

# DRINKING WATER QUALITY REPORT



## 2021 Consumer Confidence Report

The City of Cottage Grove is committed to supplying you with a reliable supply of high-quality drinking water. This report describes the quality of your drinking water and the services the City of Cottage Grove Row River Water Treatment Plant delivers to you every day. If you have any questions about this report or your water utility, please contact Ryan Kimball, Water Production Superintendent, at: (541) 942-7094. *(Continued on page 3.)*



### CONTENTS

Our Water Source and Water Regulations .....	2	Additional Information .....	8
By the Numbers: Cottage Grove's Water Quality Analysis .....	3	Water System Accomplishments and Improvements .....	8
Water Source Information .....	6	Water Conservation Tips .....	10
Lead in Drinking Water .....	7		





Cottage Grove gets its drinking water from a surface intake on the Row River.

## Our Water Source and Water Regulations

### At a Glance:

#### Cottage Grove Water Customers

Citizens Served: 10,792

Metered Accounts: 5,333

Active Accounts: 3,975

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 intake have a total tributary area of approximately 371 square miles.

Sources of drinking water (both tap water and bottled water) can be from wells, streams, rivers, reservoirs, or springs. As water travels over the surface of the land or through the ground it may pick up contaminants.

Contaminants that may be present in source waters include:

- Microbial, such as bacteria or viruses, which may come from sewage treatment plants, septic systems, agricultural operations, and wildlife
- Inorganic, such as 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, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which can be by-products of industrial process petroleum production or come from gas stations, urban storm water runoff, and septic systems
- Radioactive contaminants, which can be 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. The Food and Drug Administration (FDA) prescribes regulations for bottled water.

All of Cottage Grove's drinking water is properly and professionally treated before it is distributed to the consumer.



The City of Cottage Grove recognizes the importance of identifying contaminants in the water from the surface water intake. With the aid of online process analyzers, the Water Treatment Plant operators continuously monitor the water treatment process.

(Continued from page 1.) The City's Water Treatment Plant operators are state-certified and complete required educational courses to maintain certification annually and to assure technical competence in the most recent advances in water treatment. Water treatment plant operators sample and test the water,

according to federal and state laws, screening for any of the approximately 91 currently regulated contaminants that could be in your drinking water. The water samples are sent to laboratories certified by the Oregon Environmental Laboratory Accreditation Program in Oregon.



## By the Numbers: Cottage Grove's Water Quality Analysis

The following tables show the results of Cottage Grove's water quality analysis. Every regulated contaminant that was detected in Cottage Grove's water during testing from January 1, 2021 to December 31, 2021 is listed. All test results were below the Maximum Contaminate Levels (MCLs). The regulations do not require the water to be tested for all (approximately 91) of the regulated contaminants each and every year. The data presented in this report are from the most recent testing done in accordance with the regulations. To help you better understand the terms used in the tables, definitions are provided below.

### Definitions

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Lead** - 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.

**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 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 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.

**Maximum Residual Disinfectant Level (MRDL)** - 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.

**Nephelometric Turbidity Unit (NTU)** - 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)** - A contaminant not detectable at laboratory testing limits.

**Parts Per Billion (PPB) or Micrograms Per Liter (ug/L)** - One PPB corresponds to 1 minute in 2,000 years, or a single penny in \$10,000,000.

**Parts Per Million (PPM) or Milligrams Per Liter (mg/L)** - One PPM corresponds to 1 minute in 2 years, or a single penny in \$10,000.

**Treatment Technique (TT)** - 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.





Cottage Grove’s Water Treatment Plant opened in 1993 with a production capacity of 2 million gallons per day. Previously, the City utilized 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.

Key To Abbreviations In The Tables

AL	Action Level	N/A	Not Applicable
LRAA	Locational Running Annual Average	pCi/L	picocuries per liter (a measure of radioactivity)
MCL	Maximum Contaminant Level	PPB	Parts Per Billion
MCLG	Maximum Contaminant Level Goal	PPM	Parts Per Million
mg/L	Milligrams Per Liter	RAA	Running Annual Average
MRDL	Maximum Residual Disinfectant Level	SMCL	Secondary Maximum Contaminant Level
MRDLG	Maximum Residual Disinfectant Level Goal	TT	Treatment Technique
ND	Non-Detects	ug/L	Micrograms Per Liter
NTU	Nephelometric Turbidity Unit		

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

ROW RIVER WATER TREATMENT PLANT						
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity - Highest Single Measurement	No	0.04	NTU	N/A	> 5 TT	Soil Erosion
Turbidity - Low est Monthly Percentage	No	100%	NTU	N/A	95% ≤ 1 TT	Soil Erosion
WATER DISTRIBUTION SYSTEM						
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Copper (last test date 2021)	No	90th% value = 0.017	PPM	1.3	AL = 1.3 Zero sites exceeded the action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (last test date 2021)	No	90th% value = 6	PPB	0	AL = 15 Zero sites exceeded the action level	Corrosion of household plumbing systems; erosion of natural deposits
<b>Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals</b>						
TTHM (Total Trihalomethanes)	No	Range = 16.6 - 47.4 LRAA = 33.2	PPB	N/A	80	By-Product of drinking water disinfection
HAA5 (Haloacetic Acid)	No	Range = 8.4 - 18.3 LRAA = 14.1	PPB	N/A	60	By-Product of drinking water disinfection
Chlorine	No	Range = 0.12 - 0.81 RAA = 0.56	PPM	MRDLG 4	MRDL 4.0	Water additive used to control microbes
TOC of Finished Water (Total Organic Carbon)	No	Range = 0.65- 1.06 RAA = 0.78	PPM	N/A	2 TT	Naturally present in the environment

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

Contaminant	Level Detected	Unit of Measure	SMCL*	Likely Source of Contamination
Sodium	2.77	mg/L	20	Naturally present in the environment and a water treatment additive
Sulfate (Last test date 2011)	9.38	mg/L	250	Naturally present in the environment
Hardness of Finished Water Calcium Carbonate (CaCO3)	Range = 15 - 30 Avg = 23	mg/L	N/A	Naturally present in the environment
pH of Finished Water.	Range = 7.7- 8.2 Avg = 8.0	pH Unit	6.5-8.5	Naturally present in the environment
Bromodichloromethane.	Range = 1.8 - 5.5 Avg = 3.0	PPB	N/A	By-Product of drinking water disinfection
Chloroform	Range = 14.9 - 44.2 Avg = 30.3	PPB	N/A	By-Product of drinking water disinfection
Dichloroacetic Acid	Range = 2.1 - 4.7 Avg = 3.4	PPB	N/A	By-Product of drinking water disinfection
Trichloroacetic Acid	Range = 5.2 - 13.4 Avg = 8.6	PPB	N/A	By-Product of drinking water disinfection
* SMCL - Secondary Maximum Contaminant Level. Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.				
It is reassuring to note that all our testing results were below the MCLs and represent a high quality of drinking water.				





Cyanotoxins produced by blue-green algae in Dorena Reservoir represent a potential contaminant for Cottage Grove’s drinking water. The Oregon Department of Environmental Quality (DEQ) operates the only laboratory that currently meets Oregon Health Authority’s laboratory certification requirements to test for cyanotoxins produced by blue-green algae.

## Water Source Information

The Oregon Department of Environmental Quality has completed two Source Water Assessments to identify the surface areas (and/or subsurface areas) that supply water to the City of Cottage Grove’s public water system intakes and to inventory the potential contaminant sources that may impact the water supply.

Potential contaminant sources or “sensitive areas” identified in the watershed include managed forestlands, campgrounds, and recreational areas (Dorena Lake -

cyanotoxins); nurseries; quarries; several parks; residential areas with septic systems and wells; gas stations (currently active and historical); 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, impact water quality in the watershed.

The information in the assessments provides a basis for prioritizing areas in and around our community that are most vulnerable to potential impacts. This information will enhance the City’s Drinking Water Protection Plan.

The City of Cottage Grove’s public water system staff/operators, consumers, and citizens can use the information in the assessments to refine the developed strategies to protect the source of their drinking water, and to minimize future public expenditures for drinking water treatment.

The full City of Cottage Grove Source Water Assessment reports (the 2000 original and 2019 update), which provide additional details on the methodology and results of the assessments, are available as PDFs on DEQ’s website at <https://www.deq.state.or.us/wq/dwp/swrpts.asp> and as print copies at the Cottage Grove Public Library, 700 E. Gibbs Ave.





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

## Lead in Drinking Water

**E**levated 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 of Cottage Grove 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 **EPA Safe Drinking Water Hotline (1-800-426-4791)** or at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>.

All sources of water are subject to potential contamination by substances that are naturally occurring or manufactured. 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. More information about contaminants and potential health effects can be obtained by calling the **EPA 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 **EPA Safe Drinking Water Hotline (1-800-426-4791)**.

## Additional Information

If you want to learn more about your water quality, attend a City Council meeting on the second and fourth Monday of each month at 7:00 p.m. in the City Hall Council Chambers or virtually. Visit the City Meetings Calendar for more information at <https://www.cottagegroveor.gov/calendar>.

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, please call our office at: (541) 942-3349.

Access to the 2021 Consumer Confidence Report and previous year's Consumer Confidence Reports are available online at: <https://www.cottagegroveor.gov/publicworks/page/water-quality-reports>.

### Additional Water Quality Information

U.S. Environmental Protection Agency at: <https://www.epa.gov/ground-water-and-drinking-water>

Oregon Health Authority at: <https://www.oregon.gov/OHA/PH/HealthyEnvironments/DrinkingWater/Pages/index.aspx>

NSF at: [www.nsf.org](http://www.nsf.org) or 1-800-673-8010

American Water Works Association (AWWA) at: [www.drinktap.org](http://www.drinktap.org) and [www.awwa.org](http://www.awwa.org)

## Water System Accomplishments and Improvements

The Row River Water Treatment Plant had a successful and productive 2021. We were awarded the Northwest Membrane Operator Associations 2021 Outstanding Membrane Large Plant Award as well as a nomination for the American Water Works

Association Membrane Plant of the Year award. We hired two new operators who will be assets to the community for years to come. We also made numerous safety upgrades to the plant. This includes new chemical bulk storage tanks that will allow a more hands-off approach to loading and unloading chemicals, cut down on shipping costs, and provide higher storage capacity. We reinforced plant security with enhanced fencing around the exterior. We also completed our 2021 Lead & Copper sampling with no samples meeting or exceeding exposure limits.

### 2021 Accomplishments:

- Completed construction of a 10 million gallon treated wastewater effluent reservoir to supply irrigation water to Middlefield Golf Course, Interstate 5 (I-5) Interchange landscape project, Trailhead, and Bohemia Parks.
- Installed irrigation for 15 acres of landscaping at the 174 Interchange on I-5.
- Installed 500 lineal feet of 12-inch purple water pipe in N. Douglas Street to pipe treated effluent to Trailhead and Bohemia Parks.
- Adopted the Water Management and Conservation Plan.
- Secured one of the City's water rights for operation of the Water Treatment Plant.
- Completed an instream water rights lease with the State of Oregon for Layng, Prather, and Dinner Creeks.

### 2022 Projects:

- Complete the 12-inch treated effluent line to Trailhead and Bohemia Parks for irrigation. This will replace using treated drinking water at Trailhead and Bohemia Parks for irrigation. The estimated savings is 120,000 gallons per day.
- Design two new high-level reservoirs.





In 2021 the staff of the Row River Water Treatment Plant were awarded the Northwest Membrane Operator Association (NWMOA) Outstanding Membrane Large Plant of the year award.



Our newest membrane filtration rack (pictured above) means we now have a 6-million-gallon-per-day production capacity, as well as added redundancy to our other two existing racks. This improvement makes maintenance on the filtration system more efficient and keeps our produced drinking water at the highest quality possible.

# 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.

## Water-Wise Irrigation Technology

Consider improving your irrigation system's watering efficiency by installing these products:

- Rotating sprinkler heads deliver water evenly and slowly to minimize runoff and wasted water.
- Soil moisture sensors show the amount of water retained by the soil and adjust irrigation schedules accordingly.
- Weather-based controllers adjust watering according to current weather and climate data to determine optimal watering times and automatically adjust the watering schedule.
- Soaker hoses and drip irrigation minimize water waste by efficiently delivering water close to plant roots.



## Irrigate Efficiently

Save water by using these methods to increase the efficiency of your irrigation system:

- 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.



## Water-Wise Your Landscape

Modify your yard using the practices below to create more drought-tolerant areas that require less water:

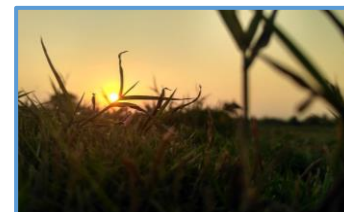
- Plant wisely by using water-wise and/or native plants.
- Apply mulch to help the soil retain moisture.
- Consider converting some lawn area to a water-wise landscape.



## Reduce Outdoor Water Waste

A portion of irrigation water can be lost through evapotranspiration. Here are simple ways to reduce 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

Consider the following practices to reduce water use inside:

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

