



Water Quality REPORT 2018



PUBLIC WORKS

PRIDE IN SERVICE – INTEGRITY IN ACTION

Funding and Resources for Projects that Improve 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

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.

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

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

Report ANYONE you see dumping into stormdrains 503-538-8321

2018 IMPROVEMENTS

WELL FIELD/WATER SOURCE:

Wellfield pump 7 has been replaced to avoid failure during peak water needs. During a routine inspection the impellers and internal parts were declared worn beyond life and replacement parts no longer available. To avoid complete failure of the pump and expensive emergency repairs, the pump has been replaced.

Wellfield pump 6 has a new backup power generator that will keep water flowing during power events. This is in addition to power generators belonging to PGE increasing reliability.

WATER TREATMENT PLANT:

The upgrade for the PSI Microcolor on demand Hypochlorite System is complete. This system is modular and allows for maintenance and repairs without taking the treatment plant out of service. It doses raw water “on demand” with the required 1% hypochlorite needed to disinfect and protect water from contamination in the transportation lines. The water and wastewater plants now use the same technology allowing for more efficient parts management and cost control.

Public Works posts projects and upgrades on the website at www.newbergoregon.gov/publicworks.



HOW CAN I PARTICIPATE IN DECISIONS ABOUT NEWBERG'S WATER SYSTEM AND THE COSTS?

A Citizen Rate Review Committee meets to review water rates. The committee considers factors such as current and future water demand, State and Federal regulations, operation and maintenance costs, needed improvements, reserve funds, and other factors. The committee then submits a report to the City Council. The Council then determines the rates for the water. If you would like to be involved, contact the Finance Department at 503-538-9425.



Visit us on Facebook! Public Works Newberg



VOLUNTEER WITH US!

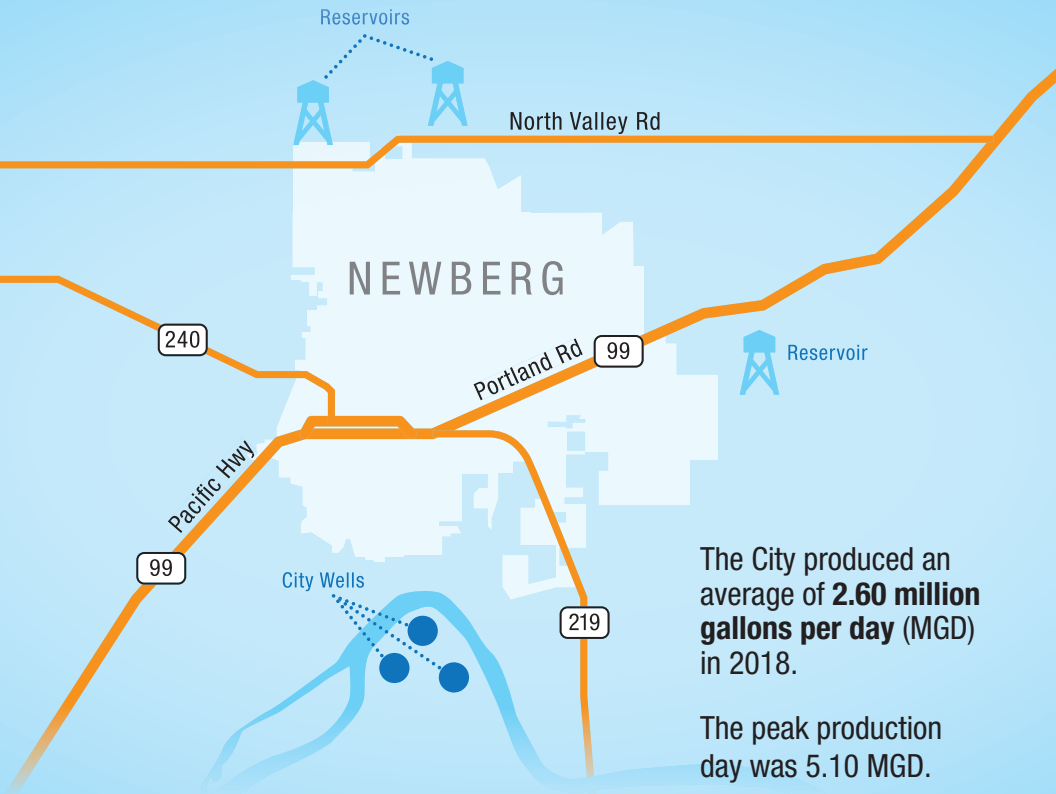
Opportunities to partner with the City on restoration projects near streams, install water gardens and mark storm drains. Our staff will assist your civic, community, classroom or youth group in getting started.

Contact 503-537-1282 or email environment@newbergoregon.gov.

The City of Newberg provides reliable water to you!

Once again we are proud to present our annual water quality report for the calendar year 2018. The City of Newberg compliance with state and federal drinking water laws remains exemplary. We continue to be committed to providing a safe and dependable supply of drinking water each and every day. We remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all of our water users.

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.



The City produced an average of **2.60 million gallons per day (MGD)** in 2018.

The peak production day was 5.10 MGD.

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

City of Newberg Water Quality Data for the Year 2018

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.

PWSID# 4100557

Substance	Water Source	Level	MCL	Goal Level	Date Tested	Influenced by
Nitrate (ppm)	Well Field	None Detected	10.0	10.0	8/21/18	Runoff from Fertilizer, natural deposits, septic systems etc.
TTHM ¹ (ppb)	Distribution System	26	80	80	10/2018	Byproduct of disinfection
HAA5 ¹ (ppb)	Distribution System	16	60	60	10/2018	Byproduct of disinfection
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	Erosion of natural deposits
Chlorine (ppm)	Treatment Plant	1.97	<4.0	4.0	2018	EPA requires range of disinfectant to stay in water
	Distribution system	1.34	<4.0	4.0	2018	Throughout the system. Not to exceed 4.0 ppm.
Substance	Test Location	Over Limit	Level	Goal	Date Tested	Influenced by
Lead (ppb)	Residential Taps	0%	15	0	8/2018	Corrosion of household plumbing
Tested every 3 yrs						
Copper 3 (ppm)	Residential Taps	0%	<1.3	1.3	8/2018	Corrosion of household plumbing
Tested every 3 yrs						
Sodium (ppm)	Well Field	0%	37.6	0%	2017	There are no limits set for Sodium by the EPA.
Substance	Location	Number of Tests	Result	Goal	Year	Notes
Total Coliform Bacteria	Multiple Locations	395	395 Negative	NA	2018	Naturally occurring but high levels will trigger further testing for other contaminants
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	37	Every 3 yrs	37 Below MCLs	NA	2016	Pesticides, PCBs
Inorganic	18	Every 9 yrs	Below MCLs	NA	2011	Man made compounds

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 2018. 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

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.

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.

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].



Bottled water is not safer than tap water.

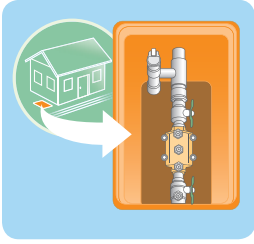
- ◆ More than half of all bottled water comes from tap water.
- ◆ FDA does not require testing by bottling companies.
- ◆ Oregon requires the City to conduct 10 different tests weekly.
- ◆ Bottled water is \$8.26 per gallon. That's 1000 times more expensive than tap.
- ◆ Water bottle manufacturing is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



Use a
refillable
water
bottle

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.

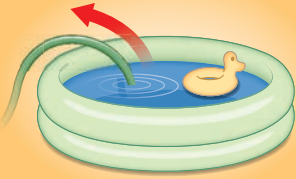
The backflow prevention assembly is a brass valve usually found near your water meter.

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

3 **Test Your Backflow Assembly Device Annually!**

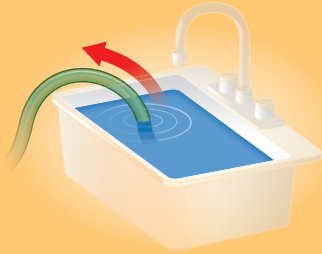
We will help you remember by sending you a letter each year to have your inspection done.

HERE ARE ADDITIONAL CROSS CONNECTIONS AROUND YOUR HOME WITH TIPS TO HELP KEEP OUR DRINKING WATER SAFE.



in a pool...

in a
laundry sink...



...or car wash bucket



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.

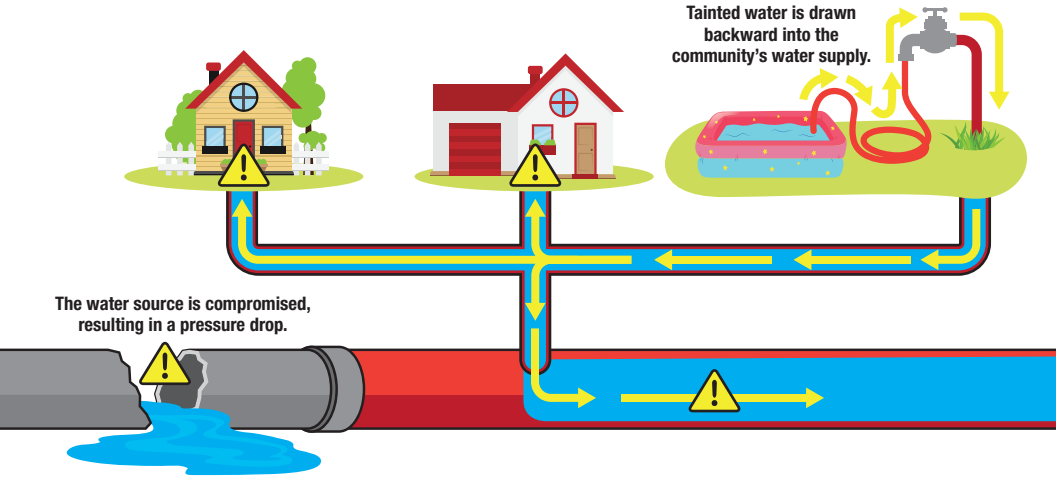


Not sure if you have a device?

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

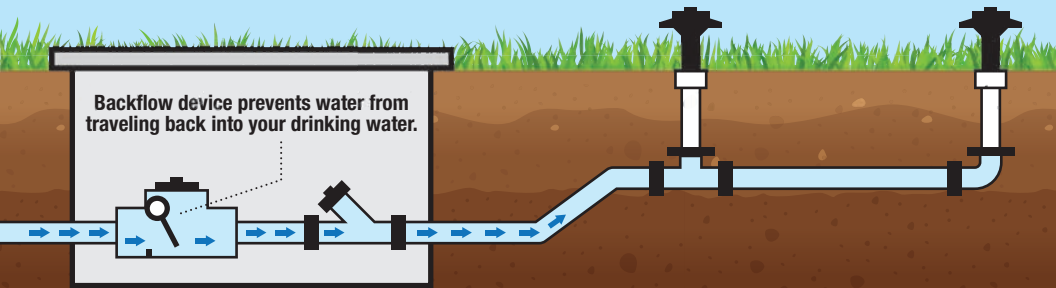
Why does it matter so much?

Your water is delivered by the same pipe as your neighbors, whether at work or at home. Water can be drawn out of pools, watering troughs and bathtubs, and into the water supply.

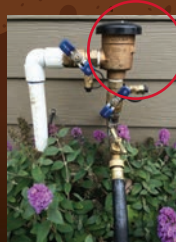


Be a savvy customer. Research what is included in 'Do-it-yourself' kits

Devices to PREVENT backflow are required. They keep your family or customers safe.

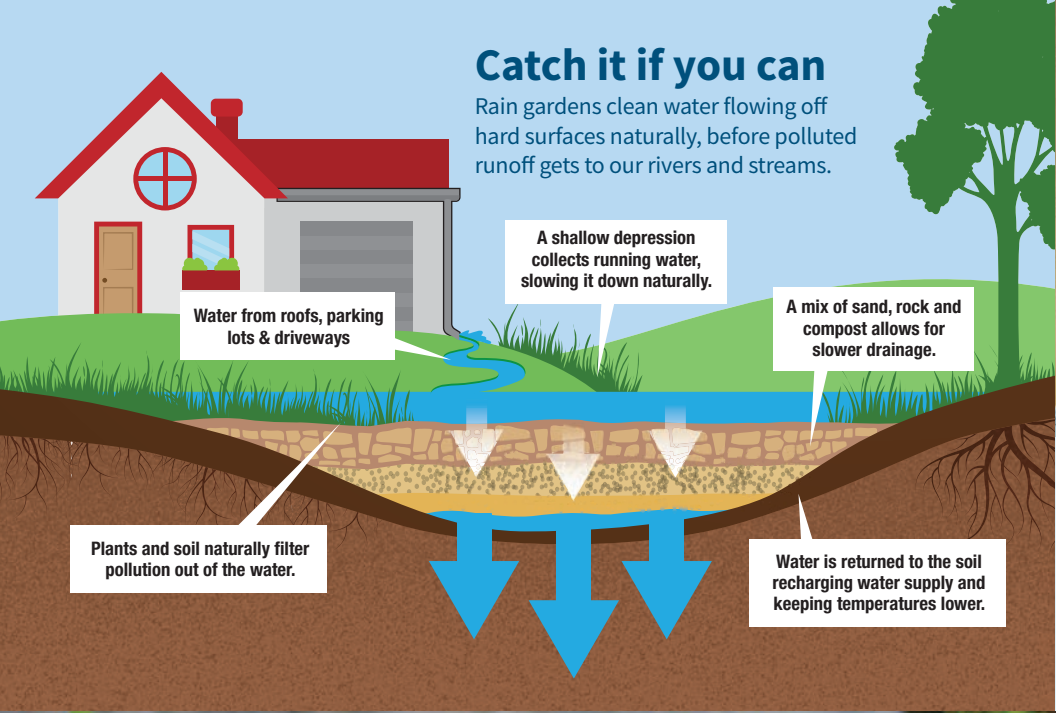


Be a good neighbor and ensure the proper backflow devices are connected to your outlets.



Catch it if you can

Rain gardens clean water flowing off hard surfaces naturally, before polluted runoff gets to our rivers and streams.



We will help you grow.

NEWGROW Compost

EPA rating Class A



PERSONAL CHECKS

**\$14 Bulk per
cubic yard**

**Small gardeners
bags: \$4.50 each**

OPEN ALL YEAR

Regular hours: Weekdays, 8am - 3:30pm - Closed Holidays -

2600 NE Wynooski Rd., Newberg, OR 97132

Off Hwy 219 South, 3 blocks west of Sandoz Rd.

www.newbergoregon.gov/publicworks • 503-537-1252, ext. #1



@newbergpublicworks

THINK BEFORE YOU FLUSH



AN OVERFLOWING TOILET CAN RUIN YOUR HOME IN AN INSTANT!

Maxi pads & tampons/ applicators



Dental floss & whitening strips



Baby & cleaning wipes



Cotton swabs & hair



Kitty litter & condoms



Bandages & OTC medications



CLOG

Photo illustration © 2016 Goldstreet Design Agency, Inc.

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.



414 E First St
Newberg OR 97132

How do I pay my City Services bill?

Customers are invoiced on one monthly statement for all city fees including water, waste water 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.