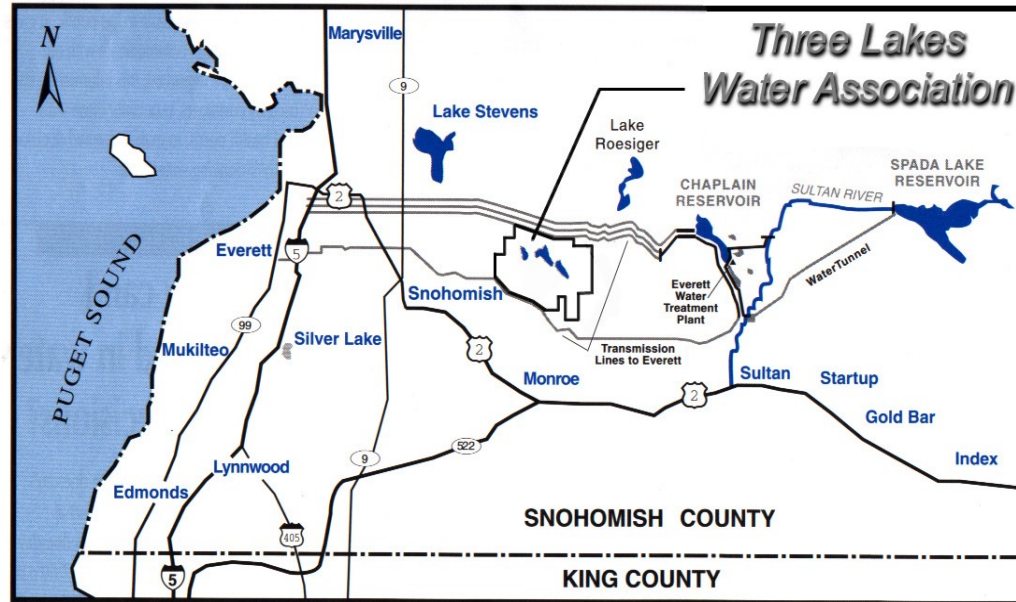


## ANNUAL WATER QUALITY REPORT

Three Lakes Water Association  
P.O. Box 24  
Snohomish, WA 98291  
(360) 568-8022



## THREE LAKES WATER ASSOCIATION

# 2017 Annual Water Quality Report

March 2018

### What's in Your Drinking Water?

The Three Lakes Water Association is pleased to provide our customers with our 20th annual water quality report. The purpose of this water quality report is to inform our customers about the high quality of their drinking water and their water system. We want you to know where your water comes from, what it contains, and how it compares to stringent state and federal water quality standards.

The water you drink is supplied from Spada Lake, which is managed by the City of Everett. A map located on the last page of this report illustrates the City's supply system which provides service to many water systems in the area. Drinking water quality is determined by testing for a variety of natural and man-made contaminants that can enter the water system.

The City of Everett conducts an aggressive testing program which goes beyond the government requirements. Of the more than 175 substances the City tested for this past year, most were not detected and those that were detected were found at levels far below the most stringent drinking water standards. Please read through this report and if you have any questions, please contact the Water Association at (360) 568-8022.



Spada Lake

#### Drinking Water Source

The source of your drinking water is rain and snowmelt collected in the Spada Lake Reservoir, which is located in the Sultan Basin Watershed. Water from this 50 billion gallon reservoir flows through a tunnel and pipeline to Chaplain Reservoir where it is held in preparation for treatment. The City of Everett maintains five large transmission pipelines, which run between the Chaplain Reservoir and the City. The Three Lakes Water Association obtains your water from two different taps located on two separate Everett transmission mains.

#### Required Monitoring Violation Statement

The City of Everett is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During March, April and May 2017, the City of Everett did not complete all monitoring or testing for turbidity, and therefore cannot be sure of the quality of your drinking water during that time. There is nothing you need to do. At no time was the quality of your drinking water compromised. The City of Everett water treatment plant has resolved the problem and taken steps to prevent a repeat occurrence.

#### Bottled Water

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

#### Cross-Connection Control

On January 21, 2008 the Association's Board approved a Cross-Connection Control Program as required by the Washington State Department of Health (DOH). The full text of this program is available at the Association office. The program describes the purveyor's responsibility to protect the water system from contamination via cross-connections.

What's a cross-connection? Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the

pressure in the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to unusual occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool, animal water trough or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals.

#### Water Use Efficiency


In October 2010, the State Supreme Court affirmed that the 2003 Municipal Water Law applies to privately-owned systems, including this Association. With the recent adoption of its new water system plan, the Association extended the goal to reduce annual average day demand per connection by 0.5% per year. The measures planned to achieve this goal include system-wide leak detection efforts and customer conservation. There has been a total of over 25.7 million gallons in net savings for the nine years since the goal was originally set! Please continue to do your part!

**Be Water Smart!**

#### Association Website/Facebook

The Association has a new and improved website at [www.3lwa.org](http://www.3lwa.org) with enhanced communication and online billing capabilities. We also have a Facebook page to help you stay connected. Like our page to stay informed about Association news updates.

**Residential Tap Monitoring for Lead and Copper**

 <p><b>Combined Regional Monitoring for Lead and Copper</b></p>				
Parameter & Units	MCLG	Action Level	90th % Level	# Homes exceeding action level
Copper, ppm	1.3	1.3	0.122	0 of 108 (0.0%)
Lead, ppb	0	15	2	0 of 108 (0.0%)
Source of Contamination: Corrosion of household plumbing system. USEPA and state regulations require water systems to monitor for the presence of lead and copper at household taps every three years. Everett and many of the water systems it supplies conduct lead and copper monitoring in their combined service area as a regional group. The above data was collected in 2015. The next required round of sampling will be 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.				

The City of Everett's source waters contain virtually **no lead or copper**. If present, elevated levels of lead can cause serious health problems, especially for pregnant women

**Additional Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons – such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, or some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

During water treatment, organic polymer coagulants are added to improve 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 USEPA.

**Definitions**

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

**ppm/ppb** – One part per million/one part per billion. A part per million means one part of a particular contaminant is present for every

and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Three Lakes Water Association 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 two 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 **(1-800-426-4791)** or at <http://www.epa.gov/safewater/lead>

Although there is no detectable lead in water, tests from household taps in the distribution system show there can be low levels of lead and copper in tap water. This is primarily caused from corrosion of household plumbing systems. You may potentially have small levels of lead and copper in your home. Everett treats the water to minimize the potential for lead to enter the water and the results indicate that the program is successful.

The Three Lakes Water Association contributes to this testing by providing randomly taken water samples to the City for testing. The results provided in this report represent all testing performed by the City of Everett.

million parts of water. Similarly, parts per billion indicate the amount of a contaminant per billion parts of water.

**Maximum Contaminant Level Goal (MCLG)** - 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.

**Maximum Contaminant Level (MCL)** - 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.

**Maximum Residual Disinfectant Level (MRDL)** - 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.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - 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.

**N/A** – Not Applicable. Means the EPA has not established MCLGs for these substances.

**Turbidity**—Turbidity is a measure of particulates suspended in water in Nephelometric Turbidity Units (NTU) and is an important test in determining drinking water quality. Particulates in water can include bacteria, viruses and protozoans that can cause disease.

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

**Association Office and Meetings**

In order for the Association to exist, we need interested Board members. Please volunteer and help out your Association. Monthly Board meetings are held at the office located at 17503 58th St SE on the 2nd Tuesday of each month at 7 pm. Come join us!

**2017 Water Quality Monitoring Results**

As water travels over the land, it dissolves natural minerals and picks up other substances produced by human and animal activities. The Dept. of Health and the U.S. Environmental Protection Agency sets national standards for over 100 potential drinking water contaminants.

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, *Cryptosporidium* and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline **(1-800-426-4791)**.

The results for the 2017 testing of your water supply are illustrated in the table below. The first column lists each compound tested and the units of measure. The second and third is the highest levels allowed by the U.S. EPA. The fourth column illustrates the levels found in the City of Everett's drinking water supply, including an average and a range. The last column shows the source of the compounds.

All of the compounds found in the City of Everett's water supply were found to be at **levels lower than the maximum allowed** by the U.S. EPA.

Detected Parameter & Units of Measure	EPA's Goal (MCLG)	Maximum Allowed (MCL)	Levels in your water		Complies with Required Levels Compliance	Where does it come from? Typical Sources
			Average or Highest	Range or Other		
Turbidity, NTU <sup>1</sup>	N/A	TT	0.15	100%	<b>YES!</b>	Soil Erosion
Fluoride, ppm <sup>2</sup>	2	4	0.7	0.2-0.8	<b>YES!</b>	Dental health additive
Total Trihalomethanes (TTHM), ppb <sup>3</sup>	N/A	80	56	32-59	<b>YES!</b>	By-product of drinking water chlorination
Haloacetic Acids (5) (HAA5), ppb <sup>3</sup>	N/A	60	39	22-43	<b>YES!</b>	By-product of drinking water chlorination
Total Coliform Bacteria, % positive samples <sup>4,5</sup>	0	5% positive per month	none	0%	<b>YES!</b>	Naturally present in the environment
Residual Disinfectant Level (free chlorine), ppm	4.0 (MRDLG)	4.0 (MRDL)	0.6	0.2-1.1	<b>YES!</b>	Added as a drinking water disinfectant
Detected Unregulated Contaminants						
Bromodichloromethane, ppb	0	N/A	1.8	1.1-2.7	These substances are disinfection by-products for which no MCL Standard has been set, but which must be monitored to determine compliance with the EPA MCL's for Total Trihalomethanes and Haloacetic Acids (5).	
Chloroform (trichloromethane), ppb	70	N/A	41	30-56		
Dichloroacetic Acid, ppb	0	N/A	13	3-18		
Trichloroacetic Acid, ppb	20	N/A	21	17-24		

<sup>1</sup>The EPA turbidity limit is 0.3 NTU. In 2017, no filtered water turbidity results exceeded 0.3 NTU so the lowest percentage that met EPA limit was 100%. During the months of March, April and May 2017, an equipment malfunction caused erroneous turbidity data to be recorded and reported to the Dept. of Health. Although the problem was resolved and correct data was provided to the Dept. of Health, this constitutes a monitoring violation that requires public notification. See the Required Monitoring Violation Statement on the last page of this report.

<sup>2</sup>Fluoride is added to your water in carefully controlled levels for dental health.

<sup>3</sup>Haloacetic acids and trihalomethanes form as by-products of the drinking water chlorination process. The TTHM and HAA5 results are from eight locations in Everett which are monitored to determine compliance with the current regulations.

<sup>4</sup>Total coliform bacteria monitoring tracks the microbial quality in the water distribution system. Everett collects approximately 125 samples per month and no more than 5 percent of the monthly tests can be positive. No total coliform was detected in 2017.

<sup>5</sup>The Association samples twice per month for disease-causing organisms. These samples are taken from representative points in the Association's distribution system on regular time intervals. All samples taken had satisfactory results.