



City Of Scio, Oregon



ANNUAL DRINKING WATER QUALITY REPORT CALENDAR YEAR 2019

The City of Scio is proud to present the Annual Water Quality Report. This report represents the results of the 2019 drinking water program. The report is a required mandate and meets the specifications set forth by the Environmental Protection Agency (EPA). This report is intended to increase public awareness of drinking water, how it gets from its source to your homes and businesses, and what tests are applied to detect contaminants.

Tap Water: To ensure that tap water is safe to drink, the EPA sets limits on the amount of certain contaminants which, when contained to low levels, remain non-harmful to the user on a public water system. Presence of contaminants does not necessarily indicate a health risk. For more information about contaminants and their potential health effects call EPA's Safe Drinking Water Hotline @ 1-800-426-4791 or log onto <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

Scio's Water Source: Scio's water source stems from two artisan groundwater wells running approximately 300' deep. The water is pumped to a reservoir in lines that serve to fill and to draw from the reservoir. Water is pumped to individual residence from the reservoir. There are rare occasions when a user can get a mixture of water directly from the well, blended with reservoir water. Regardless, of which source the water comes from the water is free from any harmful contaminants.

Water Testing: As required by both Federal and Oregon State laws, the City of Scio routinely tests for water contaminants. A "testing schedule" is used to ensure that all tests are performed in accordance with both federal and state laws. The City of Scio's water testing schedule is as follows:

City of Scio Water Testing Schedule					
Analyte or Group	Sampling Interval	Samples Required	Current Monitoring Period	Last Sample Date	Year to be Tested
NITRATE	Yearly	1	1/1/2020 - 12/31/2020	4/9/2019	2020
LEAD & COPPER	3 Years	10	1/1/2020 - 12/31/2022	4/9/2019	2022
SOC	3 Years	1	1/1/2020 - 12/31/2022	4/9/2019	2022
VOLATILE ORGANICS	3 Years	1	1/1/2020 - 12/31/2022	4/9/2019	2022
RAD - URANIUM	9 Years	1	1/1/2014 - 12/31/2022	7/16/2013	2022
RAD - GROSS ALPHA	9 Years	1	1/1/2017 - 12/31/2025	4/19/2016	2025
RAD - RADIUM 226/228	9 Years	1	1/1/2017 - 12/31/2025	4/19/2016	2025
IOC	9 Years	1	1/1/2014 - 12/31/2022	4/9/2019	2028
ARSENIC	9 Years	1	1/1/2014 - 12/31/2022	4/9/2019	2028
NITRITE	9 Years	1	1/1/2014 - 12/31/2022	4/9/2019	2028
RAD - GROSS ALPHA	9 Years	1	1/1/2017 - 12/31/2025	4/19/2016	2025
RAD - RADIUM 226/228	9 Years	1	1/1/2017 - 12/31/2025	4/19/2016	2025

**** Note not all tests are required annually****

Water Quality Tests for January 1 to December 31, 2019					
Well Tested	Date of Test	Contaminate Tested	Result (ppm or mg/L)	Maximum Contaminate Level (MCL)	
Well 4	4/9/19	ARSENIC	0.00451	0.01	mg/L
Well 4	4/9/19	BARIUM	0.00848	2.0	mg/L
Well 4	4/9/19	SODIUM	22.8	20.0	MG/l
	7/2/19	LEAD & COPPER	0.00326	0.0150	mg/L
	7/2/19	LEAD & COPPER	0.00359	0.0150	mg/L

As illustrated by the table above, the city water was well below the Maximum Contaminate Level for substances tested in 2019.

The Public Works Department is diligent with its measures to ensure water safety for Scio residents. All water test results are on file at Scio City Hall and can be reviewed upon appointment. **The Environmental Protection Agency has determined that the City of Scio's water is SAFE for consumption at all testing levels.**

Maximum Contaminant Levels: More commonly referred to as "MCLs" are standards that are set by the United States Environmental Protection Agency (EPA) for drinking water quality. An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act. The most common sources of contaminants stem from the following:

- Naturally occurring chemicals and minerals (for example, arsenic, radon, uranium)
- Local land use practices (fertilizers, pesticides, livestock, concentrated animal feeding operations)
- Manufacturing processes.
- Sewer overflows.

By comparing the list of contaminants above, to the City of Scio's testing schedule, one can see that the City of Scio has and continues to monitor and test for the most common sources of contaminants. To learn more about Maximum Contaminant Levels (MCLs) log on to <http://ci.scio.or.us> or call Scio City Hall @ 503-394-3342.

Oregon Willamette Valley Water and Soil Substances: Common “natural substances” found in Willamette Valley artisan water well systems are iron, manganese, and sulfur. While these natural substances are not, in and of themselves, harmful they can create annoyances due to the smell and adverse taste impact to the water.

Iron — At sufficient concentration, iron can adversely affect the taste of water and beverages and can leave rust-colored stains on laundry, plumbing fixtures and porcelain.

Manganese — Manganese, while less abundant than iron, can cause similar problems such as a bitter metallic taste in water and leaves visible dark/black “specks” in ice cubes. Manganese can also produce staining and cause the water to have a brown or black discoloration.

Sulfur — Sulfur is notorious for the “rotten egg” type of smell in water. At low temperatures, these gaseous particles are less likely to cause problems. As the weather warms and the reservoir temperature increases, problems resulting from sulfur can increase.

**** The city is not required to test for any of the three substances mentioned above****

Ways to ease problems associated with iron, manganese and sulfur: Flush all water pipes, both within the residence and city water pipes. As the water table lowers in the late summer and fall, the city cannot flush as often due to the reduction of water levels. The city will, however, respond to problems called in during this time of the year. If you experience issues related to these substances after you have flushed your residential pipes and outdoor hoses, please call 503-394-3342 and report your address and the problem and we will do what we can to mitigate the problem.

How to protect your water sources: Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water source by:

- Eliminate excess use of lawn and garden fertilizer and pesticides as they contain hazardous chemicals that can reach your drinking water source.
- Install backflow preventers to reduce the risk of cross connections to the public water supply if you have the following on your property:
 - Sprinkler Systems
 - Accessory Wells
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil to a recycling center.

Refrain from pouring any substances, other than water, into an open water basin.

To report pollution or ask a question about an environmental concern, call the spill hotline at 503-823-7180.

When you conserve water you save money: Did you knowthe average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Here are some ways to low cost and no-cost ways to conserve water.

- Take short showers
- Shut off water while brushing your teeth, washing your hair and shaving
- Use a water-efficient shower-head
- Run your clothes washer and dishwasher only when they are full.
- Teach your kids about water conservation to ensure a future generation that uses water wisely.
- Keep a pitcher of drinking water in the refrigerator instead of letting the faucet run until the water is cool.

For more information visit: www.epa.gov/watersence.

What You Need To Know About Mercury

There is an ever growing need to increase one’s awareness of mercury and the impact it can have on our quality of life. Mercury is a natural occurring element found in air, water and soil. Over exposure to mercury, even in small amounts, may cause serious health problems to the unborn child and people of all ages.

Education about Mercury is broad and opinions differ on the negative and positive effects it can have on our environment and human development. In an effort to educate our water users we are providing the following Environmental Protection Agency website www.epa.gov/mercury/basic-information-about-mercury which gives the reader access to fact sheets and data relating to the subject of mercury and how it fits into our living environment.

- What is Mercury
- Emissions of Mercury into the Air
 - o Emission from Power Plants
 - o Other Causes of mercury Air Emissions
 - o Trends in Air Emissions
 - o Mercury Emissions around the Globe
- Common Exposures to Mercury
- Health Effects Associated with Exposures to Mercury
- Ecological Effects of Mercury Exposure
- Consumer Products that Traditionally Contain Mercury

If you have any questions about this report or concerns regarding your city water, please call Scio City Hall at 503-394-3342. A staff member will be available to assist you or redirect your question to the appropriate staff member. If you have a “water emergency” during regular business hours call 503-394-3342 for assistance. If you have a “water emergency” during closed hours, call 541-619-8152 or 541-405-5723 for assistance.

Regular Business Hours

Monday – Thursday 7:30 a.m. – 5:00 p.m., Friday 7:30 a.m. – 12:00 noon



CONSERVATION TIPS

Water conservation can mean changing habits. It can mean fixing leaks or upgrading inefficient plumbing fixtures. The following tips can help you save water in and around your home.

Leaks

- Leaks are the worst water wasters in your home. Water that leaks does not get used for any beneficial purpose, yet it was treated to be safe to drink.
- Check every faucet, toilet, showerhead, connector, and hose bib around the house for leaks. Even a slow drip can use 15 to 20 gallons of water a day. Larger leaks and running toilets can use up to 100 gallons of water per day or more.
- Check for hidden leaks in your water system. Turn off all the faucets in and around your house, then check your water meter. The water meter is in the meter box located at the front of your house, usually in the sidewalk or grass strip. Wait 15 minutes without turning any water on and check the meter again. If the reading has changed, you have a leak. If you can't locate the leak indoors, check around the yard for wet spots or small patches of very green grass or vegetation. The leak may be in an irrigation line or in the water line running to the house.
- All but the oldest water meters in the Scio Water System have a leak detector built-in. Look on the face of your meter and you should see a red triangle or diamond shape. This is the leak detector, and it is on a much smaller gear than the dials or digits. Any time water is moving through the meter, this detector spins. If you are not using water and the detector is spinning, chances are you have a leak. Fix it!

Toilets

- Check toilets for leaks at least twice per year. Place a dye tablet or several drops of food coloring in the toilet tank (not the bowl). DO NOT FLUSH THE TOILET! Wait at least 15 minutes. After waiting, check the BOWL to see if there is any color. If there is, you have a leak! It is most likely the flapper, but might be the fill valve. Fortunately, both are easy to fix with few or no tools.
- Flush only when needed. Flushing gum wrappers, spiders, or cigarette butts uses water needlessly.
- If you have an older toilet that uses more than 1.6 gallons per flush, put a water displacement device inside the tank. You can make one simply by filling a plastic bottle with water and adding a few stones or marbles to weigh it down. Make sure the bottle doesn't interfere with the movement of any hardware.
- Better yet, consider replacing older inefficient toilets (those made before 1992) with modern High Efficiency Toilets that use 1.28 gallons per flush or less.

Showers and Baths

- Which uses less water, a shower or bath? It depends on how long a shower you take and how deep you fill the tub. Here is a test: Next time you take a shower, put the bung in the tub drain. When you are done, make a note of how deep the water is. You can take a bath with no more than this amount of water and use no more than your shower.
- Are some showerheads better than others? You bet! Look for a showerhead that uses no more than 1.5 gallons per minute. Using a flow restrictor to reduce the flow to an older showerhead may not provide as good of a shower as using a showerhead designed to use less water. To find out how much water your shower uses, either time how long it takes to fill a bucket to a known volume or see how much water flows during a set amount of time.
- How long should I be staying in the shower? Six minutes should be plenty! A six-minute shower with a 2.5 gallon per minute showerhead uses just over 13 gallons of water. If you shower for ten minutes, you use closer to 25 gallons. If you have an older inefficient showerhead, you may be using more than 50 gallons for a ten-minute shower.

Kitchen

- When washing dishes by hand, remember to turn off the water between uses rather than letting the faucet run the whole time you are washing. Even if your sink is fitted with an aerator that restricts flow to 2.2 gallons per minute, washing dishes by hand with the water running easily can use 25 to

50 gallons -- maybe even more. If your faucet does not have a good aerator or flow restrictor, you may be using over 100 gallons of water when letting the water run to wash dishes.

- Instead of washing dishes with the water running, fill a basin with hot soapy water, wash the dishes, then rinse them.
- Automatic dishwashers use the same amount of water per run regardless of whether there's a full load or just a couple of dishes. The trick is to make sure the washer is fully loaded before it is turned on.
- If you are shopping for an automatic dishwasher, look for one with an internal water heater. This will let you set your hot water tank to a lower temperature, and that can reduce the risk of scald injury and save you some money, too.
- If you are shopping for an automatic dishwasher, please consider purchasing one that is water efficient.
- When washing leafy vegetables like lettuce or spinach, wash them in a bowl or basin of water rather than under a running faucet. You may be surprised to find out that soaking can remove sand and grit better than a spray of water.
- In the summer, instead of letting the faucet run until the water is cold, just fill a pitcher of water and keep it in the refrigerator.
- Try composting instead of using a garbage disposal. Your garden will benefit, and you can reduce the use of costly soil amendments.

Laundry

- Typical washing machines can use over 50 gallons of water whether the machine is full or just has a couple items. You can save water by simply washing fewer loads -- just make sure to fill the machine before you turn it on. If your machine has an adjustable water level, set it to the lowest level that will get the load clean.
- If you have been thinking about a new washing machine, make sure to get one that is water efficient. Look for a machine with a "Water Factor" (the number of gallons required to wash one cubic foot of clothes) of 9.5 or less.
- Save hot water and the energy to heat by using detergents formulated for cold water washing. Cold water is gentler on many types of delicate fabrics.

Outdoors

Many people use several times as much water in the summer than they do in the winter. Most of this increase in water use may be attributed to lawn watering. Many people use far more water than needed when watering their lawn. By practicing wise water use, you can save water and still keep your lawn green and healthy. Here are some suggestions:

- Water lawns early in the day. Early morning water is best because water washed bacteria and fungus spores off the plants. Watering in the morning also avoids excess evaporation that can occur later in the day. Deep soaks of about 1 inch once or twice a week are best. This practice encourages deep root growth, which promotes a healthy lawn. You can measure your watering by placing a cup within the range of the sprinkler; when it's about an inch full, it's time to turn off the sprinkler.
- Depending on the type of grass in your lawn, allow it to grow taller in the summer – about 2½ to 3 inches. Taller grass blades provide shade to the roots and reduce water loss from evaporation. Aerating your lawn will help water reach the roots.
- Consider letting your lawn go dormant in the summer. You will only have to water it a couple times, and you won't have to mow as often. Your lawn will turn a golden color during the hot dormant season, but will return to an emerald green with the autumn rains.
- Add water slowly to your vegetable garden, using a small droplet size. Large droplets tend to compact soil, making it difficult for roots to become well established. Most sprinklers are intended for lawns, not gardens, and tend to over apply water causing nutrients to be leached from the soil. Consider installing a drip system to slowly deliver water directly to individual plants.
- When washing the car, try using a bucket of soapy water and a hose with a shut-off nozzle. By reducing the amount of water used to wash the car, you will also reduce the amount of soapy rinse water going to storm drains and area streams.
- Clean gutters and downspouts by hand, instead of using a hose.
- Check all hoses, connectors and spigots regularly for leaks.