

<i>Substance</i>	<i>Water Source</i>	<i>Level</i>	<i>MCL</i>	<i>MCLG</i>	<i>Units</i>	<i>Date Tested</i>	<i>Major Sources</i>
<i>Nitrate</i>	Snider Spring	2.3	10	10	ppm	8/2013	Runoff from fertilizer, natural deposits, septic systems, wastewater
	Skelton Spring	2.0					
<i>TTHM¹</i>	Snider Spring	ND	80	-	ppb	8/2012	Byproduct of Chlorine Disinfection
	Skelton Spring						
<i>HAA5¹</i>	Snider Spring	ND	60	-	ppb	8/2012	Byproduct of Chlorine Disinfection
	Skelton Spring						
<i>Turbidity³</i>	Snider Spring	6.69	-	-	NTU	2013	Soil Runoff
	Skelton Spring	4.61					
<i>Radium 226/228</i>	Snider Spring	ND	5.	0	pCi/L	5/2009	Erosion of Natural Deposits
	Skelton Spring	ND					
<i>Uranium</i>	Snider Spring	ND	30	0	ppb	5/2009	Erosion of Natural Deposits
	Skelton Spring	ND					
<i>Gross Alpha Radiation</i>	Snider Spring	5.8	15				
	Skelton Spring	2.5	15				

<i>Substance</i>	<i>Date Tested</i>	<i>90th Percentile⁴</i>	<i>Action Level</i>	<i>Goal</i>	<i>Units</i>	<i>Homes Exceeding AL</i>	<i>Major Sources</i>
<i>Lead²</i>	10/2013	4.0	15.0	0.0	ppb	00%	Corrosion of Household Plumbing
<i>Copper²</i>	10/2013	1.1	1.3	1.3	ppm	30%	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 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 the maximum recorded for the most recent samples collected.

² Measured at residential taps.

³ Values shown are the highest recorded during the year. Skelton/Snider Spring exceeded 5 NTU for 9 days in 2013.

⁴ 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.

Sodium:

There is currently no drinking water standard for sodium. Sodium is an essential nutrient. At the levels found in the Spring Water, it is unlikely to significantly contribute to adverse health effects.

Chlorine:

EPA has recommended a maximum residual disinfectant level goal of 4.0 ppm. Maximum recorded chlorine residuals in 2013 were 2.20 ppm at Skelton Springs and 2.20 ppm at Snider Spring.

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City of Newberg
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Newberg Springs System Water Quality Report for 2013



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

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 sources. The City owns the land where the springs are located and these locations are in largely unthreatened areas.

Disinfection and Treatment

Water from the spring system is disinfected using chlorine. Chlorine residual is monitored at the springs daily. Chlorine is added to provide approximately one part per million (ppm) of residual after treatment. Aside from chlorination, water from the springs is not filtered or treated in any other manner. Fluoride is not added to the water from the spring source.

Turbidity

Turbidity is a measure of the cloudiness of water. Chlorination is less effective in inactivating bacteria in turbid waters. If turbidity exceeds the 5 NTU MCL, boil water notices are issued to affected residences.

Monitoring the System

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

Preventing Contamination

Maintaining water quality includes effectively managing the 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. Additionally, the Springs system is routinely flushed, preventing sediment accumulation in the water lines.

The Source:

The Snider/Skelton spring system is located north of the City on the slopes of the Chehalem Mountain. Approximately 57 customers are served by the system. The Snider/Skelton spring system was disconnected from the City distribution system in 2009 and assigned its own individual PWS (Public Water System) ID by the Oregon DHS Drinking Water Program.

In 2013, the Spring system produced 80,000 GPD (gallons per day). 40,000 GPD (50%) came from Snider Spring and 40,000 GPD (50%) came from Skelton Spring.

About Drinking Water

All drinking water, including bottled water, may be expected to contain small amounts of contaminants. As water travels over the surface 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:

- Microbial contaminants, such as viruses and bacteria, which may come from 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. 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.

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**.

Questions ?

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 and by visiting www.newbergoregon.gov

Testing:

Total Coliform Bacteria

Total coliform bacteria are naturally occurring and not generally a health risk. However their presence is an indicator of *possible* contamination by harmful bacteria or other microorganisms. Any positive 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 12 tests, 12 (100%) were negative for total coliform in 2013.

Nitrates

Testing is required on each source annually.

Trihalomethanes and Haloacetic Acids

Testing for THM/HAA5 is done on the distribution system water. The Newberg Spring System is on a reduced sampling cycle of every three years based upon past performance. THM/HAA5's 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. All inorganic compound testing produced no detectable results.

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 Spring's drinking water in testing done in 2004, 2007, 2010 and 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. The Newberg Springs system was created in 2009. We are currently in the process of performing Lead and Copper sampling. most recent testing, Oct 2013.

Radioactive Contaminants

Source waters have been tested for gross alpha emissions every four years. New rules now also require testing for uranium and radium. Testing frequency is every six years based upon previous test results.

Unregulated Contaminants

EPA required testing for 11 unregulated contaminants twice between 2002 and 2005. Testing done on samples taken in December 2002 and June 2003 did not detect any of these contaminants. In February and August of 2009 an additional 10 contaminants were tested for and were not detected in the spring drinking water sources.

Most Recent Newberg Springs System Data for the Year 2013

The following table shows the results of the City of Newberg Springs 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.