



2024

Water Quality/Consumer Confidence Report



CITY OF BEND

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ABOUT THIS REPORT

In 2024, the Bend Water Department, (Water System ID OR41 00100), met or exceeded all Federal and State requirements to provide our customers with safe, reliable drinking water. This report details how the City of Bend remains committed to producing and delivering high-quality drinking water to our community day after day.

This report provides important information about the quality of our drinking water, an explanation of where our water comes from, and tips on how to interpret the data in this report. The data presented is for Jan. 1 through Dec. 31, 2024, unless otherwise noted. If you are a manager or owner of a business or multifamily dwelling, please share this report with your employees or residents. If you would like printed copies, please call 541-317-3000, ext. 2 or visit our website at bendoregon.gov/waterquality to download a printable pdf of this report.

GET INVOLVED

- Bend City Council meetings occur on the first and third Wednesdays of the month. The work session begins at 5p.m. The regular meeting begins at 7p.m. Information is available at bendoregon.gov/citycouncil.

CONTACT US

- Bend Water Department
62975 Boyd Acres Road,
Bend, OR 97701
541-317-3000, ext. 2
- Rod Mingus,
Water Operations Manager
541-317-3000, ext. 2



Language Assistance Services & Accommodation Information for People with Disabilities

You can obtain this information in alternate formats such as Braille, electronic format, etc. Free language assistance services are also available. Please contact Water Services Communications at waterservicescomms@bendoregon.gov or 541-317-3000, ext. 2., Relay Users Dial 7-1-1.



Servicios de asistencia lingüística e información sobre alojamiento para personas con discapacidad

Puede obtener esta información en formatos alternativos como Braille, formato electrónico, etc. También disponemos de servicios gratuitos de asistencia lingüística. Póngase en contacto con Water Services Communications en waterservicescomms@bendoregon.gov o 541-317-3000, ext. 2. Los usuarios del servicio de retransmisión deben marcar el 7-1-1.

Health Information from the EPA and CDC

POTENTIAL CONTAMINANTS

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 (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 infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Types of Contaminants

- **Microbial Contaminants:** Viruses and bacteria from sewage plants, septic systems, farms, and wildlife.
- **Pesticides and Herbicides:** From farms, stormwater runoff, and homes.
- **Inorganic Contaminants:** Salts and metals from natural sources, stormwater, wastewater, or farming.
- **Organic Chemical Contaminants:** Byproducts of industrial processes, gas stations, stormwater, and septic systems.
- **Radioactive Contaminants:** From natural sources or oil and gas production and mining.

To ensure that tap water is safe to drink, EPA prescribes regulations that 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 protections for public health.

INFORMATION FOR IMMUNOCOMPROMISED PERSONS

Some people are more at risk from contaminants in drinking water. This includes those with cancer, organ transplants, HIV/AIDS, immune system disorders, some elderly, and infants. They should ask their doctors about safe drinking water. Guidelines to reduce infection risk are available from the Safe Drinking Water Hotline (1-800-426-4791).

LEAD

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. Bend Water Department is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Bend Water Department at 541-317-3000 ext. 2. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

In 2024, the Bend Water Department completed a service line inventory using approved statistical analysis and determined it has zero (0) lead or galvanized-requiring-replacement service lines of the 30,634 service lines inventoried. Results can be found at: yourwater.oregon.gov/leadcopper.php?pwsno=00100. More information can be found at: bendoregon.gov/waterquality.

2024 Water Quality Test Results

Surface Water from Bend Municipal Watershed, Bridge Creek

Regulated Contaminant	Minimum Amount Detected	Maximum Amount Detected	MCL, Action Level, Treatment Technique or MRDL	MCLG or MRDLG	Typical Source of Substance	In Compliance?
Total Organic Carbon	ND	0.7 ppm	Treatment Technique	N/A	Naturally present in the environment	YES
Turbidity	0.01 NTU	1.0 NTU	Must be less than or equal to 0.30 NTU in at least 95 percent of the measurements taken each month. Must at no time exceed 1 NTU	N/A	Soil runoff	YES

Entry Points to Distribution System – Surface and Groundwater

Regulated Contaminant	Minimum Amount Detected	Maximum Amount Detected	MCL, Action Level, Treatment Technique or MRDL	MCLG or MRDLG	Typical Source of Substance	In Compliance?
Pentachlorophenol	ND	0.1 ppb	1 ppb	0 ppb	Discharge from wood preserving factories	YES

Contaminants presented in this section are monitored less than once per year. Data is from the most recent testing done in accordance with regulations.

Arsenic <i>Most recent sample date: 8/23/2023</i>	ND	8 ppb	10 ppb	0 ppb	Erosion of natural deposits; Runoff from orchards	YES
Fluoride: <i>Most recent sample date: 8/23/2023</i>	ND	0.2 ppm	4 ppm	4 ppm	Erosion of natural deposits	YES
Nitrite (NO2): <i>Most recent sample date: 8/23/2023</i>	ND	0.1 ppm	1 ppm	1 ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	YES
Mercury <i>Most recent sample date: 8/23/2023</i>	ND	1 ppb	2 ppb	2 ppb	Erosion of natural deposits; Runoff from landfills; Runoff from cropland	YES
Sodium: <i>Most recent sample date: 8/23/2023</i>	4 ppm	11 ppm	N/A	20 ppm	Erosion of natural deposits	YES
Di(2-ethylhexyl) phthalate: <i>Most recent sample date: 8/14/2024</i>	ND	2 ppb	6 ppb	0 ppb	Discharge from rubber and chemical factories	YES

Distribution System

MICROBIOLOGICAL CONTAMINANTS

Regulated Contaminant	Minimum Amount Detected	Maximum Amount Detected	MCL, Action Level, Treatment Technique or MRDL	MCLG or MRDLG	Typical Source of Substance	In Compliance?
Total Coliform (non-fecal)	1 of 1,177 samples collected throughout 2024 had detectable coliform bacteria		Treatment Technique	N/A	Naturally present in the environment	YES

DISINFECTION BYPRODUCTS

Haloacetic Acids	Running annual average	5.2 ppb	12 ppb	60 ppb	N/A	Byproduct of drinking water disinfection	YES
	Range of single results at all sites	ND	25 ppb	N/A			
Total Trihalomethanes	Running annual average	2.5 ppb	16 ppb	80 ppb			YES
	Range of single results at all sites	ND	42 ppb	N/A			

DISINFECTION RESIDUAL

Free Residual Chlorine	0 ppm	1.5 ppm	4 ppm	4 ppm	Water additive used to control microbes	YES
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High-Risk Residential Water Taps: Sampled in 2023

Lead and Copper

Regulated Contaminant	2023 90 th Percentile Results	Sites Exceeding Action Level	EPA Standard: Action Level	MCLG	Typical Source of Substance	In Compliance?
Copper	0.11 ppm	0 out of 31 (0%)	1.3 ppm	1.3 ppm	Corrosion of household and commercial plumbing systems; Erosion of natural deposits	YES
Lead	0 ppb	0 out of 31 (0%)	15 ppb	0 ppb	Corrosion of household and commercial plumbing systems; Erosion of natural deposits	YES



Per- and Polyfluoroalkyl Substances (PFAS)

2024 Detections at Copperstone Well #1 (Facility ID: EP-H)

Contaminants presented in this section are unregulated: See note 'PFAS' below

PFAS - Unregulated contaminants	Minimum Amount Detected	Maximum Amount Detected	Average of results	In Compliance?
Perfluoro octanoic acid (PFOA)	ND	15.3 ppt	5.0 ppt	NA
Perfluoro octane sulfonic acid (PFOS)	ND	3.0 ppt	0.7 ppt	NA
Perfluoro hexanoic acid (PFHxA)	ND	8.1 ppt	2.5 ppt	NA
Perfluoro heptanoic acid (PFHpA)	ND	7.5 ppt	2.2 ppt	NA
Perfluoro pentanoic acid (PFPeA)	ND	14.4 ppt	4.2 ppt	NA
Perfluoro butanoic acid (PFBA)	ND	3.6 ppt	0.9 ppt	NA
Perfluoro butane sulfonic acid (PFBS)	ND	2.9 ppt	0.6 ppt	NA

REGULATED AND UNREGULATED SUBSTANCES DETECTED IN 2024

The City of Bend Water Services Department checks for over 130 different contaminants in its water sources all year. This includes things like lead, copper, minerals, pesticides, and radioactive materials. Some of these contaminants have been found and are listed in this report.

Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. The Bend Water Department monitors unregulated contaminants under the EPA's Unregulated Contaminant Monitoring Rule (UCMR). The latest sampling under the Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) began in 2023 and concluded in 2024. UCMR 5 test results and data for the Bend Water Department and other public water systems is available for review at epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule.

For further information, you may also visit epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule or call EPA's Safe Drinking Water Hotline at 1-800-426-4791.

PFAS

The EPA has established Maximum Contaminant Levels (MCLs) for certain per and poly fluoro alkyl substances, more commonly referred to as PFAS. The MCLs for PFAS will go into effect in 2029.

During UCMR 5 monitoring, one of Bend's eight groundwater sources, Copperstone Well #1, was found to contain small amounts of some PFAS. Copperstone Well #1 was removed from regular service and further monitored for PFAS in 2024. Details of that monitoring are included in the table above. Some of the detections of PFAS are above state and federal health advisory limits. Work is ongoing to isolate and remove PFAS contamination from Copperstone Well #1.

- Information about UCMR 5 detections and PFAS at the Bend Water Department can be found at bendoregon.gov/government/departments/utilities/water/water-quality-reports/perfluoroalkyl-and-polyfluoroalkyl-substances-pfas.
- State of Oregon health advisories for PFAS can be found at: oregon.gov/oha/ph/healthyenvironments/drinkingwater/operations/pages/pfas.aspx.
- EPA health advisories for PFAS can be found at: epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfoss.



VIOLATION OF STANDARDS

The Bend Water Department and the City of Bend Water Quality Laboratory had three violations for late/nonreporting of Surface Water Treatment Rules in 2024 on March 19, April 29 and December 30. The results were transmitted to Oregon Health Authority after the monthly reporting deadlines. Bend Water Department returned to compliance automatically on May 9th, 2024 and January 10, 2025, when following monthly reports were submitted. At no time during the violation period were Bend Water Department customers at risk nor was the quality of drinking water compromised.

DEFINITIONS AND UNITS OF MEASURE

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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 disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the 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.

Most Probable Number (MPN): A method used to estimate the concentration of microorganisms.

Nephelometric Turbidity Unit (NTU): A measure of water's clarity (turbidity).

Not Applicable (N/A)

Not Detected (ND): Substance not detectable using current monitoring equipment.

Part per Million (ppm): Also known as milligrams per liter (mg/L) which is equal to the number of milligrams of a substance in one liter of water. One part per million is equal to 1,000 parts per billion.

Part per Billion (ppb): Also known as micrograms per liter ($\mu\text{g/L}$) which is equal to the number of micrograms of a substance in one liter of water.

Part per Trillion (ppt): Also known as nanograms per liter (ng/L) which is equal to the number of nanograms of a substance in one liter of water.

90th Percentile: This means that 90 percent of the samples collected were equal to or below the value reported.

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

For more definitions and tips to understanding your water quality report, visit the EPA website at epa.gov/CCR/understanding-your-annual-water-quality-report.



Water Sources and Treatment

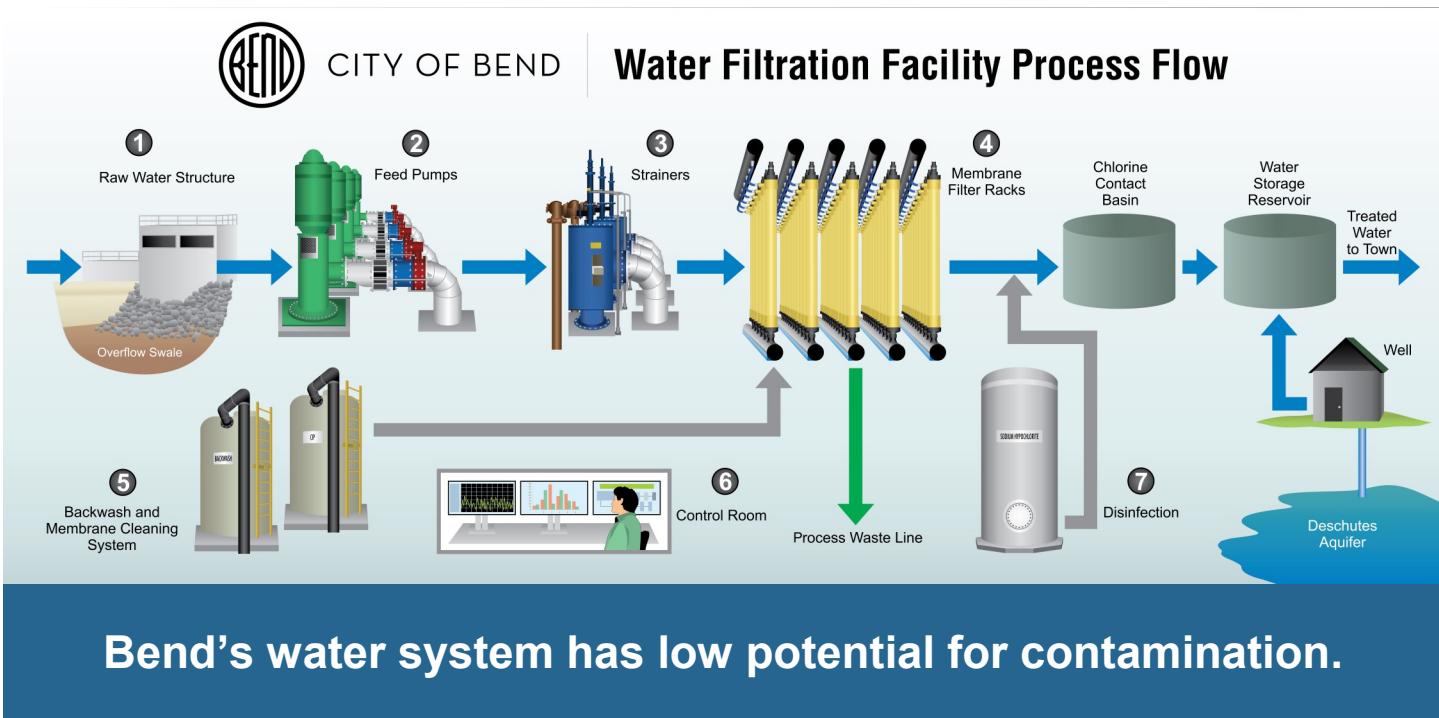


BEND HAS TWO WATER SUPPLY SOURCES

1. **BEND MUNICIPAL WATERSHED** The Bend Municipal Watershed, in the Tumalo Creek / Bridge Creek drainages of the Deschutes National Forest, supplies surface water.
2. **DESCHUTES REGIONAL AQUIFER** The City operates 20 wells to pump groundwater from the Deschutes Regional Aquifer to supplement the surface water.

SURFACE WATER

All surface water from Bend Municipal Watershed is treated, at the Water Filtration Facility by membrane filtration, which removes pathogens and other particles too small for the naked eye to see. A small amount of chlorine is added to deactivate any viruses and bacteria while keeping our network of storage tanks and pipelines clean. This image shows a snapshot of the surface water filtration process.

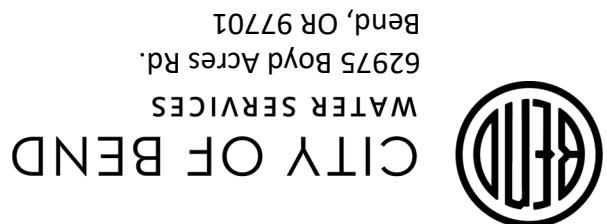


GROUNDWATER

Groundwater is naturally filtered by layers of soil, volcanic rock, sand, and gravel. Small amounts of chlorine are added when the water is pumped to ensure it is safe to drink and keep our distribution system of storage tanks and pipelines clean.

SOURCE WATER ASSESSMENT

Oregon Health Authority has determined through source water assessments that Bend Water Department's system has a low potential for contamination. For further information visit oregon.gov/oha/ph/healthyenvironments/drinkingwater/sourcewater/pages/index.aspx.



FROM THE DIRECTOR

I'm pleased to share the City of Bend's water quality report which shows that in 2024, once again, the City of Bend Water Services Department met or exceeded all current Federal and State requirements to provide our customers with safe, reliable drinking water.

Bend has **two water supply sources**.

1. BEND MUNICIPAL WATERSHED Our surface water source from deep in the Deschutes National Forest is our primary supply all year.

2. DESCHUTES REGIONAL AQUIFER The City operates 20 wells to pump groundwater from the Deschutes Regional Aquifer to supplement the surface water.

Since 1926, water from the Bend Municipal Watershed has been our primary source of drinking water. When outdoor landscape watering increases demands on water during the summer, we pump groundwater from the Deschutes Regional Aquifer to supplement surface water.

We treat all **surface water** from Bend Municipal Watershed with membrane filtration at our Water Filtration Facility. This removes pathogens and other particles too small for the naked eye to see. **Groundwater** is naturally filtered by layers of soil, volcanic rock, sand, and gravel.

Small amounts of chlorine are added to ensure water is safe to drink and keep our distribution system of storage tanks and pipelines clean. Our highest priority is providing safe and reliable drinking water to your tap. It is a pleasure to serve you.

— **Mike Buettner,**
Water Services Director