

# 2022 Water Quality Report

**PRIDE IN SERVICE - INTEGRITY IN ACTION** 



## The City of Newberg provides reliable water to you!

The City of Newberg is committed to providing safe and reliable drinking water. In Oregon, water providers are required to meet the Environmental Protection Agency (EPA) and the Oregon Health Authority (OHA) water quality regulations which include constant testing and disinfection from the source through the treatment plant up to the reservoirs and to your tap.

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**828.9 MILLION GALLONS** of water was produced in 2022 with zero water quality deficiencies or violations.  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

**2.48 MILLION GALLONS** the City produced on average per day (MGD) in 2022.

**333.8** MILLION GALLONS

of nonpotable water were supplied to the Chehalem Park & Recreation District owned Chehalem Glenn Golf Course for irrigation. This helps conserve Newberg's source of drinking water.

The City's water comes from a groundwater supply 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.  $\overset{\uparrow\uparrow\uparrow}{\underbrace{\phantom{}}}$ 

**4.70 MILLION GALLONS** was the City's peak production day in 2022.

Water from the wellfield is safe to drink without treatment. However, to protect your health, the following processes take place.

- Chlorine is used to disinfect and prevent any contamination between the source and your faucet. One part per million (ppm) is added and monitored throughout the delivery system.
- Iron and manganese are naturally occurring elements. They pose no risk but can cause discoloration and affect the taste. Filtration is used to remove these elements.



1 CITY OF NEWBERG // WATER QUALITY REPORT

## Steps to help keep our drinking water safe



**Step 1** Locate or install a Backflow Assembly Device. If you have an underground irrigation system, check to see if you already have one in place.



### Step 2

If you install irrigation or fire system plumbing, code requires a backflow device to be installed.



### Step 3

Test your Backflow Assembly Device annually! We will help you remember by sending you a letter each year to have your inspection done.



Not sure if you have a device?

Call the Water Treatment Plant at 503-554-6839 or email backflow@newbergorgegon.gov for assistance finding the device on your property.

### Protect your home from backflow!

DO NOT submerge the end of the garden hose in a swimming pool, container, or bucket to fill it. 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.



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  | Date Tested | Influenced by   |
|---------------------------|---------------------|---------------|------|-------------|---|
| Nitrate (ppm)             | Well Field          | None detected | 10.0 | 8/2/22      | Runoff from fertilizer, natural deposits, septic systems, etc.  |
| HAA5* (ppb)               | Distribution System | 8.5           | 60   | 07/22       | - Byprodut of disinfection.   |
| TTHM* (ppb)               | Distribution System | 39            | 80   | 07/22       |   |
| Radium (pCi/L)<br>226/228 | Well Field          | None Detected | NA   | 09/21       | Erosion of natural deposits.  |
| Uranium (ppb)             | Well Field          | None Detected | 30   | 09/21       |   |
| Chlorine (ppm)            | Treatment Plant     | 1.34          | <4.0 | 2022        | EPA requires the range of disinfectant to stay<br>in water throughout the system not to exceed 4.0 ppm. |
| Chlorine (ppm)            | Distribution System | 1.11          | <4.0 | 2022        |   |

| Substance                              | Test Location    | Over Limit | Level | Date Tested | Influenced by                                  |
|--|------------------|------------|-------|-------------|--|
| Lead (ppb) Tested<br>every 3 years     | Residential Taps | 0%         | 15    | 08/21       | - Corrosion of household plumbing.             |
| Copper 3 (ppm)<br>Tested every 3 years | Residential Taps | 0%         | <1.3  | 08/21       |  |
| Sodium (ppm)                           | Well Field       | 0%         | 30.2  | 2022        | There are no limits set for sodium by the EPA. |

| Substance                  | Location           | Number of Tests | Result       | Year  | Notes                                       |
|----------------------------|--------------------|-----------------|--------------|-------|---|
| Total Coliform<br>Bacteria | Multiple Locations | 395             | 395 Negative | 2022  | All check and repeat samples were negative. |
| Arsenic                    | Well Field         |                 | Negative     | 07/21 | Testing schedule every 9 years.             |

| Other Testing   | Number of Tests | Frequency     | Result                  | Last Test | Notes                              |
|-----------------|-----------------|---------------|-------------------------|-----------|------------------------------------|
| Regulated VOC   | 21              | Every 3 years | ND                      | 2022      | Organic, i.e. petroleum, solvents. |
| Unregulated VOC | 35              | Every 3 years | ND Below MCLs           | 2021      |                                    |
| Organic SOC     | 29              | Every 3 years | 29 or all ND Below MCLs | 2021      | Pesticides, PCBs.                  |
| Inorganic       | 17              | Every 9 years | Below MCLs              | 2021      | Man-made compounds.                |

#### 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 TTHMTotal TrihalomethanesHAA5Haloacetic AcidsNDNone Detected

- MCLG Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health.
- 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.
  NA Non-Applicable
- **SOC** Synthetic Organic Contaminants
- PCB Polychlorinated Biphenyls

\* Values are maximum recorded of all sources sampled during 2022.

\*\* 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.

\*\*\* Measured at residential taps.

- Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- VOC Volatile Organic Compound

AL

## Why Provide a Water Quality Report?

Drinking water (including bottled water) can come from 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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the number 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 protections for public health.

## **Contaminants that may be present include:**



#### Microbiological **Contaminants**

Such as viruses and bacteria, may come from wastewater treatment plants, septic systems, livestock operations, and wildlife.



#### **Pesticides and Herbicides**

Which may come from a variety of sources, such as agriculture, stormwater runoff, and residential use.

Which may be naturally

occurring, or be the result of mining or oil and gas production.

#### **Inorganic Contaminants**

Such as salts and metals, can be naturally occurring or result from stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

#### **Organic Chemicals**

Including synthetic and volatile organics, are byproducts of industrial processes and petroleum production. These can also come from gas stations, urban stormwater runoff, and septic systems.



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**Radioactive** 

Contaminants

CITY OF NEWBERG // WATER QUALITY REPORT



## 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/Centers for Disease Control (CDC) 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 are available at www.epa.gov/lead or the Safe Drinking Water Hotline 1-800-424LEAD (5323).

## **Frequently Asked Questions**



**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 - hard measured at 84 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 one milligram per liter of chlorine in a consumer's water.

## Team up with us to protect our watershed!



**Protect water** by helping rain absorb naturally and slowly instead of running down streets, collecting pollution, eroding hillsides, and destroying habitats. Healthy streams have lower temperatures and return water to underground sources.



#### **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.

Questions? Contact: environment@newbergoregon.gov or 503-537-1282

## A cleaner community = A safer community

Unwanted items do not belong on the curb or down storm drains!

Report ANYONE you see dumping into storm drains!

## 503-538-8321

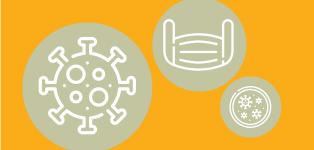
For a list of waste, yard debris, and recycling options in Newberg, visit the Waste Management website.

www.wmnorthwest.com/transferstation/newberg.htm



## COVID-19 and Your Drinking Water

## Your Water is Safe



As the COVID-19 pandemic continues, the City of Newberg is here every day providing clean, safe, and reliable drinking water to all of our customers.

## COVID-19 has no impact on the supply or quantity of your tap water

While the City of Newberg's water is sourced from an underground aquifer that prevents airborne contamination, we also adhere to strict safety requirements, per the EPA and the OHA, to ensure your drinking water is free of bacteria and viruses such as COVID-19.





#### Here When You Need Us

Access to clean water is essential to everyday life and also to stay healthy during the COVID-19 pandemic.

For more information on how we're serving you during the COVID-19 pandemic, visit us online at www.newbergoregon.gov/ publicworks or contact us at 503-537-1252.

## **Prepared for Emergencies**

#### Redundancy: Plan for the best and prepare for the rest

Newberg's main water supply, the wellfield, is located across the Willamette river and is transported using two pipelines. One runs over the river on a utility bridge, and the other pipeline is underground beneath the river. In a disaster where one line is damaged, the second line can be isolated using valves to continue to bring drinking water to the city. 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 would be available by positioning these portable systems in common areas all over the city. They run on an internal battery, generator, 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.

#### Bring Preparedness Home WHAT DO YOU NEED FOR WEEKS Follow us on Facebook HOURS ()/2weeksready A safer community starts with preparation at home. It only takes a few minutes to gather up items for your family and pets. **MAKE A BUILD A** BE PLAN **KIT INFORMED**

For more information, visit the Oregon Office of Emergency Management at www.oregon.gov/oem.

A Toilet is Not a Trash Can!

## **Think Before You Flush**

An overflowing toilet can ruin your home in an instant!



## Bottled Water Is Not Safer Than Tap Water



More than half of all bottled water comes from tap water.



Bottled water is \$8.26 per gallon. That's 1,000 times more expensive than tap water.



FDA does not require testing by bottling companies.



Oregon requires the City to conduct 10 different tests weekly.



Water bottle manufacturing is a significant source of pollution.



## How Do I Pay My City Municipal Services Bill?



Customers are invoiced on one monthly statement for all city fees, including water, wastewater, and stormwater.

SERVICES ·

Call 503-537-1205 or visit 414 E First Street, Newberg, Oregon.



**Electronic Payments** 







For more information about how to read the invoice, questions about winter averaging, or participating in the Citizens Rate Review Committee, contact the Finance office or visit www.newbergoregon.gov/finance.

## Need help paying your utility bill?

#### We're happy to help!

Visit www.newbergoregon.gov/finance/page/ water-bill-assistance or call 503-537-1205.



## **Projects and Upgrades**



#### **HB2001 Water Line Projects**

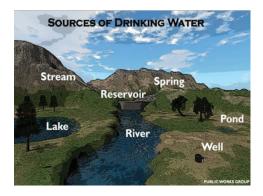
During the process of infrastructure evaluations related to enacting local provisions allowing middle housing in accordance with HB2001 (2019) and Oregon Administrative Rule (OAR) Chapter 660, Division 46, the City of Newberg identified areas that require upgrades to the existing infrastructure. Eight significant pipe improvement projects were identified in the south study area and one minor project was identified for the north study area to provide adequate fire flows to potential higher density development. Most of these projects are for the replacement of undersized pipe with larger pipes. The work will be completed by June 2029.



#### **New Groundwater Treatment Plant**

Our existing ground water treatment plant was originally constructed in 1953.

The current plant is vulnerable to damage in a seismic event and there is a need to cover the treatment plant filters to meet State requirements for airborne contamination of treated water. It makes more fiscal sense to construct a new ground water treatment plant to meet the City's needs.



#### Safe, Reliable Water: Redundant Supply

The Water Master Plan notes that the City's system is vulnerable to flooding, ground movement, seismic activity or other natural disasters. It was recommended that the City assess redundant supply options on the north side of the Willamette River in case of an emergency that makes our existing source unavailable. This is of particular importance as the City does not have a connection to another source of water for the residents.

Property has been acquired and water rights are in the process of being acquired to provide a redundant supply option.