

# ANNUAL WATER QUALITY REPORT

Reporting Year 2024



***Presented By***  
**Northwest Regional Water District**



## Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

## Where Does My Water Come From?

The Northwest Regional Water District receives its drinking water from Scioto County Regional Water District No. 1 ([water1.org](http://water1.org)) in Lucasville. The water we supply comes from 10 wells located in the Teays Valley Aquifer near State Route 348. The water is pumped from wells and softened using lime. The water is then stabilized using carbon dioxide to prevent excessive buildup inside pipes. Chlorine is added to the water to kill any bacteria that may be present. The water then moves through nine filters, which remove any remaining particulate matter that may be present. Fluoride is added, as required. Finally, chlorine is added one more time to guarantee adequate amounts will remain in the water throughout the distribution system. If you have any questions concerning the source water, you can call Water District No. 1's treatment plant, where state-certified lab analysts work every day. For more information, call (740) 259-2301 or visit [water1.org](http://water1.org).

## Source Water Assessment

A source water assessment was completed for Scioto County Regional Water No. 1 by Ohio EPA in 2012 and revised in 2022. This assessment indicates that Scioto County Regional Water District's source of drinking water has a high susceptibility to contamination due to the presence of a relatively permeable layer of soil overlying the aquifer, the relatively shallow depth (less than 15 feet below ground surface) of the aquifer, and the presence of numerous significant potential contaminant sources in the protection area. The risk of future contamination can be minimized by implementing appropriate protective measures. The Source Water Assessment Report (SWAR) may be obtained from Water No. 1's lab chief, Mark Shonkwiler, at (740) 259-2301 or by visiting [water1.org/Files/SWPP.pdf](http://water1.org/Files/SWPP.pdf).

## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. Regularly scheduled meetings of the Water District Board are on the third Tuesday of each month at 7:30 p.m. (Daylight Savings Time) and 7:00 p.m. during the winter months. Meetings are held in the Thomas E. Slye Annex, located behind our office at 123 Smith Street.

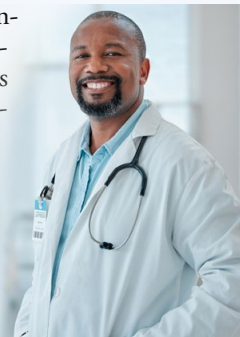
## Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use three to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791 or [epa.gov/safewater](http://epa.gov/safewater).



**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Tim Neal, General Manager, at (740) 259-2789.

## Substances That Could Be in Water

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 operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may 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.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. 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.

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the U.S. EPA by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting [epa.gov/safewater](http://epa.gov/safewater).

## BY THE NUMBERS



**3.4** BILLION

The daily volume in gallons of water recycled and reused in the U.S., reducing waste and conserving resources.



**28%**

The percent reduction in per capita water use in the U.S. since 1980, thanks to efficiency improvements.



**99.99%**

The percent effectiveness of modern water treatment plants in removing harmful bacteria and viruses from drinking water.



**1.2** MILLION

The length in miles of drinking water pipes in the U.S. delivering clean water to millions of homes and businesses daily.



**1.7** MILLION

The number of jobs supported by the U.S. water sector.

## What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air-conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.



## Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.



Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water and the use of chlorine are probably the most significant public health advancements in human history.

### How chlorination works:

- **Potent Germicide:** Reduction of many disease-causing microorganisms in drinking water to almost immeasurable levels.
- **Taste and Odor:** Reduction of many disagreeable tastes and odors from foul-smelling algae secretions, sulfides, and decaying vegetation.
- **Biological Growth:** Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
- **Chemical:** Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

## What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

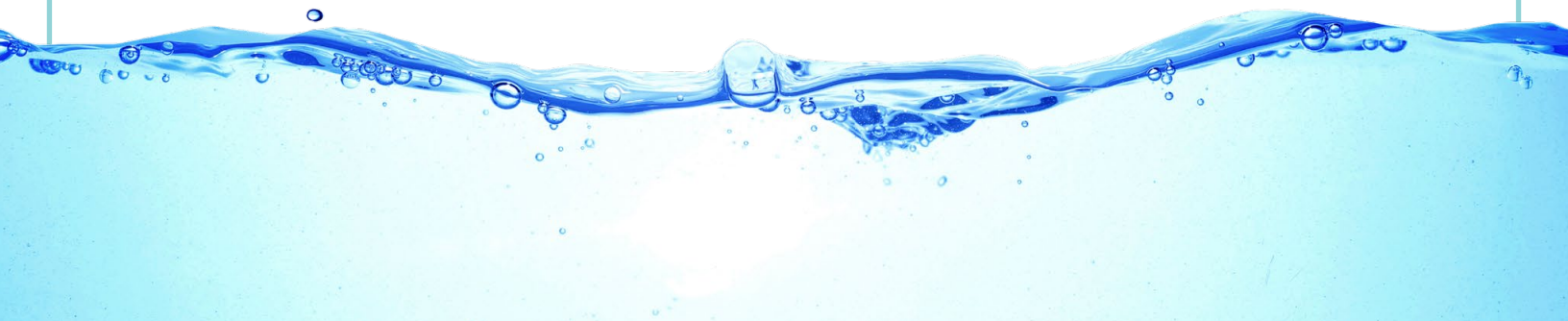
- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit [bit.ly/3Z5AMm8](https://bit.ly/3Z5AMm8).

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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, you may wish to have your water tested. A list of laboratories certified in Ohio to test for lead may be found at [epa.ohio.gov/ddagw](https://epa.ohio.gov/ddagw) or by calling (614) 644-2752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or [epa.gov/safewater/lead](https://epa.gov/safewater/lead).

Our distribution system has no lead, galvanized requiring replacement, or lead status unknown service lines. To determine this, we used the following sources: physical inspection in meter pit, construction and plumbing codes, and historic records.



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

Note that we have a current, unconditioned license to operate our water system.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

| REGULATED SUBSTANCES   |                 |                    |                 |                                |                   |                               |  |  |
|--|-----------------|--------------------|-----------------|--------------------------------|-------------------|-------------------------------|--|--|
| SUBSTANCE<br>(UNIT OF MEASURE)   | YEAR<br>SAMPLED | MCL<br>[MRDL]      | MCLG<br>[MRDLG] | AMOUNT<br>DETECTED             | RANGE<br>LOW-HIGH | VIOLATION                     | TYPICAL SOURCE   |  |
| Arsenic (ppb) <sup>1</sup>   | 2022            | 10                 | 0               | 1.9                            | NA                | No                            | Erosion of natural deposits; Runoff from orchards; Runoff from glass electronics production wastes |  |
| Asbestos (MFL)   | 2024            | 7                  | 7               | 0.18                           | NA                | No                            | Decay of asbestos cement water mains; Erosion of natural deposits                                  |  |
| Barium (ppm) <sup>1</sup>  | 2022            | 2                  | 2               | 0.011                          | NA                | No                            | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits         |  |
| Chlorine (ppm)   | 2024            | [4]                | [4]             | 0.943333                       | 0.83–1.04         | No                            | Water additive used to control microbes  |  |
| Fluoride (ppm)   | 2024            | 4                  | 4               | 0.98                           | 0.83-1.08         | No                            | Water additive which promotes strong teeth; Erosion of natural deposits                            |  |
| Haloacetic Acids [HAAs] (ppb)  | 2024            | 60                 | NA              | 5.8                            | 5.2–5.8           | No                            | By-product of drinking water disinfection  |  |
| Nitrate (ppm)  | 2024            | 10                 | 10              | .35                            | NA                | No                            | Run off from fertilizer use; Erosion of natural deposits   |  |
| TTHMs [total trihalomethanes] (ppb)  | 2024            | 80                 | NA              | 39.2                           | 38.10–39.2        | No                            | By-product of drinking water disinfection  |  |
| Tap water samples were collected for lead and copper analyses from sample sites throughout the community   |                 |                    |                 |                                |                   |                               |  |  |
| SUBSTANCE<br>(UNIT OF MEASURE)   | YEAR<br>SAMPLED | AL                 | MCLG            | AMOUNT DETECTED<br>(90TH %ILE) | RANGE<br>LOW-HIGH | SITES ABOVE<br>AL/TOTAL SITES | VIOLATION  | TYPICAL SOURCE   |
| Copper (ppm)   | 2024            | 1.3                | 1.3             | 0.072                          | 0.005–0.103       | 0/30                          | No   | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead (ppb)   | 2024            | 15                 | 0               | 0.4                            | ND–12.9           | 0/30                          | No   | Corrosion of household plumbing systems; Erosion of natural deposits |
| UNREGULATED SUBSTANCES   |                 |                    |                 |                                |                   |                               |  |  |
| SUBSTANCE<br>(UNIT OF MEASURE)   | YEAR<br>SAMPLED | AMOUNT<br>DETECTED |                 | RANGE                          |                   |                               |  |  |
| Perfluoropentanoic acid [PFPeA] (ppt)  | 2024            | 0.00315            |                 | NA                             |                   |                               |  |  |
| <sup>1</sup> In 2022, required Arsenic and Barium samples were detected below the Maximum Contaminant Levels and reported on the 2022 Consumer Confidence Report. Arsenic and Barium were not required to be analyzed in 2023. Scioto County Regional Water District failed to report the same results from 2022 on the 2023 CCR in the Table of Detected Contaminants. The Arsenic and Barium samples collected in 2022 are being reported in our 2024 Consumer Confidence Report to maintain compliance with the Consumer Confidence Reporting Requirements. Scioto County Regional Water District #1 will maintain compliance |                 |                    |                 |                                |                   |                               |  |  |

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**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.

**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.

**MFL (million fibers per liter):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

**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.

**MRDLG (Maximum Residual Disinfectant 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.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).