# **Drinking Water Quality Report**



### 2022 Consumer Confidence Report

The City of Cottage Grove is pleased to present you with the 2022 Water Quality Report, also known as the Consumer Confidence Report. This annual report is designed to inform you about the quality of drinking water and the services the City delivers to you every day. Our constant goal is to supply you with a reliable supply of high-quality drinking water. If you have any questions about this report or your water utility, contact Ryan Kimball, Water Production Superintendent, at 541-942-7094 or water@cottagegrove.org.

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## **Protecting Our Drinking Water from Contamination**

In Cottage Grove, we are lucky to have an ample supply of clean drinking water—but we still need to work hard to protect our water supply from contamination. As water travels over the surface of the land or through the ground it may pick up contaminants, such as:

- **Microbial Contaminants** Bacteria or viruses, which may come from sewage treatment plants, septic systems, agricultural operations and wildlife.
- Inorganic Contaminants Salts or metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and Herbicides** These may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic Chemicals, including Synthetic and Volatile Organic
  Chemicals By-products of industrial process petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.

### COTTAGE GROVE WATER CUSTOMERS AT A GLANCE:

Citizens Served: **10,729** Metered Accounts: **4,082** Active Accounts: **3,961** 

• **Radioactive Contaminants** – Naturally occurring or the result of oil and gas production and mining activities.

The U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. All of Cottage Grove's drinking water is properly and professionally treated to meet EPA standards before it is distributed to your tap.

#### Your Water's Journey from Source to Tap

Cottage Grove's drinking water supply comes from surface water through an intake facility located on the Row River. The intake is within the Coast Fork Willamette Sub-Basin of the Willamette Basin. The streams that contribute to the Row River flows at the intake have a total tributary area of approximately 371 square miles.

Water entering the intake facility then travels to the City's water treatment plant to remove potential contaminants. Our treatment plant operators are state-certified and complete required educational courses to maintain certification annually and assure technical competence in the most recent advances in water treatment. They sample and test the water for the 91 contaminants regulated under state and federal laws that could be in your drinking water. The water samples are sent to accredited laboratories for testing. This process helps ensure that the water that comes out of your tap is clean and safe to drink.



The City of Cottage Grove recognizes the importance of identifying contaminants in the water. Our operators use onsite and remote online process analyzers to continuously monitor the water treatment process.

# Water Quality Analysis

The tables below show the results of Cottage Grove's water quality analysis. Definitions for acronyms, abbreviations, and terms used in the tables are provided on the next page. Every regulated contaminant that was detected in Cottage Grove's water during testing from January 1, 2022, to December 31, 2022, is listed. All test results were below the maximum contaminate levels (MCLs). The regulations do not require the water to be tested for all of the regulated contaminants (approximately 91) every year. The data presented in this report are from the most recent testing done in accordance with the regulations. All our testing results were below the MCLs and represent a high quality of drinking water.

### **Detected Levels of Regulated (Primary) Contaminants**

Contaminant	Violation (Yes/No)	Unit of Measure	Level Detected	MCLG	MCL	Likely Source(s) of Contamination			
Row River Water Treatment Plant, Microbiological Contaminants									
Turbidity - Highest Single Measurement	No	NTU	0.03	N/A	>517	Soil erosion			
Turbidity - Lowest Monthly Percentage	No	NTU	100%	N/A	95%≤1TT	Soil erosion			
Water Distribution System, Inorganic Contaminants									
Copper (last test date 2021)	No	ppm	90th% value = 0.017	1.3	AL = 1.3 Zero sites exceeded the AL	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives			
Lead (last test date 2021)	No	ppb	90th% value = 6	0	AL = 15 Zero sites exceeded the AL	Corrosion of household plumbing systems, erosion of natural deposits.			
Disinfection By-Products, By-Product Precursors, and Disinfectant Residuals									
Total Trihalomethanes (TTHM)	No	ppb	Range = 16.3-32.3 LRAA = 26.1	N/A	80	By-product of drinking water disinfection			
Haloacetic Acid (HAA5)	No	ppb	Range = 9.2-19.2 LRAA = 12.7	N/A	60	By-product of drinking water disinfection			
Chlorine	No	ppm	Range = 0.1980 RAA = 0.58	MRDLG 4.0	MRDL 4.0	Water additive used to control microbes			
Total Organic Carbon (TOC) of Finished Water	No	ppm	Range = 0.62-0.92 RAA = 0.74	N/A	2 TT	Naturally present in the environment			

### **Detected Levels of Unregulated (Secondary) Contaminants**

Contaminant	Unit of Measure	Level Detected	SMCL	Likely Source(s) of Contamination
Sodium	mg/L	2.77	20	Naturally present in the environment and a water treatment additive
Sulfate (last test date 2011)	mg/L	9.38	250	Naturally present in the environment
Hardness of Finished Water Calcium Carbonate (CaCO3)	mg/L	Range = 4-20 Average = 9	N/A	Naturally present in the environment
pH of Finished Water	pH Unit	Range = 7.5-8.3 Average = 8.0	6.5-8.5	Naturally present in the environment
Bromodichloromethane	ppb	Range = 2.1-3.0 Average = 2.4	N/A	By-product of drinking water disinfection
Chloroform	ppb	Range = 14.2-29.7 Average = 23.6	N/A	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	Range = 1.2-4.6 Average = 2.9	N/A	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	Range = 5.9-16.9 Average = 5.9	N/A	By-product of drinking water disinfection

### Definitions of Terms Used in the Data Tables

**action level (AL)** - The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**lead** – Lead is a metal. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in a household should be identified and removed, replaced or reduced.

**locational running annual average (LRAA)** – The LRAA is the average of sample analytical results during the previous four calendar quarters for samples taken at a particular monitoring location.

maximum contaminant level (MCL) – The MCL is 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 MCLG is 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 MRDL is 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 MRDLG is 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.

**micrograms per liter (µg/L)** – A unit of measurement.

milligrams per liter (mg/L) – A unit of measurement.

**not applicable (N/A)** – Used when something doesn't apply.

**Nephelometric Turbidity Unit (NTU)** – The NTU is an empirical measure of the clarity of water. Turbidity in excess of 5 NTU is just visibly noticeable to the average person.

**non-detect (ND)** – An ND is a contaminant not detectable at laboratory testing limits.

**parts per billion (ppb)** – One ppb corresponds to 1 minute in 2,000 years, or a single penny in \$10,000,000.

**parts per million (ppm)** – One ppm corresponds to one minute in two years, or a single penny in \$10,000.

**picocuries per liter (pCi/L)** – pCi/L are a measure of radioactivity.

r**unning annual average (RAA)** – The RAA is the average of the monitoring period average for one year.

#### secondary maximum contaminant level

(SMCL) – Guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. Monitoring unregulated contaminants helps EPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

**treatment technique (TT)** – A TT is a required process intended to reduce the level of a contaminant in drinking water.

**turbidity** – Turbidity is a measure of the cloudiness of the water. The City monitors it because it is a good indicator of the effectiveness of the treatment process. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

# Lead in Drinking Water and Other Health Risks

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 Cottage Grove 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.

The City maintains a continuous Corrosion Control Program for drinking water. The pH of the water is tested daily to ensure our water is not corrosive to plumbing components. Our lead and copper test results prove our program's effectiveness.

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 (1-800-426-4791) or at www.epa.gov/ground-water-and-drinking-water/ basic-information-about-lead-drinking-water.



Minimize lead exposure by flushing your water tap for 30 seconds to 2 minutes after your water has been sitting for several hours.

### Health Risks from Other Types of Contamination

All sources of water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. This includes immuno-compromised people such cancer patients undergoing chemotherapy, people who have had an organ transplant, people with HIV/AIDS or other immune system disorders, some elderly community members, and infants. These folks can be particularly at risk from infections and should seek advice about drinking water from their health care providers. Learn more about contaminants in drinking water including lead an microbial contaminants such as Cryptosporidium by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.



#### The History of Your Water Treatment Plant

Cottage Grove's Water Treatment Plant opened in 1993 with a production capacity of 2 million gallons per day. Previously, the City used a treatment plant at Layng Creek. In 2008, the plant's production capacity was expanded to 4 million gallons per day and the filtration process was changed from rapid sand to micro-filtration membranes. As of fall 2020, the plant has expanded its production capacity to 6 million gallons per day.

# Accomplishments and Improvements

The Row River Water Treatment Plant had a successful and productive 2022:

- Our newest team members successfully completed their operator certification exams.
- We transitioned to a new bulk storage system for our chemicals, which greatly reduced risk of contact to our employees and eliminated the risk of sprains/strains and soft tissue injuries that could have resulted from the older barrel system that was in place.
- We began the implementation of new and more efficient record-keeping software to log all of our daily parameters.

- The water treatment plant successfully completed the State of Oregon's Sanitary Survey and no deficiencies were found.
- The City purchased two surplus emergency water treatment units that will be used as the base for the construction of user-friendly, quick to deploy water treatment options in the event of an emergency.
- West Yost was awarded the contract to complete the City of Cottage Grove's Water System Master Plan.



Left: The 2022 water treatment plant staff. Middle: The three filtration racks at the water treatment plant have a production capacity of 6 million gallons per day. Having three filtration racks makes maintenance on the filtration system more efficient and keeps our produced drinking water at the highest quality possible. Right: New bulk water storage tanks.

# **Protecting Our Drinking Water**

Treating our water and monitoring it for contamination is only part of the story. It's also essential that we protect our drinking water source from contamination in the first place.

The Oregon Department of Environmental Quality (DEQ) has completed two Source Water Assessments to identify and inventory the potential contaminant sources that may impact the water supply.

Potential contaminant sources or "sensitive areas" in the watershed include managed forestlands,



Row River intake

campgrounds and recreational areas (Dorena Lake - cyanotoxins), nurseries, guarries, several parks, residential areas with septic systems and wells, gas stations (active and historic), a former mill, and the drinking water treatment plants. These sensitive areas are the main existing potential sources of contamination that could, if improperly managed or released, affect water quality in the watershed.

The information in the assessments provides a basis for prioritizing areas the most vulnerable areas in and around our community and has been used to enhance the City's Drinking Water Protection Plan. This plan helps our community protect our source of drinking water and minimize future public expenditures for water treatment.

Download these documents here:

- Original Source Water Assessment (2000): https://bit.ly/41TUoul
- Updated Source Water Assessment (2019): https://bit.ly/3o152RS
- Drinking Water Protection Plan: https://bit.ly/3qfO6aX

These documents are also available for review at the Cottage Grove Public Library, 700 East Gibbs Avenue

### Learn More about Water Quality

We want our valued customers to be informed about their water quality. Learn more by attending a City Council meeting on the second and fourth Monday of each month at 7:00 p.m. in the City Hall Council Chambers, 400 E. Main Street. The City of Cottage Grove considers it our paramount responsibility to supply safe water for the health and future of our community. If you have any questions, call our office at 541-942-3349.



Scan to download past water quality reports.

### **Additional Resources**





Oregon Drinking Water Services

National Sanitation

Foundation



American Water Works Association



## Water Conservation Tips

Our water is a precious resource, so using water efficiently is important, particularly in the summer. Here are some tips to help you conserve water.







#### **Use Water-Efficient Irrigation Technology**

- Minimize runoff with rotating sprinkler heads.
- Add a soil moisture sensor to water only when your soil needs it.
- Install a weather-based controller to automatically adjust the watering schedule if rain is in the forecast.
- Use soaker hoses or drip irrigation in garden beds.

#### Irrigate Efficiently

- Check your irrigation system for leaks and repair any leaks you find, even if they appear to be minor.
- Regularly check soil moisture before watering.
- Avoid watering the pavement.

#### **Use Water-Wise Landscaping Practices**

- Plant wisely by using water-wise and/or native plants.
- Apply mulch to help the soil retain moisture.
- Consider converting some lawn area to a water-wise landscape.



#### **Reduce Outdoor Water Waste**

- Irrigate in the early morning or late evening.
- Avoid watering when it's windy.
- Aim sprinklers low.
- Set mower blades high.



#### Save Water Indoors

- Install water-efficient faucet aerators and showerheads.
- Upgrade to a more water-efficient toilet.
- Fix leaks.