

# **Annual Drinking Water Quality Report- Gladstone**

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

## **Do I need to take special precautions?**

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 infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

Your drinking water is spring water in Gladstone and is obtained from one (1) spring. Water is distributed throughout the community by one booster station, 2 storage tanks, and distribution piping consisting of 4-inch and 6-inch pipe. Treatment is provided by chlorination to disinfect the water prior to distribution.

## **Source water assessment and its availability**

A source water assessment for the Nelson County Service Authority, Gladstone water works was completed by the Virginia Department of Health on July 22, 2002. The assessment determined that the spring serving the community may be susceptible to contamination because it is located in an area that promotes migration of contaminants from certain land use activities of concern.

## **Why are there contaminants in my drinking water?**

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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:

microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **How can I get involved?**

If you have any questions about this report or if you want additional information about any aspect of your drinking water, please contact Mr. George T. Miller, Jr., Executive Director at toll-free 1-888-263-5341. The times and location of regularly scheduled meetings are as follows: The third Tuesday of every month at 9am at the Nelson County Service Authority Administrative Building-basement at 620 Cooperative Way, Arrington, VA 22922.

## **Description of Water Treatment Process**

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

## **Monitoring and reporting of compliance data violations**

### **Failure to Monitor for Combined Nitrate-Nitrite as Nitrogen**

Our water system violated drinking water requirements over the past year. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

\*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2025, we did not monitor or test for nitrate-nitrite as nitrogen and therefore cannot be sure of the quality of your drinking water during that time.\*

**What should I do?** There is nothing you need to do at this time.

You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

**What is being done?** We will collect our 2026 annual nitrate-nitrite as nitrogen sample.

Health effects: Infants younger than the age of six months who drink water containing nitrate and/or nitrite in excess of their PMCLs could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

### **Failure to Monitor for Volatile Organic Chemicals (VOCs)**

Our water system violated drinking water requirements over the past year. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

\*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2023-2025 compliance period, we did not monitor or test for volatile organic chemicals at our Spring entry point and therefore cannot be sure of the quality of your drinking water during that time.\*

**What should I do?** There is nothing you need to do at this time.

You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

**What is being done?** We are continuing to collect our samples for volatile organic chemicals as requested by the Office of Drinking Water.

Health effects: Volatile organic chemicals (VOCs) are a large class of chemicals, which range from relatively nontoxic to highly toxic in nature. If consumed well in excess of their PMCLs over a long period, certain VOCs can cause health effects including increased risks of cancer, issues with the liver, kidney, or circulatory systems, or issues with anemia.

## **Additional Information for Lead**

**The system inventory includes lead service lines.**

**In 2024, we developed a service line inventory as required by EPA Lead and Copper Rule Revisions. We do not have any lead service lines as part of this water system. Should you have detailed questions or wish to see the results of the service line inventory, please contact the Nelson County Service Authority.**

**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. NCSA - GLADSTONE is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact NCSA - GLADSTONE (Public Watersystem Id: VA2125065) by calling 434-263-5341 or emailing gmiller@ncsava.com. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.**

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## **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at

low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| Contaminants                                                                                                      | MCLG<br>or<br>MRDLG | MCL,<br>TT, or<br>MRDL | Detect<br>In<br>Your<br>Water | Range |        | Sample<br>Date | Violation | Typical<br>Source                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|-------------------------------|-------|--------|----------------|-----------|--------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                   |                     |                        |                               | Low   | High   |                |           |                                                                                                                          |
| Disinfectants & Disinfection By-Products                                                                          |                     |                        |                               |       |        |                |           |                                                                                                                          |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) |                     |                        |                               |       |        |                |           |                                                                                                                          |
| Chlorine (as Cl2)<br>(ppm)                                                                                        | 4                   | 4                      | 0.52                          | 0.7   | 1.46   | 2025           | No        | Water additive<br>used to control<br>microbes                                                                            |
| Haloacetic Acids<br>(HAA5) (ppb)                                                                                  | NA                  | 60                     | 4                             | ND    | 4      | 2024           | No        | By-product of<br>drinking water<br>chlorination                                                                          |
| TTHMs [Total<br>Trihalomethanes]<br>(ppb)                                                                         | NA                  | 80                     | 7                             | ND    | 7      | 2024           | No        | By-product of<br>drinking water<br>disinfection                                                                          |
| Inorganic Contaminants                                                                                            |                     |                        |                               |       |        |                |           |                                                                                                                          |
| Antimony (ppb)                                                                                                    | 6                   | 6                      | 0.04                          | ND    | 0.04   | 2024           | No        | Discharge from<br>petroleum<br>refineries; fire<br>retardants;<br>ceramics;<br>electronics;<br>solder; test<br>addition. |
| Barium (ppm)                                                                                                      | 2                   | 2                      | 0.0097                        | NA    | 0.0097 | 2024           | No        | Discharge of<br>drilling wastes;<br>Discharge from<br>metal<br>refineries;<br>Erosion of<br>natural<br>deposits          |

| Contaminants                                                                   | MCLG<br>or<br>MRDLG | MCL,<br>TT, or<br>MRDL                                                                                                                                                                                                                                                                           | Detect<br>In<br>Your<br>Water | Range  |       | Sample<br>Date               | Violation      | Typical<br>Source                                                                                                |                                                                                  |
|--------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------|-------|------------------------------|----------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|                                                                                |                     |                                                                                                                                                                                                                                                                                                  |                               | Low    | High  |                              |                |                                                                                                                  |                                                                                  |
| Nitrate [measured<br>as Nitrogen] (ppm)                                        | 10                  | 10                                                                                                                                                                                                                                                                                               | 0.18                          | ND     | 0.18  | 2024                         | No             | Runoff from<br>fertilizer use;<br>Leaching from<br>septic tanks,<br>sewage;<br>Erosion of<br>natural<br>deposits |                                                                                  |
| Sodium (optional)<br>(ppm)                                                     | NA                  |                                                                                                                                                                                                                                                                                                  | 3.7                           | NA     | 3.7   | 2024                         | No             | Erosion of<br>natural<br>deposits;<br>Leaching                                                                   |                                                                                  |
| Microbiological Contaminants                                                   |                     |                                                                                                                                                                                                                                                                                                  |                               |        |       |                              |                |                                                                                                                  |                                                                                  |
| E. coli (RTCR) - in<br>the distribution<br>system (positive<br>samples)        | 00                  | Routine and<br>repeat samples<br>are total coliform<br>positive and either<br>is E. coli - positive<br>or system fails to<br>take repeat<br>samples following<br>E. coli positive<br>routine sample or<br>system fails to<br>analyze total<br>coliform positive<br>repeat sample for<br>E. coli. | 1                             | NA     | NA    | 2025                         | No             | Human and<br>animal fecal<br>waste                                                                               |                                                                                  |
| Although we have detected E. coli, we are not in violation of the E. coli MCL. |                     |                                                                                                                                                                                                                                                                                                  |                               |        |       |                              |                |                                                                                                                  |                                                                                  |
| Contaminants                                                                   | MCLG                | AL                                                                                                                                                                                                                                                                                               | Your<br>Water                 | Range  |       | # Samples<br>Exceeding<br>AL | Sample<br>Date | Exceeds<br>AL                                                                                                    | Typical Source                                                                   |
|                                                                                |                     |                                                                                                                                                                                                                                                                                                  |                               | Low    | High  |                              |                |                                                                                                                  |                                                                                  |
| Inorganic Contaminants                                                         |                     |                                                                                                                                                                                                                                                                                                  |                               |        |       |                              |                |                                                                                                                  |                                                                                  |
| Copper - action<br>level at consumer<br>taps (ppm)                             | 1.3                 | 1.3                                                                                                                                                                                                                                                                                              | 0.174                         | 0.0076 | 0.291 | 0                            | 2025           | No                                                                                                               | Corrosion of<br>household<br>plumbing systems;<br>Erosion of natural<br>deposits |

| Contaminants                               | MCLG | AL | Your Water | Range |      | # Samples Exceeding AL | Sample Date | Exceeds AL | Typical Source                                                       |
|--------------------------------------------|------|----|------------|-------|------|------------------------|-------------|------------|----------------------------------------------------------------------|
|                                            |      |    |            | Low   | High |                        |             |            |                                                                      |
| Lead - action level at consumer taps (ppb) | 00   | 15 | 7.2        | 0.26  | 13.4 | 0                      | 2025        | No         | Corrosion of household plumbing systems; Erosion of natural deposits |

#### Violations and Exceedances

## Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

| Contaminants           | MCLG or MRDLG | MCL, TT, or MRDL | Your Water | Violation | Typical Source                                                                                                            |
|------------------------|---------------|------------------|------------|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Alpha emitters (pCi/L) | 0             | 15               | ND         | No        | Erosion of natural deposits                                                                                               |
| Fluoride (ppm)         | 4             | 4                | ND         | No        | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |

#### Unit Descriptions

| Term             | Definition                                                          |
|------------------|---------------------------------------------------------------------|
| ppm              | ppm: parts per million, or milligrams per liter (mg/L)              |
| ppb              | ppb: parts per billion, or micrograms per liter (µg/L)              |
| pCi/L            | pCi/L: picocuries per liter (a measure of radioactivity)            |
| NA               | NA: not applicable                                                  |
| ND               | ND: Not detected                                                    |
| NR               | NR: Monitoring not required, but recommended.                       |
| positive samples | positive samples/yr: The number of positive samples taken that year |

#### Important Drinking Water Definitions

| Term | Definition |
|------|------------|
|------|------------|

| <b>Important Drinking Water Definitions</b> |                                                                                                                                                                                                                                                         |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MCLG                                        | MCLG: Maximum Contaminant Level Goal: 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.                                                                        |
| MCL                                         | MCL: Maximum Contaminant Level: 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.                                                     |
| TT                                          | TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.                                                                                                                                            |
| AL                                          | AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.                                                                                                     |
| Variances and Exemptions                    | Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.                                                                                                                                 |
| MRDLG                                       | MRDLG: Maximum residual disinfection level goal. 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 contaminants. |
| MRDL                                        | MRDL: Maximum residual disinfectant level. 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.                              |
| MNR                                         | MNR: Monitored Not Regulated                                                                                                                                                                                                                            |
| MPL                                         | MPL: State Assigned Maximum Permissible Level                                                                                                                                                                                                           |
| 90th Percentile                             | Compliance with the lead and copper action levels is based on the 90th percentile lead and copper levels. This means that the concentration of lead and copper must be less than or equal to the action level in at least 90% of the samples collected. |

**For more information please contact:**

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