

MICROBIOLOGICAL CONTAMINANT INFORMATION

- ❖ Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.
- ❖ Turbidity has no health effects; however, it can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. [TT = 1.0 NTU; <0.3 NTU 95% of samples]
- ❖ Copper is an essential nutrient, but some people who drink water containing copper in excess of the AL over a relatively short amount of time could experience gastrointestinal distress.
- ❖ Lead; Infants and children who drink water containing lead in excess of the AL could experience delays in their physical or mental development. Children could show slight defects in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing,
- ❖ Nitrates are a naturally occurring oxide of nitrogen. Nitrogen is present in the air and reacts with oxygen and ozone to produce nitrate. Nitrate is an essential component of living things and is a major part of animal manure, human sewage waste and commercial fertilizers. Nitrates and nitrites can be associated with septic systems and have been used for centuries as fertilizers, in explosives and as food preservatives. At naturally occurring levels, nitrates are not harmful to health.
- ❖ Inorganic chemicals are those found in nature, such as metals, minerals, and salts.
- ❖ Synthetic Organic Chemicals include weed killer and insect sprays.
- ❖ Volatile Organic Chemicals include petroleum-based products, industrial by-products and dry cleaning solvents.

TEST RESULTS AND SPECIAL NOTES

The City of Gearhart is proud to report that the water provided by the Gearhart Water System meets or exceeds established water quality standards. [see Table]

Special Notes:

1. Testing was completed on contaminants in the Table. Not all contaminants require testing every year.
2. Turbidity is monitored 24 hours a day and therefore not in the Table.
3. Results from lead and copper testing are far below the EPA's MCL for lead, which is .015 mg/L (or 15 ppb), and 1.3 mg/L for copper. The City of Gearhart did not detect any lead or copper that has exceeded these limits at the last testing. The City of Gearhart 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 two 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. Lead and copper will be tested again this year.
4. No Nitrates were detected in any of the samples taken over the past year.

REQUIRED ADDITIONAL HEALTH INFORMATION

According to 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 possesses a health risk. For more information on contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline: 1-800-426-4791.

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 cryptosporidium parasitic infection and other microbial contaminants are available from the Safe Drinking Water Hotline: 1-800-426-4791.



ANNUAL WATER QUALITY REPORT

2021 Year End



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WATER QUALITY PURPOSE AND CONTACT INFORMATION

The City of Gearhart Public Works Department is pleased to provide the Water Quality Report for 2021. The purpose of this report is to inform consumers about the City of Gearhart's water. Our staff is committed to providing our consumers a safe, reliable, and clean water supply! This is accomplished by continually monitoring our water for various contaminants and pollutants to ensure that we meet or exceed regular standards. The Oregon Drinking Water Services (DWS) administers and enforces drinking water quality standards for public water systems in the State of Oregon and provides water data such as coliform testing, chemical testing, contacts, violations, enforcements, public notices, and basic system information. The City of Gearhart's ID number with DWS is 00318. Please visit DWS to view our data: <https://yourwater.oregon.gov/inventory.php?pwsno=00318>.

We value our residents' input. If you would like to learn more about issues affecting your water and community, please attend a City Council meeting. Meeting information is available on the City's website at www.cityofgearhart.com. If you have any questions or comments about this report or other water inquiries, contact our Public Works Director, Mark McFadden, publicworks@cityofgearhart.com.

WATER SOURCES

The City of Gearhart water comes from a combination of eight wells located along Neacoxie Blvd. There is also some purchased water provided to our consumers from the City of Warrenton and the City of Seaside. Both Cities also have available Water Quality Reports: <https://www.ci.warrenton.or.us/publicworks/page/water-quality-report>; <https://www.cityofseaside.us/public-works/water-department/pages/annual-water-quality-reports>

In general, 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.

At this time, the City of Gearhart's water is treated for arsenic removal, disinfected with chlorine, filtered, and then fluoride is added. The City of Gearhart tests its water system daily for sufficient chlorine levels.

WATER QUALITY STANDARDS

Public drinking water systems must meet health-based federal standards for contaminants. The federal government, through the US Environmental Protection Agency (EPA), sets national drinking water standards and establishes drinking water testing methods. The Oregon Health Division (OHD) administers the drinking water regulations for the EPA in our State.

A contaminant is defined as any substance in water, however, not all contaminants are harmful. Some contaminants are of concern only if they are detected above certain levels. In order to be in compliance with State & Federal laws and regulations, the City of Gearhart's water must have contaminant levels at or below all drinking water quality standards, and therefore routinely monitor your water for

contaminants. The Table below provides the most current monitoring results. 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

WATER QUALITY DEFINITIONS

To help you better understand some of the terms used on the report, we have provided the following definitions, some of which may or may not apply:

- Non-Detects (ND) indicates that the contaminant is not present.
- Parts Per Million (ppm) or Milligrams Per Liter (mg/L) corresponds to one minute in 2,000 years, or a single penny in \$10,000.
- Parts Per Billion (ppb) or Micrograms Per Liter (µg/L) corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries Per Liter (pCi/l) is a measure of the radioactivity in water.
- Millirems Per Year (MREM) is the measure of radioactivity absorbed by the body.
- Million Fibers Per Liter (MFL) measures the presence of asbestos fibers that are longer than 10 micrometers.
- Nephelometric Turbidity Unit (NTU) measures the clarity of water. An excess of 5 NTU is noticeable to the average person.
- Maximum Contaminant Level Goal (MCLG) where the "goal" is the level of containment in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety; N/A is listed where there is no margin.
- Maximum Contaminant Level (MCL) is the "maximum allowed" or highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLG'S as feasible using the best available treatment technology.
- Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a drinking water disinfectant below which there are no known or expected risks to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbes.
- Maximum Residual Disinfectant Level (MRDL) is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.
- Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) is a concentration that triggers treatment or other requirements which a water system must follow.
- Variances & Exceptions (V&E) denote permission not to meet an MCL or a TT under certain conditions.

GEARHART WATER QUALITY DATA TABLE

CONTAMINANT MONITORING TEST RESULTS

Contaminant	Test Year	Your Water	Violation	MCLG	MCL	Typical/Likely Source of Contamination
Arsenic	2021	ND	No	N/A	.010 ppm	Naturally exists in ground water (test yearly at distribution system entry point)
Asbestos (MFL)	2021	ND	No	7 MFL	7 MFL	Leaching of water main pipe (tested every 9 yrs at designated sample station)
Chlorine	2021	.70 ppm (avg)	No	4.0 ppm (MRDLG)	4.0 ppm (MRDL)	Water additive used to control microbes (tested daily and required to keep at least 0.2 ppm in distribution system)
Coliforms (Total)	2021	Absent	No	N/A	N/A	Animal/human fecal matter (indicator organisms routinely tested for twice/mo by our laboratory)
Copper	2019	high 0.461 ppm low ND	No	1.3 ppm	1.3 ppm (AL)	Corrosion of household plumbing and erosion of natural deposits (tested every 3 yrs; have a high/low range; (10) tests are taken directly from customer taps)
e.Coli	2021	Absent	No	N/A	N/A	Animal/human fecal matter (indicator organisms routinely tested for twice/mo by our laboratory)
Fluoride	2021	.80 ppm (avg)	No	4.0 ppm	4.0 ppm	Naturally exists in ground water; additive that promotes strong teeth (tested daily and required to maintain an avg of .80 ppm in distribution system)
Haloacetic Acids (HAAS)	2021	high 0.0112 ppm low 0.0078 ppm	No	N/A	.060 ppm	By-product of drinking water disinfection (tested quarterly from approved sample stations; have a high/low range)
Lead	2019	ND	No	0.0 ppm	.015 ppm (AL)	Corrosion of household plumbing and erosion of natural deposits (tested every 3 yrs; (10) tests are taken directly from customer taps)
Nitrates	2021	ND	No	N/A	10 ppm	Runoff from fertilizer use; leaching from septic systems (tested yearly at distribution system entry point)
Total Trihalomethanes (TTHM)	2021	high 0.0447 ppm low 0.0305 ppm	No	N/A	.080 ppm	By-product of drinking water disinfection (tested quarterly from approved sample stations; have a high/low range)