



2016 Annual Drinking Water Report for Chehalem Valley Water Assn

This is the annual Consumer Confidence Report (CCR) for your drinking water system. In this report, you can find general information regarding water quality testing, health information, and specific information regarding the water quality in your water system.

Educational & Health Information

The sources of drinking water (both tap water and bottled water) include 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, 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.

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. Hiland Water Corporation 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 2 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 the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.



About Chehalem Valley Water Assn and 2016 Sampling Results

Your drinking water comes from the City of Newberg. We buy bulk water. The Annual Report from Newberg can be found below.

We continually sample for many different chemicals and have found very little contamination. Contamination is anything other than pure water. We sample total coliform bacteria as an indicator of microorganisms that should not be present. The table below lists all the drinking water contaminants that we detected during the past calendar year or in our most recent tests as noted. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Regulated	MCLG	MCL	Our Water	Sample Date	Violation	Typical Source of Contaminant
Total Trihalomethanes TTHM (ppb)	N/A	80	21	June 2016	No	Disinfection byproduct
Total Haloacetic Acids HAA5 (ppb)	N/A	60	4.5	June 2016	No	Byproduct of drinking water disinfection
Copper (ppm)	1.3	1.3 AL	0.123	Sept 2014*	No	Corrosive water & home plumbing

*This is the most recent monitoring, done in compliance with regulations.

Violations: We had no violations in 2016.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

N/A: not applicable ND: not detectable at testing limit

ppm: parts per million or milligrams per liter **ppb:** parts per billion or micrograms per liter **pCi/L:** picocuries per liter (a measure of radiation)

General information & CCR questions

Maureen Rogers
 316 Columbia Dr
 Newberg, OR 97132
 503-544-4237

Water District Edition



Water Quality Report 2016



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 strongly running sewer systems, there's a lot going on and we want to keep you informed.



Learn with us!

We host education programs in collaboration with Local Schools. Students participate in stream sampling, World Water Monitoring Day, Stormwater prevention and other ecology programs. We can bring MAD SCIENCE assemblies to Your School!



Volunteer with Us!

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



Contact 503-537-1262 or visit environment@newberg.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 2015. 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.

Raw can 1 participate in donations 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 503-537-1283.

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.
THM1 (ppb)	Distribution System	53	80	60	11/2016	Byproduct of disinfection with chlorine
HAA51 (ppb)	Distribution System	18	60	60	11/2016	Byproduct of disinfection with chlorine
Radium (pCi/L) 228/226	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	1.21	4.0	4.0	2016	EPA requires range of disinfectant to stay in water
	Distribution system	0.67	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	358 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 in petroleum, solvents
Organic SOC	81	Every 3 yrs	Negative		2016	Pesticides, PCBs
Inorganic	18	Every 9 yrs	Below MCL		2011	Man made compounds
Unregulated/Voluntary	11		Negative		2014	

ABBREVIATIONS

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

FOOTNOTES: 1. Values are maximum recorded or all sources sampled during 2016. The 95th percentile value is the level that 95% of the homes tested were at or below. If the 95th percentile value exceeds the AL, water suppliers must soon engage to reduce lead and/or copper levels. 2. Measured at residential taps

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 City Council.

RESERVOIR UPGRADES
 Reservoir upgrades at North Valley 1 and 2 were completed by the end of 2016. Seismic upgrades and water mixing improvements provide consistent daily quality and stability in the event of an earthquake.

The city has 3 such Reservoirs providing up to 12 million gallons total in storage and supply.

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].

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.

Water Efficiency Kits:

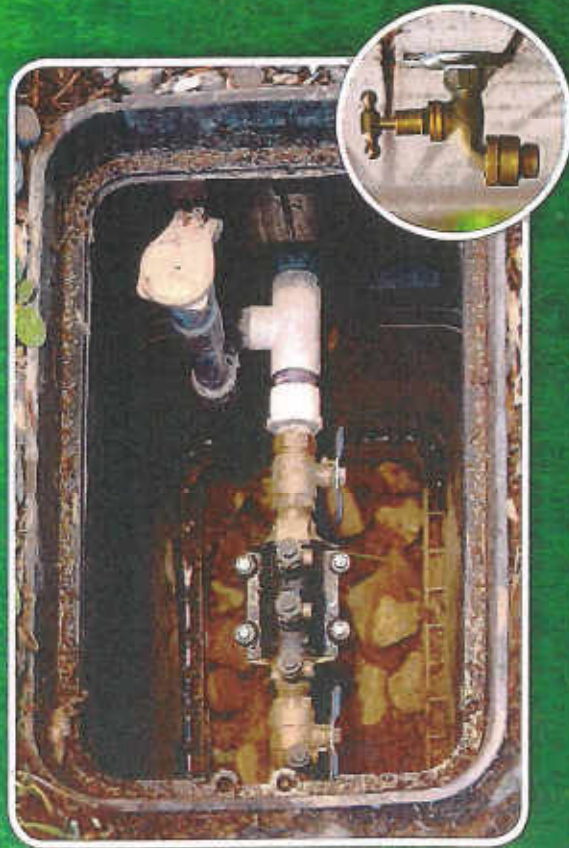
Want to improve water efficiency and save money? Request a free water conservation kit that includes low-flow faucet aerators for bath and kitchen, dye tablets to check for leaks, a showerhead, and more!



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

Backflow Devices

Preventing Contamination in the Drinking Water



What's a Backflow Device? Do I have a Device?

The sprinkler system or water fountain at your home should have a backflow prevention device on it. This device prevents water that has entered the fountain or sprinklers from accidentally flowing back into the drinking water lines.

If you have a new water connection or device installed, you or your contractor must obtain a permit from the City Building Department. For permit questions, contact the Building Department at 503-537-1209.

The Program

As required by Oregon Statute and City Code, backflow devices must be tested annually to ensure they are functioning. The city will mail a reminder letter to each residence each year. Tests are conducted by Certified Testers chosen and hired by the property owner. Once device testing is complete, the tester will send the City a copy of the report. Home Associations are also required to have an annual backflow device inspections each year.

Need a list of certified testers?
<https://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/CrossConnection/pages/publicists.aspx>

The City of Newberg does not promote or endorse any specific business, vendor or aftermarket products. Public Record laws allow private companies to obtain mailing lists from the City and send solicitation to you without the City's consent. Citizens and business owners have the right to hire the vendor of their choosing and should take precautionary steps to research any company or product against sales fraud and to make sure a service or product meets code.

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.



NEWBERG WATERSHED GRANT

NOW AVAILABLE

CIVIC GROUPS & SCHOOLS (501c-3):

The objective of the watershed grant is to provide up to \$1,000 for projects that increase the water quality in streams or provide education on water quality. Typical projects include invasive plant removal with native replanting, native tree planting along streams, construction of rain gardens or other green infrastructure or classroom education that includes an outdoor field trip.

PRIVATE PROPERTY OWNERS:

Apply to receive 50% reimbursement (maximum \$200) to install erosion control, compost, and native plants within 25 ft. of any streambank; or to construct a rain garden or native plants and systems that slow Stormwater drainage.

Grant applications or information about other programs, conservation kits and volunteer opportunities are available by contacting Sonja Johnson at 503.537.1282 email: environment@newbergoregon.gov

In the kitchen

Clogged sink drains can ruin your home, too! Keep all sinks in your home clog-free by following these simple steps:

- Fruit and vegetable stickers belong in the trash, not the drain.
- Always place cooled fats, oils and grease into a covered, disposable container and throw it into your solid waste cart. Never pour fats, oils or grease down sink drains or toilets.
- Soak up remaining oils and grease with an absorbent material such as paper towels and throw into your food waste/organics cart.
- Before you wash dishes, place food scraps into your food waste/organics cart.



THINK BEFORE YOU FLUSH

AN OVERFLOWING TOILET CAN RUIN YOUR HOME IN AN INSTANT!

CLOG

- Maxi pads & tampons/ applicators
- Dental floss & whitening strips
- Baby & cleaning wipes
- Cotton swabs & hair
- Kitty litter & condoms
- Bandages & OTC medications

FLUSHABLE WIPES CLOG PIPES!

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

Photo Illustration © 2014 International Design Agency, Inc.

A TOILET IS NOT A TRASH CAN

NEWGROW COMPOST

Spring will return. Are you ready?

\$14.00 a yard bulk **\$4.50** per bag

Weekdays 8:00am - 3:30pm
503-537-1252 #1

NEW ENTRANCE
2 blocks west of Sandoz Rd
2301 NE Wynooski Rd Newberg
Open during ODOT construction

www.newbergoregon.gov/publicworks