



2021 Water Quality Report PRIDE IN SERVICE - INTEGRITY IN ACTION

The City of Newberg provides reliable water to you!

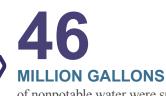
The City of Newberg is committed to providing safe and reliable drinking water. In Oregon, water providers are required to meet the Environmental Protection Agency (EPA) and the Oregon Health Authority water quality regulations which include constant testing and disinfection from the source through the treatment plant up to the reservoirs and to your tap.



907.7 MILLION GALLONS of water was produced with zero water

of water was produced with zero water quality deficiencies or violations.





of nonpotable water were supplied to the Chehalem Park & Recreation District owned Chehalem Glenn Golf Course for irrigation. This helps conserve Newberg's source of drinking water.



2.68 MILLION GALLONS

the City produced on average per day (MGD) in 2021.

★ 5.4 MILLION GALLONS was the City's peak production day in 2021.

The City's water comes from a groundwater supply drawn from a "wellfield" located just south of the Willamette River on property owned by the City of Newberg. Raw water is pumped from this natural sand and rock aquifer to the treatment plant for further treatment and distribution.

Water from the wellfield is safe to drink without treatment. However, to protect your health, the following processes take place.

- Chlorine is used to disinfect and prevent any contamination between the source and your faucet. 1 part per million (ppm) is added and monitored throughout the delivery system.
- Iron and manganese are naturally occurring elements. They pose no risk but can cause discoloration and affect the taste. Filtration is used to remove these elements.





Backflow Devices

Preventing contamination in the drinking water

Steps to help keep our drinking water safe



Locate or install a Backflow Assembly Device. If you have an underground irrigation system, check to see if you already have one in place.

If you install irrigation or fire system plumbing, code requires a backflow device to be installed.

Test your Backflow Assembly Device annually! We will help you remember by sending you a letter each year to have your inspection done.

Not sure if you have a device?

Call the Water Treatment Plant at 503-554-6839 or email backflow@newbergorgegon.gov for assistance finding the device on your property.

Protect your home from backflow!

DO NOT submerge the end of the garden hose in a swimming pool, container, or bucket to fill it.

To protect against these common cross-connections, check to see if you have installed air vacuum breakers on each hose bib. These simple devices are inexpensive and can be purchased from your local hardware store.



The City of Newberg provides reliable water to you!

The following tables show the results of the City of Newberg's water quality analyses. All regulated contaminants that have been detected, even in minute amounts, are shown in the table. The table contains the name of the substance, the water source, the amount detected, the maximum level allowed by regulation (MCL or AL), the ideal goal for public health (MCLG), and the likely source of the substance.

Substance	Water Source	Level	MCL	Date Tested	Influenced by	
Nitrate (ppm)	Well Field	0.22	10.0	07/27/21	Runoff from fertilizer, natural deposits, septic systems, etc.	
HAA5* (ppb)	Distribution System	7.4	60	07/21	Byprodut of disinfection	
TTHM* (ppb)	Distribution System	31	80	07/21	_	
Radium (pCi/L) 226/228	Well Field	None Detected	NA	09/21	Erosion of natural deposits	
Uranium (ppb)	Well Field	None Detected	30	09/21	_	
Chlorine (ppm)	Treatment Plant	1.71	<4.0	2021	EPA requires the range of disinfectant to stay	
	Distribution System	1.38	<4.0	2021	in water throughout the system not to exceed 4.0 ppm.	

Substance	Test Location	Over Limit	Level	Date Tested	Influenced by
Lead (ppb) Tested every 3 years	Residential Taps	0%	15	08/21	Corrosion of household plumbing
Copper 3 (ppm) Tested every 3 years	Residential Taps	0%	<1.3	08/21	
Sodium (ppm)	Well Field	0%	35.2	2021	There are no limits set for sodium by the EPA.

Substance	Location	Number of Tests	Result	Year	Notes
Total Coliform Bacteria	Multiple Locations	395	395 Negative	2021	All check and repeat samples were negative
Arsenic	Well Field		Negative	07/21	Testing schedule every 9 years.

Other Testing	Number of Tests	Frequency	Result	Last Test	Notes
Regulated VOC	21	Every 3 years	ND	2021	Organic, i.e. petroleum, solvents
Unregulated VOC	35	Every 3 years	ND Below MCLs	2021	
Organic SOC	29	Every 3 years	29 or all ND Below MCLs	2021	Pesticides, PCBs
Inorganic	17	Every 9 years	Below MCLs	2021	Man-made compounds

ABBREVIATIONS

ppm	Parts Per Million or	HAA5	Haloacetic Acids	
	Milligrams Per Liter	ND	None Detected	
ppb	Parts Per Billion or	MCLG	Maximum Contaminant	
	Micrograms Per Liter		Level Goal: The level of	
NTU	Nephelometric Turbidity Units		a contaminant in drinking	
pCi/L	Picocuries Per Liter		water below which there is no	
mgd	Million Gallons per Day		known or expected risk to	
TTHM	Total Trihalomethanes		health.	\$

 MCL Maximum Contaminant Level: The highest level allowed in drinking water. The MCL is set as close to the MCLG as feasible using the best available technology.
 NA Non-Applicable
 SOC Synthetic Organic Contaminants

 PCB
 Polychlorinated Biphenyls

 AL
 Action Level:

 The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

 VOC
 Volatile Organic Compound

*Values are maximum recorded of all sources sampled during 2021.

**The 90th percentile value is the level that 90% of the homes tested were at or below. If the 90th percentile value exceeds the

AL, water suppliers must take steps to reduce lead and/or copper levels.

***Measured at residential taps.

Why Provide a Water Quality Report?

Drinking water (including bottled water) can come from 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 radioactive material and can pick up substances from the presence of animals or human activity. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the number 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.

Contaminants that may be present include:



Microbiological Contaminants

Pesticides and Herbicides

Which may come from a variety of sources, such as agriculture, stormwater runoff,

and residential use.

Such as viruses and bacteria, may come from wastewater treatment plants, septic systems, livestock operations, and wildlife.

Inorganic Contaminants

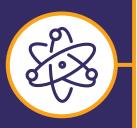
Such as salts and metals, can be naturally occurring or result from stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.





Including synthetic and volatile organics, are byproducts of industrial processes and petroleum production. These can also come from gas stations, urban stormwater runoff, and septic systems.





Radioactive Contaminants Which may be

naturally occurring, or be the result of mining or oil and gas production.



A Message from the EPA

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 (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infections by cryptosporidium and other microbiological contaminants are available from the *EPA Safe Drinking Water Hotline 1-800-426-4791*.

Lead plumbing was banned in 1985. 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 Newberg 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 are available at www.epa.gov/lead or the *Safe Drinking Water Hotline 1-800-424LEAD (5323)*.

Frequently Asked Questions



Does Newberg's water supply contain fluoride? The City of Newberg does not add fluoride to the water,

however, there are trace amounts that occur naturally in the water supply.

Is Newberg's water hard or soft?

Our water supply is considered medium - hard measured at 84 milligrams per liter (ppm).

Is there chlorine in my drinking water?

The City is required to maintain a "chlorine residual" in the water. This is to protect the water from microbial contamination as it travels from the treatment facility to your home. There is approximately 1 milligram per liter of chlorine in a consumer's water.



Team up with us to protect our watershed!

Protect water by helping rain absorb naturally and slowly instead of running down streets, collecting pollution, eroding hillsides, and destroying habitats. Healthy streams have lower temperatures and return water to underground sources.



Schools or Civic Groups

- Stormwater or watershed classroom education or projects
- Create a rain garden or rain swale
- Replace invasive plants with native stock
- Mark storm drains or clean up invasive plants



Private Property Owners

- Add erosion control
- Add native plants within 50 feet of a stream
- Create a rain garden or swale

Questions? Contact: environment@newbergoregon.gov or 503-537-1282

A cleaner community = A safer community



Unwanted items do not belong on the curb or down storm drains!

Report ANYONE you see dumping into storm drains!

503-538-8321

For a list of waste, yard debris, and recycling options in Newberg, visit the Waste Management website.

www.wmnorthwest.com/transferstation/newberg.htm

COVID-19 and Your Drinking Water

Your Water is Safe



As the COVID-19 pandemic continues, the City of Newberg is here every day providing clean, safe, and reliable drinking water to all of our customers.

COVID-19 has no impact on the supply or quantity of your tap water

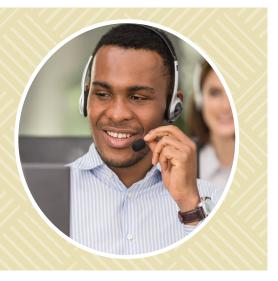
While the City of Newberg's water is sourced from an underground aquifer that prevents airborne contamination, we also adhere to strict safety requirements, per the Environmental Protection Agency and the Oregon Health Authority, to ensure your drinking water is free of bacteria and viruses such as COVID-19.



Here When You Need Us

Access to clean water is essential to everyday life and also to stay healthy during the COVID-19 pandemic.

For more information on how we're serving you during the COVID-19 pandemic, visit us online at www.newbergoregon.gov/publicworks or contact us at 503-537-1252.



Prepared for Emergencies

Redundancy: Plan for the best and prepare for the rest

Newberg's main water supply, the wellfield, is located across the Willamette river and is transported using two pipelines. One runs over the river on a utility bridge, and the other pipeline is underground beneath the river. In a disaster where one line is damaged, the second line can be isolated using valves to continue to bring drinking water to the city.

The city owns 14 Hurricane Portable Water Purification Systems. Each unit can "clean" 2.25 gallons per minute. If the water system became unexpectedly unsafe, water would be available by positioning these portable systems in common areas all over the city. They run on an internal battery, generator, or by gravity. The system requires no added chemicals.

Our staff train an average of 40 hours a year on safety, heavy equipment handling, and National Emergency Response techniques. Keeping our community safe every day and in an emergency is important to us.

Bring Preparedness Home



For more information, visit the Oregon Office of Emergency Management at www.oregon.gov/oem.



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FLUSHABLE WIPES CLOG PIPES!

"Flushable" wipes are NOT flushable. They are the #1 cause of sewer backups in your system.

Fo

Bottled Water Is Not Safer Than Tap Water



More than half of all bottled water comes from tap water.



Bottled water is \$8.26 per gallon

That's 1,000 times more expensive than tap water.



FDA does not require testing by bottling companies.



Oregon requires the City to conduct **10 different tests** weekly.



Water bottle manufacturing is **a significant source** of pollution.

How Do I Pay My City Municipal Services Bill?



Customers are invoiced on one monthly statement for all city fees, including water, wastewater, and stormwater.

SERVICES

Call 503-537-1205 or visit 414 E First Street, Newberg, Oregon.





Ask a Question





For more information about how to read the invoice, questions about winter averaging, or participating in the Citizens Rate Review Committee, contact the Finance office or visit

www.newbergoregon.gov/finance.

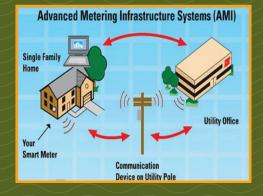
Need help paying your utility bill?

We're happy to help!

Visit www.newbergoregon.gov/finance/page/ water-bill-assistance or call 503-537-1205.



Projects and Upgrades



Fixed Base Radio Read

Towers have been installed and meters are being upgraded for plant staff to have access to real time data, saving the City money on collecting readings. When completed, rate payers will also be able to view hourly real-time and historical water use information for their account.



New Groundwater Treatment Plant

Our existing ground water treatment plant was originally constructed in 1953 and it was expanded and upgraded in 1961, 1970, 1980, 1997 and 2006.

The current plant is vulnerable to damage in a seismic event and there is a need to cover the treatment plant filters to meet State requirements for airborne contamination of treated water. Instead of spending over \$8,000,000 for these improvements, it has been determined that it makes more fiscal sense to construct a new ground water treatment plant to meet the City's needs.



Safe, Reliable Water: Redundant Supply

Phase 1 and 2 are complete for additional supply options for potable water—includes water rights, exploration, property acquisition and potentially another treatment plant.

Property has been acquired and water rights are in the process of being acquired.