



City of Silverton

Data from 2018

ANNUAL DRINKING WATER QUALITY REPORT



503-873-8679 | 306 S. Water Street, Silverton, OR | silverton.or.us



WELCOME TO THE 2018 DRINKING WATER QUALITY REPORT

The purpose of this report is to share information with our customers regarding the quality of your drinking water and to convey basic knowledge of our water system. Using data collected in 2018, this report summarizes information about your supply source, the water system facilities that deliver water to your tap and the quality of your drinking water.

Providing safe, high quality drinking water is our top priority. We continually strive to adopt new methods for delivering the best quality drinking water to you, the consumer.

WATER SOURCES AND TREATMENT

Sources of Supply

The majority of the water that Silverton uses comes from Abiqua Creek at a point about 7 miles upstream of Silverton. The Abiqua basin drains approximately 80 square miles of mostly privately-owned land. Abiqua Creek is 30 miles long and originates at the 3600' level in the Western Cascade foothills in Marion County near the Clackamas County line. After traveling by gravity through a 21" ductile iron pipe to Norway Street where it transitions to a 14" steel pipeline, the water enters the City's Water Treatment Plant at the corner of Ames and East Main Streets.

Water is also drawn from Silver Creek and pumped from an intake station by the Community Swimming Pool to the Water Treatment Plant. In order to ensure an adequate supply of water is available for pumping, the City stores 1,300 acre-feet (about 423 million gallons) in the Silverton Reservoir.



Source Water Assessment

A Source Water Assessment for the City of Silverton's surface water from Abiqua Creek was completed in 2018 and the report for the Silverton Reservoir was completed in 2002. The assessment consists of (1) identification of the Drinking Water Protection area, (2) identification of potential sources of pollution within the Drinking Water Protection area, (3) determination of the susceptibility or relative risk to the surface water from those sources. Copies of the reports are on file with the City of Silverton Public Works Department at Silverton City Hall.

WATER QUALITY INFORMATION FROM THE EPA

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline 1-800-426-4791.

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.



Special Precautions

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.

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.



Contaminants in Drinking Water May 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 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.

WHAT WE TEST FOR IN YOUR DRINKING WATER

The City of Silverton routinely monitors your drinking water for contaminants in accordance with federal and state laws. In 2018 drinking water delivered to the Silverton community met all EPA and State of Oregon drinking water health standards. The water received no drinking water quality violations, as certified by independent testing laboratories.

Information about Lead

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 Silverton 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 www.epa.gov/safewater/lead.

Cyanobacteria and Cyanotoxins and Our Drinking Water System

The Safe Drinking Water Act (SDWA) protects public health by regulating the nation’s public drinking water supply and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. The SDWA requires the EPA to publish a list of unregulated contaminants that are known or expected to occur in public water systems in the U.S. that may pose a risk in drinking water. This list is known as the Contaminant Candidate List (CCL).

The cyanotoxins included in the most recent CCL are produced by several cyanobacteria, known as blue-green algae. Cyanobacteria are photosynthetic bacteria that share some properties with algae and are found naturally in lakes, streams, ponds, and other surface waters. Similar to other types of algae, when conditions are favorable, cyanobacteria can rapidly multiply in surface water and cause “blooms”. Cyanobacterial blooms can be harmful to the environment, animals, and human health. Exposure to cyanobacteria and their toxins could be by ingestion of drinking water contaminated with cyanotoxins and through direct contact, inhalation and/or ingestion during recreational activities. Exposure can result in a wide range of symptoms in humans including fever, headaches, muscle and joint pain, blisters stomach cramps, diarrhea, vomiting, mouth ulcers and allergic reactions. Effects can occur within minutes to days after exposure.

In Oregon last summer, in response to the cyanotoxins in Detroit Lake and the Salem drinking water system, the Oregon Health Authority and the Department of Environmental Quality mandated all water systems deemed to be at risk to begin regular (every other week) sampling and testing for the presence of cyanotoxin compounds. The Silverton water system was monitored at the Silver Creek intake facility, downstream from the Silverton Reservoir. All of the samples collected were below detectable limits indicating cyanotoxins were not detected at a level associated with a potential health risk.

Water Sampling Definitions

Term	Definition
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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 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 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 contamination.

Term	Definition
(N/A)	Not Applicable
(ND)	Not Detected
(NTU)	Nephelometric Turbidity Units
(PPM)	Parts per Million
(PPB)	Parts per Billion
(mg/L)	Milligrams per Liter
(MRL)	Test Method Reporting Limit

WATER QUALITY MONITORING RESULTS

Substance	Goal (MCLG)	Highest Level Allowed (MCL)*	Range Detected or Overall Results	Sample Date/Freq.	Source of Substance	Violation
INORGANIC CHEMICALS						
Barium ppm*	ND	2.0	ND	3/20/2018	Discharge of drilling wastes Erosion of natural deposits	No
Sodium ppm*	N/A	25.0	7.02 mg/L	4/18/2018	Naturally present in the environment	No
Silver Creek Nitrate ppm*	10	10.0	0.510 mg/L	Multiple dates in 2018	Runoff from fertilizer use; Leaching from septic tanks, sewage;	No
Abiqua Creek			ND		Erosion from natural deposits	
Fluoride ppm*	2	4.0	0.3 – 0.8	Daily	Erosion of natural deposits; Water additive which promotes strong teeth	No
MICROBIOLOGICAL						
Turbidity NTU	N/A	0.3	0.03 – 0.17	Every 15 minutes	Erosion and soil runoffs	No

COPPER AND LEAD TESTING (every three years)

Substance	Goal (MCLG)	Action Level (AL)*	90th Percentile	Homes Exceeding AL	Sample Date 2017	Source of Substance	Violation
Copper ppm*	1.3	1.3	<0.1	0	9/12 /2017 9/13/2017	Corrosion of household plumbing systems	No
Lead ppb*	0	1.5	<0.002	0	9/12 /2017 9/13/2017	Corrosion of household plumbing systems	No



RESULTS OF MONITORING BYPRODUCTS OF WATER CHLORINATION

Variable	Haloacetic Acids mg/L	Total Trihalomethanes mg/L
Minimum Amount Detected	N/D	0.00696
Max Amount Detected	0.00592	0.0126
EPA Limit	0.06	0.08
MRL*	0.003	0.0005
Source of Contaminant	Byproducts of drinking water disinfection	
In Compliance	YES	YES

THE CITY OF SILVERTON WANTS YOU TO KNOW...

Cross Connection Control protects your water purity. One of the measures the City of Silverton takes to ensure the safety of your drinking water is the implementation of a Cross Connection Control Program. The program is designed to prevent used water or other substances from returning back to the water supply. Cross connections occur when an actual or potential unprotected connection is made between drinking water and any substance which is not drinking water. Some examples of cross connection are lawn irrigation systems and fire sprinkler systems. These cross connections require mechanical units called backflow prevention assemblies.

As a water customer you are required to maintain your plumbing system and to comply with annual backflow preventer testing. More information on the cross connection program can be found by contacting the program coordinator at 503-874-2206 or visit www.silverton.or.us/crossconnection.



Public Participation Opportunity

The City of Silverton Public Works Department invites all interested citizens to join them at City Council meetings which provide opportunities for public participation in decisions that may affect the quality of the water. Meetings are held on the 1st working Monday of each month at the Community Center Council Chambers, 421 S. Water Street, Silverton, Oregon.

Request a Paper Copy

You are likely reading this report online, rather than a traditional paper copy sent by mail. The Environmental Protection Agency recently changed the requirements to allow utilities to communicate this important information digitally. Customers are still able to request a paper copy and can do so by calling 503-874-2206 or by visiting Silverton City Hall at 306 S. Water Street, Silverton, OR.

Utility Billing

For information about your water bill or to stop/start your water service, call the Finance Department at 503-873-5321 or visit our website at www.silverton.or.us/utilities.

Questions About Your Water?

If you have any questions about this report, please contact Steve Starnier at 503-873-5439.



503-873-8679 | 306 S. Water Street, Silverton, OR | silverton.or.us