

Annual Drinking Water Quality Report For 2020

Monitoring period January 1, 2020, to December 31, 2020

City of Aumsville

PWS ID # 4100065

The 2020 Water Quality Report is a requirement of the FEDERAL SAFE DRINKING WATER ACT and provides the results of the latest tests of the quality of the City's drinking water. This report provides information on the quality of water the City delivers to you every day. Our goal is to provide a safe and dependable supply of drinking water. We want all our citizens to understand the efforts we take to continually improve the water treatment process, ensure our water is safe to drink, and protect groundwater resources. We are committed to ensuring the quality of your water.

LAST YEAR, AUMSVILLE WATER SYSTEM AND DRINKING WATER MET ALL U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) AND STATE DRINKING WATER HEALTH STANDARDS. THE CITY VIGILANTLY SAFEGUARDS ITS WATER SUPPLIES AND WE ARE PROUD TO REPORT THAT OUR SYSTEM HAS NOT VIOLATED A MAXIMUM CONTAMINANT LEVEL OR ANY OTHER WATER QUALITY STANDARD.

Violations

The Oregon Health Authority oversees our water system. The City provides regular water quality test results to the state. The testing of our water is performed by an independent lab. If you would like to see all the water testing performed, you can look it up online. Go to:

<http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx>. Click on Drinking Water Data Online, Click on WS ID Lookup, and enter ID number 41-00065. Check it out!

WHERE OUR WATER COMES FROM

Aumsville's water comes from five groundwater wells located within the city limits. Boone Well #1, Tower Well #2, and Reservoir Well draw from the Eugene formation, which is a deep marine sedimentary rock aquifer. Boone Well #2 and the Church Well draw from the Columbia River Basalt formation, one of the most productive aquifers in the region. Groundwater is drawn from all wells and pumped through a water filter, treated with chlorine then into the one-million-gallon reservoir, then sent directly into the water distribution system. Please note that Boone Well #2 and the Church Well water are from Basalt formations and our biggest water producers. Basalt rock has a high sulfur content and causes taste and odor problems.

If you noticed that Tower Well has become Tower Well #2, you're paying attention. The original Tower Well was losing the amount of water it was producing, so we had to drill another to replace it. The Tower Well has been abandoned and we are now using Tower Well #2. Because this is a new well, many extra water quality tests had to be done.

In 2004, the State Health Division prepared a Source Water Assessment of the city wells. This tells us where our water comes from and identifies potential contaminant sources. This Source Water Assessment has been recently updated in also available to view at city hall or copies are available for purchase.

Ground Water Protection

Groundwater recharge provides water to our streams, lakes, ponds, rivers, and wetlands. Our city uses groundwater for drinking water and the groundwater beneath the homes in our community may travel great distances, eventually surfacing at springs or wells being used as ours or someone else's drinking water source. Animal waste, septic systems, pesticides, fertilizers, motor vehicle fluids, and many other substances all can make it into our drinking water if it is not maintained, used, or disposed of properly. Please do your part to make the effort to make sure our groundwater does not get contaminated. Once groundwater is polluted, it is very difficult and expensive to clean up. It is best to prevent groundwater



pollution in the first place. The future quality of our groundwater and environment will depend upon well-informed and caring citizens.



Sometimes we get complaints that there is so much chlorine in the water that it smells like a swimming pool. It may smell like a swimming pool, but we are not adding additional chlorine. That strong chlorine smell is usually because there is not enough chlorine. What you smell is called Chloramines. This is caused by the reaction of chlorine, organics, and minerals in the water. I know it doesn't seem right, but that's usually it. This problem is usually found on dead-end lines and at the farthest reaches of the distribution system. If you have water quality problems, call us and we'll come out and see what we can do to make the water better. Our water does have a fair amount of iron and manganese. These minerals can settle to the bottoms of our water lines. When this happens because of high water demand, such as a fire hydrant being

opened, this sediment can get stirred up in the lines and you see dirty water. Again, call us so we can get that cleared up as soon as possible.

It is recommended to flush your water heater once a year. This should extend the life and flush minerals that have accumulated at the bottom of the tank. Follow safety procedures when doing this, like turning the breaker off for electricity. For gas, turn the gas valve to the pilot light. There have been times that on some older, not flushed often water heaters that I flush that will then have leaks after flushing. Flushing may loosen rust and corrosion in weak parts of the tank that may then leak.

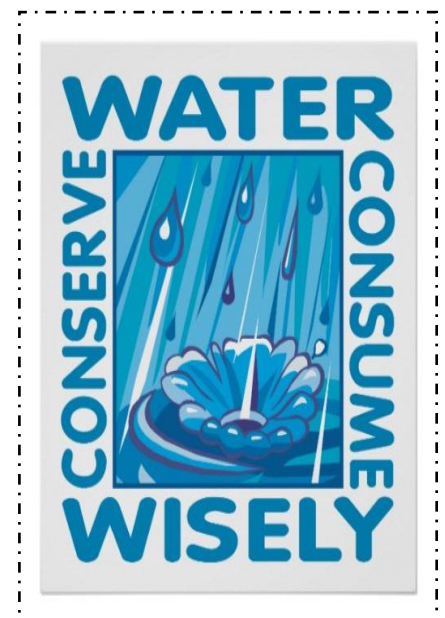
We, at the City of Aumsville, are working very hard to provide top-quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Please email me at soslie@aumsville.us with ideas, suggestions, and comments (good or bad). Also, talk to your city council members; they are the governing body that represents you.

IRRIGATION SYSTEMS AND BACKFLOW ASSEMBLIES

As a water user in Oregon, you are required to follow the laws about irrigation systems and the installation of backflow assemblies. **If you have an irrigation system, you are required to have a backflow assembly correctly installed and tested every year to protect the public water system from contamination.** Failure to obtain a plumbing permit, install, and test these assemblies can result in having your water service turned off. The City does not charge for the inspection, but a Marion County plumbing permit is required, and the owner is required to pay for the annual testing costs. For further information on backflow assembly requirements, contact Public Works Director Oslie at 503-749-1185.

Helpful Tips for Reducing Outdoor Water Use:

- A lawn only needs approximately one inch of water during the week to stay healthy and green.
- Like the color brown? Let your lawn go to sleep (dormant) for the summer. There are certain cases where you should water your lawn. If you have new sod or grass, excessive thatch buildup, poor soil conditions, or if it has been damaged by insects or disease, your lawn may not survive a period of dormancy.
- Water your lawn efficiently by properly maintaining and adjusting your irrigation system regularly.
 - Look for broken sprinkler heads and misdirected spray.
 - Be sure to check how much water you are applying weekly by adjusting your watering schedule. Some controllers will run irrigation water more than once a day.
 - Set your watering schedule for early in the morning or late in the evening to avoid water loss from evaporation.
 - Add a weather sensor to your irrigation system that shuts off your system when it is raining outside to help conserve water.



- Water outside pots and planters using a hose nozzle or watering can.
- Plant native plants that use less water once established.
- Encourage healthy root growth by watering deeply and infrequently. It is better to give your lawn a healthy dose of water a few times a week rather than a little bit of water every day.

Conserving Aumsville's drinking water is easy to do and can save you money on your water bill. You can help conserve water in two ways. You can make behavioral changes to your everyday activities or you can replace older, inefficient fixtures in your home with newer, low-flow fixtures. Behavioral changes include things like taking shorter showers, using a hose nozzle to wash your car, sweeping off patios and decks instead of washing them off, running full loads in your dishwasher or clothes washer. Behavioral changes can save water without any additional costs. Retrofitting or replacing your older fixtures can cost you money upfront, but should immediately help you save water and see savings on your next water bill.

What EPA Wants You to Know

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 Safe Drinking Water Hotline (800-426-4791).

LEAD TAINTED WATER IN THE NEWS

Still in the news, Flint, Michigan lead-tainted water continues to go on and so with many other cities in the US that have lead water service lines. Flint is still in the news and is slowly addressing the failures in its water system. We want you to know that Aumsville's water system does not have lead service lines and the chemistry of the water does not corrode and leach lead out of the pipes as easily. Every 3 years, the City samples water from some homes that have copper water lines with lead soldered joints built during the years of lead-based solder. When replacing home fixtures, buy quality lead-free brands. Federal Legislation has brought about the Reduction of Lead in the Safe Drinking Water Act. (SDWA) This amended SDWA requires the reduction of the allowable lead content in brass products from 8.0% to 0.25% (weighted average). It requires water systems to use lead-free water meters and fittings, to reduce the chances of lead in our water. With these changes, water fittings cost the city more for meters, valves, and other various parts. This is partially the reason for the increase in water rates.

The City and EPA want you to know the following:

"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 Aumsville 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."

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 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 by-products of industrial processes and petroleum production and can also come from gas stations, urban

stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the number of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protections for public health.

Water Quality Data Table



Do I need to take special precautions?

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. If this applies to you, seek advice about drinking water from your health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

FLUORIDE - There is no fluoride being added to your water. There are no requirements to add fluoride to our water and at this time and there are no plans to do so.

Aumsville Water System Test Results

The City tests its drinking water as required by EPA and the Oregon Health Division's Drinking Water Program. Here are the results of some of the testing completed during the past year.

Unit Descriptions:

<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (ug/L)
NA	NA: Not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended

Important Drinking Water Definitions

<u>Term</u>	<u>Definition</u>
MCLG:	Maximum Contaminant Level Goal: 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.
MCL:	Maximum Contaminant Level: 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. Extra Note: MCLs 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 every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
TT:	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL:	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDL:	Maximum residual disinfection level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
MRDLG:	Maximum Residual Disinfectant Level Goal. 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.

MNR: Monitored Not Regulated

MPL: State Assigned Maximum Permissible Level

Variations & Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	N	ND		0	No more than 1 positive monthly sample	Naturally present in the environment
Fecal coliform and <i>E. coli</i>	N	ND		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste

Total coliform testing was also performed at each of the 5 wells that the city operates; the results came back with no coliforms detected.

Disinfectants and Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Highest average (AVG)	Range Low-High	MCLG	MCL	Likely Source of Contamination
TTM (ppb) [Total Trihalomethanes]	N	8.09	na	0	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	ND	na	0	60	By-product of drinking water disinfection
Chlorine (ppm)	N	0.65	0.5 to 0.70	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

TEST RESULTS (continued)

Lead and Copper Contaminants (2018)

40 samples taken at home site that was built in the years that lead solder was used for connecting copper pipes

Contaminant (units)	Sample Date	Site Sample Results	Unit Measurement	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	6/20	ND	ppm	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 th percentile)	6/20	0.9	ppb	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Inorganic Contaminants

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen)	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	N	3.6	ppb		10	

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants						
Combined radium	N	0.4	pCi/l	0	5	Erosion of natural deposits

There were many other water tests performed this year and tested below the detection limits. These are not included in this report. If you would like to see how our and other water systems are doing, visit the DHS Drinking water program web site at <http://www.ohd.hr.state.or.us/dwp>. Our water system (ws) name is the City of Aumsville; our PWS ID number is OR4100065. Click on the latest chemical results.

Our Friend The Toilet Is Sometimes Not So Friendly When It Leaks

The toilet is the least noticeable water waster you have in your home. Coming in close behind is your teenager with 45-minute showers. If you still have the old 5 or 3.5-gallon flush toilets, consider replacing them with a new 1.5-gallon flush toilet. They are much better than they used to be. We try to let you know when we think you are using more water than you normally use. The biggest culprit by far is a leaking toilet. Check to see that the water in the tank is $\frac{3}{4}$ to an inch lower than the overflow. Chlorine tablets in the tank can deteriorate the rubber parts and cause leaks. Oddly, over the past year, some leaks have been found at shower valves. Leaking solder joints that have broken loose and dripping in the wall, straight to the ground under the house.

Congratulations, if you've read everything up to this point, thank you for being interested in your drinking water. If you have any questions about this report or concerning your water utility, please contact Steve Oslie, Public Works Director, at (503) 749-1185, or soslie@aumsville.us. We want our valued customers to be informed about their water utility. Please attend any of our regularly scheduled City Council meetings. They are held on the second Monday of every month, 7 pm, in the Chester Bridges Memorial Community Center located at 555 Main Street, Aumsville. Currently, due to Covid-19, City Council meetings are being held via Zoom meetings. If you are interested in this, please contact city hall to set you up. 503-749-2030