

Sam Lake Improvement Association

Water Quality Report

2021

Consumer Confidence Report for the Year 2021

We're pleased to present to you the 2021 Annual Water Quality Report. This report is designed to inform you about the quality of the water that was provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We believe the information provides a valuable service to our customers.

Your drinking water is highly regulated by the EPA and is tested regularly. Keeping pace with upgraded water testing and more stringent federal standards is a challenge but one that Sam Lake Improvement Association strongly supports. Our constant goal is to provide you with a safe source of drinking water.

Who We Are...

Sam Lake Improvement Association is a water utility of 69 active connections. Our water sources consist of 2 wells and 1 reservoir. Well #1 is 420 feet deep and is used as an emergency source. Well #2 is 276 feet deep and provides approximately 50 gallons of water per minute. After the water is drawn from the well then, we add disinfectant (chlorine) to protect you against microbial contaminants.

Our Board of Directors consists of 5 members working with Water & Wastewater Services, LLC, a certified water manager, to bring you good quality water. Annual meetings may be postponed due to COVID-19. If you have any questions or concerns regarding this water utility, your water, or this report we will be happy to answer them. **In case of emergency, please call Water & Wastewater Services, LLC our water system manager, at 1-800-895-882.1 or 360-630-0970.**

Presence of Contaminants in Drinking Water

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 the EPA's Safe Drinking Water Hotline (800-426-4791).

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 before we chlorinate it 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 storm water 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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations.

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 (800-426-4791).

Water Quality Data

The table below lists all the drinking water contaminants that were detected during the 2021 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2021. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terminology

MCLG (Maximum Contaminant Level Goal): the level of a contaminant allowed in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL (Maximum Contaminant Level): the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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

ND (Not Detected)

ppm (parts per million or milligrams per liter (mg/L)): about the same as ½ an aspirin tablet dissolved in a bathtub full (50 gallons of water)

ppb (parts per billion or micrograms per liter): about the same as 1 dissolved aspirin tablet in a 100,000-gallon swimming pool.

Inorganic Contaminants	MCL	MCLG	Sam Lake Water	Range of Detections	Sample Date	Violation	Typical Sources of Contaminant
Arsenic (ppb)	0.010	0	0.007	0.007	2019	NO	Erosion of natural deposits; runoff from orchards
Nitrate (ppm)	10	10	1.51	1.51	2021	NO	Runoff from fertilizer use
Lead & Copper	MCL	MCLG	Sam Lake Water	Total # of Samples / # Exceeding AL	Sample Date	Violation	Typical Sources of Contaminant
Lead (ppb)	0.015	0	ND	5 / 0	2019	NO	Corrosion of household plumbing system
Copper (ppm)	1.3	1.3	0.005-0.082	5 / 0	2019	NO	Corrosion of household plumbing system
Disinfection Byproducts	MCL	MCLG	Sam Lake Water	Range of Detections	Sample Date	Violation	Typical Sources of Contaminant
Haloacetic Acids (ppb)	60	0	ND	ND	2020	NO	By-product of drinking water disinfection
Total Trihalomethanes (ppb)	80	0	ND	ND	2020	NO	By-product of drinking water disinfection
Disinfection Byproducts	MRDL	MRDLG	Average Level Detected	Range of Level Detected	Sample Date	Violation	Typical Sources of Contaminant
Chlorine (ppm)	4.0 (MRDL)	4 (MRDLG)	0.699	0.30-1.45	2021	NO	Water additive to control microbes
Synthetic Organic Contaminants	MCL	MCLG	Sam Lake Water	Range of Detections	Sample Date	Violation	Typical Source of Contamination
Herbicides	N/A	N/A	ND	ND	2018	NO	Runoff from herbicide used on row crops
Radioactive Contaminants	MCL	MCLG	Sam Lake Water	Range of Detections	Sample Date	Violation	Typical Sources of Contaminant
Gross Alpha (pCi/l)	15	0	ND	ND	2020	NO	Erosion of natural deposits
Gross Beta (pCi/l)	50	0	ND	ND	2020	NO	Decay of natural and man-made deposits
Radium 228	5	0	ND	ND	2020	NO	Erosion of natural deposits
Disinfection Byproducts	MCL	MCLG	Sam Lake Water	Range of Detections	Sample Date	Violation	Typical Sources of Contaminant
Total Coliform Bacteria	0	0	ABSENT	ABSENT	2021	NO	Naturally present in the environment

Additional Information for Haloacetic Acids: Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Additional Information for Trihalomethanes: Some people who drink water containing Trihalomethanes 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.

Additional Information for Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Additional Information for Lead in Drinking Water: 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. Sam Lake Improvement 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 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 or at <http://www.epa.gov/safewater/lead>. We have learned through our monitoring and testing that some elements have been detected. The EPA has determined that your water **Is SAFE** at these levels. Every month our system is tested for Fecal Coliform Bacteria. All water samples came back from the lab with a good report. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements.

Additional Information

Why do the taste and odor of my water sometimes differ? Water naturally varies in taste and odor at different times of the year. Taste and odor problems can also come from new or old pipelines, plumbing fixtures or changes in water quality. Customers may notice changes during severe winter storms, when reservoirs are low, or during hot weather. Sam Lake Improvement Association closely monitors such changes to ensure they do not affect the safety of the water.

Security – We all need to be careful! While Washington State's Division of Drinking Water has never been lax regarding this issue, they have implemented more stringent guidelines to be sure that all that can be done is being done to protect your quality water. Four topics being focused on are 1) Emergency Response, 2) Sanitary Surveys, 3) Operator Certifications, and 4) Enforcement. Sam Lake Improvement Association wholly supports the DOH in these efforts and continues to do all that can be done to maintain good quality water.

IMPORTANT WATER CONSERVATION TIPS:

Bathroom:

- Check toilets for leaks. Drop food coloring or a leak-detection tablet in the toilet tank. If color appears in the bowl, there is a leak that requires immediate attention.
- Reduce the water level per flush by installing a water displacement device in the toilet tank. A plastic bottle, weighted with water or sand works well. Never use a brick.
- Install water-saving showerheads or flow restrictors, which are available at local hardware stores and other retail outlets.
- Check faucets and pipes for leaks. A small drip from a worn washer can waste 20 or more gallons a day. Larger leaks waste even more.

Kitchen & Laundry:

- Turn the dishwasher and washing machines on only when full.
- Buy and install a faucet aerator.

Lawn & Garden:

- Water only when needed. Frequency depends on the type of plants and soil conditions.
- Water the lawn in the evening when evaporation is less likely to occur. Avoid watering during the heat of the day or when windy. Use a broom, not a hose when cleaning driveways and walkways.