

Water Quality Report 2016

PUBLIC WORKS

Pride in Service – Integrity in Action

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Hard for You!

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The City of Newberg works Hard for You!

While you are living your daily lives, we are hard at work making sure you have reliable water and wastewater systems. From safe drinking water to smoothly running sewer systems, there's a lot going on and we want to keep you informed.



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.



Volunteer with Us!

Opportunities to partner with the City and SOLVE exist for groups and individuals. Let us know your interests. Materials provided.

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

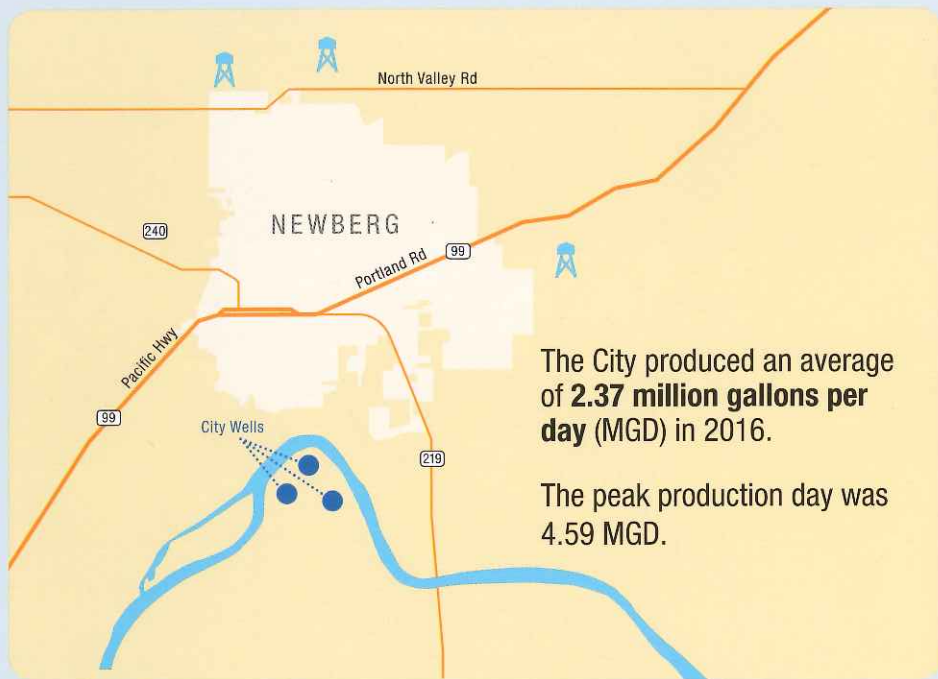


Visit us on Facebook!
Public Works Newberg

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 2016. The City of Newberg is pleased to share that our compliance with state and federal drinking water laws remains exemplary. As in the past, we continue to be committed to providing you with a safe and dependable supply of drinking water each and every day. To that end, 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 and pumped underground 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 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 head of 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 2016

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	08/20/16	Runoff from Fertilizer, natural deposits, septic systems etc.
TTHM1 (ppb)	Distribution System	33	80	80	11/2016	Byproduct of disinfection with chlorine
HAA51 (ppb)	Distribution System	18	60	60	11/2016	Byproduct of disinfection with chlorine
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 vv	5/2009	Erosion of natural deposits
Chlorine (ppm)	Treatment Plant	1.21	4.0	4.0	2016	EPA requires range of disinfectant to stay in water
	Distribution system	0.87	4.0	4.0	2016	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 Test	0%	36.1	0%	2016	There are no limits set for Sodium by the EPA.
Substance	Location	Number of Tests	Result	Goal	Year	Notes
Total Coliform Bacteria	Multiple Locations	397	396 Negative		2016	Naturally occurring but high levels will trigger further testing for other contaminants
Arsenic	Well Field		Negative		5/2014	Testing schedule every 3 years
Other testing	Number of tests	Frequency	Result		Last test	
Organic VOC	21	Every 3 yrs	Negative		2014	Organic ie petroleum, solvents
Organic SOC	61	Every 3 yrs	Negative		2016	Pesticides, PCBs
Inorganic	18	Every 9 yrs	Below MCLs		2011	Man made compounds
Unregulated/Voluntary	11		Negative		2014	

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.

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.)

FOOTNOTES: 1. Values are maximum recorded of all sources sampled during 2016. 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.

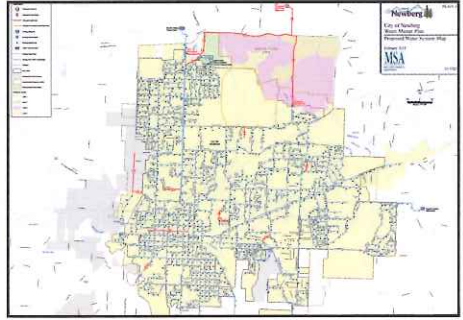
A Message From the EPA

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].

Building for the Future

Upgrades and Improvements 2016



WELL UPGRADES

Well 9 has been completed at the wellfield. This well adds redundancy to the draw of water from the aquifer keeping supply consistent and strain on the water table and pumps low.

WATER SYSTEM MASTER PLAN

Long term planning for infrastructure and supply is a proactive tool for City planning. A Water Master Plan includes a complex study of current, replacement and upgrade costs. It also projects population growth and demand for the future. The Master Plan is currently in development for future presentation to the City Council.

RESERVOIR UPGRADES

The City has 3 reservoirs each with 4 million gallons capacity. The 2 North Valley reservoirs are receiving seismic and mixing system upgrades. Proper mixing improves water quality for the entire system. Seismic upgrades bring the older reservoirs up to current standards to withstand potential damage from an earthquake event.

The city has three such reservoirs providing up to 12 million gallons total in storage and supply.

Water Efficiency Kits:

Want to improve water efficiency and save money? Request a free water conservation kit that includes low-flow faucet aerators for bath and kitchen, dye tablets to check for leaks, a showerhead, and more!



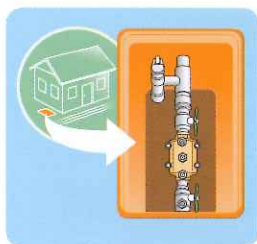
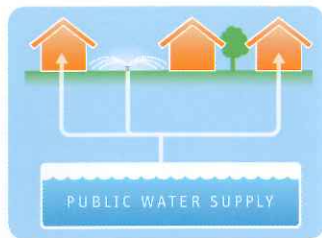
Call 503-537-1282 or visit City Hall to request yours!

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 for assistance finding the device on your property.

Stormwater

Is it allowed to pour old chemicals, oil, dirty water into the storm drains on the street ?

Never! The storm drains and storm ditches take rain water out of your streets to prevent flooding. This water eventually ends up in our rivers and streams. Nothing but storm water should go into these drains. Call 503-537-1234 to report anyone (home or business) dumping ANYTHING into any storm & sewer drains.



'Newgrow' GARDEN COMPOST

\$14 PER CUBIC YARD
(loaded in bulk)

BEST VALUE IN THE REGION! A FAVORITE OF LOCAL LANDSCAPERS AND HOMEOWNERS.

(Tested and heat cured to meet EPA "Class A" rating with NO restrictions on use.)

- Available all year
- Pathogen free
- Open weekdays 8 - 3:30
- Visa Mastercard & Check Accepted

2301 Wynooski Road, Newberg, OR 503-537-1252 www.newbergoregon.gov/operations

'Newgrow' GARDEN COMPOST

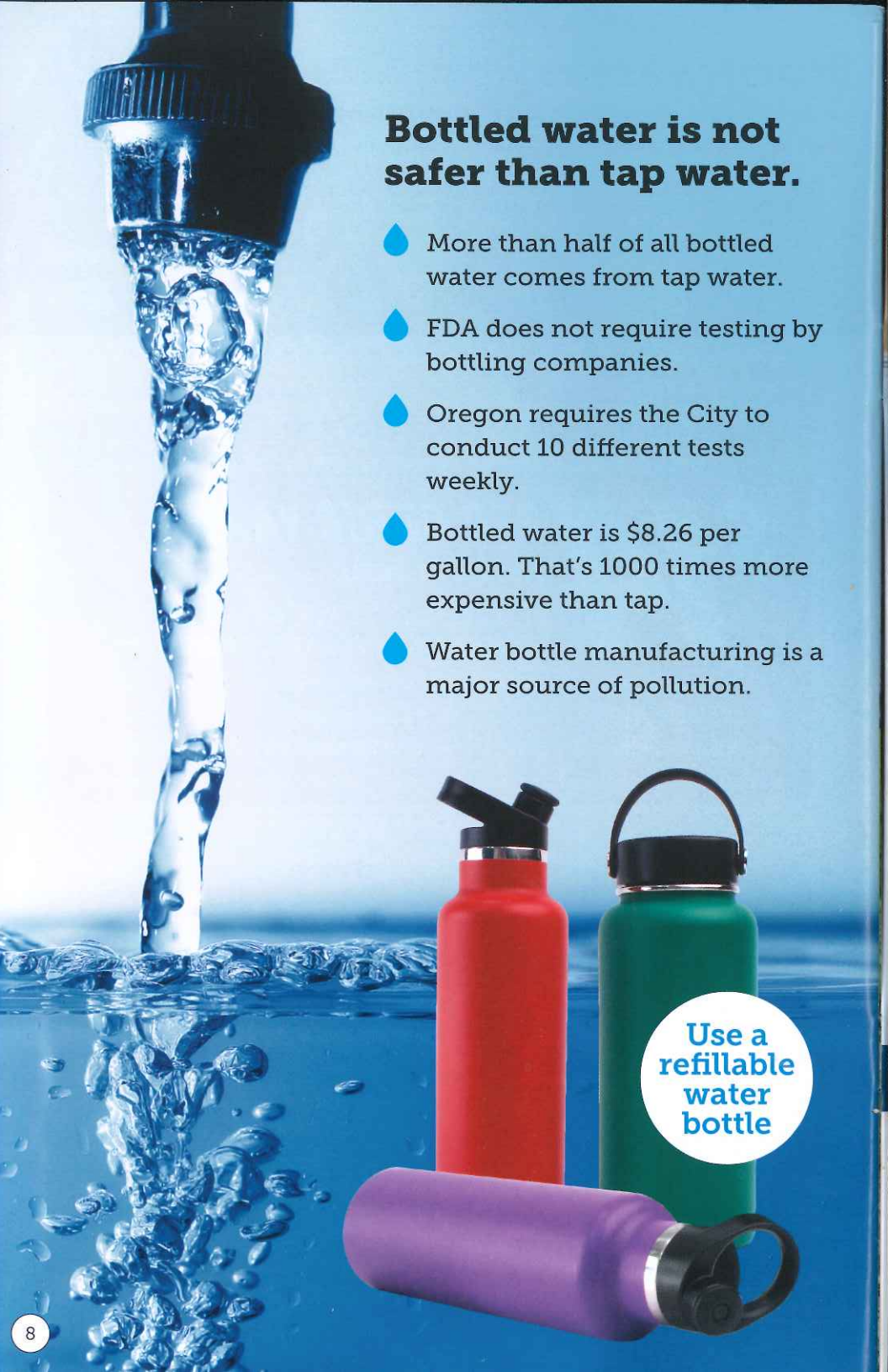
\$4⁵⁰ 1.5 CUBIC FOOT
GARDENER'S BAGS

**PERFECT FOR SMALLER PROJECTS
THAT DON'T NEED A TRUCK TO HAUL.**

(Tested and heat cured to meet EPA "Class A" rating with NO restrictions on use.)

- Available all year
- Pathogen free
- Open weekdays 8 - 3:30
- Visa Mastercard & Check Accepted

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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



CLOG



Bandages &
OTC medications

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 or call 503-537-1205.