City of Newberg's
WATER QUALITY REPORT 2019

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 and the Oregon Health Authority water quality regulations which includes constant testing and disinfection from the source through the treatment plant up to the reservoirs and to your tap.

In 2019 we produced
806.1
million gallons
of water with zero quality deficiencies or violations.

In addition
28.97
million gallons
of recycled water was supplied to the CPRD owned Chehalem Glenn Golf Course for irrigation. This helps conserve Newberg's source of drinking water.

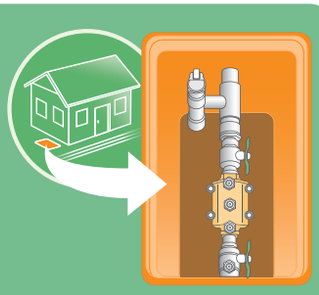
The City produced an average of
2.50
million gallons
per day (MGD) in 2019.

The peak production day was
4.50
million gallons

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 taste. Filtration is used to remove these elements.



The backflow prevention assembly is a brass valve usually found near your water meter.

Backflow Devices:

Preventing Contamination in the Drinking Water

Steps to Help Keep Our Drinking Water Clean and Safe:

1. Locate or Install a Backflow Assembly Device. If you have an underground irrigation system check to see if you have a backflow assembly prevention device.
2. If you install irrigation or a fire system plumbing, code requires a backflow device be installed.
3. Test Your Backflow Assembly Device Annually! We will help you remember by sending you a letter each year to have your inspection done.

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.

Not sure if you have a device?

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

City of Newberg Water Quality Data for the Year 2019

PWSID# 4100557

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	Goal Level	Date Tested	Influenced by
Nitrate (ppm)	Well Field	None Detected	10.0	10.0	10/7/19	Runoff from Fertilizer, natural deposits, septic systems etc.
TTHM[1] (ppb)	Distribution System	32	80	80	08/19	Byproduct of disinfection
HAA5[1] (ppb)	Distribution System	8	60	60	08/19	
Radium (pCi/L) 226/228	Well Field	0.08	NA	NA	10/2012	Erosion of natural deposits
Uranium (ppb)	Well Field	None Detected	30	30	5/2009	
Chlorine (ppm)	Treatment Plant	1.63	<4.0	4.0	2019	EPA requires range of disinfectant to stay in water Throughout the system. Not to exceed 4.0 ppm.
	Distribution system	1.07	<4.0	4.0	2019	
Substance	**Test Location**	**Over Limit**	**Level**	**Goal**	**Date Tested**	**Influenced by**
Lead (ppb) *Tested every 3 yrs*	Residential Taps	0%	15	0	8/2018	Corrosion of household plumbing
Copper 3 (ppm) *Tested every 3 yrs*	Residential Taps	0%	<1.3	1.3	8/2018	
Sodium (ppm)	Well Field	0%	28.7	0%	2019	There are no limits set for Sodium by the EPA.
Substance	**Location**	**Number of Tests**	**Result**	**Goal**	**Year**	**Notes**
Total Coliform Bacteria	Multiple Locations	396	396 Negative	NA	2019	Naturally occurring but high levels will trigger further testing for other contaminates
Arsenic	Well Field		Negative	NA	5/2014	Testing schedule every 9 years
Other testing	**Number of tests**	**Frequency**	**Result**		**Last test**	
Regulated VOC	21	Every 3 yrs	ND	NA	2017	Organic ie petroleum, solvents
Unregulated VOC	36	Every 3 yrs	ND	NA	2017	
Organic SOC	43	Every 3 yrs	37 Below MCLs	NA	2019	Pesticides, PCBs
Inorganic	18	Every 9 yrs	Below MCLs	NA	2011	Man made compounds

Why Provide A Water Quality Report?

The source of drinking water (including bottled water) includes 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.

Contaminants that may be present include:

- Microbiological contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Pesticides and herbicides which may come from a variety of sources, such as agriculture, storm water runoff and residential use.
- Organic chemicals, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production. These can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which may be naturally occurring, or be the result of mining or oil and gas production.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which 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 protection for public health.

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 is available from www.epa.gov/lead or the Safe Drinking Water Hotline (800) 424-LEAD [5323].

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—measured at 42 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.

ABBREVIATIONS

ppm	Parts Per Million or milligrams per liter
ppb	Parts Per Billion or micrograms per liter
NTU	Nephelometric Turbidity Units
pCi/L	Picocuries Per Liter
mgd	Million Gallons per Day
TTHM	Total Trihalomethanes
HAA5	Haloacetic Acids
ND	None Detected
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
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health.
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
SOC	Synthetic Organic Contaminants
PCB	Polychlorinated Biphenyls

FOOTNOTES: 1. Values are maximum recorded of all sources sampled during 2019. 2. 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. 3. Measured at residential taps

Team up with us to Protect our Watershed

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

Call today!
Contact: Kristen Svicarovich at 503-537-1282

PRIVATE PROPERTY OWNERS

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

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

REPORT ***ANYONE*** YOU SEE DUMPING INTO STORMDRAINS CALL 503-538-8321

A Cleaner COMMUNITY = *A Safer* COMMUNITY

Unwanted items do not belong on the curb or down stormdrains!

For a list of waste, yard debris and recycling options in Newberg, visit the Waste Management website at www.wmnorthwest.com/transferstation/newberg.htm

COVID-19 and Your Drinking Water

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

YOUR WATER IS SAFE

COVID-19 has no impact on the supply or quality 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 staying healthy during the coronavirus pandemic. For more information on how we're serving you during the COVID-19 pandemic, visit us online at https://www.newbergoregon.gov/publicworks or contact us at (503) 537-1252.

Prepared for Emergencies

Redundancy: Plan for the best and Prepare for the rest.

The Wellfield is located on the other side of the river and water is transported using two pipelines. One runs over the river on a utility bridge and the other pipeline is underground beneath the river. In the event of a disaster where one line was damaged the second line can be isolated using valves to continue to bring drinking water into the city.

A new 100kw generator has been installed at the water wellfield. The generator is permanent and will run the pumps drawing water in the event of power outages. When triggered the generator alerts staff 24-7 so they can monitor the outage and respond until power switches back over.

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 will 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:

What do you need for 2 hours / 2 Days / 2 Weeks

2 WEEKS READY

Follow us on Facebook
https://www.facebook.com/2WeeksReady

A safer community starts with preparation at home. It only takes a few minutes to gather up items for your family and pets.

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

Upgrades and Projects

WELL FIELD/WATER SOURCE

Increased security and emergency preparedness projects have been completed at the well field. New security cameras and gates have been installed plus an emergency isolation valve has been installed to the two lines that deliver raw water from the source to the Water Treatment Plant (WTP). This allows one line to be turned off and repaired, if damaged, while keeping the second line delivering water.

WATER TREATMENT PLANT:

New inline water quality monitoring equipment has been installed to replace outdated equipment and the process to begin updating communication equipment between the treatment plant and the outlying parts of the system has begun.

SYSTEM WIDE PROJECTS:

The following projects will take place over the next few years.

- Water Distribution Centers will be located throughout Newberg funded through a Grant from State of Oregon Emergency Management. 10 locations staffed by trained volunteers will provide safe emergency drinking water if the water delivery system damaged in a catastrophic event.
- A seismic study to assess the vulnerability of the well field, the Water Treatment Plant, the Reservoirs and the connecting water lines throughout the system. This study will assess vulnerable areas and determine improvements to protect the system in the event of an earthquake.
- The Water Redundancy study to develop an alternative water supply in the event of an emergency and to meet the growing needs of the community in the future.

Think
Before You Flush

AN OVERFLOWING TOILET CAN RUIN YOUR HOME IN AN INSTANT!

Maxi pads & tampons/ applicators

Cotton swabs & hair

Dental floss & whitening strips

Kitty litter & condoms

Baby & cleaning wipes

Bandages & OTC medications

A TOILET IS NOT A TRASH CAN

FLUSHABLE WIPES CLOG PIPES!

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

What if I don't like the taste of my tap water?

- Everyone has differing tastes. Dish soap, type of plumbing and temperature all affect taste.
- Odd tasting water does not necessarily mean that it is unhealthy or contaminated. The taste may be a result of natural mineral content in the water or state required chlorination.
- Chill water in refrigerator.
- Using a filter is an easy way to have consistent tasting water – and it's much less expensive than buying bottled water.

Bottled water
is not safer than tap water.

- More than half of all bottled water comes from tap water.
- FDA does not require testing by bottling companies.
- Oregon requires the City to conduct 10 different tests weekly.
- Bottled water is $8.26 per gallon. That's 1000 times more expensive than tap.
- Water bottle manufacturing is a major source of pollution.

How do I pay my City Services bill?

Customers are invoiced on one monthly statement for all city fees including water, wastewater and storm water. To arrange for electronic payments, ask question or start/end service, call 503-537-1205 or visit 414 E First Street Newberg Oregon.

For more information about how to read the invoice, questions about winter averaging, or to participate in the Citizens Rate Review committee, contact the Finance office or visit www.newbergoregon.gov/finance.

City of Newberg

414 E First St
Newberg, OR 97132