

# Water Quality Report 2017

**PUBLIC WORKS**

*Pride in Service – Integrity in Action*

# 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 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, 120/220 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.



Over 80% of the City employees are First Aid, CPR and AED trained.

# Bring Preparedness Home:

## What do you need for 2 hours 2 days and 2 weeks



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](http://www.oregon.gov/oem)

# Upgrades and Projects

**Disinfection upgrade Waterplant 2018:** The Water Treatment disinfection system is upgrading to a PSI Microclor Hypochlorite Generation. This is a more efficient disinfection system already in use at the Wastewater Treatment plant that has lower chemical and energy costs. The modular system allows for maintenance and repairs without taking the entire system out of service. It doses "on demand" generating the 1% hypochlorite as needed in real time requiring less manual adjustments.

**Wellfield Communication System:** Upgrades have been installed for complex modulation signals between the well field and the water plant. This gives the City a secure higher bandwidth in addition to the radio and QAM communications for security cameras and pump control. Vegetation has also been cut to remove interference between the facilities.



To stay current with projects and upgrades visit the Public Works Page on our website.



## 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!

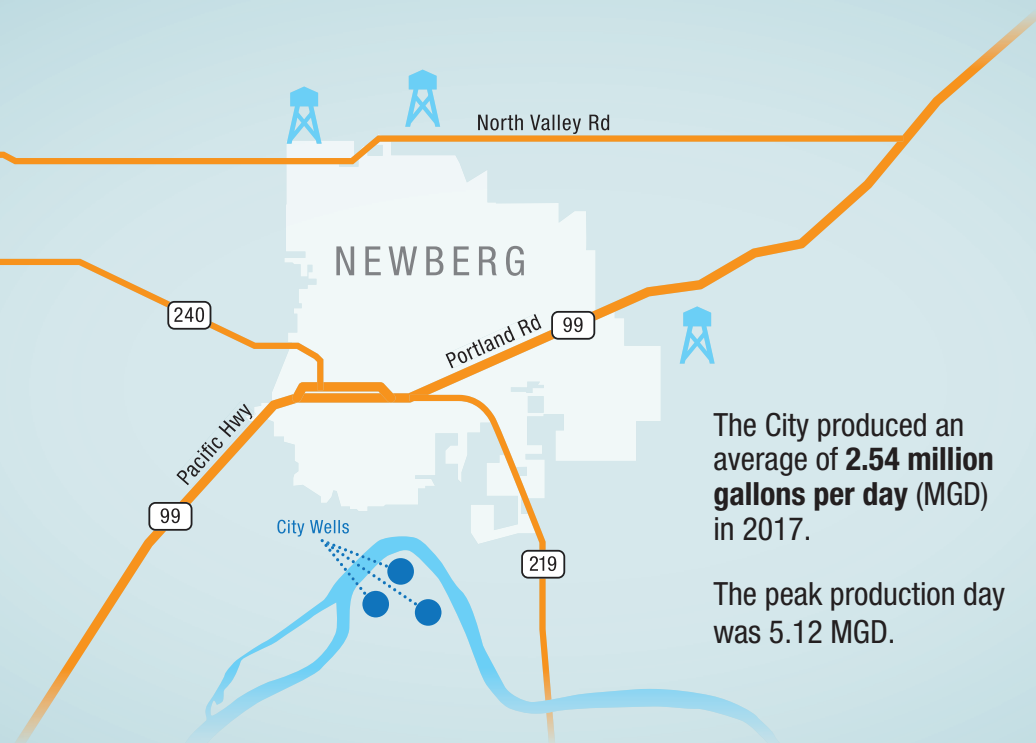
Opportunities to partner with the City on restoration projects near streams, install water gardens and mark storm drains. Our staff will assist your civic, community, classroom or youth group in getting started.

Contact 503-537-1282 or email [environment@newbergoregon.gov](mailto:environment@newbergoregon.gov).

# The City of Newberg provides exceptional water to you!

Once again we are proud to present our annual water quality report for the calendar year. The City of Newberg is pleased to share that our 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 is not from the river; instead it comes from a groundwater supply system 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 **2.54 million gallons per day (MGD)** in 2017.

The peak production day was **5.12 MGD**.

Water from the wellfield is safe to drink without treatment. However, to protect your health, the City further disinfects using Chlorine. Chlorine concentration is measured continuously at the treatment plant and is checked at various points in the system weekly. Enough chlorine is added at the plant to provide approximately one part per million (ppm) chlorine after treatment.

Water from the well field contains iron and manganese. Neither of these pose a health risk but can cause discoloration or affect taste. Therefore, raw water is filtered to minimize this. The water is also treated with sodium hydroxide to minimize the leaching of lead and copper from household plumbing into your tap.

## City of Newberg Water Quality Data for the Year 2017

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	8/1/2017	Runoff from Fertilizer, natural deposits, septic systems etc.
TTHM1 (ppb)	Distribution System	37	80	80	11/2017	Byproduct of disinfection
HAA51 (ppb)	Distribution System	15	60	60	11/2017	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	2017	EPA requires range of disinfectant to stay in water
	Distribution system	1.34	4.0	4.0	2017	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	8/2015	Corrosion of household plumbing
Tested every 3 yrs						
Copper 3 (ppm)	Residential Taps	0%	1.3	1.3	8/2015	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	396	395 Negative	na	2017	Naturally occurring but high levels will trigger further testing for other contaminants
Arsenic	Well Field		Negative	na	5/2014	Testing schedule every 3 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
Unregulated/Voluntary	11		Negative	na	2017	

### ABBREVIATIONS

<b>ppm</b> parts per million or milligrams per liter	<b>HAA5</b> haloacetic acids	<b>MCLG</b> Maximum Contaminant Level Goal The level of a contaminant in drinking water below which there is no known or expected risk to health.
<b>ppb</b> parts per billion or micrograms per liter	<b>ND</b> None Detected	<b>AL</b> Action Level The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.)
<b>NTU</b> nephelometric turbidity units	<b>MCL</b> 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.	
<b>pCi/L</b> picocuries per liter		
<b>mgd</b> million gallons per day		
<b>TTHM</b> total trihalomethanes		

**FOOTNOTES:** 1. Values are maximum recorded of all sources sampled during 2017. 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](http://www.epa.gov/lead) or the Safe Drinking Water Hotline (800) 424-LEAD [5323].

# 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](http://www.wmnorthwest.com/transferstation/newberg.htm)

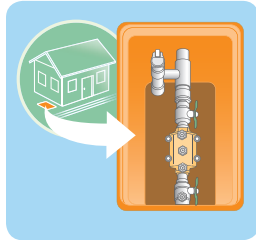
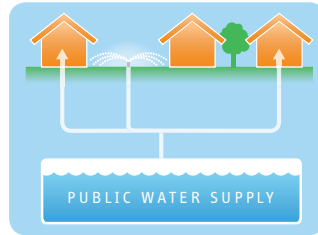
Report ANYONE you see dumping into stormdrains 503-538-8321

# Backflow Devices

Preventing Contamination in the Drinking Water

## DID YOU KNOW THAT YOUR IRRIGATION SYSTEM CAN CONTAMINATE THE DRINKING WATER?

These hazards are known as cross connections and can result in contaminated water back-flowing into your home's drinking water pipes without you even knowing. Once contaminated, the water from your house can backflow into the public water system around you.



### 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.

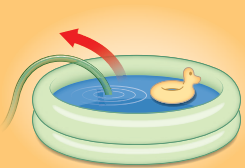
The backflow prevention assembly is a brass valve usually found near your water meter.

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

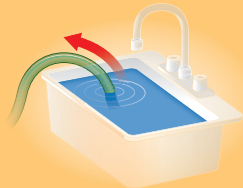
**3** Test Your Backflow Assembly Device Annually!

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 503-537-1239 or email [backflow@newbergoregon.gov](mailto:backflow@newbergoregon.gov) for assistance finding the device on your property.

# 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.



# NEWGROW Compost

EPA rating Class A



**\$14 Bulk per cubic yard**

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

2600 NE Wynooski Rd., Newberg, OR 97132

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

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

- Closed Holidays -

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503-537-1252, ext. #1



## 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

# 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



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?**

Residents receive a monthly invoice for all City Services and Fees. The Water, Stormwater, Sewer and other charges are itemized on that invoice. Invoices and payments are generated by the Finance Department. You can make your payment at City Hall, 414 E First Street, Newberg, Oregon 97132. You may also sign up online to pay electronically or set up an auto payment by visiting the website at [www.newbergoregon.gov](http://www.newbergoregon.gov) or call 503-537-1205.