

Lake Whatcom Water and Sewer District

Annual Drinking Water Quality Report

South Shore Service Area (WA State ID# 959101)

2016 Consumer Confidence Report

What is this report?

In accordance with the Federal Government's Re-authorization of the Safe Drinking Water Act of 1996, all public and private water utilities are required to prepare and provide annual drinking water quality reports to their customers. As well as being required by Federal Law, we want to keep you informed about the excellent water and sewer services delivered to you over the past year. Our goal is to provide safe, dependable, and high quality drinking water.

Where does the drinking water come from?

The drinking water supplied to your home originates from Lake Whatcom, a surface water source. Lake Whatcom Water and Sewer District draws its water from Basin #3 of Lake Whatcom near Sudden Valley. The water enters our water filtration plant where it undergoes filtration and disinfection. The water produced is very high quality, and Lake Whatcom Water and Sewer District is pleased to report the drinking water is safe and meets or exceeds all federal and state requirements.

What's in the drinking water?

Lake Whatcom Water and Sewer District routinely monitors the drinking water in accordance with Federal and State laws. Included are the results for seven constituents that are regulated by the U.S. Environmental Protection Agency (USEPA) and were detected during the period of January 1st to December 31st, 2016. To obtain a complete listing of all constituents, please contact the District. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents and/or contaminants. It's important to remember that the presence of these constituents does not necessarily pose 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 (800) 426-4791. Abbreviations and terms used in this report include:

Parts per billion (ppb)

Parts per million (ppm)

Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Maximum Contaminant Level – The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water everyday at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum Disinfection Residual 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 Contaminant Level Goal – The "Goal" (MCLG) is 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.

N/D- Non Detectable

Information for persons with compromised immune systems

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. United States Environmental Protection Agency and Centers for Disease Control (USEPA/CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the toll free Safe Drinking Water Hotline at (800) 426-4791.

Testing completed by Lake Whatcom Water and Sewer District and State certified laboratories.

Detected substance	Violation Yes/No	2016 (or most recent) Level	MCL, AL or MRLD	MCLG	Likely Source of substance
Barium	No	.006 ppm	2 ppm	2 ppm	Erosion from natural deposits, discharge from metal refiners, discharge of drilling waste
Chlorine	No	Of the free chlorine residual samples that were collected with our required bacterial samples in the distribution system the average chlorine residual was .57 ppm with a range of .10 ppm to 1.00 ppm	4 ppm (MRLD) maximum in distribution system	2 ppm minimum to first customer in distribution system	Added at Water Treatment Plant for disinfection
Nitrate	No	.48 ppm	10 ppm	10ppm	Erosion from natural deposits, runoff from fertilizer, sewage, leaching from septic tanks
Copper	No	The 90 th percentile value of 24 homes sampled showed copper at a level of 278 ppb with a range of 17 ppb to 572 ppb	1300 ppb	1300 ppb	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives
Lead	No	The 90 th percentile value of 24 homes sampled showed lead at a level of 5ppb with a range of N/D to 8 ppb	15 ppb	0 ppm	Corrosion of household plumbing, erosion of natural deposits
TTHM Total Trihalomethanes	No	35.9 ppb	80 ppb	N/A	By-product of drinking water chlorination
HAAs Halo-acetic Acid	No	16.8 ppb	60 ppb	N/A	By-product of drinking water chlorination
Turbidity	No	0.04 NTU*	1.0 NTU	N/A	Soil runoff

Facts about detected substances

Barium – Some people who drink water containing barium in excess of the MCL for many years could experience an increase in their blood pressure. Barium is a lustrous, machinable metal which exists in nature only in ores containing mixtures of elements. Barium is used in electronic components, metal alloys, bleaches, dyes, ceramics, glass, and fireworks, as well as well drilling operations where it is released directly in to the ground.

Chlorine – Chlorine is used as a water disinfectant. Disinfection is the most important step in the water treatment process to destroy pathogenic bacteria and other harmful agents. Chlorination is a very common and effective method for the disinfection of your drinking water. Your water provider is required to maintain a free-chlorine residual throughout their water distribution system.

Nitrate – Infants below the age of six months who drink water containing nitrates in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Copper – Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Lead – Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development, including slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. In Sudden Valley and Geneva, lead is not found in the treated water, but lead in drinking water can come from pipes and faucets in our homes. Lake Whatcom 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 at least 30 seconds 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 (800) 426-4791, or online at <http://www.epa.gov/safewater/lead>

TTHMs (Total Trihalomethanes) & HAAs (Halo-Acetic Acids) – Some people who drink water containing trihalomethanes or Halo-Acetic Acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Turbidity – Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

*0.07 NTU was the maximum instantaneous operational level recorded, 0.07 NTU was the maximum hourly average recorded, 0.07 NTU was the maximum daily average recorded. The annual daily average was 0.04 NTU.

Questions or Concerns about your water?

For questions regarding this report or concerning your water utility, please contact Lake Whatcom Water and Sewer District Water Treatment Plant Operator Kevin Cook at (360) 734-9224. To learn more, please attend any of our regularly scheduled Board of Commissioner meetings.

- ◆ Second Wednesday of each month at 6:30 pm
- ◆ Last Wednesday of each month at 8:00 am

Meetings are held at the District office at 1220 Lakeway Drive at the beginning and end of each Regular meeting, there is a public comment period where you may express any questions or concerns to the Board.

Cross Connections may be hazardous to your health

What is a Cross Connection? A cross connection is any actual or potential physical connection between a potable (i.e., drinkable) water line and any pipe, vessel, or machine containing a non-potable fluid, solid, or gas where the non-potable substance can enter the potable water system by backflow. Garden hoses left connected and turned on when not in use can easily contaminate your home plumbing system. For questions or concerns about potential Cross Connections, please contact Lake Whatcom Water and Sewer District employee Rich Munson at (360) 734-9224.

Do I have any obligations regarding cross connections? Yes, if your residence has an in-ground irrigation system, heat pump, boiler or any other type of identified cross connection that requires a backflow prevention device, you are required to have the device inspected annually by a State Certified Backflow Assembly Tester.

REMEMBER: a cross connection not only threatens your health and safety, but that of your neighbors and the community as whole, so **PLEASE** do your part to prevent them.

Conservation

Inefficient and or leaking faucets, toilets, and excessive outdoor watering account for a significant amount of water that is treated at water treatment plants. Lake Whatcom Water and Sewer District would like to encourage voluntary water conservation, and there are many simple ways to help in this effort. By installing water saving shower heads, kitchen and bathroom faucets and low flow toilets, an average residence will save 25% or more water in a day than a residence without. **We request voluntary even numbered addresses to only water outside on Tuesdays, Thursdays and Saturdays, and odd numbered addresses to water on Wednesdays, Fridays and Sundays, with no outdoor watering on Mondays.** Lake Whatcom Water and Sewer District is a metered system, so saving water means saving money. Water may seem like an unlimited resource in the Pacific Northwest, but there is a limit, and it can only be plentiful for all future generations if we all do our part in conserving this precious resource.

Our commitment to our customers

Lake Whatcom Water and Sewer District staff is on duty around the clock to provide the safest and best quality water service to every home. We ask that all of our customers help us protect our precious water sources which are the heart of our community, our way of life, and our children's future.