



# *City of Newberg Water Quality Report*

*2013 Water Data*

[www.newbergoregon.gov](http://www.newbergoregon.gov)

*Este informe contiene información  
muy importante sobre la calidad de  
su agua beber. Tradúzcalo o hable  
con alguien que lo entienda bien.*

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*The United States Congress passed the Safe Drinking Water Act in 1974 and reauthorized it in 1986 and 1996. The Environmental Protection Agency and the State of Oregon develop and enforce drinking water regulations to protect the public health. The City of Newberg has several programs that help protect and maintain the high quality of our water. This “multiple layer” approach includes:*

## **Protecting the Source**

Preventing pollution is the first priority in protecting our water source. The City owns the land where its wells are located. This location is in a largely unthreatened area. The land adjacent to the wells is leased for agricultural use with restrictions designed to protect the ground water from contamination by pesticides or other agricultural chemicals.

## **Disinfection and Treatment**

Water from the well field is safe to drink without treatment. However, to protect your health, the City’s drinking water is disinfected 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) of residual chlorine after treatment. Water from the well field contains iron and manganese. Neither of these pose a health risk. They may cause discoloration or affect taste. Therefore, water from the well field is filtered to minimize this possibility. Filtered water is treated with sodium hydroxide to minimize the leaching of lead and copper from household plumbing.

## **Monitoring the System**

The City of Newberg routinely monitors for contaminants in your drinking water according to federal and state laws. Routine Coliform Samples are taken from 59 different sites on a rotating basis throughout the year. All required testing is performed by independent, certified laboratories using EPA approved methods. Process control sampling is performed by City staff. All test results are summarized in the Water Quality Data section of this report.

## **Preventing Contamination**

Maintaining water quality includes effectively managing the water distribution system. Preventing contamination of the water from outside sources is very important. The City requires that backflow prevention devices be installed on any connection to the water system that could present the risk of contaminating the water. The City also routinely flushes the distribution system to maintain water quality and remove sediment from the water lines. In 2004, a comprehensive emergency response plan was developed to ensure that, in the event of a natural disaster or terrorist attack, the citizens of Newberg will continue to have an adequate supply of safe drinking water.

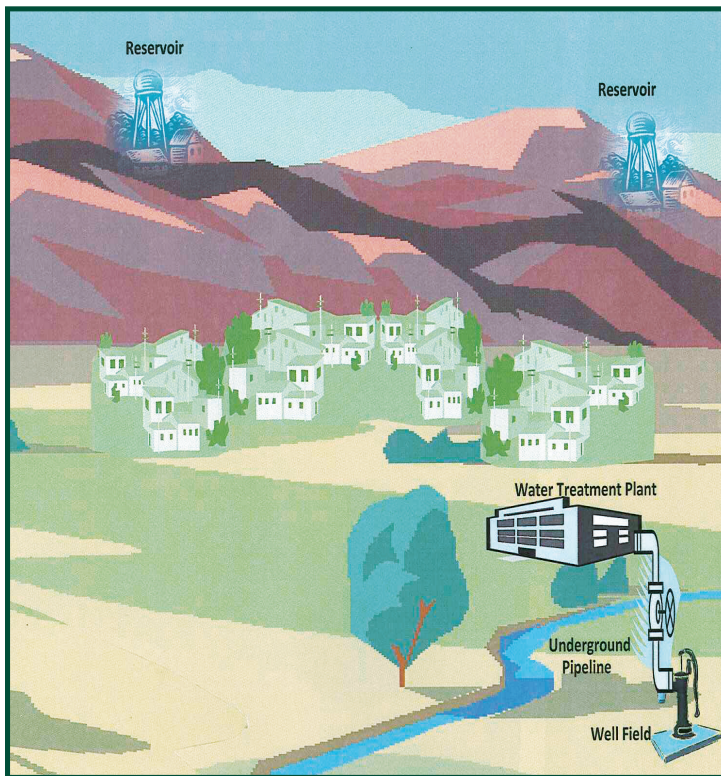


# Where Does Our Water Come From?

The City has a groundwater system, securing all of its water from a well field. Our primary source is a sand and gravel aquifer located just south of the Willamette River on property owned by the City of Newberg.

Raw water from the well field is naturally filtered by this aquifer. Water is pumped from the well field across the river to the Water Treatment facility for further treatment and distribution. In 2006, the City constructed a second pipeline under the Willamette River to provide additional well field capacity and redundancy to the Water Treatment facility.

The City produced an average of 2.24 million gallons per day (MGD) of drinking water in 2013. The peak production day was 4.39 million gallons.



## Our Goal:

The City of Newberg's drinking water continues to meet or exceed all federal and state requirements. We are committed to providing you with the highest quality water possible.

If you have questions or would like information that is not in this report, contact the **Water Treatment Supervisor at 503-537-1289**. Reports from previous years are available at City Hall, 414 E. First St., Newberg, Oregon 97132.



## About Drinking Water

All drinking water, including bottled water, may be expected to contain small amounts of contaminants. 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.

The Environmental Protection Agency (EPA) has set Maximum Contaminant Levels (MCL), Maximum Contaminant Level Goals (MCLG), or Action Levels (AL) for each regulated contaminant. MCL's are set at very stringent levels. The City's drinking water sources contain no contaminants at or near the MCL or AL. See the Water Quality Data on the last page of this report.

### **About Lead:**

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 the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



# City of Newberg Water Quality Data for the Year 2013

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	MCLG	Units	Date Tested	Major Sources
<b>Nitrate</b>	Well field	ND	10	10	ppm	8/2013	Runoff from fertilizer use, erosion of natural deposits, septic systems, wastewater discharges
<b>TTHM<sup>1</sup></b>	Distribution System	25	80	-	ppb	8/2013	Byproduct of disinfection with chlorine
<b>HAA5<sup>1</sup></b>	Distribution System	5.9	60	-	ppb	8/2013	Byproduct of disinfection with chlorine
<b>Radium 226/228</b>	Well field	.08			pCi/L	10/2012	Erosion of natural deposits
<b>Uranium</b>	Well field	ND	30	0.0	ppb	5/2009	Erosion of natural deposits

Substance	Date Tested	90th Percentile <sup>2</sup>	Level	Goal	Units	Homes Exceeding AL	Major Sources
<b>Lead<sup>3</sup></b>	9/2012	5.0	15	0.0	ppb	0%	Corrosion of household plumbing
<b>Copper<sup>3</sup></b>	9/2012	0.192	1.3	1.3	ppm	0%	Corrosion of household plumbing

## 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

<sup>1</sup> Values are maximum recorded of all sources sampled during 2013.

<sup>2</sup>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.

<sup>3</sup>Measured at residential taps

## ***Are there special health concerns I should know about?***

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**.

### ***Testing***

#### ***Total Coliform Bacteria***

Total coliform bacteria are naturally occurring and not generally a health risk, but their presence is an indicator of *possible* contamination by harmful bacteria or other microorganisms. Any positive total coliform sample requires retesting at the location of the sample, and at two locations within five service connections upstream and downstream of the positive sample site. Of 393 tests, 390 (99.2%) were negative for total coliform in 2013.

#### ***Chlorine***

The City is required to maintain a chlorine residual in the distribution system to provide post-treatment protection from microbial contamination. Chlorine residual is monitored continuously at the Water Treatment Plant. Routine monitoring is performed to ensure water in the distribution system is adequately chlorinated.

#### ***Trihalomethanes and Haloacetic Acids***

Testing is done annually on water from the distribution system. Trihalomethanes and haloacetic acids are byproducts of disinfection with chlorine.

#### ***Inorganic Compounds***

Testing is done for 18 inorganic compounds on each water source every nine years. The City's most recent testing for inorganic compounds was performed in March of 2011. At that time all samples tested well below MCL's.

## ***Arsenic***

Arsenic testing is performed every three years. The most recent testing in May of 2011 found no detectable levels of arsenic.

## ***Organic Compounds***

Testing is done for 21 volatile organic compounds (VOCs) and 42 synthetic organic compounds (SOCs) every three years. VOCs include petroleum products and solvents. SOCs include pesticides, PCBs, and other man-made organic chemicals. No VOCs or SOCs were detected in Newberg's drinking water in testing done in 2013 (for SOCs) and 2011 (for VOCs).

## ***Lead and Copper***

EPA requires testing at the customer's tap in homes built prior to 1985, which are more likely to have elevated lead and copper levels. In 1998, the City began adding sodium hydroxide (NaOH) to its finished water supply to raise the pH of the water and minimize the leaching of lead and copper from household plumbing. From 1998 until 2003, the City tested annually for lead and copper levels. Due to the successful outcome of this testing, the EPA now requires the City to test for lead and copper once every three years.

## ***Radioactive Contaminants***

Source waters have been tested for gross alpha emissions every nine years. New rules now also require testing for uranium and radium. Testing frequency is based on the amount of radiation detected in previous tests.

## ***Unregulated Contaminants***

EPA required testing for 11 unregulated contaminants twice between 2002 and 2005. Testing done did not detect any of these contaminants in Newberg's drinking water. We continue to participate in the testing program with the most recent results in 2013 still showing none of the contaminants.

## ***Sodium:***

There is currently no drinking water standard for sodium. Sodium is an essential nutrient. At the levels found in the City's water, it is unlikely to significantly contribute to adverse health effects. Water produced at the treatment plant contained 25.2 ppm of sodium in samples taken in 2013. If you are concerned about the levels of sodium in your drinking water, please consult your physician.

## ***Chlorine:***

EPA has recommended a maximum residual disinfectant level goal of 4.0 ppm. Maximum recorded chlorine residuals in 2013 were 1.54 ppm at the Water Treatment Plant. The maximum chlorine residual recorded in the distribution system in 2013 was 1.13 ppm.





## ***Frequently asked Questions:***

### ***How do I pay my water bill?***

Water billing and payments are generated by the **Finance Department**. You can make your payment at City Hall, 414 E First Street, Newberg, Oregon 97132. A new service allows you to pay your water bill online! Log on to set up your online account at [www.newbergoregon.gov](http://www.newbergoregon.gov) or call 503-537-1205.

### ***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 moderately hard—measured at 56 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.

### ***How can I participate in decisions about Newberg's water system?***

A Citizen Rate Review Committee meets periodically 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 when recommending water rates.

The committee then submits a report to the City Council. The Council then determines the rates for the water system.

**If you would like to be involved, contact the Finance Department at 503-538-9425.**

### ***Water conservation:***

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! Contact [environment@newbergoregon.gov](mailto:environment@newbergoregon.gov).



# Other Programs

## Water Reuse System

There are wide variations in water use between wet weather and dry weather. Summer use approaches 6 MGD (million gallons per day) while winter use is closer to 2 MGD. Irrigation is a substantial portion of the increased water demand during dry months.

In an effort to provide major irrigators with a source of water other than potable water, the City of Newberg built the Pall Membrane Reuse Water System. This system provides treated, recycled water to Chehalem Park & Recreation's Golf Course, reducing the use of potable water by an average of 350,000 gallons per day in the dry months. In the future, other irrigators and non potable water users will be able to access this resource. The recycle system reduces demand on the City's potable water supply and encourages local businesses to make conservation practices a part of their business model.



## Backflow Devices – Preventing Contamination in the Drinking Water

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

Most residents don't realize that the sprinkler system or water fountain in their yard or the fire system in their house has 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 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 inspection each year.

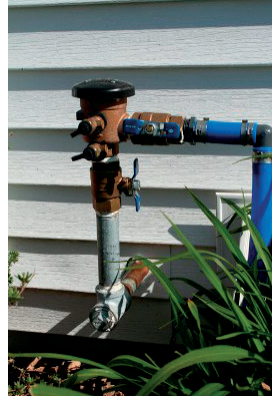
### Need a list of certified testers?

<https://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/CrossConnection/Pages/publiclist.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](mailto:backflow@newbergoregon.gov) for assistance finding the device on your property.



**FREEZE THE GREASE.  
SAVE THE DRAIN!**



**Scrape Don't Rinse!**

Place **COOLED** cooking oil, meat and **DAIRY** Fats in sealed containers into the garbage.

Never rinse them down the drain.



Local grade school students learning lab skills and water facts -2013

## **CLOGS in your Pipes!**

Public Works maintains 80 miles of sewer pipes. With specialized cameras, vacuum systems and regular restaurant inspections, our efforts to prevent clogs is ongoing. However residents unknowingly create clogs with non-waste products in toilets and sinks. Clogs damage equipment, pipes and increase costs to everyone.

Medications and non-waste materials **DO NOT** flow through the system.

**Products labeled "flushable" are not actually dissolvable!**

Kitchen Grease is a primary cause because grease solidifies underground, where it is cooler. Oils are found in most food, including vegan and dairy products, even after using soap and hot water.

*What can you do? Let it F.L.O.W!*

**FREEZE** the Grease in the Kitchen (Dairy and oils too)

**LEAVE** costly products that say "flushable" in the garbage

**OUT** with Medicines – Use the Free drop box at Public Safety Bldg.

**WATER AND WASTE ONLY** in the pipes.

## **What is Stormwater?**

Most of the rain that falls on your property picks up oil, fertilizer, pet waste and litter on its way to the storm drains. Keep these items cleaned up, dispose of automotive products properly, pick up litter and keep fertilizer/pesticide use to a minimum.

**Call 503-537-1234 or 503-537-1282 to report ANYONE (private or commercial) dumping ANYTHING into any storm & sewer drains.**

## **Prevent Erosion**

Keep your property from going downstream with FREE plants from the Trees for Streams Program. Provided in partnership with BLM for streams and rain garden projects.

## **Learn with us!**

Middle school students join us each spring for World Water Day collecting stream samples and learning about ecology.

We sponsor Mad Science assemblies and field trips for elementary students. Ask teachers to contact us.

Our Website has articles, events and resources. Information updates regularly at [www.newbergoregon.gov/operations](http://www.newbergoregon.gov/operations).

Free Guides for efficient landscapes, reducing runoff and water saving kits are available at City Hall, the WaterWise Garden or by contacting us directly.

## **Volunteer with Us!**

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

## **FOR INFORMATION:**

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



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Things Get Done



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