DRINKING WATER QUALITY REPORT

CITY OF COTTAGE GROVE OREGON

Consumer Confidence Report 2020

The City of Cottage Grove is pleased to present you with this year's annual Water Quality Report. This report is designed to inform you about the quality of drinking water and services we deliver to you every day. Our constant goal is to supply you with a reliable supply of high quality drinking water, and we are committed to ensuring its quality. If you have any questions about this report or your water utility, please contact Ryan Kimball, Water Production Superintendent, at: (541) 942-7094.

Cottage Grove gets its drinking water from the Row River.

FROM THE SOURCE: INTAKE ON THE ROW

AT A GLANCE: COTTAGE GROVE WATER CUSTOMERS

CITIZENS SERVED: 10,657
METERED ACCOUNTS: 4,775
ACTIVE ACCOUNTS: 3,899

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. The 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 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 chemicals contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial process petroleum production and can also come from gas stations, urban stormwater runoff and septic systems

• Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

The Environmental Protection Agency (EPA) creates regulations which limit the amounts of certain contaminants in water provided by public water systems.

The Food and Drug Administration (FDA) creates 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. With the aid of online process analyzers, the operators continuously monitor both onsite and remotely the water treatment process 24 hours a day, seven days a week, 365 days a year.

FROM THE SOURCE: INTAKE ON THE ROW – *(CONTINUED)*

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 daily, according to Federal and State laws, screening for any of the approximately 91 currently regulated contaminants that could be in your drinking water. Currently the water samples are sent to certified laboratories accredited 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, 2020 to December 31, 2020 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 the report are from the most recent testing done in accordance with the regulations.

In these tables you may find many terms and abbreviations you might not be familiar with. To help you better understand the terms used in the tables, definitions are provided below.

DEFINITION

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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-Detects (ND) – Contaminant not detectable at laboratory testing limits.

Parts Per Billion (PPB) or Micrograms Per Liter (ug/L) – One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts Per Million (PPM) or Milligrams Per Liter (mg/L) – One part per million corresponds to one minute in two 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.

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
Microbiological Contaminants						
Turbidity - Highest Single Measurement	No	0.045	NTU	N/A	> 5 TT	Soil Erosion
Turbidity - Lowest 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
Inorganic Contaminants						
Copper (last test date 2018)	No	90th% value = 0.023	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 2018)	No	90th% value = 4	PPB	0	AL = 15 Zero sites exceeded the action level	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals						
TTHM (Total Trihalomethanes)	No	Range = 13.0 - 29.2 LRAA = 29.2	PPB	N/A	80	By-Product of drinking water disinfection
HAA5 (Haloacetic Acid)	No	Range = 7.9 - 16.8 LRAA = 12.2	PPB	N/A	60	By-Product of drinking water disinfection
Chlorine	No	Range = 0.17 - 0.81 RAA = 0.55	PPM	MRDLG 4	MRDL 4.0	Water additive used to control microbes
TOC of Finished Water (Total Organic Carbon)	No	Range = 101- 106 RAA = 0.77	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 enivironment 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 = 7.2 - 9.0 Avg = 8.0	pH Unit	6.5-8.5	Naturally present in the environment
Bromodichloromethane.	Range = 1.5 - 3.3 Avg = 2.4	PPB	N/A	By-Product of drinking water disinfection
Chloroform	Range = 13.0 - 39.0 Avg = 26.8	PPB	N/A	By-Product of drinking water disinfection
Dichloroacetic Acid	Range = 2.1 - 5.0 Avg = 3.6	PPB	N/A	By-Product of drinking water disinfection
Trichloroacetic Acid	Range = 4.9 - 13.3 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 reassurring to note that all our testing results were below the MCLs and represent a high quality of drinking water.

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		

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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.

Drinking water from the treatment plant is stored in two reservoirs with a total capacity of 4.3 million gallons. From the reservoirs the water travels in 49 miles of water mains to reach all the homes and businesses in the City. There are 461 fire hydrants connected to the water lines within the City.

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Cyanotoxins produced by blue-green algae in Dorena Reservoir represent a potential contaminant for Cottage Grove's drinking water. The Department of Environmental Quality (DEQ) operates the only laboratory that currently meets the Oregon Health Authority's laboratory certification requirements to test for cyanotoxins produced by Blue Green Algae. It is vital the Oregon Legislature provides funding to DEQ for continued operation of the laboratory in testing for cyanotoxins of water throughout the state.

Water Source Information

Two Source Water Assessments have been completed by the Department of Environmental Quality (DEQ) 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 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, impact the 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 and can be used by the City of Cottage Grove community to enhance the City's Drinking Water Protection Plan.

Assessments were completed to provide information that the City of Cottage Grove's public water system staff/operators, consumers and community citizens can use to refine the developed strategies to protect the source of their drinking water, and to minimize future public expenditures for drinking water treatment.

The City of Cottage Grove's Source Water Assessment Reports (the 2005 original and the 2018 updated) provide additional details on the methodology and results of the assessments. The full reports are available for review at: www.cottagegroveor.gov.

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Flushing your water tap for 30 seconds to two minutes after your water has been sitting for several hours can help minimize lead exposure.

Information on Lead in Drinking Water

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 of Cottage Grove maintains a continuous Corrosion Control Program for the 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/safewater/lead.**

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. 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).**

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Additional Information

We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the second and fourth Monday of each month at 7:00 p.m. in the City Hall Council Chambers.

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 2020 Consumer Confidence report and previous year's Consumer Confidence Reports are available electronically online at: **www.cottagegroveor.gov/ccr** or follow the link on the City's webpage at: **www.cottagegroveor.gov**

Additional Water Quality Information

Environmental Protection Agency at:
www.epa.gov/safewater/

Water System Planning and Improvements

In the fall of 2020 construction and installation of a third PALL membrane filter rack was completed at the Row River Water Treatment Plant. In January of 2021 the Oregon Health Authority certified the new membrane filtration rack for use. This additional filtration rack increases the plant's production capacity from 4 million gallons per day (MGD) to 6 MGD. This will allow the city to easily meet water demands as the population increases. The additional filtration rack also adds redundancy to the system allowing the plant operators opportunities to take individual filtration racks down for maintenance without impacting their ability to meet water usage demands in peak seasons. Pacific Excavation was the contractor of choice for the installation and completed the job safely and on schedule.

In 2020 the City contracted with Wildish Construction Company to construct the Safe Routes to School Project. The project includes replacing and upsizing the water distribution system within the project boundaries. They installed 3,043 feet of 12 inch PVC pipe and replaced 169 feet of 6 inch pipe on Fillmore Avenue, 499 feet of 6 inch CIP on Taylor and 2,375 feet of 10 Asbestos Concrete Pipe in South 4th. They also installed one new fire hydrant and replaced 7 old fire hydrants as part of the project.

Above: The Row River Water Treatment Plant's four-person operations team.

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ROW RIVER WATER TREATMENT PLANT: The City continues to work on perfecting water rights for the Row River Water Treatment Plant. Currently 4 MGD of water rights are perfected for the plant with 2 MGD under permit. City staff is working with GSI Water Solutions, Inc. to perfect the water rights under permit and hopes to have the State of Oregon Water Resources Department approval by the end of 2021.

Water System Planning and Improvements
(continued)

The City Utility staff installed 4,037 new automated water meters replacing all the manual read meters that were in use in the City water distribution system. The automated water meters send water usage totals every 15 minutes to the City Utility Billing Clerk. In the past, two Utility Crew members would physically read each meter in the City taking approximately 7 days each month.

The automated meters are programmed to send alarm notices to the Utility Billing Clerk when water usage is out of the accounts normal range such as, water being used at a constant rate for a 24 hour period conflicting with past usage. The Clerk reviews the account and notifies the property owner of the usage and the possibility of a water leak. In the last few months the Clerk has called customers regarding potential leaks, successfully identifying problems before they caused potential damage and/or higher water bills. In December 2020, twelve calls were made, January 2021 - 16 calls were made and in February 2021 -15 calls were made. Working with the customer directly, most of the issues are resolved quickly reducing the number of leak checks requiring a technician to perform a service request. In a three month period (Dec. Jan. Feb.) call out requests were reduced by 27 callouts.

Utility Staff also installed 2 new Auto Flushers to flush dead end waterlines and 2 new fire hydrants. GSI Water Solutions, Inc. completed and submitted the City's Water Management and Conservation Plan (WMCP) to the Oregon Water Resources Department for their review and acceptance. The WMCP is a requirement for the extension and use of water right permit #S-42117. It guides City staff on implementing measures that conserve treated drinking water use, including educational programs for water users and youth in Cottage Grove.

Projects for 2021

The City is working to purchase 2 new sites for high level reservoirs. One on the eastside of I-5 and the other west of Sweet Lane. Once the sites are purchased the City will begin designing the new reservoirs with the intent on building a new 1.5 million gallon reservoir at each site. A third reservoir site is planned above Mount David. Construction of a new reservoir at that site will begin when phase II of the Sunrise Ridge Development is constructed.

The following new drinking water distribution infrastructure is planned; replacement of the water mainline in Polk Avenue, replacement and upsize the waterline in North 16th Street, and installation new water distribution lines in the South R Street extension connecting the Industrial Park to R Street at Sweet Lane and R Street at Emerson Lane to Hwy 99.

City staff is preparing a Request for Proposals for a Water Master Plan. Staff is also completing the natural hazards risk and resiliency plan for the water treatment and distribution system and by December 2021 will complete an Emergency Response Plan for the water treatment and distribution system.

The treated effluent for irrigation from the Cottage Grove Wastewater Treatment Plant use will be expanded to Trailhead Park and Bohemia Park eliminating the use of treated drinking water in the parks for irrigation.